Contents

Appendix 16

1 Excluded studies

1.1 Measures other than body mass index

References were excluded from this review because they did not evaluate the utility of the measure of interest compared with body mass index (BMI), but compared with some other measure of overweight or obesity. For a full list of excluded references, please contact the Methods Team.

1.2 Measures and morbidity in ethnic populations

Study	Source	Reason for exclusion
Chambers JC, Eda S, Bassett P et al. (2001) C-reactive protein, insulin resistance, central obesity, and coronary heart disease risk in Indian Asians from the United Kingdom compared with European whites. *Circulation* 104(2):145–150.	Experts	Assesses the relationship between C-reactive protein, not anthropometric measures.
Despres JP, Lemieux I, Prud'homme D (2001) Treatment of obesity: need to focus on high risk abdominally obese patients. *British Medical Journal* 322(7288):716–20.	Experts	Not focused on ethic differences.
Farooqi A, Nagra D, Edgar T, Khunti K (2000) Attitudes to lifestyle risk factors for coronary heart disease amongst South Asians in Leicester: a focus group study. *Family Practice* 17:293–97.	Searches	Qualitative study of knowledge and attitudes of coronary heart disease risk factors. Not assessment.
Forouhi NG, Sattar N, McKeigue PM (2001) Relation of C-reactive protein to body fat distribution and features of the metabolic syndrome in Europeans and South Asians. *International Journal of Obesity and Related Metabolic Disorders* 25(9):1327–31.	Experts	Assesses the relationship between C-reactive protein, and anthropometric measures – not a routinely measured marker.
Han TS, Feskens EJ, Lean ME, Seidell JC (1998) Associations of body composition with type 2 diabetes mellitus. *Diabetic Medicine* 15(2):129–35.	Experts	Discusses the use of waist circumference and the effect of different cut-offs. Effect of ethnic difference not explored.
Han TS, Lean ME, Seidell JC (1996) Waist circumference remains useful predictor of coronary heart disease. *British Medical Journal* 312(7040):1227–28.		
Han TS, McNeill G, Seidell JC, Lean ME (1997) Predicting intra-abdominal fatness from anthropometric measures: the influence of stature. *International Journal of Obesity and Related Metabolic Disorders* 21(7):587–93.		
Han TS, van Leer EM, Seidell JC, Lean ME (1995) Waist circumference action levels in the identification of cardiovascular risk factors: prevalence study in a random sample. *British Medical Journal* 311(7017):1401–405.		
Han TS, van Leer EM, Seidell JC, Lean ME (1996) Waist circumference as a screening tool for cardiovascular risk factors: evaluation of receiver operating characteristics (ROC). *Obesity Research* 4(6):533–47.		

Study	Source	Reason for exclusion
Lean ME, Han TS, Deurenberg P (1996) Predicting body composition by densitometry from simple anthropometric measurements. *American Journal of Clinical Nutrition* 63(1):4–14. Lean ME, Han TS, Morrison CE (1995) Waist circumference as a measure for indicating need for weight management. *British Medical Journal* 311(6998):158–61. Lean ME, Han TS, Seidell JC (1998) Impairment of health and quality of life in people with large waist circumference. *Lancet* 351(9106):853–56.	Experts	Discusses the use of waist circumference and the effect of different cut-offs, or equations. Effect of ethnic difference not explored.
Malina RM, Huang YC, Brown KH (1995) Subcutaneous adipose tissue distribution in adolescent girls of four ethnic groups. *International Journal of Obesity and Related Metabolic Disorders* 19 (11):793–97.	Searches	Investigated subcutaneous adipose tissue distribution in adolescents of four ethnic groups in the USA. However, 327 out of the 498 of the sample were Mexicans, the Asian sample was 63 and almost exclusively Filipino, and the Black sample was only 27. Generalisability of the sample to the UK population was therefore extremely limited.
Misra A, Arora N, Mondal S (2001) Relation between plasma leptin and anthropometric and metabolic covariates in lean and obese diabetic and hyperlipidaemic Asian Northern Indian subjects. *Diabetes, Nutrition and Metabolism* 14(1):18–26.	Searches	Plasma leptin and obesity – not routinely measured.
Misra A, Wasir JS, Pandey RM (2005) An evaluation of candidate definitions of the metabolic syndrome in adult Asian Indians. *Diabetes Care* 28(2):398–403.	Searches	Assesses the effect of different definitions for metabolic syndrome in Asian Indians.
Misra A, Wasir JS, Vikram NK (2005) Carbohydrate diets, postprandial hyperlipidaemia, abdominal obesity and Asian Indians: a recipe for atherogenic disaster. *Indian Journal of Medical Research* 121(1):5–8.	Searches	Narrative review.
Pomerleau J, McKeigue PM, Chaturvedi N (1999) Factors associated with obesity in South Asian, Afro-Caribbean and European women. *International Journal of Obesity and Related Metabolic Disorders* 23(1):25–33.	Searches	Assessed the association between different anthropometric measures and other social factors.
Rosengren A, Hawken S, Ounpuu S et al. (2004) Association of psychosocial risk factors with risk of acute myocardial infarction in 11119 cases and 13648 controls from 52 countries (the INTERHEART study): case–control study. *Lancet* 364 (9438):953–62.	Experts	Assesses the effects of psychosocial risk factors associated with myocardial infarction across countries. Not relevant to review (INTERHEART).
Sattar N, Clark P, Holmes A, Lean ME, Walker I, Greer IA (2001) Antenatal waist circumference and hypertension risk. *Obstetrics and Gynecology* 97 (2):268–71.	Searches	Waist circumference in pregnant women. No ethnic differences explored.
Sattar N, Tan CE, Han TS et al. (1998) Associations of indices of adiposity with atherogenic lipoprotein subfractions. *International Journal of Obesity and Related Metabolic Disorders* 22(5):432–9.	Searches	To assess the association of indices of adiposity with cardiovascular risk factors. No ethnic differences explored.
Seidell JC, Han TS, Feskens EJ, Lean ME (1997) Narrow hips and broad waist circumferences independently contribute to increased risk of non-insulin-dependent diabetes mellitus. *Journal of Internal Medicine* 242(5):401–6.	Searches	Describes the body shape of people with non-insulin-dependent diabetes mellitus, but no ethnic difference explored

Study	Source	Reason for exclusion
Tillin T, Forouhi N, Johnston DG, McKeigue PM, Chaturvedi N, Godsland IF (2005) Metabolic syndrome and coronary heart disease in South Asians, African-Caribbeans and white Europeans: a UK population-based cross-sectional study. *Diabetologia* 48(4):649–56.	Experts	Assesses the effect of different definitions for metabolic syndrome in different ethnic groups.
Valsamakis G, Chetty R, Anwar A, Banerjee AK, Barnett A, Kumar S (2004) Association of simple anthropometric measures of obesity with visceral fat and the metabolic syndrome in male Caucasian and Indo-Asian subjects. *Diabetic Medicine* 21(12):1339–45.	Experts	Assess the usefulness of waist circumference, but does not compare different cut-offs between White and Indo-Asian men.
Vikram NK, Misra A, Dwivedi M et al. (2003) Correlations of C-reactive protein levels with anthropometric profile, percentage of body fat and lipids in healthy adolescents and young adults in urban North India. *Atherosclerosis* 168(2):305–313.	Experts	Assesses the relationship between C-reactive protein levels and obesity. Not a routinely measured marker.
Vikram NK, Misra A, Pandey RM, Dwivedi M, Luthra K (2004) Adiponectin, insulin resistance, and C-reactive protein in postpubertal Asian Indian adolescents. *Metabolism: Clinical and Experimental* 53(10):1336–41.	Experts	To compare serum adiponectin levels and obesity. Not routinely measured.
Widjaja A, Stratton IM, Horn R, Holman RR, Turner R, Brabant G (1997) UKPDS 20: Plasma leptin, obesity, and plasma insulin in type 2 diabetic subjects. *Journal of Clinical Endocrinology and Metabolism* 82(2):	Searches	Evaluates the association between leptin and BMI in different ethnic groups. Leptin is not a routinely measured plasma marker.
Wong W, Stuff JE, Butte NF, Smith EO, Ellis KJ (2000) Estimation of body fat in Caucasian and African-American girls: total-body electrical conductivity methodology versus a four-component model. *International Journal of Obesity and Related Metabolic Disorders* 24(9):1200–206.	Searches	Compared two research methods of estimating body fat in White and African American girls. It did not explore ethnicity differences in associations between commonly used proxy indicators of obesity and total body fat
Yusuf S, Hawken S, Ounpuu S et al. (2004) Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case–control study. *Lancet* 364(9438):937–52.	Experts	Assesses the effects of potentially modifiable risk factors associated with myocardial infarction across countries. Not relevant to review (INTERHEART).

1.3 Diet interventions

Study	Source	Reason for exclusion
Ahrens RA, Hower M, Best AM (2003) Effects of weight reduction interventions by community pharmacists. *Journal of the American Pharmacists Association* 43(5):583–9.	Searches	Not 52-week follow-up.
Allison DB, Gadbury G, Schwartz LG et al. (2003) A novel soy-based meal replacement formula for weight loss among obese individuals: a randomized controlled clinical trial. *European Journal of Clinical Nutrition* 57(4):514–22.	Searches	Not 52-week follow-up.
Arvidsson E, Viguerie N, Andersson I, Verdich C, Langin D, Arner P (2003) Effects of different hypocaloric diets on protein secretion from adipose tissue of obese women. *Diabetes* 53(8):1966–71.	Searches	Not 52-week follow-up.
Ash S, Reeves MM, Yeo S, Morrison G, Carey D, Capra S (2003) Effect of intensive dietetic interventions on weight and glycaemic control in overweight men with type II diabetes: a randomised trial. *International Journal of Obesity and Related Metabolic Disorders* 27(7):797–802.	Searches	Aimed to assess the effectiveness of intensive, innovative methods for implementing isoenergetic dietary prescriptions on weight management and glycaemic control in men with type 2 diabetes. Compared liquid meal replacements, prepared meals provided, self-prepared and selected meals, but all had the same balance of 50% of energy from carbohydrate and 30% from fat. Weight change for all men only, not by different intervention group.
Ashley JM, St Jeor ST, Perumean-Chaney S, Schrage J, Bovee V (2001) Meal replacements in weight intervention. *Obesity Research* 9(Suppl 4):S312–20.	Searches	Evaluates two comparable diets, but uses MR in one group. MR not clinical interventio
Bacon L, Keim NL, Van Loan MD et al. (2002) Evaluating a 'non-diet' wellness intervention for improvement of metabolic fitness, psychological well-being and eating and activity behaviors. *International Journal of Obesity and Related Metabolic Disorders* 26(6):854–65.	Searches	Compared behavioural therapy (BT), diet and physical activity (PA) with BT only. Added to PA review.
Barnard ND, Scialli AR, Turner-McGrievy G, Lanou AJ (2004) Acceptability of a low-fat vegan diet compares favorably to a step II diet in a randomized, controlled trial. *Journal of Cardiopulmonary Rehabilitation* 24(4):229–35.	PH cross-reference	Not 52-week follow-up.
Bouche C, Rizkalla SW, Luo J et al. (2002) Five-week, low-glycemic index diet decreases total fat mass and improves plasma lipid profile in moderately overweight nondiabetic men. *Diabetes Care* 25(5):822–8.	Searches	Not 52-week follow-up.

Study	Source	Reason for exclusion
Bray GA, Lovejoy JC, Most-Windhauser M et al. (2002) A 9-mo randomized clinical trial comparing fat-substituted and fat-reduced diets in healthy obese men: the Ole Study. *American Journal of Clinical Nutrition* 76(5):928–34.	Searches	Not 52-week follow-up.
Brehm BJ, Seeley RJ, Daniels SR, D'Alessio DA (2003) A randomized trial comparing a very low carbohydrate diet and a calorie-restricted low fat diet on body weight and cardiovascular risk factors in healthy women. *Journal of Clinical Endocrinology and Metabolism* 88(4):1617–23.	Searches	Not 52-week follow-up.
Clifton PM, Noakes M, Keogh JB (2004) Very low-fat (12%) and high monounsaturated fat (35%) diets do not differentially affect abdominal fat loss in overweight, nondiabetic women. *Journal of Nutrition* 134(7):1741–5.	Searches	Not 52-week follow-up.
Conceicao de Oliveira M, Sichieri R, Sanchez MA (2003) Weight loss associated with a daily intake of three apples or three pears among overweight women. *Nutrition* 19(3):253–6.	Searches	Not 52-week follow-up.
Cox KL, Burke V, Morton AR, Beilin LJ, Puddey IB (2003) The independent and combined effects of 16 weeks of vigorous exercise and energy restriction on body mass and composition in free-living overweight men – a randomized controlled trial. *Metabolism: Clinical and Experimental* 52(1):107–115.	Searches	Not 52-week follow-up.
Deibert P, Konig D, Schmidt-Trucksaess A et al. (2004) Weight loss without losing muscle mass in pre-obese and obese subjects induced by a high-soy-protein diet. *International Journal of Obesity and Related Metabolic Disorders* 28(10):1349–52.	Searches	Not 52-week follow-up.
Ditschuneit HH, Flechtner-Mors M (2001) Value of structured meals for weight management: risk factors and long-term weight maintenance. *Obesity Research* 9(Suppl 4):S284–9.	Searches	Not 52 week intervention. Only randomised for 3 months, then single arm trial.
Djuric Z, Lababidi S, Heilbrun LK, Depper JB, Poore KM, Uhley VE (2002) Effect of low-fat and/or low-energy diets on anthropometric measures in participants of the women's diet study. *Journal of the American College of Nutrition* 21(1):38–46.	Searches	Not 52-week follow-up
Dzator JA, Hendrie D, Burke V et al. (2004) A randomized trial of interactive group sessions achieved greater improvements in nutrition and physical activity at a tiny increase in cost. *Journal of Clinical Epidemiology* 57(6):610–19.	Searches	Change in weight (kg) not reported.

Study	Source	Reason for exclusion
Ebbeling CB, Leidig MM, Sinclair KB, Hangen JP, Ludwig DS (2003) A reduced-glycemic load diet in the treatment of adolescent obesity. *Archives of Pediatrics and Adolescent Medicine* 157(8):773–9.	Searches	Not adults – adolescents aged 13 to 21 years.
Fagerberg B, Wiklund O, Agewall S, Camejo G, Wikstrand RJ (1996) Multifactorial treatment of hypertensive men at high cardiovascular risk and low-density lipoprotein cholesterol affinity to human arterial proteoglycans. *European Journal of Clinical Investigation* 26(11):960–65.	Agency for Healthcare Research and Quality (AHRQ)	Intervention was multifaceted – included diet, use of lipid-lowering agents, smoking cessation programme. Excluded as smoking cessation could affect weight change (NHS Health Technology Assessment Project [HTA] exclusion).
Fernandez de la Puebla RA, Fuentes F, Perez-Martinez P et al. (2003) A reduction in dietary saturated fat decreases body fat content in overweight, hypercholesterolemic males. *Nutrition Metabolism and Cardiovascular Diseases* 13(5):273–7.	Searches	Not 52-week follow-up.
Gerhard GT, Ahmann A, Meeuws K, McMurry MP, Duell PB, Connor WE (2004) Effects of a low-fat diet compared with those of a high-monounsaturated fat diet on body weight, plasma lipids and lipoproteins, and glycemic control in type 2 diabetes. *American Journal of Clinical Nutrition* 80(3):668–73.	Searches	Not 52-week follow-up.
Hays NP, Starling RD, Liu X et al. (2004) Effects of an ad libitum low-fat, high-carbohydrate diet on body weight, body composition, and fat distribution in older men and women: a randomized controlled trial. *Archives of Internal Medicine* 164(2):210–7.	Searches	Not 52-week follow-up.
Jen KL, Djuric Z, DiLaura NM et al. (2004) Improvement of metabolism among obese breast cancer survivors in differing weight loss regimens. *Obesity Research* 12(2):306–312.	Searches	Compared Weight Watchers (diet and meetings), individual counselling (no details of dietary or other content), Weight Watchers and counselling, and control. Not diet alone.
Joseph LJ, Trappe TA, Farrell PA et al. (2001) Short-term moderate weight loss and resistance training do not affect insulin-stimulated glucose disposal in postmenopausal women. *Diabetes Care* 24 (11):1863–9.	Searches	Not 52-week follow-up.
Kirk SF, Harvey EL, McConnon A et al. (2003) A randomised trial of an Internet weight control resource: the UK Weight Control Trial [ISRCTN58621669].*[BMC Health Services Research* 3(1):19.	Searches	Study protocol – not results.
Knowler WC, Barrett-Connor E, Fowler SE (2002) Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *New England Journal of Medicine* 346(6):393–403.	Searches and Guidance Development Group (GDG)	DPP study excluded as aim not weight loss, and no direct comparison of lifestyle, but lifestyle plus placebo.

Study	Source	Reason for exclusion
Krotkiewski M (2001) Value of VLCD supplementation with medium chain triglycerides. *International Journal of Obesity and Related Metabolic Disorders* 25(9):1393–1400.	Searches	Not 52-week follow-up.
Landers P, Wolfe MM, Glore S, Guild R, Phillips L (2002) Effect of weight loss plans on body composition and diet duration. *Journal of the Oklahoma State Medical Association* 95(5):329–31.	Searches	Not 52-week follow-up.
Landry N, Bergeron N, Archer R et al. (2003) Whole-body fat oxidation rate and plasma triacylglycerol concentrations in men consuming an ad libitum high-carbohydrate or low-carbohydrate diet. *American Journal of Clinical Nutrition* 77(3):580–6.	Searches	Not 52-week follow-up.
Lantz H, Peltonen M, Agren L, Torgerson JS (2003) Intermittent versus on-demand use of a very low calorie diet: a randomized 2-year clinical trial. *Journal of Internal Medicine* 253(4):463–71.	Searches	Compared intermittent and regular use of short-term diets, not type of diet.
Lantz H, Peltonen M, Agren L, Torgerson JS (2003) A dietary and behavioural programme for the treatment of obesity. A 4-year clinical trial and a long-term posttreatment follow-up. *Journal of Internal Medicine* 254(3):272–9.	Searches	See included trial: Torgerson 1997.
Lean ME, Han TS, Prvan T, Richmond PR, Avenell A (1997) Weight loss with high and low carbohydrate 1200 kcal diets in free living women. *European Journal of Clinical Nutrition* 51(4):243–8.	CR Pirozzo	Not 12-month outcomes.
Leslie WS, Lean ME, Baillie HM, Hankey CR (2002) Weight management: a comparison of existing dietary approaches in a work-site setting. *International Journal of Obesity and Related Metabolic Disorders* 26(11):1469–75.	Searches	Not 52-week follow-up.
Lovejoy JC, Bray GA, Lefevre M et al. (2003) Consumption of a controlled low-fat diet containing olestra for 9 months improves health risk factors in conjunction with weight loss in obese men: The Ole Study. *International Journal of Obesity* 27(10):1242–9.	Searches	Not 52-week follow-up.
Meckling KA, O'Sullivan C, Saari D (2004) Comparison of a low-fat diet to a low-carbohydrate diet on weight loss, body composition, and risk factors for diabetes and cardiovascular disease in free-living, overweight men and women. *Journal of Clinical Endocrinology and Metabolism* 89(6):2717–23.	Searches	Not 52-week follow-up.

Study	Source	Reason for exclusion
Miyashita Y, Koide N, Ohtsuka M et al. (2004) Beneficial effect of low carbohydrate in low calorie diets on visceral fat reduction in type 2 diabetic patients with obesity. *Diabetes Research and Clinical Practice* 65:235–41.	Submitted evidence and searches	Not 52-week follow-up.
Nieman DC, Brock DW, Butterworth D, Utter AC, Nieman CC (2002) Reducing diet and/or exercise training decreases the lipid and lipoprotein risk factors of moderately obese women. *Journal of the American College of Nutrition* 21(4):344–50.	Searches	Not 52-week follow-up.
Noakes M, Foster PR, Keogh JB, Clifton PM (2004) Meal replacements are as effective as structured weight-loss diets for treating obesity in adults with features of metabolic syndrome. *Journal of Nutrition* 134(8):1894–9.	Searches	Not 52-week follow-up.
Parker B, Noakes M, Luscombe N, Clifton P (2002) Effect of a high-protein, high-monounsaturated fat weight loss diet on glycemic control and lipid levels in type 2 diabetes. *Diabetes Care* 25(3):425–30.	Searches	Not 52-week follow-up.
Pelkman CL, Fishell VK, Maddox DH et al. (2004) Effects of moderate-fat (from monounsaturated fat) and low-fat weight-loss diets on the serum lipid profile in overweight and obese men and women. *American Journal of Clinical Nutrition* 79(2):204–212.	Searches	Not 52-week follow-up.
Piers LS, Walker KZ, Stoney RM, Soares MJ, O'Dea K (2003) Substitution of saturated with monounsaturated fat in a 4-week diet affects body weight and composition of overweight and obese men. *British Journal of Nutrition* 90(3):717–27.	Searches	Not 52-week follow-up.
Poston WSC, Haddock CK, Pinkston MM, Pace P, Karakoc ND, Reeves RS, Foreyt JP. (2005) Weight loss with meal replacement and meal replacement plus snacks: a randomized trial. International Journal of Obesity 29 (9):1107-14.	Stakeholder	Not 52-week follow-up.
Poppitt SD, Keogh GF, Prentice AM et al. (2002) Long-term effects of ad libitum low-fat, high-carbohydrate diets on body weight and serum lipids in overweight subjects with metabolic syndrome. *American Journal of Clinical Nutrition* 75(1):11–20.	Searches	Not 52-week follow-up.
Ricci TA, Heymsfield SB, Pierson RN Jr, Stahl T, Chowdhury HA, Shapses SA (2001) Moderate energy restriction increases bone resorption in obese postmenopausal women. *American Journal of Clinical Nutrition* 73(2):347–52.	Searches	Not 52-week follow-up.

Study	Source	Reason for exclusion
Rolland-Cachera MF, Thibault H, Souberbielle JC et al. (2004) Massive obesity in adolescents: dietary interventions and behaviours associated with weight regain at 2 y follow-up. *International Journal of Obesity and Related Metabolic Disorders* 28(4):514–9.	Searches	Not adults – children aged 11 to 16 years
Ross R, Janssen I, Dawson J et al. (2004) Exercise-induced reduction in obesity and insulin resistance in women: a randomized controlled trial. *Obesity Research* 12(5):789–98.	Searches	Not 52-week follow-up.
Roy HJ, Most MM, Sparti A et al. (2002) Effect on body weight of replacing dietary fat with olestra for two or ten weeks in healthy men and women. *Journal of the American College of Nutrition* 21(3):259–67.	Searches	Not 52-week follow-up.
Saris WHM (2001) Very low calorie diets and sustained weight loss. *Obesity Research* 9(4):	Searches	Narrative review.
Sondike SB, Copperman N, Jacobson MS (2003) Effects of a low-carbohydrate diet on weight loss and cardiovascular risk factor in overweight adolescents. *Journal of Pediatrics* 142(3):253–8.	Searches	Not adults – children aged 12 to 18 years.
St Onge MP, Bourque C, Jones PJ, Ross R, Parsons WE (2003) Medium- versus long-chain triglycerides for 27 days increases fat oxidation and energy expenditure without resulting in changes in body composition in overweight women. *International Journal of Obesity and Related Metabolic Disorders* 27(1):95–102.	Searches	Not 52-week follow-up.
St Onge MP, Jones PJ (2003) Greater rise in fat oxidation with medium-chain triglyceride consumption relative to long-chain triglyceride is associated with lower initial body weight and greater loss of subcutaneous adipose tissue. *International Journal of Obesity and Related Metabolic Disorders* 27(12):1565–71.	Searches	Not 52-week follow-up.
St Onge MP, Ross R, Parsons WD, Jones PJ (2003) Medium-chain triglycerides increase energy expenditure and decrease adiposity in overweight men. *Obesity Research* 11(3):395–402.	Searches	Not 52 week follow-up
Stamets K, Taylor DS, Kunselman A, Demers LM, Pelkman CL, Legro RS (2004) A randomized trial of the effects of two types of short-term hypocaloric diets on weight loss in women with polycystic ovary syndrome. *Fertility and Sterility* 81(3):630–37.	Searches	Not 52-week follow-up.

Study	Source	Reason for exclusion
Taylor FC, Irons LJ, Finn P, Summerbell CD (2003) Controlled clinical trial of two weight reducing diets in a NHS hospital dietetic outpatient clinic – a pilot study [erratum appears in *Journal of Human Nutrition and Dietetics* (2003) 16(3):215]. *Journal of Human Nutrition and Dietetics* 16(2):85–87.	Searches	Not 52-week follow-up.
Tsai AG, Wadden TA (2005) Systematic review: an evaluation of major commercial weight loss programs in the United States. *Annals of Internal Medicine* 142(1):56–66.	Searches	Systematic review of commercial weight loss programmes available and evaluated only in the USA.
Volek JS, Sharman MJ, Love DM (200) Body composition and hormonal responses to a carbohydrate-restricted diet. *Metabolism: Clinical and Experimental* 51(7):864–70.	Searches	Not overweight participants – normal weight men only (not defined).
Volek JS, Sharman MJ, Gomez AL et al. (2004) Comparison of a very low-carbohydrate and low-fat diet on fasting lipids, LDL subclasses, insulin resistance, and postprandial lipemic responses in overweight women. *Journal of the American College of Nutrition* 23(2):177–84.	Submitted evidence	Not 52-week follow-up.
West JA, de Looy AE (2001) Weight loss in overweight subjects following low-sucrose or sucrose-containing diets. *International Journal of Obesity and Related Metabolic Disorders* 25(8):1122–8.	Searches	Not 52 week follow-up.
Wien MA, Sabate JM, Ikle DN, Cole SE, Kandeel FR. Almonds vs complex carbohydrates in a weight reduction program [erratum appears in *International Journal of Obesity and Related Metabolic Disorders* (2004) 28(3):459]. *International Journal of Obesity and Related Metabolic Disorders* 27(11):1365–72.	Searches	Not 52 week follow-up
Womble LG, Wadden TA, McGuckin BG, Sargent SL, Rothman RA, Krauthamer-Ewing ES (2004) A randomized controlled trial of a commercial internet weight loss program. *Obesity Research* 12(6):1011–8.	Searches	Compared low-energy diets but intervention arm had Internet support – not clinical setting.
Yancy WS Jr, Olsen MK, Guyton JR, Bakst RP, Westman EC (2004) A low-carbohydrate, ketogenic diet versus a low-fat diet to treat obesity and hyperlipidemia: a randomized, controlled trial. *Annals of Internal Medicine* 140(10):769–77.	Searches	Not 52-week follow-up.
Yip I, Go VL, DeShields S et al. (2001) Liquid meal replacements and glycemic control in obese type 2 diabetes patients. *Obesity Research* 9(Suppl 4):S341–7.	Searches	Not 52-week follow-up.

1.4 Behaviour therapy (with or without diet)

Study	Source	Reason for exclusion
Bacon L, Keim NL, Van Loan MD et al. (2002) Evaluating a 'non-diet' wellness intervention for improvement of metabolic fitness, psychological well-being and eating and activity behaviors. *International Journal of Obesity and Related Metabolic Disorders* 26 (6):854–65.	Searches	Compared BT, diet and PA with BT only. In PA review.
Burke V, Giangiulio N, Gillam HF, Beilin LJ, Houghton S (2003) Physical activity and nutrition programs for couples: a randomized controlled trial. *Journal of Clinical Epidemiology* 5(5):421–32.	Searches	Weight (in kg) not reported.
Dalle GR, Todesco T, Banderali A, Guardini S (2004) Cognitive-behavioural guided self-help for obesity: a preliminary research. *Eating and Weight Disorders* 9(1):69–76.	Searches	Not 52-week follow-up.
Dallow CB, Anderson J (2003) Using self-efficacy and a transtheoretical model to develop a physical activity intervention for obese women. *American Journal of Health Promotion* 17(6):373–81.	Searches	Not 52-week follow-up.
Dzator JA, Hendrie D, Burke V et al. (2004) A randomized trial of interactive group sessions achieved greater improvements in nutrition and physical activity at a tiny increase in cost. *Journal of Clinical Epidemiology* 57(6):610–19.	Searches	Weight (in kg) not reported.
Fagerberg B, Wiklund O, Agewall S, Camejo G, Wikstrand RJ (1996) Multifactorial treatment of hypertensive men at high cardiovascular risk and low-density lipoprotein cholesterol affinity to human arterial proteoglycans. *European Journal of Clinical Investigation* 26(11):960–65.	AHRQ	Intervention included smoking cessation, which may have had an effect on weight change.
Gorin AA, Le Grange D, Stone AA (2003) Effectiveness of spouse involvement in cognitive behavioral therapy for binge eating disorder. *International Journal of Eating Disorders* 33(4):421–33.	Searches	Participants were women with binge eating disorder.
Harvey-Berino J, Pintauro SJ, Gold EC (2002) The feasibility of using Internet support for the maintenance of weight loss. *Behavior Modification* 26(1):103–116.	Searches	Compared diet, BT and PA with different levels of support for maintenance – in non-clinical settings review.
Harvey-Berino J, Pintauro S, Buzzell P, Gold EC (2004) Effect of internet support on the long-term maintenance of weight loss. *Obesity Research* 12 (2):320–29.	Searches	Compared diet, BT and PA with different levels of support for maintenance – in non-clinical settings review.
Heshka S, Anderson JW, Atkinson RL et al. (2004) Weight loss with self-help compared with a structured commercial program: a randomized trial. *Journal of the American Medical Association* 289(14):1792–8.	Searches	Compared self-help with a commercial programme. Not clinical setting.
Hoeger KM, Kochman L, Wixom N, Craig K, Miller RK, Guzick DS (2004) A randomized, 48-week, placebo-controlled trial of intensive lifestyle modification and/or metformin therapy in overweight women with polycystic ovary syndrome: a pilot study. *Fertility and Sterility* 82(2):421–9.	Searches	Compared diet, PA and possible BT with metformin or placebo, and placebo only.
Jeffery RW, Wing RR, Sherwood NE, Tate DF (2003) Physical activity and weight loss: does prescribing higher physical activity goals improve outcome? *American Journal of Clinical Nutrition* 78(4):684–9.	Searches	Compared different levels of PA and BT.

Study	Source	Reason for exclusion
Jeffery RW, Sherwood NE, Brelje K et al. (2003) Mail and phone interventions for weight loss in a managed-care setting: Weigh-To-Be one-year outcomes. *International Journal of Obesity and Related Metabolic Disorders* 27(12):1584–92.	Searches	Compared mail or telephone delivery of intervention – non-clinical setting.
Jenkins I, Djuric Z, Darga L, DiLaura NM, Magnan M, Hryniuk WM (2003) Relationship of psychiatric diagnosis and weight loss maintenance in obese breast cancer survivors. *Obesity Research* 11(11):1369–75.	Searches	Individualised counselling – not BT.
Kajaste S, Brander PE, Telakivi T, Partinen M, Mustajoki P (2004) A cognitive-behavioral weight reduction program in the treatment of obstructive sleep apnea syndrome with or without initial nasal CPAP: a randomized study. *Sleep Medicine* 5(2):125–31.	Searches	Comparison of nasal continuous positive airway pressure (CPAP), not weight loss intervention.
Keele-Smith R, Leon T (2003) Evaluation of individually tailored interventions on exercise adherence. *Western Journal of Nursing Research* 25(6):623–40, 2003.	Searches	Not 52-week follow-up.
Kenardy J, Mensch M, Bowen K, Green B, Walton J (2002) Group therapy for binge eating in Type 2 diabetes: a randomized trial. *Diabetic Medicine* 19(3):234–9.	Rubak	Not 52-week follow-up. Participants with binge eating disorder.
Kerr D, Miles P (2004) The 12 month findings of using a commercial very low calorie diet (VLCD) weight-loss programme for patients with Type 2 diabetes who have unsuccessfully reduced weight despite following all first line interventions.	Submitted evidence	No published papers (checked April 2005).
Kirk SF, Harvey EL, McConnon A et al. (2003) A randomised trial of an Internet weight control resource: the UK Weight Control Trial [ISRCTN58621669]. *BMC Health Services Research* 3(1):19.	Searches	Trial protocol, not results.
Knowler WC, Barrett-Connor E, Fowler SE et al. (2002) Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *New England Journal of Medicine* 346(6):393–403.	AHRQ, ICSI	Compared diet and BT and PA with metformin or placebo
Krummel DA, Semmens E, Boury J, Gordon PM, Larkin KT (2004) Stages of change for weight management in postpartum women. *Journal of the American Dietetic Association* 104(7):1102–108.	Searches	Not results of the randomised controlled trial (RCT):
Lindstrom J, Louheranta A, Mannelin M et al. (2003) The Finnish Diabetes Prevention Study (DPS): Lifestyle intervention and 3-year results on diet and physical activity. *Diabetes Care* 26(12):3230–6.	Searches	In combined review – Finnish Diabetes Prevention Study.
Littrell KH, Hilligoss NM, Kirshner CD, Petty RG, Johnson CG (2003) The effects of an educational intervention on antipsychotic-induced weight gain. *Journal of Nursing Scholarship* 35(3):237–41.	Searches	Not BMI ≥28 kg/m^2.
Mayer-Davis EJ, D'Antonio AM, Smith SM et al. (2004) Pounds off with empowerment (POWER): a clinical trial of weight management strategies for black and white adults with diabetes who live in medically underserved rural communities. *American Journal of Public Health* 94(10):1736–42.	Searches	Compared diet, PA and BT using two forms of delivery with control (information).
Moore H, Summerbell CD, Greenwood DC et al. (2003) Improving management of obesity in primary care: cluster randomised trial. *British Medical Journal* 327(7423):1085.	Searches	Intervention aimed at healthcare professionals.

Study	Source	Reason for exclusion
O'Toole ML, Sawicki MA, Artal R (2003) Structured diet and physical activity prevent postpartum weight retention. *Journal of Women's Health* 12(10):991–8.	Searches	Compares structured individualised programme on diet and PA with group sessions, and self-directed weight loss (information with no additional contact).
Oldroyd JC, Unwin NC, White M, Imrie K, Mathers JC, Alberti KG (2001) Randomised controlled trial evaluating the effectiveness of behavioural interventions to modify cardiovascular risk factors in men and women with impaired glucose tolerance: outcomes at 6 months. *Diabetes Research and Clinical Practice* 52(1):29–43.	Shaw CR	Not 52-week follow-up.
Painot D, Jotterand S, Kammer A, Fossati M, Golay A (2001) Simultaneous nutritional cognitive–behavioural therapy in obese patients. *Patient Education and Counseling* 42(1):47–52.	Shaw CR	Not 52-week follow-up.
Park TL, Perri MG, Rodrigue JR (2003) Minimal intervention programs for weight loss in heart transplant candidates: a preliminary examination. *Progress in Transplantation* 13 (4):284–8.	Searches	Not 52-week follow-up.
Raynor HA, Jeffery RW, Tate DF, Wing RR (2004) Relationship between changes in food group variety, dietary intake, and weight during obesity treatment. *International Journal of Obesity and Related Metabolic Disorders* 28(6):813–20.	Searches	Compared BT and diet with different levels PA. In PA review.
Read A, Ramwell H, Storer H, Webber J (2004) A primary care intervention programme for obesity and coronary heart disease risk factor reduction. *British Journal of General Practice* 54(501):272–8.	PH *cross*-reference	Not RCT.
Renjilian DA, Perri MG, Nezu AM, McKelvey WF, Shermer RL, Anton SD (2001) Individual versus group therapy for obesity: effects of matching participants to their treatment preferences. *Journal of Consulting and Clinical Psychology* 69(4):717–21.	Searches	Not 52-week follow-up.
Sartorio A, Lafortuna CL, Marinone PG, Tavani A, La Vecchia C, Bosetti C (2003) Short-term effects of two integrated, non-pharmacological body weight reduction programs on coronary heart disease risk factors in young obese patients. *Diabetes, Nutrition and Metabolism* 16(4):262–5.	Searches	Not 52-week follow-up.
Simkin-Silverman LR, Wing RR, Boraz MA, Kuller LH (2003) Lifestyle intervention can prevent weight gain during menopause: results from a 5-year randomized clinical trial. *Annals of Behavioral Medicine* 26(3):212–20.	Searches	Earlier publications from the same trial excluded from the HTA. Not BMI ≥28 kg/m^2.
Tate DF, Jackvony EH, Wing RR (2003) Effects of Internet behavioral counseling on weight loss in adults at risk for type 2 diabetes: a randomized trial. *Journal of the American Medical Association* 289(14):1833–6.	Searches	Compared diet, BT and PA with different levels of support – basic Internet vs. e-counselling. Non-clinical setting
Womble LG, Wadden TA, McGuckin BG, Sargent SL, Rothman RA, Krauthamer-Ewing ES (2004) A randomized controlled trial of a commercial internet weight loss program. *Obesity Research* 12(6):1011–18.	Searches	Compared diet, BT and PA with different levels of support – manual vs. Internet site. Non-clinical setting.

Study	Source	Reason for exclusion
Yeh MC, Rodriguez E, Nawaz H, Gonzalez M, Nakamoto D, Katz DL (2003) Technical skills for weight loss: 2-y follow-up results of a randomized trial. *International Journal of Obesity and Related Metabolic Disorders* 27(12):1500–506.	Searches	Compared skills-based BT therapy with BT counselling – no details of techniques used in counselling – excluded.
Yu CM, Li LS, Ho HH, Lau CP (2003) Long-term changes in exercise capacity, quality of life, body anthropometry, and lipid profiles after a cardiac rehabilitation program in obese patients with coronary heart disease. *American Journal of Cardiology* 91(3):321–5.	Searches	Not BMI ≥28 kg/m^2.

1.5 Physical activity (alone or in combination with diet or behaviour therapy)

Study	Source	Reason for exclusion
Aggel-Leijssen DP, Saris WH, Hul GB, Van Baak MA (2001) Short-term effects of weight loss with or without low-intensity exercise training on fat metabolism in obese men. *American Journal of Clinical Nutrition* 73(3):523–31.	Shaw CR	Not 52-week follow-up.
Aggel-Leijssen DP, Saris WH, Homan M, Van Baak MA (2001) The effect of exercise training on beta-adrenergic stimulation of fat metabolism in obese men. *International Journal of Obesity and Related Metabolic Disorders* 25(1):16–23.	Shaw CR	Not 52 week follow-up.
Aggel-Leijssen DP, Saris WH, Wagenmakers AJ, Senden JM, Van Baak MA (2002) Effect of exercise training at different intensities on fat metabolism of obese men. *Journal of Applied Physiology* 92(3):1300–309.	Searches	Not 52-week follow-up.
Allen JK (1996) Coronary risk factor modification in women after coronary artery bypass surgery. *Nursing Research* 45(5):260–65.	AHRQ	Intervention included smoking cessation, which may have had an effect on weight change.
Andersen RE, Franckowiak SC, Bartlett SJ, Fontaine KR (2002) Physiologic changes after diet combined with structured aerobic exercise or lifestyle activity. *Metabolism: Clinical and Experimental* 51(12):1528–33.	Searches (PH cross-reference)	Not 52-week follow-up.
Balkestein EJ, Aggel-Leijssen DP, Van Baak MA, Struijker-Boudier HA, Van Bortel LM (1999) The effect of weight loss with or without exercise training on large artery compliance in healthy obese men. *Journal of Hypertension* 17(12 Pt 2):1831–5.	Shaw CR	Not 52-week follow-up.
Baughman K, Logue E, Sutton K, Capers C, Jarjoura D, Smucker W (2003) Biopsychosocial characteristics of overweight and obese primary care patients: do psychosocial and behavior factors mediate sociodemographic effects? *Preventive Medicine* 37(2):129–37.	Searches	Not RCT. Checked for published RCT results.

Study	Source	Reason for exclusion
Brach JS, VanSwearingen JM, FitzGerald SJ, Storti KL, Kriska AM (2004) The relationship among physical activity, obesity, and physical function in community-dwelling older women. *Preventive Medicine* 39(1):74–80.	Searches	Reported 14-year follow-up from RCT Results not reported by group, but for whole cohort only.
Brankston GN, Mitchell BF, Ryan EA, Okun NB (2004) Resistance exercise decreases the need for insulin in overweight women with gestational diabetes mellitus. *American Journal of Obstetrics and Gynecology* 190(1):188–93.	Searches	Not 52-week follow-up.
Burke V, Giangiulio N, Gillam HF, Beilin LJ, Houghton S (2003) Physical activity and nutrition programs for couples: a randomized controlled trial. *Journal of Clinical Epidemiology* 56(5):421–32.	Searches	Change in weight (kg) not reported.
Cox KL, Burke V, Morton AR, Beilin LJ, Puddey IB (2003) The independent and combined effects of 16 weeks of vigorous exercise and energy restriction on body mass and composition in free-living overweight men – a randomized controlled trial. *Metabolism: Clinical and Experimental* 52(1):107–115.	Shaw CR	Weight loss not reported.
Cox KL, Burke V, Morton AR, Beilin LJ, Puddey IB (2004) Independent and additive effects of energy restriction and exercise on glucose and insulin concentrations in sedentary overweight men. *American Journal of Clinical Nutrition* 80(2):308–316.	Searches	Not 52-week follow-up.
Cox KL, Puddey IB, Morton AR, Burke V, Beilin LJ, McAleer M (1996) Exercise and weight control in sedentary overweight men: effects on clinic and ambulatory blood pressure. *Journal of Hypertension* 14(6):779–90.	Searches	Not 52-week follow-up.
Deibert P, Konig D, Schmidt-Trucksaess A et al. (2004) Weight loss without losing muscle mass in pre-obese and obese subjects induced by a high-soy-protein diet. *International Journal of Obesity and Related Metabolic Disorders* 28(10):1349–52.	Searches	Not 52-week follow-up.
Dunn AL, Garcia ME, Marcus BH, Kampert JB, Kohl HW, Blair SN (1998) Six-month physical activity and fitness changes in Project Active, a randomized trial. *Medicine and Science in Sports and Exercise* 30(7):1076–83.	Morgan	Not 52-week follow-up. No weight outcomes.
Dunn AL, Marcus BH, Kampert JB, Garcia ME, Kohl HW III, Blair SN (1999) Comparison of lifestyle and structured interventions to increase physical activity and cardiorespiratory fitness: a randomized trial. *Journal of the American Medical Association* 281(4):327–34.	Searches	Not required to be overweight.
Dzator JA, Hendrie D, Burke V et al. (2004) A randomized trial of interactive group sessions achieved greater improvements in nutrition and physical activity at a tiny increase in cost. *Journal of Clinical Epidemiology* 57(6):610–19.	Searches	Change in weight (kg) not reported.
Esposito K, Giugliano F, Di Palo C et al. (2004) Effect of lifestyle changes on erectile dysfunction in obese men: a randomized controlled trial. *Journal of the American Medical Association* 29 (24):2978–84.	Searches	No details of level of PA.
Esposito K, Pontillo A, Di Palo C et al. (2003) Effect of weight loss and lifestyle changes on vascular inflammatory markers in obese women: a randomized trial. *Journal of the American Medical Association* 289(14):1799–1804.	Searches	No details of level of PA.

Study	Source	Reason for exclusion
Fagerberg B, Wiklund O, Agewall S, Camejo G, Wikstrand RJ (1996) Multifactorial treatment of hypertensive men at high cardiovascular risk and low-density lipoprotein cholesterol affinity to human arterial proteoglycans. *European Journal of Clinical Investigation* 26(11):960–65.	AHRQ	Intervention included smoking cessation, which may have had an effect on weight change.
Fox KR (2004) Impact assessment of Body Magic, Slimming World's physical activity promotion campaign.	Submitted evidence	Survey, not RCT.
Gillett PA & Eisenman PA (1987) The effect of intensity controlled aerobic dance exercise on aerobic capacity of middle-aged, overweight women. *Research in Nursing and Health* 10(6):383–90.	Searches	Not 52-week follow-up.
Gordon NF, Scott CB, Levine BD (1997) Comparison of single versus multiple lifestyle interventions: are the antihypertensive effects of exercise training and diet-induced weight loss additive? *American Journal of Cardiology* 79(6):763–7.	Shaw CR	Not 52-week follow-up.
Grant S, Todd K, Aitchison TC, Kelly P, Stoddart D (2004) The effects of a 12-week group exercise programme on physiological and psychological variables and function in overweight women. *Public Health* 11(1):31–42.	Searches	Not 52-week follow-up.
Harland J, White M, Drinkwater C, Chinn D, Farr L, Howel D (1999) The Newcastle exercise project: a randomised controlled trial of methods to promote physical activity in primary care. *British Medical Journal* 319 (7213):828–32.	Morgan	No details of baseline BMI status. Participants did not have to be overweight.
Hays NP, Starling RD, Liu X et al. (2004) Effects of an ad libitum low-fat, high-carbohydrate diet on body weight, body composition, and fat distribution in older men and women: a randomized controlled trial. *Archives of Internal Medicine* 164(2):210–17.	Searches	Not 52 week follow-up
Hellenius ML, de Faire U, Berglund B, Hamsten A, Krakau I (1993) Diet and exercise are equally effective in reducing risk for cardiovascular disease. Results of a randomized controlled study in men with slightly to moderately raised cardiovascular risk factors. *Atherosclerosis* 103(1):81–91.	Shaw CR	Not 52-week follow-up.
Heshka S, Anderson JW, Atkinson RL et al. (2003) Weight loss with self-help compared with a structured commercial program: a randomized trial. *Journal of the American Medical Association* 289(14):1792–8.	Searches	Non-clinical setting
Jakicic JM, Wing RR, Butler BA, Robertson RJ (1995) Prescribing exercise in multiple short bouts versus one continuous bout: effects on adherence, cardiorespiratory fitness, and weight loss in overweight women. *International Journal of Obesity and Related Metabolic Disorders* 19(12):893–901.	Searches	Not 52-week follow-up.
Janssen I, Fortier A, Hudson R, Ross R (2002) Effects of an energy-restrictive diet with or without exercise on abdominal fat, intermuscular fat, and metabolic risk factors in obese women. *Diabetes Care* 25(3):431–8.	Shaw CR	Not 52-week follow-up.
Jen KL, Djuric Z, DiLaura NM (2004) Improvement of metabolism among obese breast cancer survivors in differing weight loss regimens. *Obesity Research* 12(2):306–312.	Searches	No detail of PA.
Kaplan RM, Hartwell SL, Wilson DK, Wallace JP (1987) Effects of diet and exercise interventions on control and quality of life in non-insulin-dependent diabetes mellitus. *Journal of General Internal Medicine* 2(4):220–8.	Avenell HTA	Not overweight or obese requirement

Study	Source	Reason for exclusion
Keele-Smith R, Leon T (2003) Evaluation of individually tailored interventions on exercise adherence. *Western Journal of Nursing Research* 25(6):623–40.	Searches	Not 52-week follow-up
Kiernan M, King AC, Stefanick ML, Killen JD (2001) Men gain additional psychological benefits by adding exercise to a weight-loss program. *Obesity Research* 9(12):770–77.	Shaw CR	Part of Wood 1991 trial.
Knowler WC, Barrett-Connor E, Fowler SE et al. (2002) Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *New England Journal of Medicine* 346(6):393–403.	Shaw CR	Compared lifestyle intervention with standard BT and placebo or standard BT and metformin.
Kostis JB, Wilson AC, Shindler DM, Cosgrove NM, Lacy CR (2002) Persistence of normotension after discontinuation of lifestyle intervention in the trial of TONE Trial of Nonpharmacologic Interventions in the Elderly. *American Journal of Hypertension* 15(8):732–4.	AHRQ	Part of the TONE study included in the HTA diet, BT, PA vs. control review.
Krummel DA, Semmens E, Boury J, Gordon PM, Larkin KT (2004) Stages of change for weight management in postpartum women. *Journal of the American Dietetic Association* 104(7):1102–108.	Searches	Not results of the RCT. Not published yet (April 2005)
Kumanyika SK, Espeland MA, Bahnson JL et al. (2002). Ethnic comparison of weight loss in the Trial of Nonpharmacologic Interventions in the Elderly. *Obesity Research* 10(2):96–106.	AHRQ	Part of the TONE study included in the HTA diet, BT, PA vs. control review.
Laitinen JH, Ahola IE, Sarkkinen ES, Winberg RL, Harmaakorpi-Iivonen PA, Uusitupa MI (1993) Impact of intensified dietary therapy on energy and nutrient intakes and fatty acid composition of serum lipids in patients with recently diagnosed non-insulin-dependent diabetes mellitus. *Journal of the American Dietetic Association* 93(3):276–83.	HTA	No requirement for participants to be overweight.
Lamb SE, Bartlett HP, Ashley A, Bird W (2002) Can lay-led walking programmes increase physical activity in middle aged adults? A randomised controlled trial. *Journal of Epidemiology and Community Health* 56(4):246–52.	Morgan	Not BMI ≥28 kg/m^2.
Lejeune MP, Aggel-Leijssen DP, Van Baak MA, Westerterp-Plantenga MS (2003) Effects of dietary restraint vs exercise during weight maintenance in obese men. *European Journal of Clinical Nutrition* 57(10):1338–44.	Searches	Results shown graphically only. Also, most analysis not by group.
Leutholtz BC, Keyser RE, Heusner WW, Wendt VE, Rosen L (1995) Exercise training and severe caloric restriction: effect on lean body mass in the obese. *Archives of Physical Medicine and Rehabilitation* 76(1):65–70.	Searches	Not 52-week follow-up.
JM Manning, CR Dooly-Manning, K White et al. (1991) Effects of a resistive training program on lipoprotein – lipid levels in obese women. *Medicine and Science in Sports and Exercise* 23(11):1222–6.	Shaw CR	Not 52-week follow-up.
Marcus BH, Stanton AL (1993) Evaluation of relapse prevention and reinforcement interventions to promote exercise adherence in sedentary females. *Research Quarterly for Exercise and Sport* 64(4):447–52.	Morgan	Not 52-week follow-up.
McAuley E, Courneya KS, Rudolph DL, Lox CL (1994) Enhancing exercise adherence in middle-aged males and females. *Preventive Medicine* 23(4):498–506.	Morgan	Not 52-week follow-up.

Study	Source	Reason for exclusion
Melanson K, Gootman J, Myrdal A, Kline G, Rippe JM (2003) Weight loss and total lipid profile changes in overweight women consuming beef or chicken as the primary protein source. *Nutrition* 19(5):409–414.	Searches	Not 52-week follow-up.
Munsch S, Biedert E, Keller U (2003) Evaluation of a lifestyle change programme for the treatment of obesity in general practice. *Swiss Medical Weekly* 133(9/10):148–54.	Searches	No details of PA reported – other than increased
Neumark-Sztainer D, Kaufmann NA, Berry EM (1995) Physical activity within a community-based weight control program: program evaluation and predictors of success. *Public Health Reviews* 23(3):237–51.	Shaw CR	Excluded from HTA as not 52-week follow-up.
Nieman DC, Nehlsen-Cannarella SL, Henson DA et al. (1998) Immune response to exercise training and/or energy restriction in obese women. *Medicine and Science in Sports and Exercise* 30(5):679–86	Shaw CR	Not 52-week follow-up.
O'Toole ML, Sawicki MA, Artal R (2003) Structured diet and physical activity prevent postpartum weight retention. *Journal of Women's Health* 12(10):991–8.	Searches	Participants were women in the first year post-partum.
Okura T, Nakata Y, Tanaka K (2003) Effects of exercise intensity on physical fitness and risk factors for coronary heart disease. *Obesity Research* 11(9):1131–9.	Searches	Not 52-week follow-up.
Phenix A (1990) *A one year follow-up of a weight loss study comparing behavioural techniques, nutrition information and exercise*. PhD thesis: California School of Professional Psychology, Fresno.	Avenell HTA	Unpublished PhD thesis only.
Pinto BM, Friedman R, Marcus BH, Kelley H, Tennstedt S, Gillman MW (2002) Effects of a computer-based, telephone-counseling system on physical activity. *American Journal of Preventive Medicine* 23(2):113–20.	PH cross-reference	Not 52-week follow-up.
Raz I, Hauser E, Bursztyn M (1994) Moderate exercise improves glucose metabolism in uncontrolled elderly patients with non-insulin-dependent diabetes mellitus. *Israeli Journal of Medical Science* 30(10):766–70.	Shaw CR	Not 52-week follow-up.
Robertson MC, Devlin N, Gardner MM, Campbell AJ (2001) Effectiveness and economic evaluation of a nurse delivered home exercise programme to prevent falls. 1: Randomised controlled trial. *British Medical Journal* 322(7288):697–701. Robertson MC, Gardner MM, Devlin N, McGee R, Campbell AJ (2001) Effectiveness and economic evaluation of a nurse delivered home exercise programme to prevent falls. 2: Controlled trial in multiple centres. *British Medical Journal* 322(7288):701–704.	Morgan	No weight outcomes.
Ross R, Rissanen J, Pedwell H, Clifford J, Shragge P (1996) Influence of diet and exercise on skeletal muscle and visceral adipose tissue in men. *Journal of Applied Physiology* 81(6):2445–55.	Shaw CR	Not 52-week follow-up.
Ross R, Janssen I, Dawson J et al. (2004) Exercise-induced reduction in obesity and insulin resistance in women: a randomized controlled trial. *Obesity Research* 12(5):789–98.	Searches	Not 52-week follow-up.
Sartorio A, Lafortuna CL, Marinone PG, Tavani A, La Vecchia C, Bosetti C (2003) Short-term effects of two integrated, non-pharmacological body weight reduction programs on coronary heart disease risk factors in young obese patients. *Diabetes, Nutrition and Metabolism* 16(4):262–5.	Searches	Not 52-week follow-up.

Study	Source	Reason for exclusion
Sartorio A, Lafortuna CL, Massarini M, Galvani C (2003) Effects of different training protocols on exercise performance during a short-term body weight reduction programme in severely obese patients. *Eating and Weight Disorders* 8(1):36–43.	Searches	Not 52-week follow-up.
Sartorio A, Maffiuletti NA, Agosti F, Marinone PG, Ottolini S, Lafortuna CL (2004) Body mass reduction markedly improves muscle performance and body composition in obese females aged 61–75 years: comparison between the effects exerted by energy-restricted diet plus moderate aerobic-strength training alone or associated with rGH or nandrolone undecanoate. *European Journal of Endocrinology* 150(4):511–15.	Searches	Not 52-week follow-up.
Schmitz KH, Jensen MD, Kugler KC, Jeffery RW, Leon AS (2003) Strength training for obesity prevention in midlife women. *International Journal of Obesity and Related Metabolic Disorders* 27(3):326–33.	Searches	Not 52-week follow-up.
Schwartz RS (1987) The independent effects of dietary weight loss and aerobic training on high density lipoproteins and apolipoprotein A-I concentrations in obese men. *Metabolism: Clinical and Experimental* 36(2):165–71.	Shaw CR	Not 52-week follow-up.
Schwartz RS, Jaeger LF, Veith RC, Lakshminarayan S (1990) The effect of diet or exercise on plasma norepinephrine kinetics in moderately obese young men. *International Journal of Obesity* 14(1):1–11.	Shaw CR	Not 52-week follow-up.
Simkin-Silverman LR, Wing RR, Boraz MA, Kuller LH (2003) Lifestyle intervention can prevent weight gain during menopause: results from a 5-year randomized clinical trial. *Annals of Behavioral Medicine* 26(3):212–20.	Searches	Not BMI ≥28 kg/m^2. Mean BMI was 25 kg/m^2.
Simons-Morton DG (2001) Effects of physical activity counseling in primary care: The activity counseling trial: A randomized controlled trial. *Journal of the American Medical Association* 286(6): 677–87.	Hillsdon CR	No weight outcomes.
Slentz CA, Duscha BD, Johnson JL et al. (2004) Effects of the amount of exercise on body weight, body composition, and measures of central obesity: STRRIDE – a randomized controlled study. *Archives of Internal Medicine* 164(1):31–9.	Searches	Not 52-week follow-up.
Stefanick ML, Mackey S, Sheehan M, Ellsworth N, Haskell WL, Wood PD (1998) Effects of diet and exercise in men and postmenopausal women with low levels of HDL cholesterol and high levels of LDL cholesterol. *New England Journal of Medicine* 339(1):12–20.	Shaw CR	Excluded from HTA as BMI not ≥28 kg/m^2.
Stensel DJ, Brooke-Wavell K, Hardman AE, Jones PR, Norgan NG (1994) The influence of a 1-year programme of brisk walking on endurance fitness and body composition in previously sedentary men aged 42–59 years. *European Journal of Applied Physiology and Occupational Physiology* 68(6):531–7.	Shaw CR	Not BMI ≥28 kg/m^2.
Stevens W, Hillsdon M, Thorogood M, McArdle D (1998) Cost-effectiveness of a primary care based physical activity intervention in 45–74 year old men and women: a randomised controlled trial. *British Journal of Sports Medicine* 32(3):236–41.	Morgan	No weight outcomes. Not 52-week follow-up.

Study	Source	Reason for exclusion
Svendsen OL, Hassager C, Christiansen C (1993) Effect of an energy-restrictive diet, with or without exercise, on lean tissue mass, resting metabolic rate, cardiovascular risk factors, and bone in overweight postmenopausal women. *American Journal of Medicine* 95(2):131–40.	Shaw CR	Not 52-week follow-up.
Tate DF, Jackvony EH, Wing RR (2003) Effects of Internet behavioral counseling on weight loss in adults at risk for type 2 diabetes: a randomized trial. *Journal of the American Medical Association* 289(14):1833–6.	Searches	Compared diet, BT and PA with different levels of support – non-clinical setting.
Taylor AH, Doust J, Webborn N (1998) Randomised controlled trial to examine the effects of a GP exercise referral programme in Hailsham, East Sussex, on modifiable coronary heart disease risk factors. *Journal of Epidemiology Community Health* 52(9):595–601.	Morgan	No weight outcomes (BMI only, skinfold thicknesses). Not 52-week follow-up. Not overweight only.
Thong FS, Hudson R, Ross R, Janssen I, Graham TE (2000) Plasma leptin in moderately obese men: independent effects of weight loss and aerobic exercise. *American Journal of Physiology* 279(2):E307–313.	Shaw CR	Not 52-week follow-up.
Utter AC, Whitcomb DC, Nieman DC, Butterworth DE, Vermillion SS (2000) Effects of exercise training on gallbladder function in an obese female population. *Medicine and Science in Sports and Exercise* 32(1):41–5.	Shaw CR	Not 52-week follow-up.
Wadden TA, Vogt RA, Andersen RE et al. (1997) Exercise in the treatment of obesity: effects of four interventions on body composition, resting energy expenditure, appetite, and mood. *Journal of Consulting and Clinical Psychology* 65(2):269–77.	Shaw CR	Excluded from HTA as not 52 week follow-up
Wallace MB, Mills BD, Browning CL (1997) Effects of cross-training on markers of insulin resistance/hyperinsulinemia. *Medicine and Science in Sports and Exercise* 29(9):1170–5.	Searches	Not 52-week follow-up.
Whatley JE, Gillespie WJ, Honig J, Walsh MJ, Blackburn AL, Blackburn GL (1994) Does the amount of endurance exercise in combination with weight training and a very-low-energy diet affect resting metabolic rate and body composition? *American Journal of Clinical Nutrition* 59(5):1088–92.	Shaw CR	Not 52-week follow-up.
Whelton PK, Appel LJ, Espeland MA et al. (1998) Sodium reduction and weight loss in the treatment of hypertension in older persons: a randomized controlled trial of nonpharmacologic interventions in the elderly (TONE). TONE Collaborative Research Group. *Journal of the American Medical Association* 279(11):839–46.	AHRQ	Included in HTA diet, BT, PA vs. control (TONE).
Wirth A, Diehm C, Hanel W, Welte J, Vogel I (1985) Training-induced changes in serum lipids, fat tolerance, and adipose tissue metabolism in patients with hypertriglyceridemia. *Atherosclerosis* 54(3):263–71.	Shaw CR	Not 52-week follow-up.
Yancy WS Jr, Olsen MK, Guyton JR, Bakst RP, Westman EC (2003) A low-carbohydrate, ketogenic diet versus a low-fat diet to treat obesity and hyperlipidemia: a randomized, controlled trial. *Annals of Internal Medicine* 140(10):769–77.	Searches	Not 52-week follow-up.
You T, Berman DM, Ryan AS, Nicklas BJ (2004) Effects of hypocaloric diet and exercise training on inflammation and adipocyte lipolysis in obese postmenopausal women [erratum appears in *Journal of Clinical Endocrinology and Metabolism* 2004;89(6):2972]. *Journal of Clinical Endocrinology and Metabolism* 89(4):1739–46.	Searches	Not 52-week follow-up.

Study	Source	Reason for exclusion
Yu CM, Li LS, Ho HH, Lau CP (2003) Long-term changes in exercise capacity, quality of life, body anthropometry, and lipid profiles after a cardiac rehabilitation program in obese patients with coronary heart disease. *American Journal of Cardiology* 91(3):321–5.	Searches	Not BMI ≥28 kg/m^2.

1.6 Pharmacological interventions

1.6.1 Orlistat

Study	Source	Reason for exclusion
Bloch KV, Salles GF, Muxfeldt ES, Da Rocha N (2003) Orlistat in hypertensive overweight/obese patients: results of a randomized clinical trial. *Journal of Hypertension* 21(11):2159–65.	Norris CR	Not 52-week follow-up (adults).
Bonnici F (2002) Effect of orlistat on glycemic control and body weight in overweight or obese South African patients with type 2 diabetes. *Diabetes* 51(Suppl 2):1692.	Norris CR	Not 52-week follow-up (adults).
Deerchanawong C (2001) Effect of treatment with orlistat in overweight or obese Thai patients with type 2 diabetes. *Diabetes* 50(Suppl 2):A433	Norris CR	Not 52-week follow-up (adults).
Derosa G, Mugellini A, Ciccarelli L, Rinaldi A, Fogari R (2002) Effects of orlistat, simvastatin, and orlistat + simvastatin in obese patients with hypercholesterolemia: A randomized, open-label trial. *Current Therapeutic Research, Clinical and Experimental* 42:621–33.	Searches	Compared diet + orlistat with diet + simvastatin, and diet + orlistat + simvastatin. No placebo control group.
Derosa G, Cicero AFG, Murdolo G, Ciccarelli L, Fogari R (2004) Comparison of metabolic effects of orlistat and sibutramine treatment in Type 2 diabetic obese patients. *Diabetes, Nutrition and Metabolism* 17(4):222–9.	Searches	No weight outcome (kg) reported. Only change in BMI reported.
Derosa G, Cicero AF, Murdolo G et al. (2005) Efficacy and safety comparative evaluation of orlistat and sibutramine treatment in hypertensive obese patients. *Diabetes Obesity and Metabolism* 7(1):47–55.	Derosa publication search	No control group. Direct comparison of orlistat and sibutramine in people with hypertension.
Dixon et al.(2004) Evaluation of the association between health-related utility and obesity in hospital treated subjects. ISPOR 2004. Anonymous. Anonymous.10-2004.	Submitted evidence	Economic evaluation – conference presentation. No publications found – June 2005
J Erdmann, F Lippl, G Klose, V Schusdziarra (2004) Cholesterol lowering effect of dietary weight loss and orlistat treatment – efficacy and limitations. *Alimentary Pharmacology and Therapeutics* 19(11):1173–1179, 2004.	Searches	Not 52-week follow-up (adults).

Study	Source	Reason for exclusion
Guy-Grand B, Gin H, Valensi P, Crouin P, Eschwege E (2001) Differential weight loss in orlistat treated obese and overweight patients with various comorbidities. *International Journal of Obesity*:S93.	Norris CR	Not 52-week follow-up. (adults)
Hakim Z, Wolf A, Garrison LP (2002) Estimating the effect of changes in body mass index on health state preferences. *Pharmacoeconomics* 20(6):393–404.	Submitted evidence	Economic evaluation – used to cross-reference. No additional references found.
Halpern A, Mancini MC, Suplicy H et al. (2003) Latin-American trial of orlistat for weight loss and improvement in glycaemic profile in obese diabetic patients. *Diabetes, Obesity and Metabolism* 5:180–8.	Norris CR	Not 52-week follow-up (adults).
Hanefeld M, Sachse G (2002) The effects of orlistat on body weight and glycaemic control in overweight patients with type 2 diabetes: a randomized, placebo-controlled trial. *Diabetes, Obesity and Metabolism* 4(6):415–23.	Searches	Not 52-week follow-up. Four-week pre-treatment (weeks –4 to 0) with 48-week treatment phase (weeks 1 to 48).
Hawkins F, Duran S, Vilardell E et al. (2000) Orlistat promotes glycemic control and other cardiovascular risk factors lowering in obese patients with type 2 diabetes. Randomised clinical trial. *Diabetologia* 43:658	Norris CR	Not 52-week follow-up (adults).
Hsieh C, Wang P, Liu R et al. (2005) Orlistat for obesity: benefits beyond weight loss. *Diabetes Research and Clinical Practice* 67(1):78–83.	Searches	No weight outcome (kg) reported.
Jayagopal V, Kilpatrick ES, Holding S, Jennings PE, Atkin SA (2004) Orlistat and metformin are equally beneficial in reducing hyperandrogenaemia in polycystic ovary syndrome.	Submitted evidence	Not 52-week follow-up (adults).
Kelley DE, Kuller LH, McKolanis TM, Harper P, Kalhan S (2004) Effects of moderate weight loss and orlistat on insulin resistance, regional adiposity, and fatty acids in type 2 diabetes. *Diabetes Care* 27(1):33–40.	Norris CR	Not 52-week follow-up (adults).
Lucas CP, Boldrin MN, Reaven GM (2003) Effect of orlistat added to diet (30% of calories from fat) on plasma lipids, glucose, and insulin in obese patients with hypercholesterolemia. *American Journal of Cardiology* 91(8):961–64.	Searches	Subset of participants in five RCTs. No details of which trials were reported.

Study	Source	Reason for exclusion
Mathus-Vliegen EM, Van Ierland-Van Leeuwen ML, Terpstra A (2004) Lipase inhibition by orlistat: effects on gall-bladder kinetics and cholecystokinin release in obesity. *Alimentary Pharmacology and Therapeutics* 19(5):601–611.	Searches	Designed as an observational study, only part of a full RCT – no references found.
McEwan P (2004) Evaluation of the cost-utility of orlistat in the UK ISPOR 2004. Anonymous. Anonymous. 10-2004.	Submitted evidence	Economic evaluation – poster only.
Mendoza Guadarrama LG, Lopez Alvarenga JC, Castillo Martinez L et al. (2000) Orlistat reduces visceral fat independent of weight changes in obese diabetics type 2. *International Journal of Obesity* 24(Suppl 1):S167.	Norris CR	Not 52-week follow-up (adults).
Muls E, Kolanowski J, Scheen A, Van Gaal L, ObelHyx Study Group (2001) The effects of orlistat on weight and on serum lipids in obese patients with hypercholesterolemia: a randomized, double-blind, placebo-controlled, multicentre study. *International Journal of Obesity and Related Metabolic Disorders* 25(11):1713–21.	Searches	Not 52-week follow-up (adults).
National Institute of Child Health and Human Development (NICHD) (2003) Safety and efficacy of Xenical in children and adolescents with obesity-related diseases. *ClinicalTrials.gov*.	Searches	Study currently recruiting? Checked for publications, but no references found.
Prentice A, Jebb S, Blskett A, Corner A (2004) A patient support programme for orlistat: analysis of adherence and weight loss. *International Journal of Obesity* 28(Suppl 1):S28.	Submitted evidence	Abstract only. No publications found – June 2005.
Rissanen A (2004) Effect of orlistat in the prevention of weight gain and in long-term weight maintenance in abdominally obese patients after a very low calorie diet (VLCD) (Final study report).	Submitted evidence	Retrospective analysis of two trials (Sjostrom 1998; Rossner 2000), both in HTA.
Serrano Rios M, Armero F, Genis M (2001) Orlistat efficacy on weight loss in overweight or obese patients with type 2 diabetes mellitus. Diabetes 50(Suppl 1):A131.	Norris CR	Not 52-week follow-up (adults).
Sjostrom CD, Peltonen M, Wedel H, Sjostrom L (2000) Differentiated long-term effects of intentional weight loss on diabetes and hypertension. *Hypertension* 36(1):20–25.	Searches	In HTAs as Sjostrom 1998.

Study	Source	Reason for exclusion
Tiikkainen M, Bergholm R, Rissanen A et al. (2004) Effects of equal weight loss with orlistat and placebo on body fat and serum fatty acid composition and insulin resistance in obese women. *American Journal of Clinical Nutrition* 79(1):22–30.	Searches	Not 52-week follow-up (adults).
Tong PC, Lee ZS, Sea MM et al. (2002). The effect of orlistat-induced weight loss, without concomitant hypocaloric diet, on cardiovascular risk factors and insulin sensitivity in young obese Chinese subjects with or without type 2 diabetes. *Archives of Internal Medicine* 162(21):2428–35.	Searches	Not RCT (adults aged 18 to 50 years).
Vlassov VV (2001) Weight reduction for reducing mortality in obesity and overweight. In Vlassov VV, *Weight reduction for reducing mortality in obesity and overweight. The Cochrane Database of Systematic Reviews: Protocols 2001 Issue 3.* John Wiley & Sons, Ltd Chichester, UK.	Searches	Cochrane protocol only.
Wadden TA, Berkowitz RI, Womble LG, Sarwer DB, Arnold ME, Steinberg CM (2000) Effects of sibutramine plus orlistat in obese women following 1 year of treatment by sibutramine alone: a placebo-controlled trial. *Obesity Research* 8(6):431–437.	HTA	Excluded from orlistat review as continuation study of sibutramine RCT, with 16-week trial of add-on orlistat.
Wang Y, Liu C, Liu Y (2003) Orlistat for adjutant treatment of fatty type 2 diabetes mellitus in 32 patients. *Chinese Journal of New Drugs* 22(11):651–3.	Norris CR	Not 52-week follow-up (adults).
Wirth A, Platon J (2001) Effect of orlistat on body weight and co-morbidities in clinical practice: The xxl-Primary Health Care Observational Trial. *International Journal of Obesity* 25:O62.	Submitted evidence	No published references found – June 2005.
Wirth A (2004) Sustained weight reduction after cessation of obesity treatment with Sibutramine. *Deutsche Medizininische Wochenschrift* 129(18):1002–5.	Submitted evidence	Not RCT – post-marketing surveillance assumed to be adults (mean age 48 years).
Zoss I, Piec G, Horber FF (2002) Impact of orlistat therapy on weight reduction in morbidly obese patients after implantation of the Swedish adjustable gastric band. *Obesity Surgery* 12(1):	Searches	Not RCT.

1.6.2 Sibutramine

Study	Source	Reason for exclusion
Apfelbaum M, Vague P, Ziegler O, Hanotin C, Thomas F, Leutenegger E (1999) Long-term maintenance of weight loss after a very-low-calorie diet: a randomized blinded trial of the efficacy and tolerability of sibutramine. *American Journal of Medicine* 106(2):179–84.	Submitted evidence	In HTA.
Ara R, Brennan A (2004) Economic evaluation of sibutramine for the treatment of obesity in adults without other co-morbidities in the UK Anonymous. Anonymous. Sheffield: ScHARR, University of Sheffield. 1-49. From Abbott.	Submitted evidence	Economic evaluation – used to cross-reference clinical effectiveness. Of five possible trials, one excluded as German post marketing surveillance reports (see Scholze), and others to be scanned for inclusion (Hauner, James, Smith, Wirth).
Arterburn DE, Crane PK, Veenstra DL (2004) The efficacy and safety of sibutramine for weight loss: a systematic review. *Archives of Internal Medicine* 164(9):994–1003.	Searches	Systematic review – used to cross-reference (adults only). Of five possible 52 week trials, one included in TA (Apfelbaum), and others to be scanned for inclusion (Hauner,[1] James, McNulty, Smith).
Bach DS, Rissanen AM, Mendel CM et al. (1999) Absence of cardiac valve dysfunction in obese patients treated with sibutramine. *Obesity Research* 7(4):363–9.	Submitted evidence	Not 52-week follow-up (adults).
Barkeling B, Elfhag K, Rooth P, Rossner S (2003) Short-term effects of sibutramine (Reductil) on appetite and eating behaviour and the long-term therapeutic outcome. *International Journal of Obesity and Related Metabolic Disorders* 27(6):693–700.	Submitted evidence	Not 52-week follow-up (adults).
Birkenfeld AL, Schroeder C, Boschmann M et al. (2002) Paradoxical effect of sibutramine on autonomic cardiovascular regulation. *Circulation* 106(19):2459–65.	Submitted evidence	Not 52-week follow-up (adults).
Bray GA, Blackburn GL, Ferguson JM et al. (1999) Sibutramine produces dose-related weight loss. *Obesity Research* 7(2):189–98.	Submitted evidence	Not 52-week follow-up (adults).
Brennan A, Ara R, Sterz R, Matiba B, Bergemann R (2004) Cost-utility analysis of sibutramine for the treatment of obese adults without other co-morbidities in Germany. *International Journal of Obesity*	Submitted evidence	No published references found (June 2005).

[1] Hauner 2000 is a conference presentation of Hauner 2004.

Study	Source	Reason for exclusion
Canadian Coordinating Office for Health Technology Assessment (2001) Sibutramine. *Emerging Drug List*.	Searches	Summary of evidence – no clear referencing.
Cuellar GE, Ruiz AM, Monsalve MC, Berber A (2000) Six-month treatment of obesity with sibutramine 15 mg; a double-blind, placebo-controlled monocenter clinical trial in a Hispanic population. *Obesity Research* 8(1):71–82.	Submitted evidence	Not 52-week follow-up (adults).
Derosa G, Cicero GAF, Murdolo G, Ciccarelli L, Fogari R (2004) Comparison of metabolic effects of orlistat and sibutramine treatment in Type 2 diabetic obese patients. *Diabetes, Nutrition and Metabolism* 17(4):222–9.	Searches	No weight outcomes, only BMI.
Dujovne CA, Zavoral JH, Rowe E, Mendel CM, Sibutramine Study Group (2001) Effects of sibutramine on body weight and serum lipids: a double-blind, randomized, placebo-controlled study in 322 overweight and obese patients with dyslipidemia. *American Heart Journal* 142(3):489–97.	Submitted evidence	Not 52-week follow-up. (adults)
Fanghanel G, Cortinas L, Sanchez L-Reyes, Berber A (2000) Clinical trial of the use of sibutramine for the treatment of patients suffering essential obesity. *International Journal of Obesity and Related Metabolic Disorders* 24(2):144–150. Fanghanel G, Cortinas L, Sanchez L-Reyes, Berber A (2001) Second phase of a double-blind study clinical trial on Sibutramine for the treatment of patients suffering essential obesity: 6 months after treatment cross-over. *International Journal of Obesity and Related Metabolic Disorders* 25(5):741–7.	Searches, submitted evidence	Not 52-week follow-up (adults)/
Faria AN, Ribeiro Filho FF, Lerario DD, Kohlmann N, Ferreira SR, Zanella MT (2002) Effects of sibutramine on the treatment of obesity in patients with arterial hypertension. *Arquivos Brasileiros de Cardiologia* 78(2):172–180.	Submitted evidence	Not 52-week follow-up (adults).
Finer N, Bloom SR, Frost GS, Banks LM, Griffiths J (2000) Sibutramine is effective for weight loss and diabetic control in obesity with type 2 diabetes: a randomised, double-blind, placebo-controlled study. *Diabetes, Obesity and Metabolism* 2(2):105–112.	Submitted evidence	Not 52-week follow-up (adults).

Study	Source	Reason for exclusion
Fujioka K, Seaton TB, Rowe E et al. (2000) Weight loss with sibutramine improves glycaemic control and other metabolic parameters in obese patients with type 2 diabetes mellitus. *Diabetes, Obesity and Metabolism* 2(3):175–87.	Submitted evidence	Not 52-week follow-up (adults).
Gokcel A, Karakose H, Ertorer EM, Tanaci N, Tutuncu NB, Guvener N (2001) Effects of sibutramine in obese female subjects with type 2 diabetes and poor blood glucose control. *Diabetes Care* 24(11):1957–60.	Searches, submitted evidence	Not 52-week follow-up (adults).
Griffiths J, Bloom SR, Finer N, Banks LM, Romanac FM (1995) Body compositional changes following weight loss induced by sibutramine. *International Journal of Obesity and Related Metabolic Disorders* 19:144.	Submitted evidence	Not 52-week follow-up (adults).
Hadden 2001	Searches, submitted evidence	In HTA as James 2000
Hanotin C, Thomas F, Jones SP, Leutenegger E, Drouin P (1998) Efficacy and tolerability of sibutramine in obese patients: A dose-ranging study. *International Journal of Obesity* 22(1):32–8.	Searches, submitted evidence	Not 52-week follow-up (adults).
Hansen DL, Toubro S, Stock MJ, Macdonald IA, Astrup A (1999) The effect of sibutramine on energy expenditure and appetite during chronic treatment without dietary restriction. *International Journal of Obesity and Related Metabolic Disorders* 23(10):1016–24.	Submitted evidence	Not 52-week follow-up (adults).
Hayman LL (2004) Toward evidence-based practice. (Commentary on) Behavior therapy and sibutramine for the treatment of adolescent obesity: a randomized controlled trial. *MCN: The American Journal of Maternal/Child Nursing* 29(1):68.	Searches	Evidence update – no appropriate references.
Hazenberg BP (2000) Randomized, double-blind, placebo-controlled, multicenter study of sibutramine in obese hypertensive patients. *Cardiology* 94(3):152–8.	Submitted evidence	Not 52-week follow-up (adults).

Study	Source	Reason for exclusion
Hwu CM, Hung YJ, Kuo CS, Pei D, Jeng CY, Ho LT (2003) Sibutramine treatment enhances weight loss and reduces waist circumference in obese Chinese type 2 diabetic patients. *Journal of Parenteral and Enteral Nutrition* 27(1):S12–3.	Searches	Conference abstract only. No published references found (June 2005).
James WP, Astrup A, Finer N et al. (2000) Effect of sibutramine on weight maintenance after weight loss: a randomised trial. STORM Study Group. Sibutramine Trial of Obesity Reduction and Maintenance. *Lancet* 356(9248):2119–25.	Searches, submitted evidence	In HTA as James 1999.
Kaukua JK, Pekkarinen TA, Rissanen AM (2004) Health-related quality of life in a randomised placebo-controlled trial of sibutramine in obese patients with type II diabetes. *International Journal of Obesity and Related Metabolic Disorders* 28(4):600–605.	Searches	In HTA as Rissanen 1998.
Li QF, Li R, Luo R, Wang ZH et al. (2002) Sibutramine capsules for treatment of simple obesity. *Chinese Journal of New Drugs and Clinical Remedies* 21(7):401–4.	Searches	Chinese language.
McMahon FG, Fujioka K, Singh BN et al. (2000) Efficacy and safety of sibutramine in obese white and African American patients with hypertension: a 1-year, double-blind, placebo-controlled, multicenter trial. *Archives of Internal Medicine* 160(14):2185–91.	Submitted evidence	In HTA.
McNulty SJ, Ur E, Williams G, Multicenter Sibutramine Study Group (2003) A randomized trial of sibutramine in the management of obese type 2 diabetic patients treated with metformin. *Diabetes Care* 26(1):125–31.	Searches, submitted evidence	In HTA as Williams 1999.
Norris SL, Zhang X, Avenell A et al. (2004) Efficacy of pharmacotherapy for weight loss in adults with type 2 diabetes mellitus: a meta-analysis. *Archives of Internal Medicine* 164(13):1395–1404.	Submitted evidence	Will use Norris CR to cross-reference.
Scholze J (2002) Sibutramine in clinical practice – a PMS-study with positive effects on blood pressure and metabolic parameters. *Deutsche Medizinische Wochenschrift* 127(12):606–610.	Submitted evidence	Not RCT (assumed to be adults only).

Study	Source	Reason for exclusion
Seagle HM, Bessesen DH, Hill JO (1998) Effects of sibutramine on resting metabolic rate and weight loss in overweight women. *Obesity Research* 6(2):115–21.	Submitted evidence	Not 52-week follow-up (adults).
Serrano M-Rios, Melchionda N, Moreno-Carretero E, Spanish Investigators (2002) Role of sibutramine in the treatment of obese Type 2 diabetic patients receiving sulphonylurea therapy. *Diabetic Medicine* 19(2):119–24.	Submitted evidence	Not 52-week follow-up (adults).
Sircar AR, Kumar A, Lal M (2001) Clinical evaluation of sibutramine in obese type 2 diabetic patients refractory to dietary management. *Journal of the Association of Physicians of India* 49:885–8.	Submitted evidence	Not 52-week follow-up (adults).
Smith IG, Goulder MA, on behalf of the Members of the Sibutramine Clinical Study (2001) Randomized placebo-controlled trial of long-term treatment with sibutramine in mild to moderate obesity. *Journal of Family Practice* 50(6):505–512.	Searches	In HTA as Smith 1994.
Sramek JJ, Leibowitz MT, Weinstein SP et al. (2002) Efficacy and safety of sibutramine for weight loss in obese patients with hypertension well controlled by beta-adrenergic blocking agents: a placebo-controlled, double-blind, randomised trial. *Journal of Human Hypertension* 16(1):13–19.	Submitted evidence	Not 52-week follow-up (adults).
Tankova T, Dakovska G, Lazarova M, Dakovska L, Kirilov G, Koev D (2003) Sibutramine in the treatment of obesity in type 2 diabetic patients. *Endocrinologia* 8(4):257–65.	Submitted evidence	Not 52-week follow-up (adults).
Toubro S, Hansen DL, Hilsted JC, Porsborg PA, Astrup AV (2001) The effect of sibutramine for the maintenance of weight loss: A randomised, clinical, controlled study. *Ugeskrift for Laeger* 163(21):2935–40.	Searches	Danish publication of the STORM trial (see James 2000).
Vargas R, McMahon FG, Jain AK (1994) Effects of Sibutramine (S) vs Placebo (P) in NIDDM. *Clinical Pharmacology and Theraputics* 55:188.	Submitted evidence	Not 52-week follow-up (adults).

Study	Source	Reason for exclusion
Vlassov VV (2005) Weight reduction for reducing mortality in obesity and overweight. Cochrane collaboration. Anonymous. Online.	Searches	Cochrane protocol only.
Warren E, Brennan A, Akehurst R (2004) Cost-effectiveness of sibutramine in the treatment of obesity. *Medical Decision Making* 24(1):9–19.	Searches, submitted evidence	Economic evaluation – used to cross reference clinical effectiveness. Two trials to be scanned (James 2000; Smith 2001)
Weintraub M, Rubio A, Golik A, Byrne L, Scheinbaum ML (1991) Sibutramine in weight control: a dose-ranging, efficacy study. *Clinical Pharmacology and Therapeutics* 50(3):330–7.	Submitted evidence	Not 52-week follow-up (adults).
Wirth A, Krause J (2001) Long-term weight loss with sibutramine: a randomized controlled trial. *Journal of the American Medical Association* 11:1331–9.	Searches	Not 52-week follow-up (adults).
Yanovski JA, Yanovski SZ (2003) Treatment of pediatric and adolescent obesity. *Journal of the American Medical Association* 14:1851–3.	Searches	Editorial on Berkowitz. Used for discussion and limitations.
Zannad F, Gille B, Grentzinger A et al. (2002) Effects of sibutramine on ventricular dimensions and heart valves in obese patients during weight reduction. *American Heart Journal* 144(3):508–515.	Submitted evidence	Not 52-week follow-up (adults).

1.7 Surgical interventions

Study	Source	Reason for exclusion
American Diabetes Association Position Statement, 2002.	Searches	Position statement. No additional references.
American Gastroenterological Association Guidelines, 2002.	Searches	Guideline recommendations. No additional references.
Agren G, Naslund I. (1989) A prospective randomized comparison of vertical banded gastroplasty (VBG), loop gastric bypass (GBY) and gastric banding (GB). *International Journal of Obesity* 13:595.	CR	RCT of vertical banded gastroplasty (VBG).
Allgood P (2001) Surgical interventions for morbid obesity. STEER Reports. Online.	Searches	Rapid, systematic review. No additional references.
Andersen T, Backer OG, Astrup A, Quaade F (1987) Horizontal or vertical banded gastroplasty after pretreatment with very-low-calorie formula diet: a randomized trial. *International Journal of Obesity* 11(3):295–304.	Clegg TA	RCT comparing horizontal and vertical gastric banding.
Angus LDG, Cottam DR, Gorecki PJ, Mourello R, Ortega RE, Adamski J (2003) DRG, costs and reimbursement following Roux-en-y gastric bypass: an economic appraisal. *Obesity Surgery* 000:000. [115]	Searches	Retrospective study. Some health economic data.
Anonymous (2005) Surgical treatment for morbid obesity. *Evidence Based Practice* 8(2):1–2.	Searches	Commentary on Buchwald review. No additional references.
Anonymous (2004) Study finds large cost variation for laparoscopic gastric bypass. *OR Manager* 20(7):1. [33]	Searches	Benchmarking study. Some health economic data.
Anonymous (2004) AORN bariatric surgery guideline. *AORN Journal* 79(5):1026–52.	Searches	Guideline recommendations. No additional references.
Ashy AR, Merdad AA (1998) A prospective study comparing vertical banded gastroplasty versus laparoscopic adjustable gastric banding in the treatment of morbid and super-obesity. *International Surgery* 83(2):108–110.	Buchwald review	Excluded from Clegg TA as not RCT.
Barrow C (2002) Roux-en-Y gastric bypass for morbid obesity. Surgical option in bariatric surgery in the treatment of obesity. *AORN Journal* 76(4):593–604.	Searches	Narrative review. No additional references.

Study	Source	Reason for exclusion
Basque Office for Health Technology Assessment and Health Department (2003) Bariatric surgery for the treatment of morbid obesity – Systematic review. Online.	Searches	Systematic review. No additional references.
Blanco-Engert R, Weiner S, Pomhoff I, Matkowitz R, Weiner RA (2003) Outcome after laparoscopic adjustable gastric banding, using the Lap-Band and the Heliogast band: a prospective randomized study. *Obesity Surgery* 13(5):776–9. [39]	Searches	Compares two different types of bands (Lap-Band vs. Heliogast), not different surgical techniques. Checked for published Blanco-Engert references (abstract only cited). No references found.
Buchwald H, Avidor Y, Braunwald E et al. (2004) Bariatric surgery: A systematic review and meta-analysis. *Journal of the American Medical Association* 292(14):13.	Searches	Systematic review and meta-analysis. Used for cross-referencing and comparison. Added Mingrone 2002 for assessment.
Canadian Coordinating Office for Health Technology Assessment (2003) Laparoscopic adjustable gastric banding for clinically severe obesity. CCOHTA. [95]	Searches	Scoping search for HTA No additional references.
Comite d'Evaluation et de Diffusion des Innovations Technologiques (CEDIT) (2004) Laparoscopic adjustable gastric banding – systematic review, expert panel (project). HTA. [97]	Searches	Recommendations only, full text only available in French. No references.
Chapman AE, Kiroff G, Game P et al. (2004) Adjustable gastric banding in the treatment of obesity: A systematic literature review. *Surgery* 135:326–51.	Searches	Systematic review. No additional references.
Chen J, McGregor M (2004) The gastric banding procedure: an evaluation. Online.	Searches	Technology assessment. No additional references. Some health economic data.
Choban PS, Flancbaum L (2002) The effect of Roux limb lengths on outcome after Roux-en-Y gastric bypass: a prospective, randomized clinical trial. *Obesity Surgery* 12(4):540–5. [70]	Searches	RCT of different Roux limb lengths on weight loss. Not a comparison of different surgical procedures.
Cegaina V (2002) Erratum: Gastric pacing as therapy for morbid obesity: Preliminary results (*Obesity Surgery* 2002;12[Suppl 1]:14S). *Obesity Surgery* 12(3):	Searches	Report of gastric pacing.
Clegg A, Colquitt J, Sidhu M, Royle P, Walker A (2003) Clinical and cost effectiveness of surgery for morbid obesity: a systematic review and economic evaluation. *International Journal of Obesity*.	Searches	Published version of technology assessment evidence review.

Study	Source	Reason for exclusion
Cooney RN, Bryant P, Haluck R, Rodgers M, Lowery M (2001) The impact of a clinical pathway for gastric bypass surgery on resource utilization. *Journal of Surgical Research*	Searches	Not RCT of surgery. No additional references. Some health economic data.
Cooney RN, Haluck RS, Ku J et al. (2003) Analysis of cost outliers after gastric bypass surgery: What can we learn? *Obesity Surgery*	Searches	Not RCT of surgery. No additional references. Some health economic data.
Cottam DR, Schaefer PA, Shaftan GW, Velcu L, Angus LDG (2002) Effect of surgically-induced weight loss on leukocyte indicators of chronic inflammation in morbid obesity. *Obesity Surgery* 12(3):	Searches	Not RCT. No additional references.
Craig BM, Tseng DS (2002) Cost-effectiveness of gastric bypass for severe obesity (Provisional record). [delete?] *American Journal of Medicine*	Searches	Cost-effectiveness study.
Danish Obesity Project (1979) Randomised trial of jejunoileal bypass versus medical treatment in morbid obesity. The Danish Obesity Project. *Lancet* 2(8155):1255–8.	Clegg TA	Excluded as surgical procedure was jejunoileal bypass, which is no longer performed.
Davila-Cervantes A, Borunda D, Dominguez-Cherit G et al. (2002) Open versus laparoscopic vertical banded gastroplasty: a randomized controlled double blind trial. *Obesity Surgery* 12(6):812–8. [61]	Searches	RCT of laparoscopic vs. open VBG.
DeMaria EJ, Schweitzer MA, Kellum JM, Meador J, Wolfe L, Sugerman HJ (2002) Hand-assisted laparoscopic gastric bypass does not improve outcome and increases costs when compared to open gastric bypass for the surgical treatment of obesity (DARE structured abstract). *Surgical Endoscopy and Other Interventional Techniques* 16:1452–5.	Searches	Not RCT No additional references. Some cost data.
Deveney CW, MacCabee D, Marlink K, Welker K, Davis J, McConnell DB (2004) Roux-en-Y divided gastric bypass results in the same weight loss as duodenal switch for morbid obesity. *American Journal of Surgery* 187(5):.	Searches	Not RCT. No additional references.
Fernandez AZ Jr, DeMaria EJ, Tichansky DS et al. (2004) Multivariate analysis of risk factors for death following gastric bypass for treatment of morbid obesity. *Annals of Surgery* 239(5):698–702.	Searches	No weight outcomes.
Flodmark E-C, Lissau I, Moreno LA, Pietrobelli A, Widhalm K. New insights into the field of children and adolescents' obesity: The European perspective. *International Journal of Obesity* 28(10):	Searches	Narrative review on children and adolescents.

Study	Source	Reason for exclusion
Gallagher SF, Banasiak M, Gonzalvo JP et al. (2003) The impact of bariatric surgery on the veterans administration healthcare system: A cost analysis. *Obesity Surgery* 13(2):245–8. [122]	Searches	Cost analysis using retrospective data, not RCT.
Gonzalez R, Lin E, Venkatesh KR, Bowers SP, Smith CD (2003) Gastrojejunostomy during laparoscopic gastric bypass: analysis of 3 techniques (Provisional record). *Archives of Surgery*	Searches	Not RCT. Added Nguyen 2001 for assessment.
Greenberg I, Perna F, Kaplan M, Sullivan MA (2005) Behavioral and psychological factors in the assessment and treatment of obesity surgery patients. *Obesity Research* 13(2):244–9.	Searches	Recommendations on assessment for surgery.
Hell E, Miller KA, Moorehead MK, Norman S (2000) Evaluation of health status and quality of life after bariatric surgery: comparison of standard Roux-en-Y gastric bypass, vertical banded gastroplasty and laparoscopic adjustable silicone gastric banding. *Obesity Surgery* 10(3):214–9.	TEC 2005	Case series with <150 participants.
Health Technology Board for Scotland (HTBS) (2002) *The use of surgery for the morbidly obese*. 2002. [111]	Searches	Comments on NICE guidance, not new reviews. Comments on surgery not reported.
Horgan S, Holterman MJ, Jacobsen GR et al. (2005) Laparoscopic adjustable gastric banding for the treatment of adolescent morbid obesity in the United States: A safe alternative to gastric bypass. *Journal of Pediatric Surgery* 40(1):	Searches	Not adults.
Inge TH, Garcia V, Daniels S et al. (2004) Multidisciplinary approach to the adolescent bariatric surgical patient. *Journal of Pediatric Surgery* 39(3):	Searches	Not adults.
Kaur H, Hyder ML, WS Poston C (2003) Childhood overweight: an expanding problem. *Treatments in Endocrinology* 2(6):.	Searches	Not adults.
Lee WJ, Huang MT, Wang W, Lin CM, Chen TC, Lai IR (2004) Effects of obesity surgery on the metabolic syndrome. *Archives of Surgery* 139(10):1088–92.	Searches	Not RCT. No additional references.
Malaysian Health Technology Assessment Unit (MHTAU) (2004) Management of obesity in childhood. Online.	Searches	Not adults.
Mathus-Vliegen EM, Tygat GN (2002) Gastro-oesophageal reflux in obese subjects: influence of overweight, weight loss and chronic gastric balloon distension. *Scandinavian Journal of Gastroenterology* 37(11):1246–52. [59]	Searches	RCT of gastric balloons.

Study	Source	Reason for exclusion
Mathus-Vliegen EM, van Weeren M, van Eerten PV (2003) Loss of function and obesity: the impact of untreated obesity, weight loss, chronic gastric balloon distension. *Digestion* 68(2/3):161–8. [37].	Searches	RCT of gastric balloons.
MSAC Medical Services Advisory Committee (2003) Laparoscopic adjustable gastric banding for morbid obesity. Online. http://www.msac.gov.au/pdfs/reports/msacref14.pdf	Searches	Evidence review. Checked Weiner 2001 for assessment.
Muscelli E, Mingrone G, Camastra S et al. (2005) Effect of weight loss on insulin resistance in surgically treated obese patients. *American Journal of Medicine* 118(1):	Searches	Not RCT. No additional references.
Nguyen NT, Lee SL, Goldman C et al. (2001) Comparison of pulmonary function and postoperative pain after laparoscopic versus open gastric bypass: a randomized trial. *Journal of the American College of Surgery* 192(4):469–76.	Searches	Not 12-month follow-up. No weight outcomes. No additional references.
Nguyen NT, Ho HS, Fleming NW et al. (2002) Cardiac function during laparoscopic vs open gastric bypass: A randomized comparison. *Surgical Endoscopy* 16(1):78–83. [52]	Searches	Not 12-month follow-up. No weight outcomes. No additional references.
Nguyen NT, Braley S, Fleming NW, Lambourne L, Rivers R, Wolfe BM (2003) Comparison of postoperative hepatic function after laparoscopic versus open gastric bypass. *American Journal of Surgery* 186(1):40–44. [26]	Searches	Not 12-month follow-up. No weight outcomes. No additional references.
Nguyen NT, Cronan M, Braley S, Rivers R, Wolfe BM (2003) Duplex ultrasound assessment of femoral venous flow during laparoscopic and open gastric bypass. *Surgical Endoscopy* 17(2):285–90. [29]	Searches	Not 12-month follow-up. No weight outcomes. No additional references.
Nilsell K, Thorne A, Sjostedt S, Apelman J, Pettersson N (2001) Prospective randomised comparison of adjustable gastric banding and vertical banded gastroplasty for morbid obesity. *European Journal of Surgery* 167(7):504–509.	Clegg TA	RCT of adjustable vs. VBG
Norris SL, Zhang X, Avenell A et al. (2005) Long-term non-pharmacologic weight loss interventions for adults with type 2 diabetes. *The Cochrane Database of Systematic Reviews*, Issue 2. John Wiley & Sons, Ltd: Chichester.	Searches	Surgical interventions excluded from review.
Pereira JA, Claro BM, Pareja JC et al. (2003) Restored insulin inhibition on insulin secretion in nondiabetic severely obese patients after weight loss induced by bariatric surgery. *International Journal of Obesity* 27(4):1.	Searches	Not RCT. No additional references.

Study	Source	Reason for exclusion
Ponson AE, Janssen CIM, Klinkenbijl GJH (2002) Laparoscopic adjustable gastric banding: A prospective comparison of two commonly used bands. *Obesity Surgery* 12(4):	Searches	Compares two different types of bands (Swedish Adjustable Gastric Band vs. Lap-Band), not different surgical techniques. No additional references.
Potteiger CE, Paragi PR, Inverso NA et al. (2004) Bariatric surgery: Shedding the monetary weight of prescription costs in the managed care arena. *Obesity Surgery*	Searches	Not RCT, Some cost data.
Sabbioni M-EE (2002) Intermediate results of health related quality of life after vertical banded gastroplasty. *International Journal of Obesity and Related Metabolic Disorders* 26(2):277–80. [21]	Searches	Not RCT, no additional references.
Sjostrom CD, Peltonen M, Wedel H, Sjostrom L (2000) Differentiated long-term effects of intentional weight loss on diabetes and hypertension. *Hypertension* 36(1):20–5.	Submitted evidence	Review, mainly of Swedish Obese Subjects (SOS) study.
Smith SC, Edwards CB, Goodman GN, Halversen RC, Simper SC (2004) Open vs laparoscopic Roux-en-Y gastric bypass: comparison of operative morbidity and mortality. *Obesity Surgery* 14(1):73–6.	Searches	Weight outcomes only at 6, 12 months, not at minimum 24 months as required.
Stanford A, Glascock JM, Eid GM (2003) Laparoscopic Roux-En-Y gastric bypass in morbidly obese adolescents. *Journal of Pediatric Surgery* 38(3):1.	Searches	Not adults.
Stoeckli R, Chanda R, Langer I, Keller U (2004) Changes of body weight and plasma ghrelin levels after gastric banding and gastric bypass. *Obesity Research* 12(2):346–50.	CR 2005	Cohort study <150 participants
Strauss RS, Bradley LJ, Brolin RE (2001) Gastric bypass surgery in adolescents with morbid obesity. *Journal of Pediatrics* 138(4):499–504. [150]	Searches	Not adults.
Strauss RS (2002) Gastric bypass surgery in adolescents with morbid obesity. *Nutrition in Clinical Practice* 17(1):43. [134]	Searches	Not adults.
Suter M, Giusti V, Worreth M, Heraief E, Calmes J-M (2005) Laparoscopic gastric banding: A prospective, randomized study comparing the Lapband and the SAGB: Early results. *Annals of Surgery* 241(1):	Searches	Compares two different types of bands (Swedish Adjustable Gastric Band vs. Lap-Band), not different surgical techniques. No additional references.

Study	Source	Reason for exclusion
Swedish Council on Technology Assessment in Health Care (SBU) (2004) Gastric pacing (gastric electrical stimulation) for the treatment of obesity – early assessment briefs (Alert). Online.	Searches	Gastric pacing review.
Thorne A, Lonnqvist F, Apelman J, Hellers G, Arner P (2002) A pilot study of long-term effects of a novel obesity treatment: omentectomy in connection with adjustable gastric banding. *International Journal of Obesity and Related Metabolic Disorders* 26(2):193–9. [48]	Searches	Compares adjustable gastric banding with or without omentectomy.
Tolonen P, Victorzon M (2003) Quality of life following laparoscopic adjustable gastric banding – The Swedish Band and the Moorehead–Ardelt questionnaire. *Obesity Surgery* 13(3):1.	Searches	Not RCT. No additional references.
VATAP Bariatric surgery: summary of INAHTA reviews (2005) Online.	Searches	Evidence review. No additional references.
Vlassov VV (2005) Weight reduction for reducing mortality in obesity and overweight. Cochrane collaboration. Online.	Searches	Protocol only.
von Mach MA, Stoeckli R, Bilz S, Kraenzlin M, Langer I, Keller U (2004) Changes in bone mineral content after surgical treatment of morbid obesity. *Metabolism: Clinical and Experimental* 53(7):918–21.	CR 2005	Cohort study <150 participants.
Weiner R, Bockhorn H, Rosenthal R, Wagner D (2001) A prospective randomized trial of different laparoscopic gastric banding techniques for morbid obesity. *Surgical Endoscopy* 15(1):63–8.	Medical Services Advisory Committee (MSAC)	Excluded from Clegg TA.
Weiss HG, Nehoda H, Labeck B et al. (2002) Adjustable gastric and esophagogastric banding: a randomized clinical trial. *Obesity Surgery* 12(4):573–8. [49]	Searches	Gastric banding vs. oesophagogastric banding.
Widhalm K, Dietrich S, Prager G (2004) Adjustable gastric banding surgery in morbidly obese adolescents: Experiences with eight patients. *International Journal of Obesity* 28(Suppl 3):	Searches	Not adults.
Zengin K, Taskin M, Sakoglu N, Salihoglu Z, Demiroluk S, Uzun H (2002) Systemic inflammatory response after laparoscopic and open application of adjustable banding for morbidly obese patients. *Obesity Surgery* 12(2):	Searches	No mention of randomisation. No additional references.
Zoss I, Piec G, Horber FF (2005) Impact of orlistat therapy on weight reduction in morbidly obese patients after implantation of the Swedish adjustable gastric band. *Obesity Surgery* 12	Searches	Not RCT. No additional references.

1.7.1 Open and laparoscopic gastric bypass single arm studies

Study	Reason for exclusion
Arteaga JR, Huerta S, Livingston EH (2002) Management of gastrojejunal anastomotic leaks after Roux-en-Y gastric bypass. *American Surgeon* 68(12):1061–5.	Weight loss not reported.
Brolin RE, Bradley LJ, Wilson AC, Cody RP (2000) Lipid risk profile and weight stability after gastric restrictive operations for morbid obesity. *Journal of Gastrointestinal Surgery* 4(5):464–9.	Outcomes not reported by type of surgery.
Carrasquilla C, English WJ, Esposito P, Gianos J (2004) Total stapled, total intra-abdominal (TSTI) laparoscopic Roux-en-Y gastric bypass: one leak in 1000 cases. *Obesity Surgery* 14(5):613–7.	Not 24-months follow-up.
Demaria EJ, Sugerman HJ, Kellum JM, Meador JG, Wolfe LG (2002) Results of 281 consecutive total laparoscopic Roux-en-Y gastric bypasses to treat morbid obesity. *Annals of Surgery* 235(5):640–45.	Not 24-months follow-up.
Faintuch J, Matsuda M, Cruz ME (2004). Severe protein–calorie malnutrition after bariatric procedures. *Obesity Surgery* 14(2):175–81.	Not 150 participants.
Fernandez AZ Jr, DeMaria EJ, Tichansky DS et al. (2004) Multivariate analysis of risk factors for death following gastric bypass for treatment of morbid obesity. *Annals of Surgery* 239(5):698.	Laparoscopic vs. open study.
Frezza EE, Ikramuddin S, Gourash W et al. (2002) Symptomatic improvement in gastroesophageal reflux disease (GORD) following laparoscopic Roux-en-Y gastric bypass. *Surgical Endoscopy* 16(7):1027–31.	Laparoscopic gastic bypass, not 24-months follow-up.
Hedenbro JL, Frederiksen SG (2002) Fully stapled gastric bypass with isolated pouch and terminal anastomosis: 1–3 year results. *Obesity Surgery* 12(4):546–50.	Not standard Roux-en-Y gastic bypass.
Jones KB Jr (1998) Roux-en-Y gastric bypass: an effective antireflux procedure in the less than morbidly obese. *Obesity Surgery* 8(1):35–8.	Not 150 participants.
MacLean LD, Rhode BM, Nohr CW (2000) Late outcome of isolated gastric bypass. *Annals of Surgery* 231(4):524–8.	Not standard Roux-en-Y gastic bypass.
Murphy K, McCracken JD, Ozment KL (1980) Gastric bypass for obesity. Results of a community hospital series. *American Journal of Surgery* 140(6):747–50.	Only 47 patients had Roux-en-Y gastic bypass.
Obeid F, Falvo A, Dabideen H, Stocks J, Moore M, Wright M (2005) Open Roux-en-Y gastric bypass in 925 patients without mortality. *American Journal of Surgery* 189(3):352–6.	Not 24 months follow-up.
Parikh MS, Shen R, Weiner M, Siegel N, Ren CJ (2005) Laparoscopic bariatric surgery in super-obese patients (BMI>50) is safe and effective: a review of 332 patients. *Obesity Surgery* 15(6):858–63.	Not 150 patients for laparoscopic gastic bypass.

Study	Reason for exclusion
Raftopoulos I, Ercole J, Udekwu AO, Luketich JD, Courcoulas AP (2005) Outcomes of Roux-en-Y gastric bypass stratified by a body mass index of 70 kg/m^2: a comparative analysis of 825 procedures. *Journal of Gastrointestinal Surgery* 9(1):44–52.	Compared open *and* laparoscopic procedures in people who were severely obese or superobese.
Raftopoulos Y, Gatti GG, Luketich JD, Courcoulas AP (2005) Advanced age and sex as predictors of adverse outcomes following gastric bypass surgery. *Journal of the Society of Laparoendoscopic Surgeons* 9(3):272–6.	Weight loss not reported.
Smith SC, Edwards CB, Goodman GN (1997) Symptomatic and clinical improvement in morbidly obese patients with gastroesophageal reflux disease following Roux-en-Y gastric bypass. *Obesity Surgery* 7(6):479–84.	Weight loss not reported for gastric bypass group alone.
Smith SC, Edwards CB, Goodman GN, Halversen RC, Simper SC (2004) Open vs laparoscopic Roux-en-Y gastric bypass: comparison of operative morbidity and mortality. *Obesity Surgery* 14(1):73–6.	Open vs. laparoscopic.
Warde-Kamar J, Rogers M, Flancbaum L, Laferrere B (2004) Calorie intake and meal patterns up to 4 years after Roux-en-Y gastric bypass surgery. *Obesity Surgery* 14(8):1070–9.	Excluded as only 69 participants out of 360 invited.

1.8 Interventions in a UK clinical setting

Study	Source	Reason for exclusion
Mhurchu CN, Margetts BM, Speller V (1998) Randomized clinical trial comparing the effectiveness of two dietary interventions for patients with hyperlipidaemia. *Clinical Science* 95(4): 479–87.	Searches	No requirement to be overweight or obese. Baseline BMI <28 kg/m^2.
Barrett P, Finer N, Fisher C, Boyle G (1999) Evaluation of a multimodality treatment programme for weight management at the Luton and Dunstable Hospital NHS Trust. *Journal of Human Nutrition and Dietetics* 12(Suppl 1): 43–52.	Searches	No control group.
Bowerman S (2001	Non-clinical review	Non-UK study.
Cadman L, Wiles R (1996) Short report. Nutrition advice in primary care: evaluation of practice nurse nutrition training programmes. *Journal of Human Nutrition and Dietetics* 9(2):147–56.	Searches	No control group.
Collins et al. 1999	Searches	All parameters for inclusion were met, except the presence of control or comparison group.
Cooper CA, de Looy AE, Conry MA (1979) Efficiency of energy-reduced diets in the treatment of obesity by dietitians. *Proceedings of the Nutrition Society* 38(1):7A.	Searches	No control group.
Deforche B, Bourdeaudhuij ID, Tanghe A, Hills AP, Bode PD (2004) Changes in physical activity and psychosocial determinants of physical activity in children and adolescents treated for obesity. *Patient Education and Counseling* 55(3):407–415.	Searches	All parameters for inclusion were met, except the presence of control or comparison group.
Drummond S, Kirk T (1998) The effect of different types of dietary advice on body composition in a group of Scottish men. *Journal of Human Nutrition and Dietetics* 11(6):473–85.	Searches	Normal to moderately overweight men only. Baseline BMI <28 kg/m^2.
Drummond S (2000) Obesity in primary care. *Primary Health Care* 10(5):43–9.	Searches	Narrative review.
Drummond S, Dixon K, Griffin J, De Looy A (2004)Weight loss on an energy-restricted, low-fat, sugar-containing diet in overweight sedentary men. *International Journal of Food Science and Nutrition* 55(4):279–90.	Searches	No control group.
Eley Morris S, Lean MEJ, Hankey CR, Hunter C (1999) Who gets what treatment for obesity? A survey of GPs in Scotland. *European Journal of Clinical Nutrition* 53(2):S44–8.	Searches	Survey.

Study	Source	Reason for exclusion
Elgar FJ, Roberts C, Moore L, Tudor-Smith C (2005) Behaviour, physical activity and weight problems in adolescents in Wales. *Public Health* 119(6):518–24.	Searches	Cohort study, also all parameters for inclusion were met, except the presence of control or comparison group
Fletcher AM (1982) The nutritionist as the primary care provider in a team approach to obesity. *Journal of the American Dietetic Association* 80(3):253–5.	Searches	Non-UK descriptive paper.
Foster A, Brereton P, Foster A, Brereton P (1978) Professional flab fighting at district level. *Health and Social Service Journal* 88(4621):1416–7.	Searches	No control group.
Frühbeck G, Diez CA, Gómez AJ, Cienfuegos J (2003) Management of overweight and obese adults: Comment. *British Medical Journal* 326(7380):102–3.	Searches	Not study report (letter).
Fuller TL, Milburn K Backet, Hopton JL (2003) Healthy eating: the views of general practitioners and patients in Scotland. *American Journal of Clinical Nutrition* 77(4)(Suppl):S1043–7.	Searches	Qualitative study.
Garrow J (1976) Obesity clinic. 1. Who works there and why. *Nursing Times* 72(2):78–9. Garrow J (1976) Obesity clinic. 2. Treatment of refractory patients. *Nursing Times* 72(3):116–7.	Searches	No control group.
Green SM, Passway TJ (1998) Focus on nutrition. Management of obesity in the primary care setting. *British Journal of Community Nursing* 3(5):244–9.	Searches	Narrative review.
Green SM, McCoubrie M, Cullingham C (2000) Practice nurses' and health visitors' knowledge of obesity assessment and management. *Journal of Human Nutrition and Dietetics* 13(6):413–23.	Searches	Survey.
Grignard S, Pierre B Jean, Michel B, Philippe M, Chantal V (2003) Characteristics of adolescent attempts to manage overweight. *Patient Education and Counseling* 51)2):183–9.	Searches	Cohort study, also all parameters for inclusion were met, except the presence of control or comparison group.
Hankey CR, Rumley A, Lowe G-DO, Woodward M, Lean MEJ (1997) Moderate weight reduction improves red cell aggregation and factor VII activity in overweight subjects. *International Journal of Obesity* 21(8):644–50.	Searches	No control group.
Hankey CR (2002) Weight change after myocardial infarction: Statistical perspectives for future study. *Journal of Human Nutrition and Dietetics* 15(6):439–44,	Searches	See Leslie WS, 2004

Study	Source	Reason for exclusion
Hankey CR, Eley S, Leslie WS, Hunter CM, Lean MEJ (2004) Eating habits, beliefs, attitudes and knowledge among health professionals regarding the links between obesity, nutrition and health. *Public Health Nutrition* 7(2):337–43.	Searches	Survey.
Harland J, White M, Drinkwater C, Chinn D, Farr L, Howel D (1999) The Newcastle exercise project: A randomised controlled trial of methods to promote physical activity in primary care. *British Medical Journal* 319(7213): 828–32.	Searches	No requirement for participants to be overweight or obese. No weight outcomes reported.
Harland P-SE, Watson MJ, Ashworth L (1997) The effect of metabolic programming on atherosclerosis and obesity risk factors in UK adolescents living in poor socioeconomic areas. *Annals of the N Y Academy of Sciences* 817:361–4.	Searches	Study to determine associations between metabolic consequences and birth weight.
Harvey EL, Summerbell CD, Kirk SF et al. (2002) Dietitians' views of overweight and obese people and reported management practices. *Journal of Human Nutrition and Dietetics* 15(5):331–47.	Searches	Survey.
Hillsdon M, Thorogood M, White I, Foster C (2002) Advising people to take more exercise is ineffective: A randomized controlled trial of physical activity promotion in primary care. *International Journal of Epidemiology* 31(4):808–815.	Non-clinical review	No baseline BMI reported and no requirement to be overweight or obese.
Hudson A (2004) Fighting fat: who slims wins. *Primary Health Care* 14(3):12–4.	Searches	No control group. Report of counterweight.
Hughes J, Todorovic V, Kemp H (1999) 'The Sugar Buddies': An intervention programme for 'obese' patients with poorly controlled diabetes. *Journal of Human Nutrition and Dietetics* 12(Suppl 1):71–8.	Searches	No control group.
Hughes J, Martin S (1999) The Department of Health's project to evaluate weight management services. *Journal of Human Nutrition and Dietetics* 12(Suppl 1):1–8.	Searches	Report of Department of Health survey.
Jayagopal V, Kilpatrick ES, Holding S, Jennings PE, Atkin SL (2005) Orlistat is as beneficial as metformin in the treatment of polycystic ovarian syndrome. *Journal of Clinical Endocrinology and Metabolism* 90(2):729–33.	Searches	Compared orlistat and metformin for polycystic ovarian syndrome.
Kenny C (2001) Primary care prevention of cardiovascular disease in diabetes. *Practical Diabetes International* 18(6):212–6.	Searches	Narrative review.
Keppie B, Lyon A (1999) Evaluation of weight management services provided by dietitians within a community trust. *Journal of Human Nutrition and Dietetics* 12(Supp 1): 53–60.	Searches	No control group.

Study	Source	Reason for exclusion
King S, Gibney M (1999) Dietary advice to reduce fat intake is more successful when it does not restrict habitual eating patterns. *Journal of the American Dietetic Association* 99(6): 685–9.	Searches	Conducted in Ireland, not UK
Kirk SFL (2003)	Searches	Not results of intervention, methods paper.
Kirk T, Crombie N, Cursiter M (2000) Promotion of dietary carbohydrate as an approach to weight maintenance after initial weight loss: a pilot study. *Journal of Human Nutrition and Dietetics* 13(4):277–85.	Searches	No control group.
Koliopoulos G, Wood PL, Papanikou E, Creatsas G (2005) Body mass index extremes in a British adolescent gynecology clinic. *Journal of Pediatric and Adolescent Gynecology* 18(3):163–6.	Searches	Retrospective case-series.
Lamb SE, Bartlett HP, Ashley A, Bird W (2002) Can lay-led walking programmes increase physical activity in middle aged adults? A randomised controlled trial. *Journal of Epidemiology and Community Health* 56(4): 246–52.	Searches	No requirement to be overweight or obese. Baseline BMI <28 kg/m^2.
Leslie WS, Lean MEJ, Baillie HM, Hankey CR (2002) Weight management: A comparison of existing dietary approaches in a work-site setting. *International Journal of Obesity* 26(11): 1469–75.	Searches	In non-clinical review.
Leslie WS, Hankey CR, Matthews D, Currall JEP, Lean MEJ (2004) A transferable programme of nutritional counselling for rehabilitation following myocardial infarction: A randomised controlled study. *European Journal of Clinical Nutrition* 58(5): 778–86).	Searches	No requirement to be overweight or obese. Baseline BMI <28 kg/m^2.
Little P (1998) GP documentation of obesity: what does it achieve? *British Journal of General Practice* 48(426):890–4.	Searches	No control group.
Marshall D, McConkey R, Moore G (2003) Obesity in people with intellectual disabilities: the impact of nurse-led health screenings and health promotion activities. *Journal of Advanced Nursing* 41(2):147–53.	Searches	No control group.
Martell R (20040 Childhood obesity 'is everyone's problem'. *Physiotherapy Frontline* 10(12):23–5.	Searches	Information brochure.
Martin C, Woolf-May K (1999) The retrospective evaluation of a general practitioner exercise prescription programme. *Journal of Human Nutrition and Dietetics* 12(Suppl 1): 32–42.	Searches	Not 12 weeks.
Maryon-Davis A (2005) Weight management in primary care: how can it be made more effective? *Proceedings of the Nutrition Society* 64(1):97–103.	Searches	Narrative review.

Study	Source	Reason for exclusion
McArdle S (2004) Running an obesity management clinic. *Practice Nurse* 27(10):38.	Searches	Narrative review.
Mercer SW, Tessier S, Mercer SW, Tessier S (2001) A qualitative study of general practitioners' and practice nurses' attitudes to obesity management in primary care. *Health Bulletin (Edinburgh)* 59(4):248–53.	Searches	Survey.
Munnelly P, Feehan S (2002) An obesity clinic model. *Proceedings of the Nutrition Society* 61(1):9–10.	Searches	No control group.
Murphy C, Simkins M, Helowicz R (1999) Diabetes exercise project. *Journal of Human Nutrition and Dietetics* 12(Suppl 1):79–90).	Searches	Relevant to non-clinical review on people with co-morbidities.
Nupponen R, Laukkanen R (1998) How to develop a group curriculum: developing an exercise programme for overweight adults. *Patient Education and Counseling* 33(Suppl 1):S77–85.	Searches	Non-UK study. No control group.
Ogden J, Bandara I, Cohen H et al. (2001) General practitioners' and patients' models of obesity: Whose problem is it? *Patient Education and Counseling* 44(3):227–33.	Searches	Survey.
Oldroyd JC, Unwin NC, White M, Imrie K, Mathers JC, Alberti KG (2001) Randomised controlled trial evaluating the effectiveness of behavioural interventions to modify cardiovascular risk factors in men and women with impaired glucose tolerance: outcomes at 6 months. *Diabetes Research and Clinical Practice* 52(1):29–4.	Searches	Focus on improving cardiovascular risk factors, not main aim of weight loss. No requirement for participants to be overweight, but mean BMI $\geq$28 kg/m^2.
Owen TA (2004) Weight in Wales. *Nutrition Bulletin* 29(2):85–91.	Searches	Survey.
Pike H (2004) Welsh pharmacist tackling obesity with weight reduction support clinic. *Pharmaceutical Journal* 272(7292):383–87	Searches	No control group.
Pill R, Stott NCN, Rollnick SR, Rees M (1998) A randomized controlled trial of an intervention designed to improve the care given in general practice to Type II diabetic patients: Patient outcomes and professional ability to change behaviour. *Family Practice* 15(3): 229–35.	Searches	No baseline BMI reported and no requirement to be overweight or obese.
Prentice A (2004)	Searches	No control group. Abstract only.
Raaff CA (2005) A preliminary investigation into the use of multimedia to enhance dietetic management of overweight and obese children: multimedia design for child–dietitian consultations. *Nutrition Bulletin* 30(2):126–31.	Searches	Appears to be case series.

Study	Source	Reason for exclusion
Rayner M, Ziebland S (1999) Process evaluation of a research workshop and follow-up support to help practitioners from 13 weight management projects to carry out evaluations. *Journal of Human Nutrition and Dietetics* 12(Supp 1): 9–19.	Searches	Process evaluation of research workshop.
Read S (2004)	Searches	No control group.
Reed B, Jackson J, Harborne J, Roberts R (1999) Study to evaluate the effect of dietary advice and the role of exercise in obese women who are trying to lose weight. *Journal of Human Nutrition and Dietetics* 12(Suppl 1):61–70.	Searches	Not evaluation of defined intervention, but retrospective review of factors that influenced weight loss.
Roberts A, Ashley G (1999) What are the characteristics of overweight and obese patients who achieve weight loss and what factors are most helpful? A quantitative and qualitative study of patients and interventions in a rural general practice. *Journal of Human Nutrition and Dietetics* 12(Suppl 1):20–27.	Searches	Not evaluation of defined intervention, but retrospective review of factors that influenced weight loss.
Rudolf MCJ, Sahota P (2004) WATCH IT. A community based approach for the treatment of childhood obesity: a pilot study. *International Journal of Obesity and Metabolic Disorders*		Children
Sleath C (1999) Can clinically significant weight loss be achieved and sustained? An evaluation of a general practice based weight control clinic. *Journal of Human Nutrition and Dietetics* 12(Suppl 1): 28–31.	Searches	No control group.
Stensel DJ (1994)	Searches	No requirement to be overweight or obese. Baseline BMI <28 kg/m^2.
Stevens W, Hillsdon M, Thorogood M, McArdle D, Eaton CB (1998) Cost-effectiveness of a primary care based physical activity intervention in 45–74 year old men and women: A randomised controlled trial. *British Journal of Sports Medicine* 32(3): 236–41.	Searches	No weight outcomes. No requirement to be overweight or obese.
Taylor AH, Doust J, Webborn N (1998) Randomised controlled trial to examine the effects of a GP exercise referral programme in Hailsham, East Sussex, on modifiable coronary heart disease risk factors. *Journal of Epidemiology and Community Health* 52(9): 595–601.	Searches	No requirement to be overweight or obese. Baseline BMI <28 kg/m^2.
Tessier S, Morris SE, Lean ME (2000) The demand and supply of nutritional advice and guidance in Scottish family planning services. *British Journal of Family Planning* 26(2):97–99.	Searches	Survey.
Thompson RL, Thomas DE (2000) A cross-sectional survey of the opinions on weight loss treatments of adult obese patients attending a dietetic clinic. *International Journal of Obesity and Related Metabolic Disorders* 24(2):164–70.	Searches	Survey.

Study	Source	Reason for exclusion
Tod AM, Lacey A (2004) Overweight and obesity: helping clients to take action. *British Journal of Community Nursing* 9(2):59–66.	Searches	Qualitative study.
Treasure JL, Katzman M, Schmidt U, Troop N, Todd G, De Silva P (1999) Engagement and outcome in the treatment of bulimia nervosa: First phase of a sequential design comparing motivation enhancement therapy and cognitive behavioural therapy. *Behaviour Research and Therapy* 37(5): 405–18.	Dunn review	People with bulimia.
Turner S (2005) Promoting healthy lifestyles for people with learning disabilities: a survey of provider organisations. *British Journal of Learning Disabilities* 24(4):138–44.	Searches	Survey.
Viner R, Nicholls D, Viner R, Nicholls D (2005) Managing obesity in secondary care: a personal practice. *Archives of Disease in Childhood* 90(4):385–90.	Searches	Literature review/expert opinion.
Watch it – An NHS Community Service for obese children.	Submitted evidence	Information brochure. No experimental study was conducted.
Wells MB, Turner S, Martin DM, Roy A (1997) Health gain through screening – coronary heart disease and stroke: developing primary health care services for people with intellectual disability. *Journal of Intellectual and Developmental Disabilities* 22(4):251–63.	Searches	Describes the results of a screening programme.
West JA, De Looy AE (2001) Weight loss in overweight subjects following low-sucrose or sucrose-containing diets. *International Journal of Obesity* 25(8):1122–8.	Searches	Not 12 weeks.
Williams J, Sultan M (1999) Evaluation of an Asian women's healthy eating and exercise group. *Journal of Human Nutrition and Dietetics 12*(Suppl 1):91–8).	Searches	No control group.

1.9 Barriers and attitudes to the management of overweight and obesity in the clinical setting

Study	Reason for exclusion
Adolfsson B et al (2002) Treating obesity: a qualitative evaluation of a lifestyle intervention for weight reduction. *Health Education Journal* 61:244–58.	Not UK-based.
Andersen et al. (1998)	Participants were not overweight or obese.
Banning M (2005) Obesity. The management of obesity: the role of the specialist nurse. *British Journal of Nursing* 14(3):139–44.	Literature review.
Drummond S (2000) Address the weighty problem of obesity. *Practice Nurse* 20:146–9.	Literature review.
Farooqi A, Nagra D, Edgar T, Khunti K (2000) Attitudes to lifestyle risk factors for coronary heart disease amongst South Asians in Leicester: a focus group study. *Family Practice* 17(4):293–7.	Not relevant to weight management.
Fuller TL, Backett-Milburn K, Hopton JL (2003) Healthy eating: the views of general practitioners and patients in Scotland. *American Journal of Clinical Nutrition* 77(4 Suppl):S1043–7.	Not relevant to weight management.
Green (1998)	Literature review.
Heyes T, Long S, Mathers N (2004) Preconception care: practice and beliefs of primary care workers. *Family Practice* 21(1):22–7.	Not relevant to weight management.
Hunt P, Pearson D (2001) Motivating change. *Nursing Standard* 16(2):45–52.	Literature review.
Ingledew, Sullivan (2002)	Adolescents were recruited in Germany.
John J, Ziebland S (2004) Reported barriers to eating more fruit and vegetables before and after participation in a randomized controlled trial: a qualitative study. *Health Education Research* 19(2):165–74.	Not relevant to weight management.
John J, Yudkin P, Neil H (2003) Does Stage of Change predict outcome in a primary-care intervention to encourage an increase in fruit and vegetable consumption? *Health Education Research* 18(4):429–38.	Not relevant to weight management.
Lloyd et al. (1995)	Included subjects that were overweight and subjects with normal weight, and no stratification of weight results was performed.

Study	Reason for exclusion
Nigg CR (1999) Stages of change across ten health risk behaviors for older adults. Gerontologist 39(4):473–82.	Not UK-based.
Prochaska JO (1994) Stages of change and decisional balance for 12 problem behaviors. *Health Psychology* 13:39–46.	Not relevant to weight management.
Salmon et al. Reducing sedentary behaviour and increasing physical activity among 10-year-old children: Overview and process evaluation of the 'Switch-Play' intervention. *Health Promotion International* 20:7–17.	Not UK-based.
Sutton K, Logue E, Jarjoura D, Baughman K, Smucker W, Capers C (2003) Assessing dietary and exercise stage of change to optimize weight loss interventions. *Obesity Research* 11(5):641–52.	Not UK-based.
Taylor et al. 2004	Not UK-based
Thompson RL, Thomas DE (2000) A cross-sectional survey of the opinions on weight loss treatments of adult obese patients attending a dietetic clinic. *International Journal of Obesity and Related Metabolic Disorders* 24(2):164–70.	No barriers were reported in this study.
Turner 1996	Participants were not overweight or obese.
Wallace PG, Brennan PJ, Haines AP (1987) Are general practitioners doing enough to promote healthy lifestyle? Findings of the Medical Research Council's general practice research framework study on lifestyle and health. *British Medical Journal (Clinical Research Ed.)* 294(6577):940–2.	Participants were not overweight. Promotion of health lifestyle.
Williams, Sultan	Not relevant to clinical practice.

1.10 Effectiveness of brief interventions in primary care and other general clinical settings in improving outcomes for people who are overweight and obese

Study	Reason for exclusion
Albright CL (2000) Incorporating physical activity advice into primary care: Physician- delivered advice within the Activity Counseling Trial. *American Journal of Preventive Medicine* vol 2000;Apr-234	Participants were not obese/overweight.
Ammerman AS, Keyserling TC, Atwood JR, Hosking JD, Zayed H, Krasny C (2003) A randomized controlled trial of a public health nurse directed treatment program for rural patients with high blood cholesterol. *Preventive Medicine* 36(3):340–51.	Not a brief intervention.
Ammerman AS, Lindquist CH, Hersey J (2002) The efficacy of behavioral interventions to modify dietary fat and fruit and vegetable intake: A review of the evidence. *Preventive Medicine* 35:25–41.	Not relevant.
Ashley JM, St Jeor ST, Schrage JP et al. (2001) Weight control in the physician's office. *Archives of Internal Medicine* 161(13):1599–1604.	Not relevant to KCQ.
Beresford SA, Curry SJ, Kristal AR, Lazovich D, Feng Z, Wagner EHA (1997) Dietary intervention in primary care practice: the Eating Patterns Study. *American Journal of Public Health* 87:610–616.	Aim other than to assess effectiveness of a brief intervention in weight loss/maintenance in obese/overweight individuals.
Black DR, Coe WC, Friesen JG, Wurzmann AG (1984) Minimal interventions for weight control: a cost-effective alternative. *Addictive Behavior* 9(3):279–85.	Less than12-month study.
Bull FC, Jamrozik K, Blanksby BA (1999) Tailored advice on exercise – Does it make a difference. *American Journal of Preventive Medicine* 16(3):230–9.	BMI values were only reported at month 1.
Burke BL (2004) The emerging evidence base for motivational interviewing: a meta-analytic and qualitative inquiry. *Journal of Cognitive Psychotherapy* (Special Issue: Motivational Interviewing: Theory, Research, and Practice)	Narrative review.
Conn Vicki, Valentine J, Cooper H (2002) Interventions to increase physical activity among aging adults: A meta-analysis. *Annals of Behavioral Medicine* 24(3): 190–200.	Participants were not overweight/obese
Dowell AC, Ocheran JJ, Hilton SR et al. (1996) Prevention in practice: Results of a 2-year follow-up of routine health promotion interventions in general practice. *Family Practice* 13(4):357–62.	Also included participants that were not overweight or obese.
Drummond S, Kirk T (1999) Assessment of advice to reduce dietary fat and non-milk extrinsic sugar in a free-living male population. *Public Health Nutrition* 2(2):187–97.	Weight and BMI values were only reported at baseline.

Dubbert PM (2002) Physical activity and exercise: Recent advances and current challenges. *Journal of Consulting and Clinical Psychology* (Special Issue: Behavioral medicine and clinical health psychology).	Participants were not obese/overweight.
Dunn C, Deroo L, Rivara FP (2001) The use of brief interventions adapted from motivational interviewing across behavioral domains: A systematic review. *Addiction* 96:1770-2.	Not relevant systematic review. References checked.
Fulton JE, Garg M, Galuska DA, Rattay KT, Caspersen CJ (2004) Public health and clinical recommendations for physical activity and physical fitness: special focus on overweight youth. *Sports Medicine* 2004; 34(9):581–99.	Aim other than to assess effectiveness of a brief intervention in weight loss/maintenance in obese/overweight individuals.
Goldstein MG (2004) Multiple behavioral risk factor interventions in primary care: summary of research evidence. *American Journal of Preventive Medicine* (Special Issue: Addressing Multiple Behavioral Risk Factors in Primary Care).	Literature review. References checked.
Halbert JA, Silagy CA, Finucane PM, Withers RT, Hamdorf PA (2000) Physical activity and cardiovascular risk factors: Effect of advice from an exercise specialist in Australian general practice. *Medical Journal of Australia* 173(2):85–7.	Not relevant to KCQ.
Hebert JR, Ebbeling CB, Ockene IS et al. (1999) A dietitian-delivered group nutrition program leads to reductions in dietary fat, serum cholesterol, and body weight: the Worcester Area Trial for Counseling in Hyperlipidemia (WATCH). *Journal of the American Dietetic Association* 99:544–52.	6 weeks study.
Hensrud DD (2004) Tackling obesity in a 15 minute office visit. Physicians can start patients on an effective weight-loss program, despite time constraints 115(1): 95–61.	Not RCT.
Hilton S, Doherty S, Kendrick T, Kerry S, Rink E, Steptoe A Promotion of healthy behaviour among adults at increased risk of coronary heart disease in general practice: methodology and baseline data from the Change of Heart study. *Health Education*	Not a brief intervention as nurse contacted patients via telephone in between counselling sessions.
Gerda J, Martin BW (2005) Implementation and effectiveness of a primary care based physical activity counselling scheme. *Patient Education and Counseling* 2(1):16–34.	Aim other than to assess effectiveness of a brief intervention in weight loss/maintenance in obese/overweight individuals.
King AC (2002) Harnessing motivational forces in the promotion of physical activity: The Community Health Advice by Telephone (CHAT) project. *Health Education Research*	Not relevant to KCQ.
Leslie WS, Hankey CR, Matthews D, Currall JE, Lean ME (2004) A transferable programme of nutritional counselling for rehabilitation following myocardial infarction: a randomised controlled study. *European Journal of Clinical Nutrition* 58:778–86.	Aim other than to assess effectiveness of a brief intervention in weight loss/maintenance in obese/overweight individuals.

Little P, Kelly J, Barnett J, Dorward M, Margetts B, Warm D (2004) Randomised controlled factorial trial of dietary advice for patients with a single high blood pressure reading in primary care. *British Medical Journal* 328(7447):1054–7.	Aim other than to assess effectiveness of a brief intervention in weight loss/maintenance in obese/overweight individuals.
Logue E, Sutton K, Jarjoura D et al. (2005) Transtheoretical model – chronic disease care for obesity in primary care: a randomized trial. *Obesity Research* 13(5):917–27.	Not a brief intervention.
Loreto et al. (2003)	Exclusively for participants with type 2 diabetes. Aim other than to assess effectiveness of a brief intervention in weight loss in obese/overweight individuals.
Massari A, Point C, Truffe P, Chatellier G, Simon A, Menard J (1995) A randomised trial comparing 2 different educational interventions for teaching diet in 300 subjects having a high cardiovascular risk. *Archives des Maladies du Coeur et des Vaisseaux*	Language other than English.
Mengham LH, Morris BF, Palmer CR, White AJS (1999) Is intensive dietetic intervention effective for overweight patients with diabetes mellitus? A randomised controlled study in a general practice. *Practical Diabetes International* 16:5–8.	Not a brief intervention.
Moore H, Summerbell CD, Greenwood DC et al. (2003) Improving management of obesity in primary care: Cluster randomised trial. *British Medical Journal* 327(7423):1085–8.	Not a brief intervention.
Naylor PJ (1999) Comparison of stage-matched and unmatched interventions to promote exercise behaviour in the primary care setting. *Health Education Research*	Participants were not obese/overweight.
Nemet et al. (2005) Short- and long-term beneficial effects of a combined dietary-behavioral-physical activity intervention for the treatment of childhood obesity. *Pediatrics* 115	3-month study.
Nicholas L, Pond D, Roberts D-CK The effectiveness of nutrition counselling by Australian General Practitioners. *European Journal of Clinical Nutrition* 59(Suppl 1):S140–6.	Not RCT.
Ockene IS, Hebert JR, Ockene JK et al. (1999) Effect of physician-delivered nutrition counseling training and an office-support program on saturated fat intake, weight, and serum lipid measurements in a hyperlipidemic population: Worcester area trial for counseling in hyperlipidemia (WATCH). *Archives of Internal Medicine* 159(7):725–31.	Aim other than to assess effectiveness of a brief intervention in weight loss/maintenance in obese/overweight individuals.
Olivarius N-DF, Palmvig B, Andreasen AH, Thorgersen JT, Hundrup C (2005) An educational model for improving diet counselling in primary care: A case study of the creative use of doctors' own diet, their attitudes to it and to nutritional counselling of their patients with diabetes. *Patient Education and Counseling* 58(2):199–202.	Not relevant to KCQ.

Olsen J, Willaing I, Ladelund S, Jorgensen T, Gundgaard J, Sorensen J (2005) Cost-effectiveness of nutritional counseling for obese patients and patients at risk of ischemic heart disease. *International Journal of Technology Assessment in Health Care* 2005; 21(2):194–202	Not a brief intervention.
Petrella RJ (2003) Can primary care doctors prescribe exercise to improve fitness? The Step Test Exercise Prescription (STEP) Project. *American Journal of Preventive Medicine*	Being overweight/obese was not part of inclusion criteria.
Pignone MP (2003) Counseling to promote a healthy diet in adults: A summary of the evidence for the U.S Preventive Services Task Force. *American Journal of Preventive Medicine*	Studies that included only obese/overweight subjects were excluded from this review.
Pronk NP (2004) Addressing multiple behavioral risk factors in primary care: a synthesis of current knowledge and stakeholder dialogue sessions. *American Journal of Preventive Medicine* (Special Issue: Addressing multiple behavioral risk factors in primary care	Not relevant to KCQ.
Reed B, Jackson J, Harborne J, Roberts R (1999) Study to evaluate the effect of dietary advice and the role of exercise in obese women who are trying to lose weight. *Journal of Human Nutrition and Dietetics* 12(Suppl 1):61–70.	Retrospective analysis.
Roderick P, Ruddock V, Hunt P, Miller G (1997) A randomized trial to evaluate the effectiveness of dietary advice by practice nurses in lowering diet-related coronary heart disease risk. *British Journal of General Practice* 47(414):7–12.	Not a brief intervention.
Simkin-Silverman LR (20050 Predictors of weight control advice in primary care practices: Patient health and psychosocial characteristics. *Preventive Medicine*	Not a brief intervention.
Simkin-Silverman LR, Wing RR (1997) Management of obesity in primary care 5(6):603–612.	Not clear length of follow-up.
Simons-Morton DG (2001) Effects of physical activity counseling in primary care: The Activity Counseling Trial: A randomized controlled trial. *Journal of the American Medical Association*	Aim other than to assess effectiveness of a brief intervention in weight loss/maintenance in obese/overweight individuals.
Smith DE, Heckemeyer CM, Kratt PP, Mason DA (1997) Motivational interviewing to improve adherence to a behavioral weight-control program for older obese women with NIDDM A pilot study. *Diabetes Care* 20:52–4.	Not relevant to KCQ.
Staten LK (2004) Provider Counseling, Health Education, and Community Health Workers: The Arizona WISEWOMAN Project. *Journal of Women's Health*	Aim other than to assess effectiveness of a brief intervention in weight loss/maintenance in obese/overweight individuals.

Steptoe A, Doherty S, Rink E, Kerry S, Kendrick T, Hilton S (1999) Behavioural counselling in general practice for the promotion of healthy behaviour among adults at increased risk of coronary heart disease: Randomised trial. *British Medical Journal* 319(7215):943–7.	No weight values were reported at the assessments.
Steptoe A, Kerry S, Rink E, Hilton S (2001) The impact of behavioral counseling on stage of change in fat intake, physical activity, and cigarette smoking in adults at increased risk of coronary heart disease. *American Journal of Public Health* 91:265–9. [77]	No subgroup analysis for subjects with overweight/obesity or normal weight.
Traeden UI, Holm L, Sandstrom B, Andersen PK, Jarden M (1998) Effectiveness of a dietary intervention strategy in general practice: effects on blood lipids, health and well-being. *Public Health Nutrition* 1(4):273–81.	Not an RCT.
Van der Veen J, Bakx C, Van den Hoogen H et al. (2002) Stage-matched nutrition guidance for patients at elevated risk for cardiovascular disease: A randomized intervention study in family practice. *Journal of Family Practice* 51(9):751–8.	Aim other than to assess effectiveness of a brief intervention in weight loss/maintenance in obese/overweight individuals.
Van der Bij AK (2002) Effectiveness of physical activity interventions for older adults. *American Journal of Preventive Medicine*	Participants were not obese/overweight.
Whitlock EP (2002) Evaluating primary care behavioral counseling interventions: An evidence-based approach. *American Journal of Preventive Medicine*	Literature review.
Willaing I, Ladelund S, Jorgensen T, Simonsen T, Nielsen LM (2004) Nutritional counselling in primary health care: A randomized comparison of an intervention by general practitioner or dietician. *European Journal of Cardiovascular Prevention and Rehabilitation* 11(6):513–20	Not a brief intervention.
Wolf AM, Conaway MR, Crowther JQ et al. (2004) Translating lifestyle intervention to practice in obese patients with type 2 diabetes: Improving Control with Activity and Nutrition (ICAN) study. *Diabetes Care* 27(7):1570–6	Not a brief intervention.
Woollard J, Beilin L, Lord T, Puddey I, MacAdam D, Rouse I (1995) A controlled trial of nurse counselling on lifestyle change for hypertensives treated in general practice: Preliminary results. *Clinical and Experimental Pharmacology and Physiology* 22(6/7):466–8.	Not a brief intervention.
Woollard J, Burke V, Beilin LJ, Verheijden M, Bulsara MK (2003) Effects of a general practice-based intervention on diet, body mass index and blood lipids in patients at cardiovascular risk. *Journal of Cardiovascular Risk* 10:31–40.	Being overweight/ obese was not part of inclusion criteria.

2 Update searches and papers considered

Reference	Reason for exclusion
Abate N, Chandalia M, Snell PG, Grundy SM, Abate N, Chandalia M *et al*. Adipose tissue metabolites and insulin resistance in nondiabetic Asian Indian men. *J.Clin.Endocrinol.Metab* 2004;89:2750-5.	Not considered to affect evidence statements…
Acarturk TO, Wachtman G, Heil B, Landecker A, Courcoulas AP, Manders EK *et al*. Panniculectomy as an adjuvant to bariatric surgery. [Review] [21 refs]. *Ann.Plast.Surg.* 2004;53:360-6.	Reviewed the use of panniculectomy as adjuvant. Not technique of weight loss surgery.
Acheson KJ,.Acheson KJ. Carbohydrate and weight control: where do we stand?. [Review] [70 refs]. *Curr.Opin.Clin.Nutr.Metab Care* 2004;7:485-92.	Narrative review
Adami GF, Ramberti G, Weiss A, Carlini F, Murelli F, Scopinaro N. Quality of life in obese subjects following biliopancreatic diversion. *Behavioral Medicine.* 2005;31:53-60.	Not effectiveness of weight loss surgery. Mean EWL not reported.
Alvarado R, Alami RS, Hsu G, Safadi BY, Sanchez BR, Morton JM *et al*. The impact of preoperative weight loss in patients undergoing laparoscopic Roux-en-Y gastric bypass. *Obesity Surgery.* 2005;15:1282-6.	Less than 150 participants.
Ames GE, Perri MG, Fox LD, Fallon EA, De Braganza N, Murawski ME *et al*. Changing weight-loss expectations: a randomized pilot study. *Eat.* 2005;6:259-69.	Added in relevant Update section
Anderson JW, Luan J, Hoie LH, Anderson JW, Luan J, Hoie LH. Structured weight-loss programs: meta-analysis of weight loss at 24 weeks and assessment of effects of intervention intensity. [Review] [75 refs]. *Adv.Ther.* 2004;21:61-75.	Effects at 24 weeks, not 12 months
Angrisani L, Favretti F, Furbetta F, Iuppa A, Doldi SB, Paganelli M *et al*. Italian Group for Lap-Band System: results of multicenter study on patients with BMI < or =35 kg/m2. *Obes.Surg.* 2004;14:415-8.	Added detail in relevant Update section
Ardern CI, Janssen I, Ross R, Katzmarzyk PT, Ardern CI, Janssen I *et al*. Development of health-related waist circumference thresholds within BMI categories. *Obes.Res.* 2004;12:1094-103.	Not considered to affect evidence statements…
Armitage CJ. Evidence That Implementation Intentions Reduce Dietary Fat Intake: A Randomized Trial. *Health Psychology.* 2004;23:319-23.	Not 52 week follow-up
Aucott L, Poobalan A, Smith WC, Avenell A, Jung R, Broom J *et al*. Weight loss in obese diabetic and non-diabetic individuals and long-term diabetes outcomes--a systematic review. [Review] [17 refs]. *Diabetes Obes.Metab* 2004;6 :85-94.	Systematic review.

Reference	Reason for exclusion
Aude YW, Agatston AS, Lopez JF, Lieberman EH, Almon M, Hansen M *et al*. The National Cholesterol Education Program diet vs a diet lower in carbohydrates and higher in protein and monounsaturated fat: a randomized trial. *Arch.Intern.Med.* 2004;164:2141-6.	Not 52 week follow-up
Azizi F, Esmaillzadeh A, Mirmiran P, Ainy E, Azizi F, Esmaillzadeh A *et al*. Is there an independent association between waist-to-hip ratio and cardiovascular risk factors in overweight and obese women? *Int.J.Cardiol.* 2005;101 :39-46.	Not considered to affect evidence statements…
Beck-da-Silva L, Higginson L, Fraser M, Williams K, Haddad H, Beck-da-Silva L *et al*. Effect of Orlistat in obese patients with heart failure: a pilot study. *Congest.Heart Fail.* 2005;11:118-23.	Not 52 week follow-up
Bennett P. Obesity, diabetes and VLCDs. Primary and secondary care partnership model to treat obesity. *British Journal of Diabetes & Vascular Disease.* 2004;4:328-30.	Description of service, not evaluation.
Berne C, the Orlistat ST, Berne C, the Orlistat ST. A randomized study of orlistat in combination with a weight management programme in obese patients with Type 2 diabetes treated with metformin. *Diabet.Med.* 2005;22:612-8.	Absolute weight change not reported.
Bhat DS, Yajnik CS, Sayyad MG, Raut KN, Lubree HG, Rege SS *et al*. Body fat measurement in Indian men: Comparison of three methods based on a two-compartment model. *International Journal of Obesity.* 2005;29:842-8.	Not considered to affect evidence statements…
Bigaard J, Frederiksen K, Tjonneland A, Thomsen BL, Overvad K, Heitmann BL *et al*. Waist and hip circumferences and all-cause mortality: Usefulness of the waist-to-hip ratio? *International Journal of Obesity.* 2004;28:741-7.	Not considered to affect evidence statements…
Birkenfeld AL, Schroeder C, Pischon T, Tank J, Luft FC, Sharma AM *et al*. Paradoxical effect of sibutramine on autonomic cardiovascular regulation in obese hypertensive patients--sibutramine and blood pressure. *Clin.Auton.Res.* 2005;15:200-6.	Not 52 week follow-up
Birketvedt GS, Shimshi M, Erling T, Florholmen J, Birketvedt GS, Shimshi M *et al*. Experiences with three different fiber supplements in weight reduction. *Med.Sci.Monit.* 2005;11:I5-I8.	Effectiveness of fibre supplements.
Blair SN, LaMonte MJ, Nichaman MZ, Blair SN, LaMonte MJ, Nichaman MZ. The evolution of physical activity recommendations: how much is enough?. [Review] [62 refs]. *Am.J.Clin.Nutr.* 2004;79:913S-20S.	Narrative review.

Reference	Reason for exclusion
Borg P, Fogelholm M, Kukkonen-Harjula K. Food selection and eating behaviour during weight maintenance intervention and 2-y follow-up in obese men. *International Journal of Obesity.* 2004;28:1548-54.	Observational follow-up study from RCT
Brandsma LL. Physician and patient attitudes toward obesity. *Eating Disorders.* 2005;13:1-211.	Not UK based
Branson R, Potoczna N, Brunotte R, Piec G, Ricklin T, Steffen R *et al*. Impact of age, sex and body mass index on outcomes at four years after gastric banding. *Obesity Surgery.* 2005;15:834-42.	Added detail in relevant Update section
Cabioglu MT, Ergene N, Cabioglu MT, Ergene N. Electroacupuncture therapy for weight loss reduces serum total cholesterol, triglycerides, and LDL cholesterol levels in obese women. *Am.J.Chin.Med.* 2005;33:525-33.	Not included therapy
Camerini G, Marinari GM, Adami GF, Scopinaro N. Preoperative resting energy expenditure does not predict weight loss and maintenance after vertical banded gastroplasty. *Obesity Surgery.* 2005;15:809-12.	Less than 150 participants.
Carels RA DLDOCHR. Education on the glycemic index of foods fails to improve treatment outcomes in a behavioral weight loss program. *Eat.* 2005;6:145-50.	Compared effectiveness of different education programmes (with/without GI component), rather than different diets.
Chapman MJ, Craven MJ, Chadwick DD. Fighting fit? An evaluation of health practitioner input to improve healthy living and reduce obesity for adults with learning disabilities. *Journal of Intellectual Disabilities.* 2005;9:131-44.	Not RCT
Chopra M, Darnton-Hill I, Chopra M, Darnton-Hill I. Tobacco and obesity epidemics: not so different after all?. [Review] [23 refs]. *BMJ* 2004;328:1558-60.	Narrative review
Christou NV, Jarand J, Sylvestre JL, McLean APH. Analysis of the Incidence and Risk Factors for Wound Infections in Open Bariatric Surgery. *Obesity Surgery.* 2004;14:16-22.	Wound infection in the immediate period after surgery, not weight loss.
Cikim AS, Ozbey N, Orhan Y. Relationship between cardiovascular risk indicators and types of obesity in overweight and obese women. *Journal of International Medical Research.* 2004;32:268-73.	Not considered to affect evidence statements…
Coffey CS, Steiner D, Baker BA, Allison DB, Coffey CS, Steiner D *et al*. A randomized double-blind placebo-controlled clinical trial of a product containing ephedrine, caffeine, and other ingredients from herbal sources for treatment of overweight and obesity in the absence of lifestyle treatment. *Int.J.Obes.Relat Metab Disord.* 2004;28:1411-9.	OTC herbal product

Reference	Reason for exclusion
Collet D, Rault A, Sa C, Larroude D, Masson B. Laparoscopic adjustable gastric banding results after 2 years with two different band types. *Obesity Surgery.* 2005;15:853-7.	Comparison of different lap bands.
Cook NR KSCJWPToHPCRG. Dose-response of sodium excretion and blood pressure change among overweight, nonhypertensive adults in a 3-year dietary intervention study. *J.Hum.Hypertens.* 2005;19:47-54.	TOHP II paper
Crowe TC,.Crowe TC. Safety of low-carbohydrate diets. [Review] [70 refs]. *Obes.Rev.* 2005;6:235-45.	Narrative review
Dalle Grave R, Calugi S, Magri F, Cuzzolaro M, Dall AE, Lucchin L *et al*. Weight Loss Expectations in Obese Patients Seeking Treatment at Medical Centers. *Obesity Research, Dec 2004, vol.12., no.12., p.2005 2012., eISSN.: 1550.8528., ISSN.: 1071.7323.Publisher.: North American Assn.for the Study of Obesity (NAASO.), US, http.://www.naaso.org.* 2004.	Refer to CPHE review on Behaviour Change for evidence (to be published)
Dargent J. Esophageal dilatation after laparoscopic adjustable gastric banding: Definition and strategy. *Obesity Surgery.* 2005;15:843-8.	No mean EWL reported.
Day P. What is the evidence for the safety and effectiveness of surgical and non-surgical interventions for patients with morbid obesity? 2005.	Technical review – similar conclusions re evidence base
de Zwaan M, Mitchell JE, Crosby RD, Mussell MP, Raymond NC, Specker SM *et al*. Short-Term Cognitive Behavioral Treatment Does Not Improve Outcome of a Comprehensive Very-Low-Calorie Diet Program in Obese Women With Binge Eating Disorder. *Behavior Therapy, Win.2005, vol.36., no.1, p.89.99., ISSN.: 0005.7894.Publisher.: Assn.for the Advancement.of Behavior Therapy, US, http.://www.aabt.org.* 2005.	Not 52 week follow-up. Also involved treatment of BED.
Deforche B, De B, I, Tanghe A, Debode P, Hills AP, Bouckaert J *et al*. Post-treatment phone contact: a weight maintenance strategy in obese youngsters. *Int.J.Obes.Relat Metab Disord.* 2005;29:543-6.	Children/adolescents, not adults
Dolan K,.Fielding G. Bilio pancreatic diversion following failure of laparoscopic adjustable gastric banding. *Surgical Endoscopy.* 2004;18:60-3.	Only subset of 85 patients who had band removed.
Douketis JD, Paradis G, Keller H, Martineau C, Douketis JD, Paradis G *et al*. Canadian guidelines for body weight classification in adults: application in clinical practice to screen for overweight and obesity and to assess disease risk. *ECMAJ., Can.* 2005;172:995-8.	Guidelines, used for cross reference
Due A, Toubro S, Stender S, Skov AR, Astrup A, Due A *et al*. The effect of diets high in protein or carbohydrate on inflammatory markers in overweight subjects. *Diabetes Obes.Metab* 2005;7:223-9.	Not 52 week follow-up.

Reference	Reason for exclusion
Dunstan DW DRO. Home-based resistance training is not sufficient to maintain improved glycemic control following supervised training in older individuals with type 2 diabetes. *Diabetes Care* 2005;28:3-9.	Added in relevant Update searches,
Ebbeling CB LMSKS-SLFHLD. Effects of an ad libitum low-glycemic load diet on cardiovascular disease risk factors in obese young adults. *The American journal of clinical nutrition* 2005;81:976-82.	Not added, as compares different diets in combination with activity and behavioural interventions. Small study, with limited detail on interventions. Would not change evidence statements or recommendations.
Elfhag K,.Rossner S. Who succeeds in maintaining weight loss? A conceptual review of factors associated with weight loss maintenance and weight regain. *Obesity Reviews.* 2005;6:67-85.	Refer to CPHE review on Behaviour Change for evidence (to be published)
Ellis Gardner R,.Hausenblas HA. Understanding Exercise and Diet Motivation in Overweight Women Enrolled in a Weight-Loss Program: A Prospective Study Using the Theory of Planned Behavior. *Journal of Applied Social Psychology, Jul.2004, vol.34., no.7., p.1353.1370., ISSN.: 0021.9029.Publisher.: Bellwether.Publishing., US, http.://www.bellpub.com.* 2004.	Refer to CPHE review on Behaviour Change for evidence (to be published)
Esmaillzadeh A, Mirmiran P, Azizi F, Esmaillzadeh A, Mirmiran P, Azizi F. Waist-to-hip ratio is a better screening measure for cardiovascular risk factors than other anthropometric indicators in Tehranian adult men. *Int.J.Obes.Relat Metab Disord.* 2004;28:1325-32.	Not considered to affect evidence statements…
Farmer SR, Auwerx J, Farmer SR, Auwerx J. Adipose tissue: new therapeutic targets from molecular and genetic studies--IASO Stock Conference 2003 report. [Review] [24 refs]. *Obes.Rev.* 2004;5:189-96.	Not relevant
Fatouros IG, Tournis S, Leontsini D, Jamurtas AZ, Sxina M, Thomakos P *et al*. Leptin and adiponectin responses in overweight inactive elderly following resistance training and detraining are intensity related. *Journal of Clinical Endocrinology & Metabolism.* 2005;90:5970-7.	No requirement for participants to be overweight/obese.
Feigenbaum A, Pasternak S, Zusk E, Sarid M, Vinker S, Feigenbaum A *et al*. Influence of intense multidisciplinary follow-up and orlistat on weight reduction in a primary care setting. *BMC Fam.Pract.* 2005;6:5.	Not RCT
Ferreira I, Snijder MB, Twisk JWR, Van M, Kemper HCG, Seidell JC *et al*. Central fat mass versus peripheral fat and lean mass: Opposite (adverse versus favorable) associations with arterial stiffness? The Amsterdam growth and health longitudinal study. *Journal of Clinical Endocrinology & Metabolism.* 2004;89:2632-9.	Not considered to affect evidence statements…

Reference	Reason for exclusion
Focht BC, Rejeski WJ, Ambrosius WT, Katula JA, Messier SP, Focht BC *et al*. Exercise, self-efficacy, and mobility performance in overweight and obese older adults with knee osteoarthritis. *Arthritis Rheum.* 2005;53:659-65.	Messier 2004 paper
Foster GD, Phelan S, Wadden TA, Gill D, Ermold J, Didie E *et al*. Promoting more modest weight losses: a pilot study. *Obes.Res.* 2004;12:1271-7.	Not RCT
Foster-Schubert KE, McTiernan A, Frayo RS, Schwartz RS, Rajan KB, Yasui Y *et al*. Human plasma ghrelin levels increase during a one-year exercise program. *Journal of Clinical Endocrinology & Metabolism.* 2005;90:820-5.	Added detail in relevant Update section.
Frank LL SBY. Effects of exercise on metabolic risk variables in overweight postmenopausal women: a randomized clinical trial. *Obes.Res.* 2005;13:615-25.	Weight loss not reported.
Friedman KE, Reichmann SK, Costanzo PR, Zelli A, Ashmore JA, Musante GJ *et al*. Weight stigmatization and ideological beliefs: relation to psychological functioning in obese adults. *Obes.Res.* 2005;13:907-16.	Refer to CPHE review on Behaviour Change for evidence (to be published)
Ghosh A, Bose K, Chakravarti S, Chaudhuri AB, Chattopadhyay J, Dasgupta G *et al*. Central obesity and coronary risk factors. *J.R.Soc.Health* 2004;124:86-90.	Not considered to affect evidence statements…
Go MR, Muscarella IIP, Needleman BJ, Cook CH, Melvin WS. Endoscopic management of stomal stenosis after Roux-en-Y gastric bypass. *Surgical Endoscopy.* 2004;18:56-9.	Weight outcomes not reported.
Goh VHH, Tain CF, Tong TYY, Mok HPP, Wong MT. Are BMI and other anthropometric measures appropriate as indices for obesity? A study in an Asian population. *Journal of Lipid Research.* 2004;45:1892-8.	Not considered to affect evidence statements…
Gokce N, Vita JA, McDonnell M, Forse AR, Istfan N, Stoeckl M *et al*. Effect of medical and surgical weight loss on endothelial vasomotor function in obese patients. *American Journal of Cardiology.* 2005;95:266-8.	Less than 150 participants.
Goldstein MG, Whitlock EP, DePue J, Planning Committee of the Addressing Multiple Behavioral Risk Factors in Primary Care Project., Goldstein MG, Whitlock EP *et al*. Multiple behavioral risk factor interventions in primary care. Summary of research evidence. [Review] [146 refs]. *Am.J.Prev.Med.* 2004;27:61-79.	Review based on USPSTF evidence summary.
Graci S, Izzo G, Savino S, Cattani L, Lezzi G, Berselli ME *et al*. Weight cycling and cardiovascular risk factors in obesity. *Int.J.Obes.Relat Metab Disord.* 2004;28:65-71.	Not relevant…

Reference	Reason for exclusion
Grievink L, Alberts JF, O'Niel J, Gerstenbluth I, Grievink L, Alberts JF *et al*. Waist circumference as a measurement of obesity in the Netherlands Antilles; associations with hypertension and diabetes mellitus. *Eur.J.Clin.Nutr.* 2004;58:1159-65.	Not considered to affect evidence statements…
Gus M, Fuchs SC, Moreira LB, Moraes RS, Wiehe M, Silva AF *et al*. Association between different measurements of obesity and the incidence of hypertension. *Am.J.Hypertens.* 2004;17:50-3.	Not considered to affect evidence statements…
He M,.Stubbs RS. Gastric bypass surgery for severe obesity: What can be achieved? *New Zealand Medical Journal.* 2004;117:14p.	See White 2005
Hesse UJ, Ceelen W, Cardon A, Pattyn P. One- to three-year results of gastric banding on secondary complications of morbid obesity in 625 patients. *Chirurgische Gastroenterologie.* 2005;21:37-9.	Follow-up less than 24 months.
Hsu C, Hwang K, Chao C, Chang H, Chou P. Electroacupuncture in obese women: a randomized, controlled pilot study. *J.Womens Health (Larchmt.)* 2005;14:434-40.	Not relevant
Janssen I, Katzmarzyk PT, Ross R. Waist circumference and not body mass index explains obesity-related health risk. *Am.J.Clin.Nutr.* 2004;79:379-84.	Not considered to affect evidence statements…
Keller CS, Robinson B, Pickens L, Keller CS, Robinson B, Pickens L. Comparison of two walking frequencies in African American postmenopausal women. *ABNF J.* 2004;15:3-9.	Not 52 week follow-up. Also community based.
Kelly J, Tarnoff M, Shikora S, Thayer B, Jones DB, Forse RA *et al*. Best practice recommendations for surgical care in weight loss surgery. [Review] [71 refs]. *Obes.Res.* 2005;13:227-33.	Evidence based recommendations, focussing on process and delivery, in addition to surgical technique
Kral JG, Thung SN, Biron S, Hould FS, Lebel S, Marceau S *et al*. Effects of surgical treatment of the metabolic syndrome on liver fibrosis and cirrhosis. *Surgery.* 2004;135:48-58.	Subset of 104 patients who had repeat liver biopsies.
Kukkonen-Harjula KT, Borg PT, Nenonen AM, Fogelholm MG. Effects of a weight maintenance program with or without exercise on the metabolic syndrome: A randomized trial in obese men. *Preventive Medicine.* 2005;41:784.	Added in relevant Update section
Kumanyika SK, Shults J, Fassbender J, Whitt MC, Brake V, Kallan MJ *et al*. Outpatient weight management in African-Americans: the Healthy Eating and Lifestyle Program (HELP) study. *Prev.Med.* 2005;41:488-502.	Added detail in relevant Update section

Reference	Reason for exclusion
Lara-Esqueda A, Aguilar-Salinas CA, Velazquez-Monroy O, Gomez-Perez FJ, Rosas-Peralta M, Mehta R *et al*. The body mass index is a less-sensitive tool for detecting cases with obesity-associated co-morbidities in short stature subjects. *Int.J.Obes.Relat Metab Disord.* 2004;28:1443-50.	Not considered to affect evidence statements…
Larsson I, Berteus FH, Lindroos AK, Lissner L, Naslund I, Peltonen M *et al*. Body composition in the SOS (Swedish Obese Subjects) reference study. *Int.J.Obes.Relat Metab Disord.* 2004;28:1317-24.	From SOS study already included
LeCheminant JD, Jacobsen DJ, Hall MA, Donnelly JE. A comparison of meal replacements and medication in weight maintenance after weight loss. *Journal of the American College of Nutrition.* 2005;24:347-53.	Orlistat dose 240mg/day, not usual dose of 360mg/day.
Leiter LA. A dietitian-led intervention reduced weight and waist circumference in obese patients with type 2 diabetes. *ACP J.Club* 2005;142:17.	Report of Wolf 2004
Leslie WS, Hankey CR, McCombie L, Lean MEJ. Weight management: A survey of current practice in secondary care NHS settings in 2004. *Journal of Evaluation in Clinical Practice.* 2005;11:462-7.	Not relevant
Li Z, Maglione M, Tu W, Mojica W, Arterburn D, Shugarman LR *et al*. Meta-analysis: Pharmacologic treatment of obesity. *Annals of Internal Medicine.* 2005;142:532-46.	Used for cross reference
Linde JA, Jeffery RW, Finch EA, Ng DM, Rothman AJ. Are Unrealistic Weight Loss Goals Associated with Outcomes for Overweight Women? *Obesity Research, Mar.2004, vol.12., no.3, p.569.576., eISSN.: 1550.8528., ISSN.: 1071.7323.Publisher.: North American Assn.for the Study of Obesity (NAASO.), US, http.://www.naaso.org.* 2004.	Not clinical setting. Comparison of mail/phone interventions.
Linde JA, Jeffery RW, Levy RL, Pronk NP, Boyle RG, Linde JA *et al*. Weight loss goals and treatment outcomes among overweight men and women enrolled in a weight loss trial. *Int.J.Obes.* 2005;29:1002-5.	Refer to CPHE review on Behaviour Change for evidence (to be published)
Lofgren I, Herron K, Zern T, West K, Patalay M, Shachter NS *et al*. Waist circumference is a better predictor than body mass index of coronary heart disease risk in overweight premenopausal women. *J.Nutr.* 2004;134:1071-6.	Not considered to affect evidence statements…
Logue EE JDSKSWBKCC. Longitudinal relationship between elapsed time in the action stages of change and weight loss. *Obes.Res.* 2004;12:1499-508.	Refer to CPHE review on Behaviour Change for evidence (to be published)

Reference	Reason for exclusion
Maffiuletti NA, Agosti F, Marinone PG, Silvestri G, Lafortuna CL, Sartorio A *et al*. Changes in body composition, physical performance and cardiovascular risk factors after a 3-week integrated body weight reduction program and after 1-y follow-up in severely obese men and women. *Eur.J.Clin.Nutr.* 2005;59:685-94.	Not RCT
Maffiuletti NA, Agosti F, Proietti M, Riva D, Resnik M, Lafortuna CL *et al*. Postural instability of extremely obese individuals improves after a body weight reduction program entailing specific balance training. *J.Endocrinol.Invest.* 2005;28:2-7.	Not RCT
Malone DC, Raebel MA, Porter JA, Lanty FA, Conner DA, Gay EC *et al*. Cost-effectiveness of sibutramine in the LOSE Weight Study: evaluating the role of pharmacologic weight-loss therapy within a weight management program. *J.Manage.Care Pharm.* 2005;11:458-68.	Cost effectiveness study. Based on Porter 2004.
Mamtani MR, Kulkarni HR, Mamtani MR, Kulkarni HR. Predictive performance of anthropometric indexes of central obesity for the risk of type 2 diabetes. *Arch.Med.Res.* 2005;36:581-9.	Not considered to affect evidence statements…
Mannucci E, Spila A, Monami M, Sarli E, Avogaro A. Indexes of abdominal adiposity in patients with Type 2 diabetes. *Journal of Endocrinological Investigation.* 2004;27:535-40.	Not considered to affect evidence statements…
Marchesini G, Cuzzolaro M, Mannucci E, Grave RD, Gennaro M, Tomasi F *et al*. Weight cycling in treatment-seeking obese persons: data from the QUOVADIS study. *International Journal of Obesity, Nov.2004, vol.28., no.11, p.1456.1462., ISSN.: 0307.0565.Publisher.: Nature Publishing., United Kingdom., http.://www.nature.com./.* 2004.	Not relevant
Martin MJ, Mullenix PS, Steele SR, See CS, Cuadrado DG, Carter PL. A case-match analysis of failed prior bariatric procedures converted to resectional gastric bypass. *American Journal of Surgery.* 2004;187:666-71.	Not 150 participants.
Martin PD, Dutton GR, Brantley PJ, Martin PD, Dutton GR, Brantley PJ. Self-efficacy as a predictor of weight change in African-American women. *Obes.Res.* 2004;12:646-51.	Refer to CPHE review on Behaviour Change for evidence (to be published)
Mathus-Vliegen EM, Balance Study Group., Mathus-Vliegen EMH, Balance Study Group. Long-term maintenance of weight loss with sibutramine in a GP setting following a specialist guided very-low-calorie diet: a double-blind, placebo-controlled, parallel group study. *Eur.J.Clin.Nutr.* 2005;59 Suppl 1:S31-S38.	Although reported as intervention including activity, no details were provided.

Reference	Reason for exclusion
McCarty TM, Arnold DT, Lamont JP, Fisher TL, Kuhn JA, Buchwald H *et al*. Optimizing outcomes in bariatric surgery: Outpatient laporoscopic gastric bypass. *Annals of Surgery.* 2005;242:494-501.	No weight loss outcomes reported.
McTiernan A. Effect of exercise on serum androgens in postmenopausal women: a 12-month randomized clinical trial. *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology* 2004;13:1099-105.	Weight outcome not reported.
Melin I, Karlstrom B, Berglund L, Zamfir M, Rossner S, Melin I *et al*. Education and supervision of health care professionals to initiate, implement and improve management of obesity. *Patient Educ.Couns.* 2005;58:127-36.	Not UK based
Messier SP, Gutekunst DJ, Davis C, DeVita P, Messier SP, Gutekunst DJ *et al*. Weight loss reduces knee-joint loads in overweight and obese older adults with knee osteoarthritis. *Arthritis Rheum.* 2005;52:2026-32.	From Messier 2004 study.
Miller GD, Nicklas BJ, Davis CC, Ambrosius WT, Loeser RF, Messier SP. Is serum leptin related to physical function and is it modifiable through weight loss and exercise in older adults with knee osteoarthritis? *International Journal of Obesity.* 2004;28:1383-90.	From Messier 2004 study.
Misra A, Wasir JS, Vikram NK. Waist circumference criteria for the diagnosis of abdominal obesity are not applicable uniformly to all populations and ethnic groups. *Nutrition.* 2005;21:969-76.	Not considered to affect evidence statements…
Miyatake N, Takahashi K, Wada J, Nishikawa H, Morishita A, Suzuki H *et al*. Changes in serum leptin concentrations in overweight Japanese men after exercise. *Diabetes Obes.Metab* 2004;6:332-7.	Not RCT
Moreira-Andres MN, izo-Gomez FJ, Losa MA, Ferrando P, Gomez d, Hawkins FG. Comparison of anthropometric parameters as predictors of serum lipids in premenopausal women. *Journal of Endocrinological Investigation.* 2004;27:340-7.	Not considered to affect evidence statements…
Muzio F, Mondazzi L, Sommariva D, Branchi A, Muzio F, Mondazzi L *et al*. Long-term effects of low-calorie diet on the metabolic syndrome in obese nondiabetic patients. *Diabetes Care* 2005;28:1485-6.	Not RCT
Noakes M, Keogh JB, Foster PR, Clifton PM, Noakes M, Keogh JB *et al*. Effect of an energy-restricted, high-protein, low-fat diet relative to a conventional high-carbohydrate, low-fat diet on weight loss, body composition, nutritional status, and markers of cardiovascular health in obese women.[see comment]. *Am.J.Clin.Nutr.* 2005;81:1298-306.	Not 52 week follow-up.

Reference	Reason for exclusion
Orzano AJ, Scott JG, Orzano AJ, Scott JG. Diagnosis and treatment of obesity in adults: an applied evidence-based review. [Review] [78 refs]. *J.Am.Board Fam.Pract.* 2004;17:359-69.	Used for cross reference
Pentin PL, Nashelsky J, Pentin PL, Nashelsky J. What are the indications for bariatric surgery?. [Review] [6 refs]. *J.Fam.Pract.* 2005;54:633-4.	Summary review on surgery.
Ponce J, Haynes B, Paynter S, Fromm R, Lindsey B, Shafer A *et al*. Effect of Lap-Band-induced weight loss on type 2 diabetes mellitus and hypertension. *Obesity Surgery.* 2004;14:1335-42.	Added detail in relevant Update section
Ponce J, Paynter S, Fromm R. Laparoscopic adjustable gastric banding: 1,014 Consecutive cases. *Journal of the American College of Surgeons.* 201;2005:529-35.	See Ponce 2005
Rabkin RA, Rabkin JM, Metcalf B, Lazo M, Rossi M, Lehman-Becker LB. Nutritional Markers following Duodenal Switch for Morbid Obesity. *Obesity Surgery.* 2004;14:84-90.	Weight loss only reported for a subset, rather than whole cohort. No details of why this group chosen.
Racette SB, Weiss EP, Hickner RC, Holloszy JO, Racette SB, Weiss EP *et al*. Modest weight loss improves insulin action in obese African Americans. *Metabolism* 2005;54:960-5.	Not RCT
Raitakari M, Ilvonen T, Ahotupa M, Lehtimaki T, Harmoinen A, Suominen P *et al*. Weight reduction with very-low-caloric diet and endothelial function in overweight adults: role of plasma glucose. *Arterioscler.Thromb.Vasc.Biol.* 2004;24:124-8.	Not RCT
Raja C, Hansen R, Baber R, Allen B. Hip girth as a predictor of abdominal adiposity in postmenopausal women. *Nutrition.* 1909;#2004:772-7.	Not considered to affect evidence statements…
Razak F, Anand S, Vuksan V, Davis B, Jacobs R, Teo KK *et al*. Ethnic differences in the relationships between obesity and glucose-metabolic abnormalities: a cross-sectional population-based study. *Int.J.Obes.* 2005;29:656-67.	Not considered to affect evidence statements…
Rolls BJ, Roe LS, Beach AM, Kris-Etherton PM, Rolls BJ, Roe LS *et al*. Provision of foods differing in energy density affects long-term weight loss. *Obes.Res.* 2005;13:1052-60.	Not able to assign to dietary category. Also no details of behavioural or activity intervention.
Roux L, Ubach C, Donaldson C, Ryan M, Roux L, Ubach C *et al*. Valuing the benefits of weight loss programs: an application of the discrete choice experiment. *Obes.Res.* 2004;12:1342-51.	Not RCT

Reference	Reason for exclusion
Ruof J, Golay A, Berne C, Collin C, Lentz J, Maetzel A *et al*. Orlistat in responding obese type 2 diabetic patients: meta-analysis findings and cost-effectiveness as rationales for reimbursement in Sweden and Switzerland. *Int.J.Obes.Relat Metab Disord.* 2005;29:517-23.	Not primary study.
Salem L, Jensen CC, Flum DR. Are bariatric surgical outcomes worth their cost? A systematic review. *Journal of the American College of Surgeons.* 2000;#2005:270-8.	Systematic review exploring economic issues. Similar conclusions.
Santos IA, Stein R, Fuchs SC, Duncan BB, Ribeiro JP, Kroeff LR *et al*. Aerobic exercise and submaximal functional capacity in overweight pregnant women: a randomized trial.[see comment]. *Obstet.Gynecol.* 2005;106:243-9.	Pregnant women, not 52 week follow-up.
Sari R, Balci MK, Cakir M, Altunbas H, Karayalcin U. Comparison of efficacy of sibutramine or orlistat versus their combination in obese women. *Endocrine Research.* 2004;30:159-67.	Not 52 week follow-up.
Sauerland S, Angrisani L, Belachew M, et al. Obesity surgery: evidence-based guidelines of the European Association for Endoscopic Surgery (EAES). Surg Endosc 2005; 19:200-221.	Guidelines – broadly similar evidence base and recommendations
Shuhaiber J,.Vitello J. Is Gastric Bypass Associated with More Complications in Patients Weighing >500 lb (>227 kg)? *Obesity Surgery.* 2004;14:43-6.	Less than 150 participants.
Simkin-Silverman LR GKKWWLB. Predictors of weight control advice in primary care practices: patient health and psychosocial characteristics. *Prev.Med.* 2005;40:71-82.	Refer to CPHE review on Behaviour Change for evidence (to be published)
Singh KD, Dhillon JK, Arora A, Gill BS, Singh KD, Dhillon JK *et al*. Receiver operating characteristic curve analysis of BMI and percentage body fat in type 2 diabetics of Punjab. *Indian J.Physiol Pharmacol.* 2004;48:73-80.	Not considered to affect evidence statements…
Sjöström L, Lindroos AK, Peltonen M, Torgerson J, Bouchard C, Carlsson B *et al*. Lifestyle, Diabetes, and Cardiovascular Risk Factors 10 Years after Bariatric Surgery. *New England Journal of Medicine, Dec 2004, vol.351., no.26., p.2683.2693., eISSN.: 1533.4406., ISSN.: 0028.4793.Publisher.: Massachusetts.Medical Society, US, http.://content.nejm.org./.* 2004.	10 year results already included.
Spivak H, Hewitt MF, Onn A, Half EE. Weight loss and improvement of obesity-related illness in 500 U.S. patients following laparoscopic adjustable gastric banding procedure. *American Journal of Surgery.* 2005;189:27-32.	Added detail in relevant Update section

Reference	Reason for exclusion
Stahre L,.Haellström T. A short-term cognitive group treatment program gives substantial weight reduction up to 18 months from the end of treatment. A randomized controlled trial. *Eating and Weight Disorders, Mar.2005, vol.10, no.1, p.51.58., ISSN.: 1590.1262.Publisher.: Editrice.Kurtis., Italy, http.://www.kurtis.it.* 2005.	Added detail in relevant Update section
Tudor-Locke C, Bell RC, Myers AM, Harris SB, Ecclestone NA, Lauzon N *et al*. Controlled outcome evaluation of the First Step Program: a daily physical activity intervention for individuals with type II diabetes. *Int.J.Obes.Relat Metab Disord.* 2004;28:113-9.	No requirement for participants to be overweight.
Vage V, Berstad A, Solhaug JH, Viste A. Cardiovascular risk factors in obese patients treated with jejunoileal bypass operation: A 25-year follow-up study. *Scandinavian Journal of Gastroenterology.* 2005;40:90-5.	Less than 150 participants.
Van Gool CH, Penninx BWJH, Kempen GIJM, Rejeski WJ, Miller GD, Van E *et al*. Effects of exercise adherence on physical function among overweight older adults with knee osteoarthritis. *Arthritis Care & Research.* 2005;53:24-32.	From Messier 2004 study.
Van Hout G, Verschure SKM, Van H. Psychosocial predictors of success following bariatric surgery. *Obesity Surgery.* 2005;15:552-60.	Narrative (although described as systematic) review of psychosocial factors and bariatric surgery.
Wadden TA, Berkowitz RI, Womble LG, Sarwer DB, Phelan S, Cato RK *et al*. Randomized trial of lifestyle modification and pharmacotherapy for obesity. *New England Journal of Medicine.* 2005;353:2111-20.	Added in relevant Update section.
Wadden TA, Foster GD, Sarwer DB, Anderson DA, Gladis M, Sanderson RS *et al*. Dieting and the development of eating disorders in obese women: results of a randomized controlled trial. *Am.J.Clin.Nutr.* 2004;80:560-8.	Not relevant
Wang Y, Rimm EB, Stampfer MJ, Willett WC, Hu FB. Comparison of abdominal adiposity and overall obesity in predicting risk of type 2 diabetes among men. *Am.J.Clin.Nutr.* 2005;81:555-63.	Not considered to affect evidence statements…
Watkins BM, Montgomery KF, Ahroni JH, Erlitz MD, Abrams RE, Scurlock JE *et al*. Adjustable gastric banding in an ambulatory surgery center. *Obes.Surg.* 2005; 15:1045-9.	Not 24 month follow-up
Wei QL,.Liu ZC. Treatment of simple obesity with auricular acupuncture, body acupuncture and combination of auricular and body acupuncture. *Zhongguo Linchuang Kangfu.* 2004;8:4357-9.	Not available
White S, Brooks E, Jurikova L, Stubbs RS. Long-term outcomes after gastric bypass. *Obesity Surgery.* 2005;15:155-63.	Added detail in relevant Update section

Reference	Reason for exclusion
Wildman RP, Gu D, Reynolds K, Duan X, He J, Wildman RP *et al*. Appropriate body mass index and waist circumference cutoffs for categorization of overweight and central adiposity among Chinese adults. *Am.J.Clin.Nutr.* 2004;80:1129-36.	Not considered to affect evidence statements…
Wilkinson JR, Summerbell CD, Macknight N, Bailey K, Chappel DB. Use of surgery to aid weight reduction - Experience of two regions of Northern England: A database study. *International Journal of Obesity.* 2004;29:4-207.	Not effectiveness report, but variation in service provision.
Xu WH, Matthews CE, Xiang YB, Zheng W, Ruan ZX, Cheng JR *et al*. Effect of adiposity and fat distribution on endometrial cancer risk in Shanghai women. *Am.J.Epidemiol.* 2005;161:939-47.	Not considered to affect evidence statements…
Yalcin BM, Sahin EM, Yalcin E. Which anthropometric measurements is most closely related to elevated blood pressure? *Family Practice.* 2005;22:541-7.	Not considered to affect evidence statements…
Yeh WT, Chang HY, Yeh CJ, Tsai KS, Chen HJ, Pan WH *et al*. Do centrally obese Chinese with normal BMI have increased risk of metabolic disorders? *Int.J.Obes.* 2005;29:818-25.	Not considered to affect evidence statements…
Zemel MB, Thompson W, Milstead A, Morris K, Campbell P, Zemel MB *et al*. Calcium and dairy acceleration of weight and fat loss during energy restriction in obese adults. *Obes.Res.* 2004;12:582-90.	Not 52 week follow-up.
Zhang W, Mason EE, Renquist KE, Zimmerman MB, Contributors IBSR, Zhang W *et al*. Factors influencing survival following surgical treatment of obesity. *Obes.Surg.* 2005;15:43-50.	No weight outcomes reported.
Zhang X, Shu XO, Gao YT, Yang G, Matthews CE, Li Q *et al*. Anthropometric predictors of coronary heart disease in Chinese women. *Int.J.Obes.Relat Metab Disord.* 2004;28:734-40.	Not considered to affect evidence statements…
Zingmond DS, McGory ML, Ko CY. Hospitalization before and after gastric bypass surgery. *JAMA.* 1918; 294:18-1924.	No weight outcomes reported.

Appendix 17

3 Summary estimates for interventions

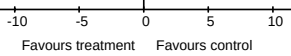
Please note all the summary statistics have been checked by a consultant statistician for accuracy.

3.1 Dietary interventions

Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 01 Weight change in kg at 3 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HOT 1999	51	-2.70(3.40)	51	-1.70(2.30)		100.00	-1.00 [-2.13, 0.13]
Total (95% CI)	51		51			100.00	-1.00 [-2.13, 0.13]

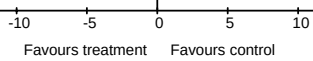
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.74 (P = 0.08)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 02 Weight change in kg at 6 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HOT 1999	51	-3.20(4.30)	51	-1.80(2.70)		19.09	-1.40 [-2.79, -0.01]
HPT 1990	112	-5.58(2.86)	119	0.18(2.95)		66.04	-5.76 [-6.51, -5.01]
TAIM 1992	89	-4.40(6.60)	90	-0.70(3.79)		14.87	-3.70 [-5.28, -2.12]
Total (95% CI)	252		260			100.00	-4.62 [-5.23, -4.01]

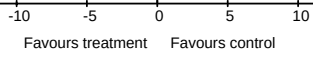
Test for heterogeneity: Chi² = 30.71, df = 2 (P < 0.00001), I² = 93.5%
Test for overall effect: Z = 14.87 (P < 0.00001)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 03 Weight change in kg at 7 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-7.60(3.90)	42	0.20(2.50)		100.00	-7.80 [-9.20, -6.40]
Total (95% CI)	42		42			100.00	-7.80 [-9.20, -6.40]

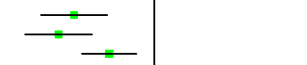
Test for heterogeneity: not applicable
Test for overall effect: Z = 10.91 (P < 0.00001)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 04 Weight change in kg at 12 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
DISH 1985	67	-4.00(5.00)	77	-0.46(3.60)		15.18	-3.54 [-4.98, -2.10]
Frey-Hewitt 1990	36	-6.68(3.94)	41	0.38(3.66)		10.85	-7.06 [-8.77, -5.35]
HOT 1999	51	-1.70(6.40)	51	-1.30(6.28)		5.22	-0.40 [-2.86, 2.06]
Hankey 2001	25	-0.60(5.30)	25	2.40(5.00)		3.87	-3.00 [-5.86, -0.14]
ODES 1995	52	-4.00(5.05)	43	1.10(2.62)		12.65	-5.10 [-6.68, -3.52]
Pritchard 1997	18	-6.40(3.30)	19	0.30(2.40)		9.05	-6.70 [-8.57, -4.83]
Pritchard 1999 Dietn	88	-5.10(7.36)	45	0.60(6.08)		5.72	-5.70 [-8.05, -3.35]
Pritchard 1999 Dn&Dr	92	-6.20(7.67)	45	0.60(6.08)		5.63	-6.80 [-9.17, -4.43]
TAIM 1992	57	-3.70(6.79)	61	-0.50(3.12)		8.49	-3.20 [-5.13, -1.27]
Wood 1988	42	-7.20(3.70)	42	0.60(3.70)		12.61	-7.80 [-9.38, -6.22]
Wood 1991 F	31	-4.10(5.50)	39	1.30(5.20)		4.93	-5.40 [-7.93, -2.87]
Wood 1991 M	40	-5.10(5.80)	40	1.70(4.80)		5.80	-6.80 [-9.13, -4.47]
Total (95% CI)	599		528			100.00	-5.32 [-5.88, -4.75]

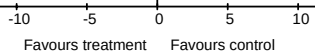
Test for heterogeneity: Chi² = 47.13, df = 11 (P < 0.00001), I² = 76.7%
Test for overall effect: Z = 18.54 (P < 0.00001)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 05 Weight change in kg at 18 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HOT 1999	51	-1.80(6.42)	51	-1.40(6.31)		42.19	-0.40 [-2.87, 2.07]
TAIM 1992	57	-2.70(7.55)	61	-1.00(3.12)		57.81	-1.70 [-3.81, 0.41]
Total (95% CI)	108		112			100.00	-1.15 [-2.76, 0.45]

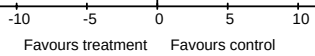
Test for heterogeneity: Chi² = 0.61, df = 1 (P = 0.43), I² = 0%
Test for overall effect: Z = 1.41 (P = 0.16)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 06 Weight change in kg at 30 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HOT 1999	51	-1.30(6.28)	51	-2.00(6.48)		100.00	0.70 [-1.78, 3.18]
Total (95% CI)	51		51			100.00	0.70 [-1.78, 3.18]

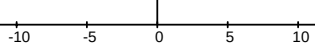
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.55 (P = 0.58)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 07 Weight change in kg at 24 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HOT 1999	51	-1.70(6.40)	51	-1.90(6.45)		43.58	0.20 [-2.29, 2.69]
TAIM 1992	57	-1.90(7.55)	61	-0.40(3.91)		56.42	-1.50 [-3.69, 0.69]
Total (95% CI)	108		112			100.00	-0.76 [-2.41, 0.89]

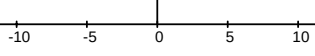
Test for heterogeneity: Chi² = 1.01, df = 1 (P = 0.32), I² = 0.7%
Test for overall effect: Z = 0.90 (P = 0.37)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 08 Weight change in kg at 36 months

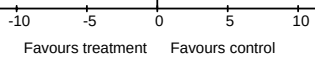
Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HPT 1990	117	-1.63(4.43)	113	1.86(4.36)		100.00	-3.49 [-4.63, -2.35]
Total (95% CI)	117		113			100.00	-3.49 [-4.63, -2.35]

Test for heterogeneity: not applicable
Test for overall effect: Z = 6.02 (P < 0.00001)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 09 Weight change in kg over time

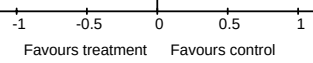
Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 HOT 1990							
HOT 3 months	51	-2.70(3.40)	51	-1.70(2.30)		40.29	-1.00 [-2.13, 0.13]
HOT 6 months	51	-3.20(4.30)	51	1.80(2.70)		26.33	-5.00 [-6.39, -3.61]
HOT 12 months	51	-1.70(6.40)	51	-1.30(6.28)		8.44	-0.40 [-2.86, 2.06]
HOT 18 months	51	-1.80(6.42)	51	-1.40(6.31)		8.38	-0.40 [-2.87, 2.07]
HOT 24 months	51	-1.70(6.40)	51	-1.90(6.45)		8.22	0.20 [-2.29, 2.69]
HOT 30 months	51	-1.30(6.28)	51	-2.00(6.48)		8.34	0.70 [-1.78, 3.18]
02 HPT 1990							
HPT 6 months	112	-5.58(2.86)	119	0.18(2.95)		69.68	-5.76 [-6.51, -5.01]
HPT 36 months	117	-1.63(4.43)	113	1.86(4.36)		30.32	-3.49 [-4.63, -2.35]
03 TAIM 1992							
TAIM 6 months	89	-4.40(6.60)	90	-0.70(3.79)		36.38	-3.70 [-5.28, -2.12]
TAIM 12 months	57	-3.70(6.79)	61	-0.50(3.12)		24.38	-3.20 [-5.13, -1.27]
TAIM 18 months	57	-2.70(7.55)	61	-1.00(3.12)		20.36	-1.70 [-3.81, 0.41]
TAIM 24 months	57	-1.90(7.55)	61	-0.40(3.91)		18.88	-1.50 [-3.69, 0.69]
04 Wood 1988							
Wood 7 months	42	-7.60(3.90)	42	0.20(2.50)		56.06	-7.80 [-9.20, -6.40]
Wood 12 months	42	-7.20(3.70)	42	0.60(3.70)		43.94	-7.80 [-9.38, -6.22]



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 10 Change in TC mmol/l at 7 months

Study or sub-category	N	600kcal/low fat diet Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-0.40(0.55)	42	-0.21(0.48)		100.00	-0.19 [-0.41, 0.03]
Total (95% CI)	42		42			100.00	-0.19 [-0.41, 0.03]

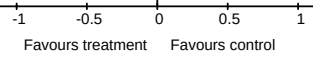
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.69 (P = 0.09)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 11 Change in TC mmol/l at 12 months

Study or sub-category	N	600kcal/low fat diet Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	52	-0.23(0.65)	43	-0.16(0.59)		26.23	-0.07 [-0.32, 0.18]
Wood 1988	42	-0.36(0.56)	42	-0.23(0.65)		24.28	-0.13 [-0.39, 0.13]
Wood 1991 F	31	-0.39(0.61)	39	-0.03(0.47)		24.08	-0.36 [-0.62, -0.10]
Wood 1991 M	40	-0.42(0.51)	40	-0.14(0.64)		25.41	-0.28 [-0.53, -0.03]
Total (95% CI)	165		164			100.00	-0.21 [-0.34, -0.08]

Test for heterogeneity: Chi² = 3.14, df = 3 (P = 0.37), I² = 4.4%
Test for overall effect: Z = 3.19 (P = 0.001)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 12 Change in LDLC mmol/l at 7 months

Study or sub-category	N	600kcal/low fat diet Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-0.27(0.59)	42	-0.15(0.46)		100.00	-0.12 [-0.35, 0.11]
Total (95% CI)	42		42			100.00	-0.12 [-0.35, 0.11]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.04 (P = 0.30)

Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 13 Change in LDLC mmol/l at 12 months

Study or sub-category	N	600kcal/low fat diet Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	52	-0.18(0.72)	43	-0.22(0.59)		23.88	0.04 [-0.22, 0.30]
Wood 1988	42	-0.31(0.64)	42	-0.21(0.67)		21.10	-0.10 [-0.38, 0.18]
Wood 1991 F	31	-0.28(0.63)	39	-0.03(0.41)		25.20	-0.25 [-0.51, 0.01]
Wood 1991 M	40	-0.39(0.48)	40	-0.20(0.59)		29.82	-0.19 [-0.43, 0.05]
Total (95% CI)	165		164			100.00	-0.13 [-0.26, 0.00]

Test for heterogeneity: Chi² = 2.73, df = 3 (P = 0.43), I² = 0%
Test for overall effect: Z = 2.00 (P = 0.05)

Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 14 Change in HDLC mmol/l at 7 months

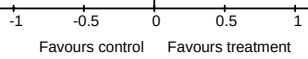
Study or sub-category	N	600kcal/low fat diet Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	41	0.06(0.14)	41	0.00(0.10)		100.00	0.06 [0.01, 0.11]
Total (95% CI)	41		41			100.00	0.06 [0.01, 0.11]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.23 (P = 0.03)

Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 15 Change in HDLC mmol/l at 12 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	52	0.05(0.12)	43	0.02(0.10)		47.85	0.03 [-0.01, 0.07]
Wood 1988	41	0.12(0.16)	41	-0.02(0.11)		26.51	0.14 [0.08, 0.20]
Wood 1991 F	31	-0.15(0.26)	39	-0.05(0.24)		6.67	-0.10 [-0.22, 0.02]
Wood 1991 M	40	0.02(0.17)	40	-0.05(0.15)		18.97	0.07 [0.00, 0.14]
Total (95% CI)	164		163			100.00	0.06 [0.03, 0.09]

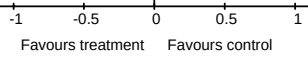
Test for heterogeneity: Chi² = 15.79, df = 3 (P = 0.001), I² = 81.0%
Test for overall effect: Z = 3.72 (P = 0.0002)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 16 Change in TG mmol/l at 7 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-0.40(0.60)	42	-0.01(0.51)		100.00	-0.39 [-0.63, -0.15]
Total (95% CI)	42		42			100.00	-0.39 [-0.63, -0.15]

Test for heterogeneity: not applicable
Test for overall effect: Z = 3.21 (P = 0.001)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 17 Change in TG mmol/l at 12 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	52	-0.23(1.01)	43	0.17(0.92)		10.04	-0.40 [-0.79, -0.01]
Wood 1988	42	-0.27(0.72)	42	0.08(0.60)		18.86	-0.35 [-0.63, -0.07]
Wood 1991 F	31	0.09(0.36)	39	0.13(0.37)		51.30	-0.04 [-0.21, 0.13]
Wood 1991 M	40	-0.12(0.59)	40	0.18(0.67)		19.80	-0.30 [-0.58, -0.02]
Total (95% CI)	165		164			100.00	-0.19 [-0.31, -0.06]

Test for heterogeneity: Chi² = 5.88, df = 3 (P = 0.12), I² = 48.9%
Test for overall effect: Z = 2.96 (P = 0.003)

Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 18 Change in FPG mmol/l at 12 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	52	-0.21(0.50)	43	0.07(0.46)		100.00	-0.28 [-0.47, -0.09]
Total (95% CI)	52		43			100.00	-0.28 [-0.47, -0.09]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.84 (P = 0.005)

Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 19 Change in SBP mmHg at 6 months

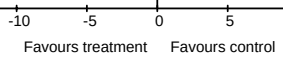
Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HPT 1990	112	-6.90(7.41)	121	-1.80(7.70)		100.00	-5.10 [-7.04, -3.16]
Total (95% CI)	112		121			100.00	-5.10 [-7.04, -3.16]

Test for heterogeneity: not applicable
Test for overall effect: Z = 5.15 (P < 0.00001)

Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 20 Change in SBP mmHg at 12 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	52	-6.40(10.10)	43	-0.50(11.15)		16.44	-5.90 [-10.22, -1.58]
Wood 1988	38	-5.70(7.90)	35	-4.10(8.00)		22.99	-1.60 [-5.25, 2.05]
Wood 1991 F	31	-4.10(6.00)	39	-0.20(6.60)		35.02	-3.90 [-6.86, -0.94]
Wood 1991 M	40	-4.10(8.10)	40	0.10(7.70)		25.55	-4.20 [-7.66, -0.74]
Total (95% CI)	161		157			100.00	-3.78 [-5.53, -2.03]

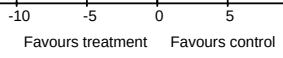
Test for heterogeneity: Chi² = 2.36, df = 3 (P = 0.50), I² = 0%
Test for overall effect: Z = 4.23 (P < 0.0001)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 21 Change in SBP mmHg at 36 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HPT 1990	117	-5.00(9.73)	115	-2.69(9.65)		100.00	-2.31 [-4.80, 0.18]
Total (95% CI)	117		115			100.00	-2.31 [-4.80, 0.18]

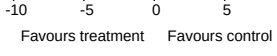
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.82 (P = 0.07)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 22 Change in DBP mmHg at 6 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HPT 1990	112	-5.30(7.41)	121	-2.50(7.70)		100.00	-2.80 [-4.74, -0.86]
Total (95% CI)	112		121			100.00	-2.80 [-4.74, -0.86]

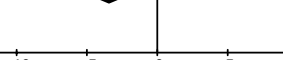
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.83 (P = 0.005)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 23 Change in DBP mmHg at 12 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	52	-3.40(7.21)	43	-0.70(8.52)		19.56	-2.70 [-5.91, 0.51]
Wood 1988	38	-5.60(7.30)	35	-2.60(8.10)		16.04	-3.00 [-6.55, 0.55]
Wood 1991 F	31	-2.20(5.10)	39	0.90(5.30)		33.72	-3.10 [-5.55, -0.65]
Wood 1991 M	40	-2.40(6.60)	40	2.10(5.00)		30.68	-4.50 [-7.07, -1.93]
Total (95% CI)	161		157			100.00	-3.44 [-4.86, -2.01]

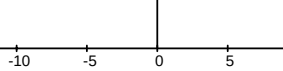
Test for heterogeneity: Chi² = 0.99, df = 3 (P = 0.80), I² = 0%
Test for overall effect: Z = 4.74 (P < 0.00001)



Review: DIET Analyses for adults
Comparison: 01 600kcal day deficit or low fat diet vs usual care
Outcome: 24 Change in DBP mmHg at 36 months

Study or sub-category	600kcal/low fat diet N	600kcal/low fat diet Mean (SD)	Usual care N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
HPT 1990	117	-4.20(8.65)	115	-2.40(8.58)		100.00	-1.80 [-4.02, 0.42]
Total (95% CI)	117		115			100.00	-1.80 [-4.02, 0.42]

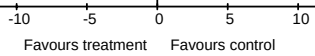
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.59 (P = 0.11)



Review: DIET Analyses for adults
Comparison: 02 Low calorie diet (1000-1600kcal/day) vs usual care
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	LCD Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
de Waard 1993 N'and	28	-5.50(7.50)	24	1.50(6.30)		55.78	-7.00 [-10.75, -3.25]
de Waard 1993 Pol	27	-5.90(7.60)	15	-0.60(6.10)		44.22	-5.30 [-9.51, -1.09]
Total (95% CI)	55		39			100.00	-6.25 [-9.05, -3.45]

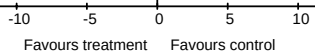
Test for heterogeneity: Chi² = 0.35, df = 1 (P = 0.55), I² = 0%
Test for overall effect: Z = 4.37 (P < 0.0001)



Review: DIET Analyses for adults
Comparison: 02 Low calorie diet (1000-1600kcal/day) vs usual care
Outcome: 02 Weight change in kg at 24 months

Study or sub-category	N	LCD Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
de Waard 1993 N'and	25	-5.00(7.30)	21	2.00(6.50)		100.00	-7.00 [-10.99, -3.01]
Total (95% CI)	25		21			100.00	-7.00 [-10.99, -3.01]

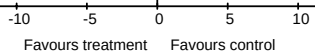
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.44 (P = 0.0006)



Review: DIET Analyses for adults
Comparison: 02 Low calorie diet (1000-1600kcal/day) vs usual care
Outcome: 03 Weight change in kg at 36 months

Study or sub-category	N	LCD Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
de Waard 1993 N'and	18	-5.00(7.30)	15	1.10(6.20)		100.00	-6.10 [-10.71, -1.49]
Total (95% CI)	18		15			100.00	-6.10 [-10.71, -1.49]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.60 (P = 0.009)



Review: DIET Analyses for adults
Comparison: 02 Low calorie diet (1000-1600kcal/day) vs usual care
Outcome: 04 Weight change in kg over time

Study or sub-category	N	LCD Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 de Waard 1993							
de Waard 12 months	281	-5.50(7.50)	24	1.50(6.30)		56.08	-7.00 [-9.67, -4.33]
de Waard 24 months	25	-5.00(7.30)	21	2.00(6.50)		25.09	-7.00 [-10.99, -3.01]
de Waard 36 months	18	-5.00(7.30)	15	1.10(6.20)		18.82	-6.10 [-10.71, -1.49]

Review: DIET Analyses for adults
Comparison: 03 Very low calorie diet (<1000kcal/day) vs usual care
Outcome: 01 Weight change in kg over time

Study or sub-category	N	VLCD Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Stenius-Aarniala 2000							
Stenius-Aa 14 weeks	19	-14.20(9.93)	19	-0.30(6.00)		48.20	-13.90 [-19.12, -8.68]
Stenius-Aa 12 months	19	-11.10(9.06)	19	2.30(6.57)		51.80	-13.40 [-18.43, -8.37]

Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 01 Weight change in kg at 2 months

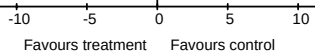
Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.50(3.80)	40	-3.80(3.60)		100.00	0.30 [-1.32, 1.92]
Total (95% CI)	40		40			100.00	0.30 [-1.32, 1.92]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.36 (P = 0.72)

Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 02 Weight change in kg at 6 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.50(5.60)	40	-3.40(5.70)		63.51	-0.10 [-2.58, 2.38]
Shah 1996	35	-3.95(7.03)	39	-4.90(7.30)		36.49	0.95 [-2.32, 4.22]
Total (95% CI)	75		79			100.00	0.28 [-1.69, 2.26]

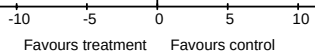
Test for heterogeneity: Chi² = 0.25, df = 1 (P = 0.62), I² = 0%
Test for overall effect: Z = 0.28 (P = 0.78)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 03 Weight change in kg at 12 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.00(4.90)	40	-3.20(6.00)		59.13	0.20 [-2.20, 2.60]
Shah 1996	36	-0.82(6.15)	39	-2.45(6.61)		40.87	1.63 [-1.26, 4.52]
Total (95% CI)	76		79			100.00	0.78 [-1.06, 2.63]

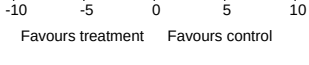
Test for heterogeneity: Chi² = 0.56, df = 1 (P = 0.46), I² = 0%
Test for overall effect: Z = 0.83 (P = 0.40)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 04 Weight change in kg at 18 months

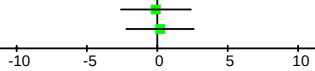
Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Shah 1996	35	1.80(6.42)	39	0.40(6.03)		100.00	1.40 [-1.45, 4.25]
Total (95% CI)	35		39			100.00	1.40 [-1.45, 4.25]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.96 (P = 0.34)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 05 Weight change in kg over time

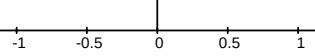
Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Shah 1996							
Shah 6 months	35	-3.95(7.03)	39	-4.90(7.30)		27.80	0.95 [-2.32, 4.22]
Shah 12 months	36	-0.82(6.15)	39	-2.45(6.61)		35.58	1.63 [-1.26, 4.52]
Shah 18 months	35	1.80(6.42)	39	0.40(6.03)		36.61	1.40 [-1.45, 4.25]
02 Dansinger 2005							
Dansinger 2 months	40	-3.50(3.80)	40	-3.80(3.60)		53.03	0.30 [-1.32, 1.92]
Dansinger 6 months	40	-3.50(5.60)	40	-3.40(5.70)		22.76	-0.10 [-2.58, 2.38]
Dansinger 12 months	40	-3.00(4.90)	40	-3.20(6.00)		24.21	0.20 [-2.20, 2.60]



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 06 Change in TC mmol/l at 12 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.21(0.62)	40	-0.26(0.90)		100.00	0.05 [-0.29, 0.39]
Total (95% CI)	40		40			100.00	0.05 [-0.29, 0.39]

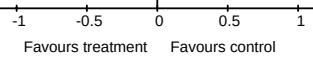
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.29 (P = 0.77)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 07 Change in LDLC mmol/l at 12 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.24(0.69)	40	-0.30(0.87)		100.00	0.06 [-0.28, 0.40]
Total (95% CI)	40		40			100.00	0.06 [-0.28, 0.40]

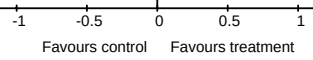
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.34 (P = 0.73)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 08 Change in HDLC mmol/l at 12 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.09(0.25)	40	0.08(0.26)		100.00	0.01 [-0.10, 0.12]
Total (95% CI)	40		40			100.00	0.01 [-0.10, 0.12]

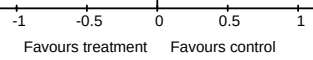
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.18 (P = 0.86)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 09 Change in TG mmol/l at 12 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.14(0.69)	40	0.03(1.65)		100.00	-0.17 [-0.72, 0.38]
Total (95% CI)	40		40			100.00	-0.17 [-0.72, 0.38]

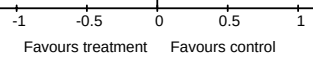
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.60 (P = 0.55)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 10 Change in FPG mmol/l at 12 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.26(1.06)	40	-0.23(1.00)		100.00	-0.03 [-0.48, 0.42]
Total (95% CI)	40		40			100.00	-0.03 [-0.48, 0.42]

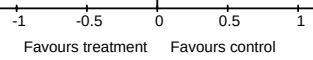
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.13 (P = 0.90)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 11 Change in DBP mmHg at 12 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-2.70(13.00)	40	1.40(15.00)		100.00	-4.10 [-10.25, 2.05]
Total (95% CI)	40		40			100.00	-4.10 [-10.25, 2.05]

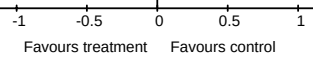
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.31 (P = 0.19)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 12 Change in SBP mmHg at 12 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-1.70(6.40)	40	-1.20(9.50)		100.00	-0.50 [-4.05, 3.05]
Total (95% CI)	40		40			100.00	-0.50 [-4.05, 3.05]

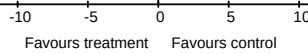
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.28 (P = 0.78)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 13 Change in TC mmol/l at 2 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.38(1.08)	40	-0.48(1.08)		100.00	0.10 [-0.37, 0.57]
Total (95% CI)	40		40			100.00	0.10 [-0.37, 0.57]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.41 (P = 0.68)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 14 Change in TC mmol/l at 6 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.21(1.08)	40	-0.16(1.08)		100.00	-0.05 [-0.52, 0.42]
Total (95% CI)	40		40			100.00	-0.05 [-0.52, 0.42]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.21 (P = 0.84)

Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 15 Change in LDLC mmol/l at 2 months

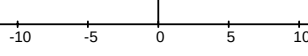
Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.31(0.74)	40	-0.25(0.74)		100.00	-0.06 [-0.38, 0.26]
Total (95% CI)	40		40			100.00	-0.06 [-0.38, 0.26]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.36 (P = 0.72)

Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 16 Change in LDLC mmol/l at 6 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.18(0.74)	40	-0.17(0.74)		100.00	-0.01 [-0.33, 0.31]
Total (95% CI)	40		40			100.00	-0.01 [-0.33, 0.31]

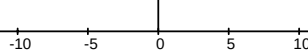
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.06 (P = 0.95)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 17 Change in FPG mmol/l at 2 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.31(1.98)	40	-0.50(1.98)		100.00	0.19 [-0.68, 1.06]
Total (95% CI)	40		40			100.00	0.19 [-0.68, 1.06]

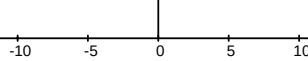
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.43 (P = 0.67)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 18 Change in FPG mmol/l at 6 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.21(1.98)	40	-0.46(1.98)		100.00	0.25 [-0.62, 1.12]
Total (95% CI)	40		40			100.00	0.25 [-0.62, 1.12]

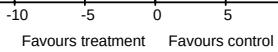
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.56 (P = 0.57)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 19 Change in SBP mmHg at 2 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.80(12.70)	40	-4.10(12.70)		100.00	-0.70 [-6.27, 4.87]
Total (95% CI)	40		40			100.00	-0.70 [-6.27, 4.87]

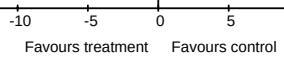
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.25 (P = 0.81)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 20 Change in SBP mmHg at 6 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.80(12.70)	40	-3.90(12.70)		100.00	-0.90 [-6.47, 4.67]
Total (95% CI)	40		40			100.00	-0.90 [-6.47, 4.67]

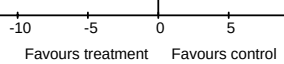
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.32 (P = 0.75)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 21 Change in DBP mmHg at 2 months

Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.10(8.30)	40	-4.80(8.30)		100.00	1.70 [-1.94, 5.34]
Total (95% CI)	40		40			100.00	1.70 [-1.94, 5.34]

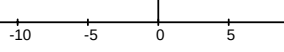
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.92 (P = 0.36)



Review: DIET Analyses for adults
Comparison: 04 Low calorie diet (1000-1600kcal/day) vs 600kcal/day deficit or low fat
Outcome: 22 Change in DBP mmHg at 6 months

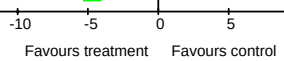
Study or sub-category	N	LCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-1.80(8.30)	40	-4.00(8.30)		100.00	2.20 [-1.44, 5.84]
Total (95% CI)	40		40			100.00	2.20 [-1.44, 5.84]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.19 (P = 0.24)



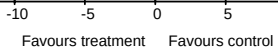
Review: DIET Analyses for adults
Comparison: 05 Very low calorie diet (<1000kcal/day) vs 600kcal day deficit or low fat
Outcome: 01 Weight change in kg at 24 months

Study or sub-category	N	VLCD Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Simonen 2000	10	-6.70(7.81)	6	-2.00(6.48)		100.00	-4.70 [-11.79, 2.39]



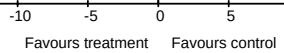
Review: DIET Analyses for adults
Comparison: 06 Very low calorie diet (<1000kcal/day) vs LCD
Outcome: 01 Weight change in kg at 1 month

Study or sub-category	N	VLCD Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Viegener 1990	31	-3.72(1.65)	32	-2.37(2.00)		100.00	-1.35 [-2.25, -0.45]



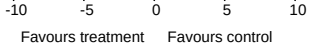
Review: DIET Analyses for adults
Comparison: 06 Very low calorie diet (<1000kcal/day) vs LCD
Outcome: 02 Weight change in kg at 2 months

Study or sub-category	N	VLCD Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Viegener 1990	31	-5.91(2.88)	32	-3.91(3.19)		100.00	-2.00 [-3.50, -0.50]



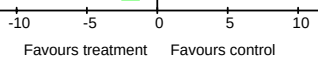
Review: DIET Analyses for adults
Comparison: 06 Very low calorie diet (<1000kcal/day) vs LCD
Outcome: 03 Weight change in kg at 3 months

Study or sub-category	N	VLCD Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Viegener 1990	31	-7.88(3.17)	32	-5.51(4.12)		100.00	-2.37 [-4.18, -0.56]



Review: DIET Analyses for adults
Comparison: 06 Very low calorie diet (<1000kcal/day) vs LCD
Outcome: 04 Weight change in kg at 4 months

Study or sub-category	N	VLCD Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Viegener 1990	31	-8.89(3.78)	32	-6.98(4.67)		100.00	-1.91 [-4.00, 0.18]



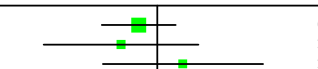
Review: DIET Analyses for adults
Comparison: 06 Very low calorie diet (<1000kcal/day) vs LCD
Outcome: 05 Weight change in kg at 5 months

Study or sub-category	N	VLCD Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Viegener 1990	31	-9.63(4.44)	32	-8.02(5.23)		100.00	-1.61 [-4.00, 0.78]

Review: DIET Analyses for adults
Comparison: 06 Very low calorie diet (<1000kcal/day) vs LCD
Outcome: 06 Weight change in kg at 6 months

Study or sub-category	N	VLCD Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Viegener 1990	31	-10.19(5.06)	32	-8.87(5.56)		69.44	-1.32 [-3.94, 1.30]
Wing 6 months conc	11	-4.05(7.06)	12	-1.47(6.33)		15.81	-2.58 [-8.08, 2.92]
Wing 6 months space	12	-1.31(6.29)	9	-3.12(6.80)		14.75	1.81 [-3.88, 7.50]
Total (95% CI)	54		53			100.00	-1.06 [-3.24, 1.13]

Test for heterogeneity: Chi² = 1.31, df = 2 (P = 0.52), I² = 0%
Test for overall effect: Z = 0.95 (P = 0.34)



Review: DIET Analyses for adults
Comparison: 06 Very low calorie diet (<1000kcal/day) vs LCD
Outcome: 07 Weight change in kg at 12 months

Study or sub-category	N	VLCD Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Viegener 1990	30	-8.97(6.72)	30	-8.95(7.26)		53.09	-0.02 [-3.56, 3.52]
Wing 6 months conc	11	-1.95(6.47)	12	0.38(6.02)		25.37	-2.33 [-7.45, 2.79]
Wing 6 months space	12	-0.58(6.08)	9	-2.69(6.68)		21.54	2.11 [-3.45, 7.67]
Total (95% CI)	53		51			100.00	-0.15 [-2.73, 2.43]

Test for heterogeneity: Chi² = 1.34, df = 2 (P = 0.51), I² = 0%
Test for overall effect: Z = 0.11 (P = 0.91)

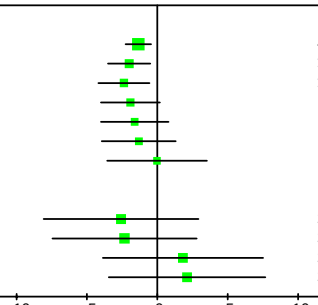
Review: DIET Analyses for adults
Comparison: 06 Very low calorie diet (<1000kcal/day) vs LCD
Outcome: 08 Weight change in kg at 18 months

Study or sub-category	N	VLCD Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pavlou 1989 1ga	18	-12.40(9.42)	10	-9.19(8.52)		37.56	-3.21 [-10.05, 3.63]
Pavlou 1989 1hb	16	-3.45(6.89)	11	-3.57(6.93)		62.44	0.12 [-5.19, 5.43]
Total (95% CI)	34		21			100.00	-1.13 [-5.32, 3.06]

Test for heterogeneity: Chi² = 0.57, df = 1 (P = 0.45), I² = 0%
Test for overall effect: Z = 0.53 (P = 0.60)

Review: DIET Analyses for adults
Comparison: 06 Very low calorie diet (<1000kcal/day) vs LCD
Outcome: 09 Weight change in kg over time

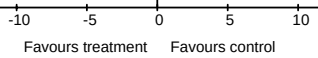
Study or sub-category	N	VLCD Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Viegener 1990							
Viegener 1 month	31	-3.72(1.65)	32	-2.37(2.00)		47.05	-1.35 [-2.25, -0.45]
Viegener 2 months	31	-5.91(2.88)	32	-3.91(3.19)		17.10	-2.00 [-3.50, -0.50]
Viegener 3 months	31	-7.88(3.17)	32	-5.51(4.12)		11.72	-2.37 [-4.18, -0.56]
Viegener 4 months	31	-8.89(3.78)	32	-6.98(4.67)		8.76	-1.91 [-4.00, 0.18]
Viegener 5 months	31	-9.63(4.44)	32	-8.02(5.23)		6.72	-1.61 [-4.00, 0.78]
Viegener 6 months	31	-10.19(5.06)	32	-8.87(5.56)		5.59	-1.32 [-3.94, 1.30]
Viegener 12 months	30	-8.97(6.72)	30	-8.95(7.26)		3.07	-0.02 [-3.56, 3.52]
02 Wing 1984							
Wing 6 months conc	11	-4.05(7.06)	12	-1.47(6.33)		24.60	-2.58 [-8.08, 2.92]
Wing 12 months conc	11	-1.95(6.47)	12	0.38(6.02)		28.36	-2.33 [-7.45, 2.79]
Wing 6 months space	12	-1.31(6.29)	9	-3.12(6.80)		22.95	1.81 [-3.88, 7.50]
Wing 12 months space	12	-0.58(6.08)	9	-2.69(6.68)		24.08	2.11 [-3.45, 7.67]



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 01 Weight change in kg at 1 month

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	68	-2.80(6.71)	63	-3.90(7.02)		100.00	1.10 [-1.26, 3.46]
Total (95% CI)	68		63			100.00	1.10 [-1.26, 3.46]

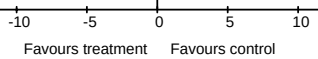
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.92 (P = 0.36)



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 02 Weight change in kg at 3 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	66	-3.70(6.96)	63	-5.00(7.33)		100.00	1.30 [-1.17, 3.77]
Total (95% CI)	66		63			100.00	1.30 [-1.17, 3.77]

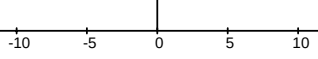
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.03 (P = 0.30)



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 03 Weight change in kg at 4 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	16	-7.40(4.00)	13	-6.90(4.70)		40.20	-0.50 [-3.72, 2.72]
Pascale 1995 NIDDM	15	-7.70(3.60)	16	-4.70(3.90)		59.80	-3.00 [-5.64, -0.36]
Total (95% CI)	31		29			100.00	-1.99 [-4.04, 0.05]

Test for heterogeneity: Chi² = 1.38, df = 1 (P = 0.24), I² = 27.8%
Test for overall effect: Z = 1.92 (P = 0.06)



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 04 Weight change in kg at 6 months

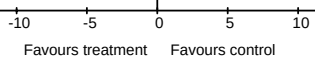
Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Harvey-Berino 1998	28	-5.20(4.60)	29	-11.80(4.90)		48.92	6.60 [4.13, 9.07]
McManus 2001	23	-5.10(4.60)	31	-4.90(4.30)		51.08	-0.20 [-2.61, 2.21]
Total (95% CI)	51		60			100.00	3.13 [1.40, 4.85]

Test for heterogeneity: Chi² = 14.92, df = 1 (P = 0.0001), I² = 93.3%
Test for overall effect: Z = 3.55 (P = 0.0004)

Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 05 Weight change in kg at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	61	-1.60(6.37)	59	-2.30(6.57)		49.14	0.70 [-1.62, 3.02]
Harvey-Berino 1998	26	-3.00(6.76)	22	-8.70(8.38)		13.87	5.70 [1.34, 10.06]
McManus 2001	13	-5.00(7.30)	27	-4.80(5.20)		13.46	-0.20 [-4.63, 4.23]
Pascale 1995 FH	16	-3.00(8.40)	13	-3.50(7.40)		7.96	0.50 [-5.26, 6.26]
Pascale 1995 NIDDM	15	-5.20(7.30)	16	-0.96(3.70)		15.57	-4.24 [-8.36, -0.12]
Total (95% CI)	131		137			100.00	0.49 [-1.14, 2.11]

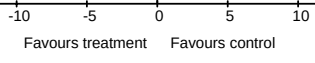
Test for heterogeneity: Chi² = 10.68, df = 4 (P = 0.03), I² = 62.6%
Test for overall effect: Z = 0.59 (P = 0.56)



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 06 Weight change in kg at 18 months

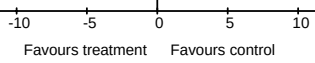
Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Harvey-Berino 1998	26	-1.80(6.42)	22	-7.50(8.04)		42.47	5.70 [1.53, 9.87]
McManus 2001	30	2.90(7.70)	31	-4.10(6.50)		57.53	7.00 [3.42, 10.58]
Total (95% CI)	56		53			100.00	6.45 [3.73, 9.16]

Test for heterogeneity: Chi² = 0.21, df = 1 (P = 0.64), I² = 0%
Test for overall effect: Z = 4.65 (P < 0.00001)



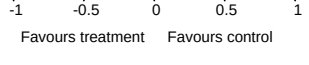
Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 07 Weight change in kg over time

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Baron 1986							
Baron 1 month	68	-2.80(6.71)	63	-3.90(7.02)		33.96	1.10 [-1.26, 3.46]
Baron 3 months	66	-3.70(6.96)	63	-5.00(7.33)		30.92	1.30 [-1.17, 3.77]
Baron 12 months	61	-1.60(6.37)	59	-2.30(6.57)		35.12	0.70 [-1.62, 3.02]
02 Harvey-Berino 1998							
Harvey-Berino 6m	28	-5.20(4.60)	29	-11.80(4.90)		59.88	6.60 [4.13, 9.07]
Harvey-Berino 12m	26	-3.00(6.76)	22	-8.70(8.38)		19.16	5.70 [1.34, 10.06]
Harvey-Berino 18m	26	-1.80(6.42)	22	-7.50(8.04)		20.96	5.70 [1.53, 9.87]
03 McManus 2001							
McManus 6 months	23	-5.10(4.60)	31	-4.90(4.30)		57.10	-0.20 [-2.61, 2.21]
McManus 12 months	13	-5.00(7.30)	27	-4.80(5.20)		16.97	-0.20 [-4.63, 4.23]
McManus 18 months	30	2.90(7.70)	31	-4.10(6.50)		25.93	7.00 [3.42, 10.58]
04 Pascale 1995							
Pascale FH 4m	16	-7.40(4.00)	13	-6.90(4.70)		29.30	-0.50 [-3.72, 2.72]
Pascale FH 12m	16	-3.00(8.40)	13	-3.50(7.40)		9.17	0.50 [-5.26, 6.26]
Pascale NIDDM 4m	15	-7.70(3.60)	16	-4.70(3.90)		43.58	-3.00 [-5.64, -0.36]
Pascale NIDDM 12m	15	-5.20(7.30)	16	-0.96(3.70)		17.94	-4.24 [-8.36, -0.12]



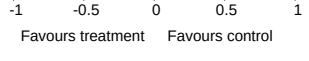
Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 08 Change in TC mmol/l at 4 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	16	-0.42(0.65)	13	-0.23(0.56)		52.53	-0.19 [-0.63, 0.25]
Pascale 1995 NIDDM	15	-0.33(0.70)	16	-0.23(0.61)		47.47	-0.10 [-0.56, 0.36]



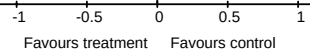
Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 09 Change in TC mmol/l at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	16	-0.18(0.28)	13	0.24(0.56)		58.02	-0.42 [-0.75, -0.09]
Pascale 1995 NIDDM	15	0.15(0.59)	16	0.08(0.52)		41.98	0.07 [-0.32, 0.46]



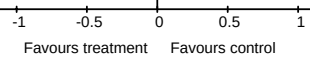
Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 10 Change in LDLC mmol/l at 4 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	15	-0.02(0.46)	13	-0.06(0.39)		68.83	0.04 [-0.27, 0.35]
Pascale 1995 NIDDM	15	-0.27(0.72)	13	-0.03(0.54)		31.17	-0.24 [-0.71, 0.23]



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 11 Change in LDLC mmol/l at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	15	-0.08(0.60)	13	0.31(0.48)		54.05	-0.39 [-0.79, 0.01]
Pascale 1995 NIDDM	15	0.02(0.59)	13	0.12(0.58)		45.95	-0.10 [-0.53, 0.33]



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 12 Change in HDLC mmol/l at 4 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	16	-0.25(0.20)	13	-0.14(0.13)		45.34	-0.11 [-0.23, 0.01]
Pascale 1995 NIDDM	15	-0.12(0.17)	16	-0.14(0.14)		54.66	0.02 [-0.09, 0.13]

Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 13 Change in HDLC mmol/l at 12 months

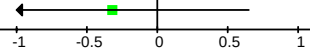
Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	16	-0.13(0.22)	13	-0.12(0.22)		37.19	-0.01 [-0.17, 0.15]
Pascale 1995 NIDDM	15	-0.05(0.21)	16	-0.12(0.13)		62.81	0.07 [-0.05, 0.19]

Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 14 Change in TG mmol/l at 4 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	16	-0.25(0.82)	13	-0.06(0.36)		70.50	-0.19 [-0.64, 0.26]
Pascale 1995 NIDDM	15	-0.24(1.24)	16	-0.27(0.59)		29.50	0.03 [-0.66, 0.72]

Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 15 Change in TG mmol/l at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	16	-0.03(0.99)	13	0.11(0.40)		76.92	-0.14 [-0.67, 0.39]
Pascale 1995 NIDDM	15	-0.16(1.79)	16	0.16(0.71)		23.08	-0.32 [-1.29, 0.65]

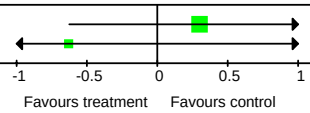


Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 16 3Change in FPG mmol/l at 4 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	16	-0.36(0.83)	13	-0.32(0.59)		94.85	-0.04 [-0.56, 0.48]
Pascale 1995 NIDDM	15	-2.85(2.24)	16	-2.80(3.90)		5.15	-0.05 [-2.27, 2.17]

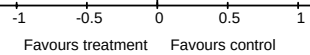
Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 17 Change in FPG mmol/l at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 FH	16	-0.38(1.70)	13	-0.68(0.74)		82.61	0.30 [-0.63, 1.23]
Pascale 1995 NIDDM	15	-1.11(3.42)	16	-0.48(2.11)		17.39	-0.63 [-2.65, 1.39]



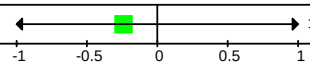
Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 18 Change in %HbA1c at 4 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 NIDDM	15	-0.70(1.50)	16	-1.10(1.80)		100.00	0.40 [-0.76, 1.56]



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 19 Change in %HbA1c at 12 months

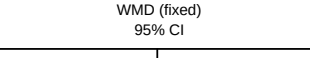
Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pascale 1995 NIDDM	15	-0.03(1.90)	16	0.21(1.70)		100.00	-0.24 [-1.51, 1.03]



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 20 Change in TC in mmol/l at 1 month

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	68	-0.42(1.08)	63	-0.14(1.08)		100.00	-0.28 [-0.65, 0.09]
Total (95% CI)	68		63			100.00	-0.28 [-0.65, 0.09]

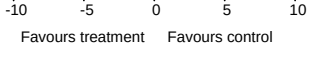
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.48 (P = 0.14)



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 21 Change in TC in mmol/l at 3 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	66	-0.10(1.08)	63	0.13(1.08)		100.00	-0.23 [-0.60, 0.14]
Total (95% CI)	66		63			100.00	-0.23 [-0.60, 0.14]

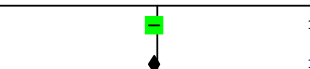
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.21 (P = 0.23)



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 22 Change in LDLC mmol/l at 1 month

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	68	-0.05(0.74)	62	0.12(0.74)		100.00	-0.17 [-0.42, 0.08]
Total (95% CI)	68		62			100.00	-0.17 [-0.42, 0.08]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.31 (P = 0.19)



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 23 Change in LDLC mmol/l at 3 months

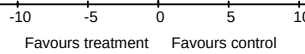
Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	65	0.15(0.74)	63	0.32(0.74)		100.00	-0.17 [-0.43, 0.09]
Total (95% CI)	65		63			100.00	-0.17 [-0.43, 0.09]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.30 (P = 0.19)

Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 24 Change in TG mmol/l at 1 month

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	66	-0.29(0.96)	61	-0.22(0.96)		100.00	-0.07 [-0.40, 0.26]
Total (95% CI)	66		61			100.00	-0.07 [-0.40, 0.26]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.41 (P = 0.68)



Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 25 Change in TG mmol/l at 3 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	66	-0.19(0.96)	63	-0.16(0.96)		100.00	-0.03 [-0.36, 0.30]
Total (95% CI)	66		63			100.00	-0.03 [-0.36, 0.30]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.18 (P = 0.86)

Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 26 Change in FPG mmol/l at 1 month

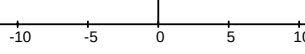
Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	58	-0.06(1.98)	56	-0.18(1.98)		100.00	0.12 [-0.61, 0.85]
Total (95% CI)	58		56			100.00	0.12 [-0.61, 0.85]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.32 (P = 0.75)

Review: DIET Analyses for adults
Comparison: 07 Low fat diet vs other weight reducing diets
Outcome: 27 Change in FPG mmol/l at 3 months

Study or sub-category	N	Low fat Mean (SD)	N	Other Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Baron 1986	66	-0.18(1.98)	63	-0.19(1.98)		100.00	0.01 [-0.67, 0.69]
Total (95% CI)	66		63			100.00	0.01 [-0.67, 0.69]

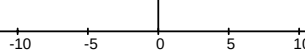
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.03 (P = 0.98)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 01 Weight change in kg at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.60(3.30)	40	-3.80(3.60)		100.00	0.20 [-1.31, 1.71]
Total (95% CI)	40		40			100.00	0.20 [-1.31, 1.71]

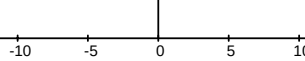
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.26 (P = 0.80)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 02 Weight change in kg at 3 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Foster 2003	33	-6.71(4.94)	30	-2.65(3.64)		100.00	-4.06 [-6.19, -1.93]
Total (95% CI)	33		30			100.00	-4.06 [-6.19, -1.93]

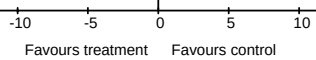
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.74 (P = 0.0002)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 03 Weight change in kg at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.20(4.90)	40	-3.40(5.70)		37.74	0.20 [-2.13, 2.53]
Foster 2003	33	-6.91(6.42)	30	-3.15(5.50)		23.61	-3.76 [-6.70, -0.82]
Stern 2004	64	-5.70(8.60)	68	-1.80(3.90)		38.65	-3.90 [-6.20, -1.60]
Total (95% CI)	137		138			100.00	-2.32 [-3.75, -0.89]

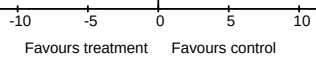
Test for heterogeneity: Chi² = 7.22, df = 2 (P = 0.03), I² = 72.3%
Test for overall effect: Z = 3.18 (P = 0.001)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 04 Weight change in kg at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-2.10(4.80)	40	-3.20(6.00)		45.40	1.10 [-1.28, 3.48]
Foster 2003	33	-4.34(6.61)	30	-2.46(6.19)		25.76	-1.88 [-5.04, 1.28]
Stern 2004	62	-5.10(8.70)	64	-3.10(8.40)		28.84	-2.00 [-4.99, 0.99]
Total (95% CI)	135		134			100.00	-0.56 [-2.17, 1.04]

Test for heterogeneity: Chi² = 3.43, df = 2 (P = 0.18), I² = 41.7%
Test for overall effect: Z = 0.69 (P = 0.49)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 05 Weight change in kg over time

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Dansinger 2005							
Dansinger 2 months	40	-3.60(3.30)	40	-3.80(3.60)		54.76	0.20 [-1.31, 1.71]
Dansinger 6 months	40	-3.20(4.90)	40	-3.40(5.70)		23.12	0.20 [-2.13, 2.53]
Dansinger 12 months	40	-2.10(4.80)	40	-3.20(6.00)		22.12	1.10 [-1.28, 3.48]
02 Stern 2004							
Stern 6 months	64	-5.70(8.60)	68	-1.80(3.90)		62.75	-3.90 [-6.20, -1.60]
Stern 12 months	62	-5.10(8.70)	64	-3.10(8.40)		37.25	-2.00 [-4.99, 0.99]
03 Foster 2003							
Foster 3 months	33	-6.71(4.94)	30	-2.65(3.64)		50.57	-4.06 [-6.19, -1.93]
Foster 6 months	33	-6.91(6.42)	30	-3.15(5.50)		26.46	-3.76 [-6.70, -0.82]
Foster 12 months	33	-4.34(6.61)	30	-2.46(6.19)		22.96	-1.88 [-5.04, 1.28]

Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 06 Change in TC mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.11(0.59)	40	-0.26(0.90)		25.94	0.15 [-0.18, 0.48]
Foster 2003	33	0.01(0.50)	30	-0.14(0.40)		58.17	0.15 [-0.07, 0.37]
Stern 2004	44	0.16(1.11)	43	-0.21(0.91)		15.89	0.37 [-0.06, 0.80]
Total (95% CI)	117		113			100.00	0.18 [0.02, 0.35]

Test for heterogeneity: Chi² = 0.86, df = 2 (P = 0.65), I² = 0%
Test for overall effect: Z = 2.13 (P = 0.03)

Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 07 Change in LDLC mmol/l at 12 months

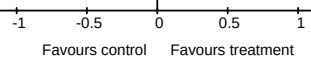
Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.18(0.62)	40	-0.30(0.87)		25.17	0.12 [-0.21, 0.45]
Foster 2003	33	0.01(0.55)	30	-0.10(0.37)		52.31	0.11 [-0.12, 0.34]
Stern 2004	44	0.18(0.91)	43	-0.10(0.75)		22.51	0.28 [-0.07, 0.63]
Total (95% CI)	117		113			100.00	0.15 [-0.02, 0.32]

Test for heterogeneity: Chi² = 0.68, df = 2 (P = 0.71), I² = 0%
Test for overall effect: Z = 1.78 (P = 0.08)

Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 08 Change in HDLC mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.09(0.18)	40	0.08(0.26)	25.09	0.01 [-0.09, 0.11]
Foster 2003	33	0.13(0.23)	30	0.02(0.14)	27.80	0.11 [0.02, 0.20]
Stern 2004	44	-0.03(0.18)	43	-0.13(0.16)	47.11	0.10 [0.03, 0.17]
Total (95% CI)	117		113		100.00	0.08 [0.03, 0.13]

Test for heterogeneity: Chi² = 2.66, df = 2 (P = 0.26), I² = 24.8%
Test for overall effect: Z = 3.20 (P = 0.001)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 09 Change in TG mmol/l at 12 months

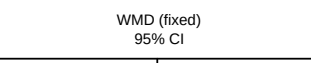
Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.02(0.94)	40	0.03(1.65)	10.91	-0.05 [-0.64, 0.54]
Foster 2003	33	-0.25(0.34)	30	0.01(0.52)	78.57	-0.26 [-0.48, -0.04]
Stern 2004	44	-0.65(1.78)	43	0.05(0.96)	10.52	-0.70 [-1.30, -0.10]
Total (95% CI)	117		113		100.00	-0.28 [-0.48, -0.09]

Test for heterogeneity: Chi² = 2.51, df = 2 (P = 0.29), I² = 20.2%
Test for overall effect: Z = 2.86 (P = 0.004)

Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 10 Change in FPG mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.08(0.77)	40	-0.23(1.00)	97.68	0.31 [-0.08, 0.70]
Stern 2004	44	-0.53(6.06)	43	-0.33(6.01)	2.32	-0.20 [-2.74, 2.34]
Total (95% CI)	84		83		100.00	0.30 [-0.09, 0.68]

Test for heterogeneity: Chi² = 0.15, df = 1 (P = 0.70), I² = 0%
Test for overall effect: Z = 1.51 (P = 0.13)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 11 Change in SBP mmHg at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.20(12.00)	40	1.40(15.00)	39.54	-1.20 [-7.15, 4.75]
Foster 2003	33	-1.21(11.33)	30	2.10(14.55)	33.32	-3.31 [-9.79, 3.17]
Stern 2004	44	1.00(19.00)	43	2.00(15.00)	27.14	-1.00 [-8.18, 6.18]
Total (95% CI)	117		113		100.00	-1.85 [-5.59, 1.89]

Test for heterogeneity: Chi² = 0.29, df = 2 (P = 0.86), I² = 0%
Test for overall effect: Z = 0.97 (P = 0.33)

Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 12 Change in DBP mmHg at 12 months

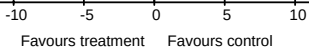
Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-1.40(7.50)	40	-1.20(9.50)	47.76	-0.20 [-3.95, 3.55]
Foster 2003	33	-2.76(9.25)	30	-2.95(10.24)	28.73	0.19 [-4.65, 5.03]
Stern 2004	44	3.00(15.00)	43	1.00(10.00)	23.51	2.00 [-3.35, 7.35]
Total (95% CI)	117		113		100.00	0.43 [-2.16, 3.02]

Test for heterogeneity: Chi² = 0.45, df = 2 (P = 0.80), I² = 0%
Test for overall effect: Z = 0.32 (P = 0.75)

Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 13 Change in TC mmol/l at 3 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Foster 2003	33	0.09(1.08)	30	-0.27(1.08)		100.00	0.36 [-0.17, 0.89]
Total (95% CI)	33		30			100.00	0.36 [-0.17, 0.89]

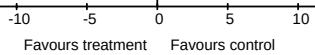
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.32 (P = 0.19)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 14 Change in TC mmol/l at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.02(1.08)	40	-0.16(1.08)		56.00	0.14 [-0.33, 0.61]
Foster 2003	33	0.12(1.08)	30	-0.12(1.08)		44.00	0.24 [-0.29, 0.77]
Total (95% CI)	73		70			100.00	0.18 [-0.17, 0.54]

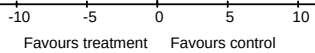
Test for heterogeneity: Chi² = 0.08, df = 1 (P = 0.78), I² = 0%
Test for overall effect: Z = 1.02 (P = 0.31)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 15 Change in LDLC mmol/l at 3 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Foster 2003	33	0.18(0.74)	30	-0.23(0.74)		100.00	0.41 [0.04, 0.78]
Total (95% CI)	33		30			100.00	0.41 [0.04, 0.78]

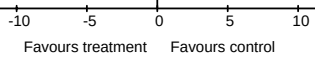
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.20 (P = 0.03)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 16 Change in LDLC mmol/l at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.07(0.74)	40	-0.17(0.74)		56.00	0.10 [-0.22, 0.42]
Foster 2003	33	0.09(0.74)	30	-0.05(0.74)		44.00	0.14 [-0.23, 0.51]
Total (95% CI)	73		70			100.00	0.12 [-0.13, 0.36]

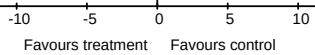
Test for heterogeneity: Chi² = 0.03, df = 1 (P = 0.87), I² = 0%
Test for overall effect: Z = 0.95 (P = 0.34)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 17 Change in SBP mmHg at 3 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Foster 2003	33	-3.13(12.70)	30	-0.74(12.70)		100.00	-2.39 [-8.67, 3.89]
Total (95% CI)	33		30			100.00	-2.39 [-8.67, 3.89]

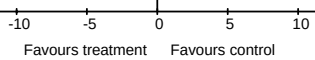
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.75 (P = 0.46)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 18 Change in SBP mmHg at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.70(12.70)	40	-3.90(12.70)		56.00	0.20 [-5.37, 5.77]
Foster 2003	33	-2.77(12.70)	30	1.23(12.70)		44.00	-4.00 [-10.28, 2.28]
Total (95% CI)	73		70			100.00	-1.65 [-5.81, 2.52]

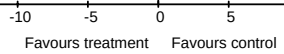
Test for heterogeneity: Chi² = 0.96, df = 1 (P = 0.33), I² = 0%
Test for overall effect: Z = 0.78 (P = 0.44)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 19 Change in DBP mmHg at 3 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Foster 2003	33	-2.24(8.30)	30	-2.72(8.30)		100.00	0.48 [-3.62, 4.58]
Total (95% CI)	33		30			100.00	0.48 [-3.62, 4.58]

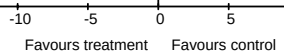
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.23 (P = 0.82)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 20 Change in DBP mmHg at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.00(8.30)	40	-4.00(8.30)		56.00	0.00 [-3.64, 3.64]
Foster 2003	33	-2.98(8.30)	30	-2.25(8.30)		44.00	-0.73 [-4.83, 3.37]
Total (95% CI)	73		70			100.00	-0.32 [-3.04, 2.40]

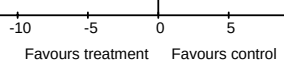
Test for heterogeneity: Chi² = 0.07, df = 1 (P = 0.79), I² = 0%
Test for overall effect: Z = 0.23 (P = 0.82)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 21 Change in TC mmol/l at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.05(1.08)	40	-0.48(1.08)		100.00	0.43 [-0.04, 0.90]
Total (95% CI)	40		40			100.00	0.43 [-0.04, 0.90]

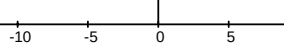
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.78 (P = 0.07)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 22 Change in LDLC mmol/l at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.03(0.74)	40	-0.25(0.74)		100.00	0.28 [-0.04, 0.60]
Total (95% CI)	40		40			100.00	0.28 [-0.04, 0.60]

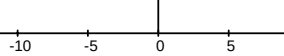
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.69 (P = 0.09)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 23 Change in FPG mmol/l at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.54(1.98)	40	-0.50(1.98)		100.00	-0.04 [-0.91, 0.83]
Total (95% CI)	40		40			100.00	-0.04 [-0.91, 0.83]

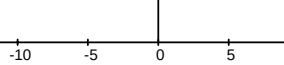
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.09 (P = 0.93)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 24 Change in FPG mmol/l at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.43(1.98)	40	-0.46(1.98)		100.00	0.03 [-0.84, 0.90]
Total (95% CI)	40		40			100.00	0.03 [-0.84, 0.90]

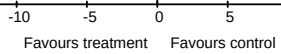
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.07 (P = 0.95)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 25 Change in SBP mmHg at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.20(12.70)	40	-4.10(12.70)		100.00	-0.10 [-5.67, 5.47]
Total (95% CI)	40		40			100.00	-0.10 [-5.67, 5.47]

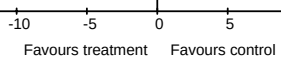
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.04 (P = 0.97)



Review: DIET Analyses for adults
Comparison: 08 Protein sparing modified fast vs 600kcal day deficit or low fat
Outcome: 26 Change in DBP mmHg at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	600kcal/low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.20(8.30)	40	-4.80(8.30)		100.00	0.60 [-3.04, 4.24]
Total (95% CI)	40		40			100.00	0.60 [-3.04, 4.24]

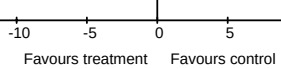
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.32 (P = 0.75)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 01 Weight change in kg at 1 week

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wadden 1994	28	-0.67(1.54)	21	-1.45(1.05)		100.00	0.78 [0.05, 1.51]
Total (95% CI)	28		21			100.00	0.78 [0.05, 1.51]

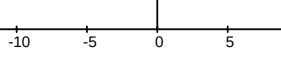
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.11 (P = 0.04)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 02 Weight change in kg at 5 weeks

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wadden 1994	28	-8.51(2.37)	21	-4.05(2.47)		100.00	-4.46 [-5.83, -3.09]
Total (95% CI)	28		21			100.00	-4.46 [-5.83, -3.09]

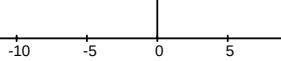
Test for heterogeneity: not applicable
Test for overall effect: Z = 6.36 (P < 0.00001)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 03 Weight change in kg at 8 weeks

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.60(3.30)	40	-3.50(3.80)		100.00	-0.10 [-1.66, 1.46]
Total (95% CI)	40		40			100.00	-0.10 [-1.66, 1.46]

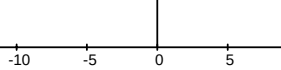
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.13 (P = 0.90)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 04 Weight change in kg at 9 weeks

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wadden 1994	28	-13.29(4.02)	21	-5.44(3.61)		100.00	-7.85 [-10.00, -5.71]
Total (95% CI)	28		21			100.00	-7.85 [-10.00, -5.71]

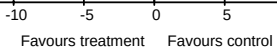
Test for heterogeneity: not applicable
Test for overall effect: Z = 7.17 (P < 0.00001)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 05 Weight change in kg at 5 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1991	17	-18.60(11.18)	16	-10.10(8.77)		100.00	-8.50 [-15.33, -1.67]
Total (95% CI)	17		16			100.00	-8.50 [-15.33, -1.67]

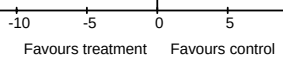
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.44 (P = 0.01)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 06 Weight change in kg at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.20(4.90)	40	-3.50(5.60)		62.56	0.30 [-2.01, 2.61]
Wadden 1989	31	-16.80(6.68)	22	-13.00(6.57)		25.46	-3.80 [-7.41, -0.19]
Wadden 1994	26	-21.45(9.63)	17	-11.86(7.89)		11.98	-9.59 [-14.86, -4.32]
Total (95% CI)	97		79			100.00	-1.93 [-3.75, -0.10]

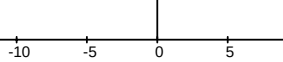
Test for heterogeneity: Chi² = 12.74, df = 2 (P = 0.002), I² = 84.3%
Test for overall effect: Z = 2.07 (P = 0.04)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 07 Weight change in kg at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-2.10(4.80)	40	-3.00(4.90)		66.38	0.90 [-1.23, 3.03]
Wadden 1989	25	-10.60(8.00)	22	-6.60(8.91)		12.66	-4.00 [-8.87, 0.87]
Wadden 1994	23	-17.33(9.86)	17	-14.43(9.46)		8.23	-2.90 [-8.94, 3.14]
Wing 1994	41	-14.20(10.30)	38	-10.50(11.60)		12.74	-3.70 [-8.55, 1.15]
Total (95% CI)	129		117			100.00	-0.62 [-2.35, 1.11]

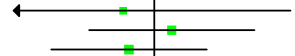
Test for heterogeneity: Chi² = 5.91, df = 3 (P = 0.12), I² = 49.3%
Test for overall effect: Z = 0.70 (P = 0.48)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 08 Weight change in kg at 18 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pavlou 1989 1ca	16	-8.64(8.36)	5	-9.19(8.52)		9.09	0.55 [-7.97, 9.07]
Pavlou 1989 1db	16	-1.13(6.23)	5	-3.57(6.93)		14.27	2.44 [-4.36, 9.24]
Pavlou 1989 1ea	10	-9.68(8.65)	5	-9.19(8.52)		7.80	-0.49 [-9.68, 8.70]
Pavlou 1989 1fb	13	-0.93(6.18)	6	-3.57(6.93)		15.69	2.64 [-3.84, 9.12]
Pavlou 1989 2a	5	-7.29(7.98)	6	-5.75(7.54)		7.73	-1.54 [-10.78, 7.70]
Pavlou 1989 2b	5	-14.04(9.89)	5	-11.83(9.26)		4.68	-2.21 [-14.09, 9.67]
Wadden 1994	21	-10.94(9.97)	16	-12.18(8.23)		19.15	1.24 [-4.63, 7.11]
Wing 1991	17	-8.60(9.20)	16	-6.80(6.90)		21.59	-1.80 [-7.33, 3.73]
Total (95% CI)	103		64			100.00	0.40 [-2.17, 2.97]

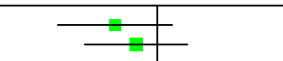
Test for heterogeneity: Chi² = 1.88, df = 7 (P = 0.97), I² = 0%
Test for overall effect: Z = 0.31 (P = 0.76)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 09 Weight change in kg at 24 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 1997	58	-9.20(13.00)	55	-6.20(8.70)		44.68	-3.00 [-7.06, 1.06]
Wing 1994	36	-7.20(8.00)	37	-5.70(7.90)		55.32	-1.50 [-5.15, 2.15]
Total (95% CI)	94		92			100.00	-2.17 [-4.88, 0.54]

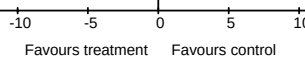
Test for heterogeneity: Chi² = 0.29, df = 1 (P = 0.59), I² = 0%
Test for overall effect: Z = 1.57 (P = 0.12)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 10 Weight change in kg at 36 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pavlou 1989 2a	5	-3.83(7.10)	6	-3.25(6.83)		22.89	-0.58 [-8.86, 7.70]
Pavlou 1989 2b	5	-13.00(3.83)	5	-10.67(8.93)		21.65	-2.33 [-10.85, 6.19]
Wadden 1989	15	-5.11(8.28)	14	-3.54(6.26)		55.46	-1.57 [-6.89, 3.75]
Total (95% CI)	25		25			100.00	-1.51 [-5.47, 2.45]

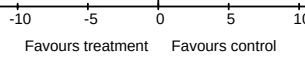
Test for heterogeneity: Chi² = 0.08, df = 2 (P = 0.96), I² = 0%
Test for overall effect: Z = 0.75 (P = 0.46)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 11 Weight change in kg at 48 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 1997	29	-7.60(12.20)	26	-6.30(8.50)		100.00	-1.30 [-6.81, 4.21]
Total (95% CI)	29		26			100.00	-1.30 [-6.81, 4.21]

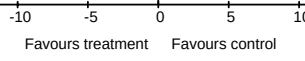
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.46 (P = 0.64)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 12 Weight change in kg at 60 months

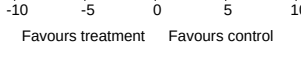
Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wadden 1989	22	2.90(11.26)	15	2.70(6.97)		100.00	0.20 [-5.68, 6.08]
Total (95% CI)	22		15			100.00	0.20 [-5.68, 6.08]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.07 (P = 0.95)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 13 Weight change in kg over time

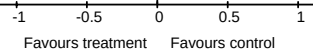
Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Dansinger 2005							
Dansinger 2 months	40	-3.60(3.30)	40	-3.50(3.80)		50.10	-0.10 [-1.66, 1.46]
Dansinger 6 months	40	-3.20(4.90)	40	-3.50(5.60)		22.92	0.30 [-2.01, 2.61]
Dansinger 12 months	40	-2.10(4.80)	40	-3.00(4.90)		26.97	0.90 [-1.23, 3.03]
02 Wadden 1989							
Wadden 6 months	31	-16.80(6.68)	22	-13.00(6.57)		41.50	-3.80 [-7.41, -0.19]
Wadden 12 months	25	-10.60(8.00)	22	-6.60(8.91)		22.89	-4.00 [-8.87, 0.87]
Wadden 36 months	16	-5.11(8.28)	14	-3.54(6.26)		19.93	-1.57 [-6.79, 3.65]
Wadden 60 months	22	2.90(11.26)	15	2.70(6.97)		15.68	0.20 [-5.68, 6.08]
03 Wadden 1994							
Wadden 1 week	28	-0.67(1.54)	21	-1.45(1.05)		69.32	0.78 [0.05, 1.51]
Wadden 5 weeks	28	-8.51(2.37)	21	-4.05(2.47)		19.36	-4.46 [-5.83, -3.09]
Wadden 9 weeks	28	-13.29(4.02)	21	-5.44(3.61)		7.94	-7.85 [-10.00, -5.71]
Wadden 6months	26	-21.45(9.63)	17	-11.86(7.89)		1.32	-9.59 [-14.86, -4.32]
Wadden 12months	23	-17.33(9.86)	17	-14.43(9.46)		1.00	-2.90 [-8.94, 3.14]
Wadden 18months	21	-10.94(9.97)	16	-12.18(8.23)		1.06	1.24 [-4.63, 7.11]
04 Pavlou 1989 2							
Pavlou 2a 18 months	5	-7.29(7.98)	6	-5.75(7.54)		24.84	-1.54 [-10.78, 7.70]
Pavlou 2a 36 months	5	-3.83(7.10)	6	-3.25(6.83)		30.90	-0.58 [-8.86, 7.70]
Pavlou 2b 18 months	5	-14.04(9.89)	5	-11.83(9.26)		15.03	-2.21 [-14.09, 9.67]
Pavlou 2b 36 months	5	-13.00(3.83)	5	-10.67(8.93)		29.22	-2.33 [-10.85, 6.19]
05 Wing 1991							
Wing 5 months	17	-18.60(11.18)	16	-10.10(8.77)		39.55	-8.50 [-15.33, -1.67]
Wing 18 months	17	-8.60(9.20)	16	-6.80(6.90)		60.45	-1.80 [-7.33, 3.73]
06 Torgerson 1997							
Torgerson 24 months	58	-9.20(13.00)	55	-6.20(8.70)		64.84	-3.00 [-7.06, 1.06]
Torgerson 48 months	29	-7.60(12.20)	26	-6.30(8.50)		35.16	-1.30 [-6.81, 4.21]
07 Wing 1994							
Wing 12 months	41	-14.20(10.30)	38	-10.50(11.60)		36.11	-3.70 [-8.55, 1.15]
Wing 24 months	36	-7.20(8.00)	37	-5.70(7.90)		63.89	-1.50 [-5.15, 2.15]



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 14 Change in TC mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.11(0.59)	40	-0.21(0.62)		77.73	0.10 [-0.17, 0.37]
Wing 1994	36	0.02(1.08)	37	-0.31(1.08)		22.27	0.33 [-0.17, 0.83]
Total (95% CI)	76		77			100.00	0.15 [-0.08, 0.39]

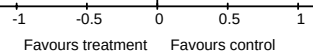
Test for heterogeneity: Chi² = 0.64, df = 1 (P = 0.42), I² = 0%
Test for overall effect: Z = 1.27 (P = 0.21)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 15 Change in TC mmol/l at 18 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1991	17	0.29(1.08)	16	0.31(1.08)		100.00	-0.02 [-0.76, 0.72]
Total (95% CI)	17		16			100.00	-0.02 [-0.76, 0.72]

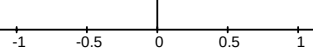
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.05 (P = 0.96)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 16 Change in LDLC mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.18(0.62)	40	-0.24(0.69)		58.25	0.06 [-0.23, 0.35]
Wing 1994	36	0.13(0.74)	37	-0.13(0.74)		41.75	0.26 [-0.08, 0.60]
Total (95% CI)	76		77			100.00	0.14 [-0.08, 0.36]

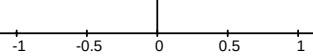
Test for heterogeneity: Chi² = 0.78, df = 1 (P = 0.38), I² = 0%
Test for overall effect: Z = 1.28 (P = 0.20)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 17 Change in HDLC mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.09(0.18)	40	0.09(0.25)		100.00	0.00 [-0.10, 0.10]
Total (95% CI)	40		40			100.00	0.00 [-0.10, 0.10]

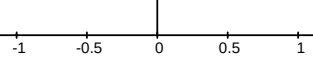
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 18 Change in HDLC mmol/l at 18 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1991	17	0.22(0.29)	16	0.13(0.29)		100.00	0.09 [-0.11, 0.29]
Total (95% CI)	17		16			100.00	0.09 [-0.11, 0.29]

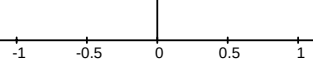
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.89 (P = 0.37)



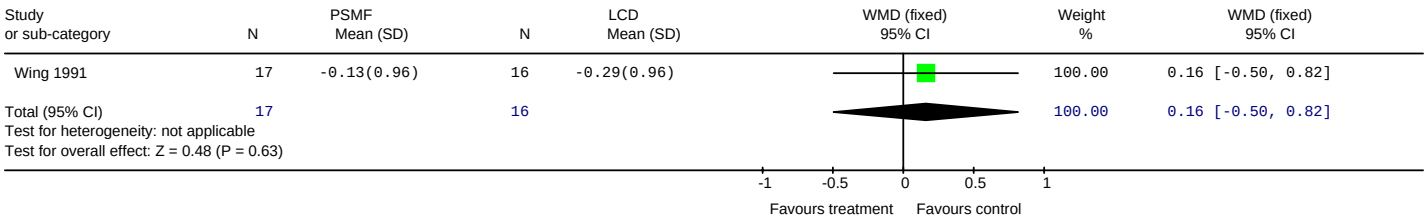
Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 19 Change in TG mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.02(0.94)	40	-0.14(0.69)		100.00	0.12 [-0.24, 0.48]
Total (95% CI)	40		40			100.00	0.12 [-0.24, 0.48]

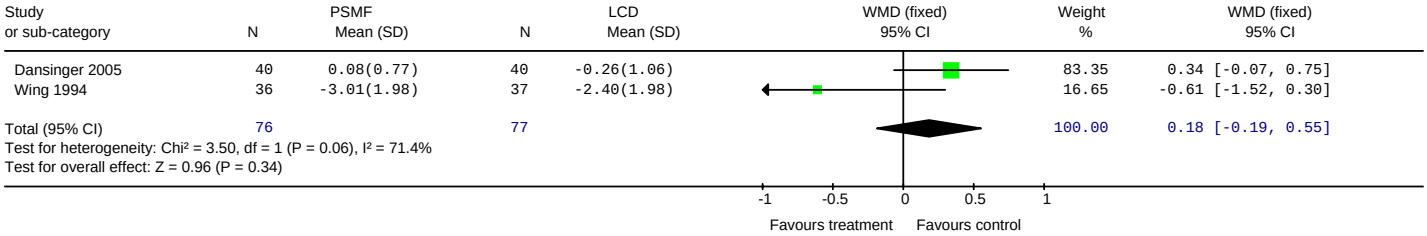
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.65 (P = 0.52)



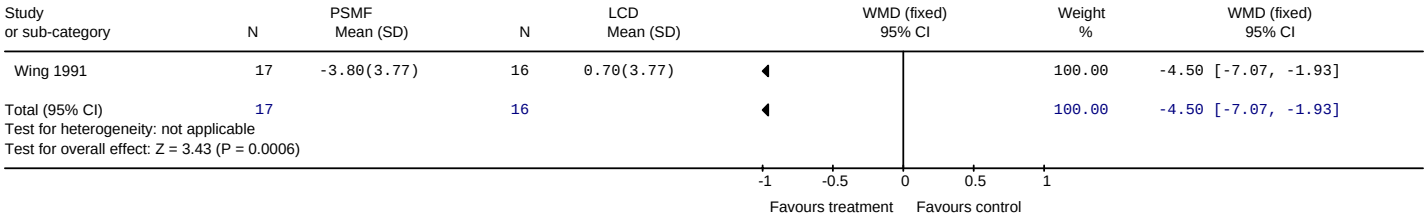
Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 20 Change in TG mmol/l at 18 months



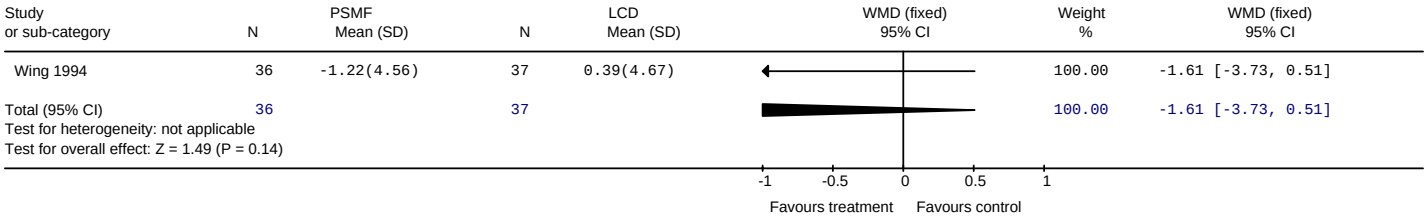
Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 21 Change in FPG mmol/l at 12 months



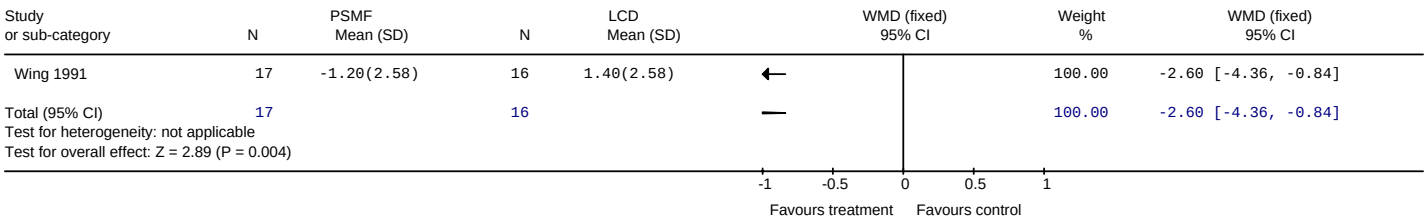
Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 22 Change in FPG mmol/l at 18 months



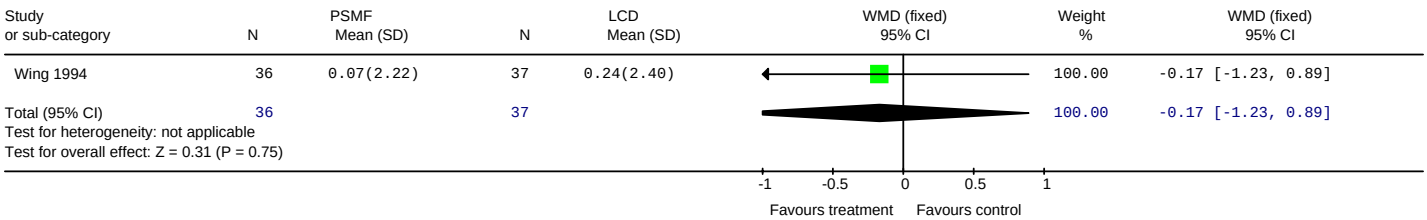
Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 23 Change in FPG mmol/l at 24 months



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 24 Change in %HbA1c at 18 months



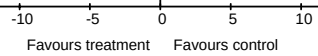
Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 25 Change in %HbA1c at 24 months



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 26 Change in SBP mmHg at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.20(12.00)	40	-2.70(13.00)		53.04	2.90 [-2.58, 8.38]
Wing 1994	36	-6.00(12.70)	37	-3.00(12.70)		46.96	-3.00 [-8.83, 2.83]
Total (95% CI)	76		77			100.00	0.13 [-3.86, 4.12]

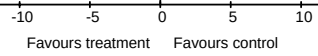
Test for heterogeneity: Chi² = 2.09, df = 1 (P = 0.15), I² = 52.1%
Test for overall effect: Z = 0.06 (P = 0.95)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 27 Change in DBP mmHg at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-1.40(7.50)	40	-1.70(6.40)		60.84	0.30 [-2.76, 3.36]
Wing 1994	36	-8.00(8.30)	37	-3.00(8.30)		39.16	-5.00 [-8.81, -1.19]
Total (95% CI)	76		77			100.00	-1.78 [-4.16, 0.61]

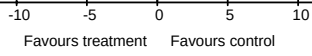
Test for heterogeneity: Chi² = 4.53, df = 1 (P = 0.03), I² = 77.9%
Test for overall effect: Z = 1.46 (P = 0.14)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 28 Change in TC mmol/l at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.02(1.08)	40	-0.21(1.08)		52.29	0.19 [-0.28, 0.66]
Wing 1994	36	-0.31(1.08)	37	-0.57(1.08)		47.71	0.26 [-0.24, 0.76]
Total (95% CI)	76		77			100.00	0.22 [-0.12, 0.57]

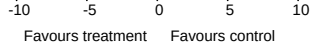
Test for heterogeneity: Chi² = 0.04, df = 1 (P = 0.84), I² = 0%
Test for overall effect: Z = 1.28 (P = 0.20)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 29 Change in LDLC mmol/l at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.07(0.74)	40	-0.18(0.74)		52.29	0.11 [-0.21, 0.43]
Wing 1994	36	-0.08(0.74)	37	-0.31(0.74)		47.71	0.23 [-0.11, 0.57]
Total (95% CI)	76		77			100.00	0.17 [-0.07, 0.40]

Test for heterogeneity: Chi² = 0.25, df = 1 (P = 0.62), I² = 0%
Test for overall effect: Z = 1.40 (P = 0.16)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 30 Change in FPG mmol/l at 5 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1991	17	-6.50(3.11)	16	-3.50(3.11)		100.00	-3.00 [-5.12, -0.88]
Total (95% CI)	17		16			100.00	-3.00 [-5.12, -0.88]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.77 (P = 0.006)

Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 31 Change in FPG mmol/l at 6 months

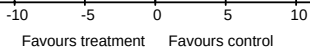
Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.43(1.98)	40	-0.21(1.98)		52.29	-0.22 [-1.09, 0.65]
Wing 1994	36	-3.62(1.98)	37	-3.17(1.98)		47.71	-0.45 [-1.36, 0.46]
Total (95% CI)	76		77			100.00	-0.33 [-0.96, 0.30]

Test for heterogeneity: Chi² = 0.13, df = 1 (P = 0.72), I² = 0%
Test for overall effect: Z = 1.03 (P = 0.30)

Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 32 Change in %HbA1c at 5 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1991	17	-2.90(2.70)	16	-1.80(2.70)		100.00	-1.10 [-2.94, 0.74]
Total (95% CI)	17		16			100.00	-1.10 [-2.94, 0.74]

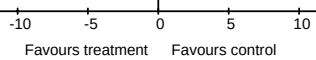
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.17 (P = 0.24)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 33 Change in %HbA1c at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1994	36	-2.00(0.76)	37	-1.70(0.76)		100.00	-0.30 [-0.65, 0.05]
Total (95% CI)	36		37			100.00	-0.30 [-0.65, 0.05]

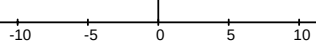
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.69 (P = 0.09)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 34 Change in %HbA1c at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1994	36	-1.50(0.76)	37	-1.30(0.76)		100.00	-0.20 [-0.55, 0.15]
Total (95% CI)	36		37			100.00	-0.20 [-0.55, 0.15]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.12 (P = 0.26)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 35 Change in SBP mmHg at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.70(12.70)	40	-4.80(12.70)		52.29	1.10 [-4.47, 6.67]
Wing 1994	36	-9.00(12.70)	37	-6.00(12.70)		47.71	-3.00 [-8.83, 2.83]
Total (95% CI)	76		77			100.00	-0.86 [-4.88, 3.17]

Test for heterogeneity: Chi² = 0.99, df = 1 (P = 0.32), I² = 0%
Test for overall effect: Z = 0.42 (P = 0.68)

Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 36 Change in DBP mmHg at 6 months

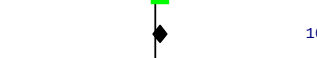
Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.00(8.30)	40	-1.80(8.30)		52.29	-2.20 [-5.84, 1.44]
Wing 1994	36	-6.00(8.30)	37	-3.00(8.30)		47.71	-3.00 [-6.81, 0.81]
Total (95% CI)	76		77			100.00	-2.58 [-5.21, 0.05]

Test for heterogeneity: Chi² = 0.09, df = 1 (P = 0.77), I² = 0%
Test for overall effect: Z = 1.92 (P = 0.05)

Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 37 Change in TC mmol/l at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.05(1.08)	40	-0.38(1.08)		100.00	0.33 [-0.14, 0.80]
Total (95% CI)	40		40			100.00	0.33 [-0.14, 0.80]

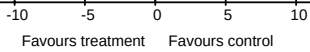
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.37 (P = 0.17)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 38 Change in LDLC mmol/l at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.03(0.74)	40	-0.31(0.74)		100.00	0.34 [0.02, 0.66]
Total (95% CI)	40		40			100.00	0.34 [0.02, 0.66]

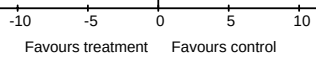
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.05 (P = 0.04)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 39 Change in FPG mmol/l at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.54(1.98)	40	-0.31(0.98)		100.00	-0.23 [-0.91, 0.45]
Total (95% CI)	40		40			100.00	-0.23 [-0.91, 0.45]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.66 (P = 0.51)



Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 40 Change in SBP mmHg at 2 months

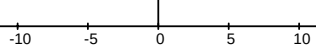
Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.20(12.70)	40	-4.80(12.70)		100.00	0.60 [-4.97, 6.17]
Total (95% CI)	40		40			100.00	0.60 [-4.97, 6.17]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.21 (P = 0.83)

Review: DIET Analyses for adults
Comparison: 09 Protein sparing modified fast vs LCD
Outcome: 41 Change in DBP mmHg at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	LCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.20(8.30)	40	-3.10(8.30)		100.00	-1.10 [-4.74, 2.54]
Total (95% CI)	40		40			100.00	-1.10 [-4.74, 2.54]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.59 (P = 0.55)



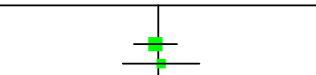
Review: DIET Analyses for adults
Comparison: 10 Protein sparing modified fast vs VLCD
Outcome: 01 Weight change in kg at 18 months

Study or sub-category	N	PSMF Mean (SD)	N	VLCD Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Pavlou 1989 1ce	8	-8.64(8.36)	10	-9.68(8.65)		15.76	1.04 [-6.85, 8.93]
Pavlou 1989 1cg	8	-8.64(8.36)	18	-12.40(9.42)		18.71	3.76 [-3.49, 11.01]
Pavlou 1989 1df	8	-1.13(6.23)	13	-0.93(6.18)		32.82	-0.20 [-5.67, 5.27]
Pavlou 1989 1dh	8	-1.13(6.23)	16	-3.45(6.89)		32.70	2.32 [-3.16, 7.80]
Total (95% CI)	32		57			100.00	1.56 [-1.57, 4.69]

Test for heterogeneity: Chi² = 0.84, df = 3 (P = 0.84), I² = 0%
Test for overall effect: Z = 0.98 (P = 0.33)

Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 01 Weight change in kg over time

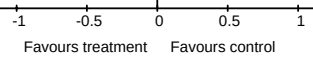
Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Dansinger 2005							
Dansinger 2 months	40	-3.80(3.60)	40	-3.60(3.40)		62.83	-0.20 [-1.73, 1.33]
Dansinger 6 months	40	-3.40(5.70)	40	-3.60(6.70)		19.91	0.20 [-2.53, 2.93]
Dansinger 12 months	40	-3.20(6.00)	40	-3.30(7.30)		17.25	0.10 [-2.83, 3.03]



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 02 Change in TC mmol/l at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.26(0.90)	40	-0.28(0.54)		100.00	0.02 [-0.31, 0.35]
Total (95% CI)	40		40			100.00	0.02 [-0.31, 0.35]

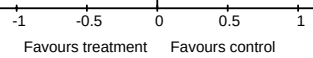
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.12 (P = 0.90)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 03 Change in LDLC mmol/l at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.30(0.87)	40	-0.32(0.49)		100.00	0.02 [-0.29, 0.33]
Total (95% CI)	40		40			100.00	0.02 [-0.29, 0.33]

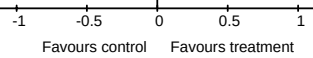
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.13 (P = 0.90)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 04 Change in HDLC mmol/l at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.08(0.26)	40	-0.01(0.17)		100.00	0.09 [-0.01, 0.19]
Total (95% CI)	40		40			100.00	0.09 [-0.01, 0.19]

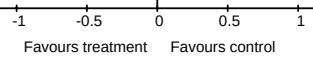
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.83 (P = 0.07)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 05 Change in TG mmol/l at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.03(1.65)	40	0.06(0.40)		100.00	-0.03 [-0.56, 0.50]
Total (95% CI)	40		40			100.00	-0.03 [-0.56, 0.50]

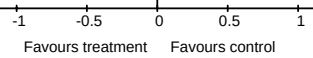
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.11 (P = 0.91)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 06 Change in FPG mmol/l at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.23(1.00)	40	-0.23(1.67)		100.00	0.00 [-0.60, 0.60]
Total (95% CI)	40		40			100.00	0.00 [-0.60, 0.60]

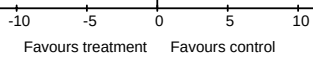
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 07 Change in SBP mmHg at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	1.40(15.00)	40	0.50(7.70)		100.00	0.90 [-4.33, 6.13]
Total (95% CI)	40		40			100.00	0.90 [-4.33, 6.13]

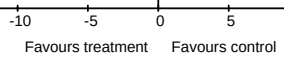
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.34 (P = 0.74)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 08 Change in DBP mmHg at 12 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-1.20(9.50)	40	0.20(4.60)		100.00	-1.40 [-4.67, 1.87]
Total (95% CI)	40		40			100.00	-1.40 [-4.67, 1.87]

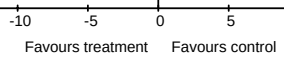
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.84 (P = 0.40)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 09 Change in TC mmol/l at 2 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.48(1.08)	40	-0.49(1.08)		100.00	0.01 [-0.46, 0.48]
Total (95% CI)	40		40			100.00	0.01 [-0.46, 0.48]

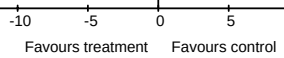
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.04 (P = 0.97)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 10 Change in TC mmol/l at 6 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.16(1.08)	40	-0.30(1.08)		100.00	0.14 [-0.33, 0.61]
Total (95% CI)	40		40			100.00	0.14 [-0.33, 0.61]

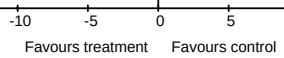
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.58 (P = 0.56)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 11 Change in LDLC mmol/l at 2 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.25(0.74)	40	-0.43(0.74)		100.00	0.18 [-0.14, 0.50]
Total (95% CI)	40		40			100.00	0.18 [-0.14, 0.50]

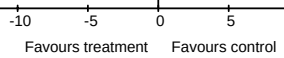
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.09 (P = 0.28)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 12 Change in LDLC mmol/l at 6 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.17(0.74)	40	-0.27(0.74)		100.00	0.10 [-0.22, 0.42]
Total (95% CI)	40		40			100.00	0.10 [-0.22, 0.42]

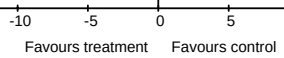
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.60 (P = 0.55)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 13 Change in FPG mmol/l at 2 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.50(1.98)	40	-0.17(1.98)		100.00	-0.33 [-1.20, 0.54]
Total (95% CI)	40		40			100.00	-0.33 [-1.20, 0.54]

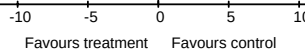
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.75 (P = 0.46)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 14 Change in FPG mmol/l at 6 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.46(1.98)	40	-0.28(1.98)		100.00	-0.18 [-1.05, 0.69]
Total (95% CI)	40		40			100.00	-0.18 [-1.05, 0.69]

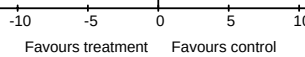
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.41 (P = 0.68)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 15 Change in SBP mmHg at 2 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.10(12.70)	40	-1.30(12.70)		100.00	-2.80 [-8.37, 2.77]
Total (95% CI)	40		40			100.00	-2.80 [-8.37, 2.77]

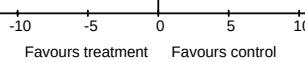
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.99 (P = 0.32)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 16 Change in SBP mmHg at 6 months

Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.90(12.70)	40	-0.60(12.70)		100.00	-3.30 [-8.87, 2.27]
Total (95% CI)	40		40			100.00	-3.30 [-8.87, 2.27]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.16 (P = 0.25)



Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 17 Change in DBP mmHg at 2 months

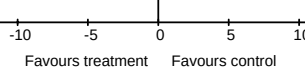
Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.80(8.30)	40	-2.50(8.30)		100.00	-2.30 [-5.94, 1.34]
Total (95% CI)	40		40			100.00	-2.30 [-5.94, 1.34]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.24 (P = 0.22)

Review: DIET Analyses for adults
Comparison: 11 Low fat diet vs very low fat diet
Outcome: 18 Change in DBP mmHg at 6 months

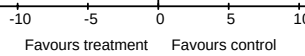
Study or sub-category	N	Low fat Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.00(8.30)	40	-0.30(8.30)		100.00	-3.70 [-7.34, -0.06]
Total (95% CI)	40		40			100.00	-3.70 [-7.34, -0.06]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.99 (P = 0.05)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 01 Weight change in kg over time

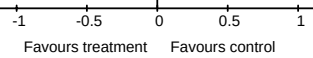
Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Dansinger 2005							
Dansinger 2 months	40	-3.50(3.80)	40	-3.60(3.40)		59.62	0.10 [-1.48, 1.68]
Dansinger 6 months	40	-3.50(5.60)	40	-3.60(6.70)		20.33	0.10 [-2.61, 2.81]
Dansinger 12 months	40	-3.00(4.90)	40	-3.30(7.30)		20.05	0.30 [-2.42, 3.02]



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 02 Change in TC mmol/l at 12 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.21(0.62)	40	-0.28(0.54)		100.00	0.07 [-0.18, 0.32]
Total (95% CI)	40		40			100.00	0.07 [-0.18, 0.32]

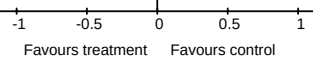
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.54 (P = 0.59)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 03 Change in LDLC mmol/l at 12 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.24(0.69)	40	-0.32(0.49)		100.00	0.08 [-0.18, 0.34]
Total (95% CI)	40		40			100.00	0.08 [-0.18, 0.34]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.60 (P = 0.55)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 04 Change in HDLC mmol/l at 12 months

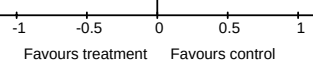
Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.09(0.25)	40	-0.01(0.17)		100.00	0.10 [0.01, 0.19]
Total (95% CI)	40		40			100.00	0.10 [0.01, 0.19]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.09 (P = 0.04)

Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 05 Change in TG mmol/l at 12 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.14(0.69)	40	0.06(0.40)		100.00	-0.20 [-0.45, 0.05]
Total (95% CI)	40		40			100.00	-0.20 [-0.45, 0.05]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.59 (P = 0.11)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 06 Change in FPG mmol/l at 12 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.26(1.06)	40	-0.23(1.67)		100.00	-0.03 [-0.64, 0.58]
Total (95% CI)	40		40			100.00	-0.03 [-0.64, 0.58]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.10 (P = 0.92)

Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 07 Change in SBP mmHg at 12 months

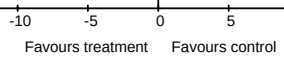
Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-2.70(13.00)	40	0.50(7.70)		100.00	-3.20 [-7.88, 1.48]
Total (95% CI)	40		40			100.00	-3.20 [-7.88, 1.48]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.34 (P = 0.18)

Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 08 Change in DBP mmHg at 12 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-1.70(6.40)	40	0.20(4.60)		100.00	-1.90 [-4.34, 0.54]
Total (95% CI)	40		40			100.00	-1.90 [-4.34, 0.54]

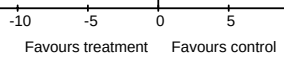
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.52 (P = 0.13)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 09 Change in TC mmol/l at 2 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.38(1.08)	40	-0.49(1.08)		100.00	0.11 [-0.36, 0.58]
Total (95% CI)	40		40			100.00	0.11 [-0.36, 0.58]

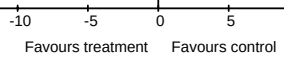
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.46 (P = 0.65)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 10 Change in TC mmol/l at 6 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.21(1.08)	40	-0.30(1.08)		100.00	0.09 [-0.38, 0.56]
Total (95% CI)	40		40			100.00	0.09 [-0.38, 0.56]

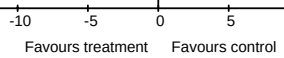
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.37 (P = 0.71)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 11 Change in LDLC mmol/l at 2 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.31(0.74)	40	-0.43(0.74)		100.00	0.12 [-0.20, 0.44]
Total (95% CI)	40		40			100.00	0.12 [-0.20, 0.44]

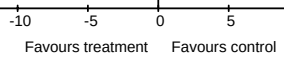
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.73 (P = 0.47)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 12 Change in LDLC mmol/l at 6 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.18(0.74)	40	-0.27(0.74)		100.00	0.09 [-0.23, 0.41]
Total (95% CI)	40		40			100.00	0.09 [-0.23, 0.41]

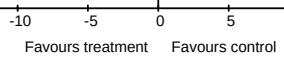
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.54 (P = 0.59)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 13 Change in FPG mmol/l at 2 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.31(1.98)	40	-0.17(1.98)		100.00	-0.14 [-1.01, 0.73]
Total (95% CI)	40		40			100.00	-0.14 [-1.01, 0.73]

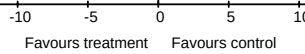
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.32 (P = 0.75)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 14 Change in FPG mmol/l at 6 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.21(1.98)	40	-0.28(1.98)		100.00	0.07 [-0.80, 0.94]
Total (95% CI)	40		40			100.00	0.07 [-0.80, 0.94]

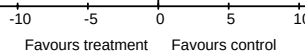
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.16 (P = 0.87)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 15 Change in SBP mmHg at 2 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.80(12.70)	40	-1.30(12.70)		100.00	-3.50 [-9.07, 2.07]
Total (95% CI)	40		40			100.00	-3.50 [-9.07, 2.07]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.23 (P = 0.22)



Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 16 Change in SBP mmHg at 6 months

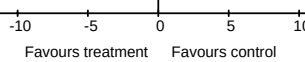
Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-4.80(12.70)	40	-0.60(12.70)		100.00	-4.20 [-9.77, 1.37]
Total (95% CI)	40		40			100.00	-4.20 [-9.77, 1.37]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.48 (P = 0.14)

Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 17 Change in DBP mmHg at 2 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-3.10(8.30)	40	-2.50(8.30)		100.00	-0.60 [-4.24, 3.04]
Total (95% CI)	40		40			100.00	-0.60 [-4.24, 3.04]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.32 (P = 0.75)



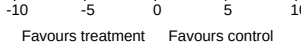
Review: DIET Analyses for adults
Comparison: 12 LCD vs very low fat diet
Outcome: 18 Change in DBP mmHg at 6 months

Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-1.80(8.30)	40	-0.30(8.30)		100.00	-1.50 [-5.14, 2.14]
Total (95% CI)	40		40			100.00	-1.50 [-5.14, 2.14]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.81 (P = 0.42)

Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 01 Weight change in kg over time

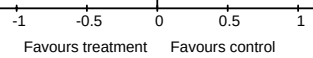
Study or sub-category	N	LCD Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Dansinger 2005							
Dansinger 2 months	40	-3.60(3.30)	40	-3.60(3.40)		61.73	0.00 [-1.47, 1.47]
Dansinger 6 months	40	-3.20(4.90)	40	-3.60(6.70)		20.11	0.40 [-2.17, 2.97]
Dansinger 12 months	40	-2.10(4.80)	40	-3.30(7.30)		18.16	1.20 [-1.51, 3.91]



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 02 Change in TC mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.11(0.59)	40	-0.28(0.54)		100.00	0.17 [-0.08, 0.42]
Total (95% CI)	40		40			100.00	0.17 [-0.08, 0.42]

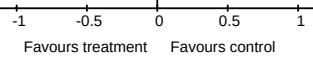
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.34 (P = 0.18)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 03 Change in LDLC mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.18(0.62)	40	-0.32(0.49)		100.00	0.14 [-0.10, 0.38]
Total (95% CI)	40		40			100.00	0.14 [-0.10, 0.38]

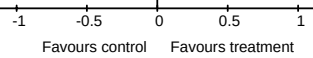
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.12 (P = 0.26)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 04 Change in HDLC mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.09(0.18)	40	-0.01(0.17)		100.00	0.10 [0.02, 0.18]
Total (95% CI)	40		40			100.00	0.10 [0.02, 0.18]

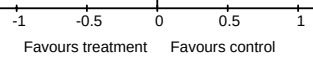
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.55 (P = 0.01)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 05 Change in TG mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.02(0.94)	40	0.06(0.40)		100.00	-0.08 [-0.40, 0.24]
Total (95% CI)	40		40			100.00	-0.08 [-0.40, 0.24]

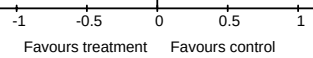
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.50 (P = 0.62)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 06 Change in FPG mmol/l at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.08(0.77)	40	-0.23(1.67)		100.00	0.31 [-0.26, 0.88]
Total (95% CI)	40		40			100.00	0.31 [-0.26, 0.88]

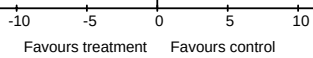
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.07 (P = 0.29)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 07 Change in SBP mmHg at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.20(12.00)	40	0.50(7.70)		100.00	-0.30 [-4.72, 4.12]
Total (95% CI)	40		40			100.00	-0.30 [-4.72, 4.12]

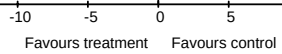
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.13 (P = 0.89)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 08 Change in DBP mmHg at 12 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-1.40(7.50)	40	0.20(4.60)		100.00	-1.60 [-4.33, 1.13]
Total (95% CI)	40		40			100.00	-1.60 [-4.33, 1.13]

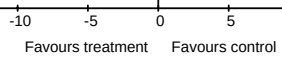
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.15 (P = 0.25)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 09 Change in TC mmol/l at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.05(1.08)	40	-0.49(1.08)		100.00	0.44 [-0.03, 0.91]
Total (95% CI)	40		40			100.00	0.44 [-0.03, 0.91]

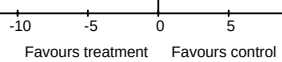
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.82 (P = 0.07)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 10 Change in TC mmol/l at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.02(1.08)	40	-0.30(1.08)		100.00	0.28 [-0.19, 0.75]
Total (95% CI)	40		40			100.00	0.28 [-0.19, 0.75]

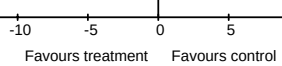
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.16 (P = 0.25)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 11 Change in LDLC mmol/l at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	0.03(0.74)	40	-0.43(0.74)		100.00	0.46 [0.14, 0.78]
Total (95% CI)	40		40			100.00	0.46 [0.14, 0.78]

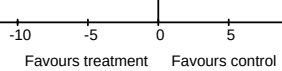
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.78 (P = 0.005)



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 12 Change in LDLC mmol/l at 6 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.07(0.74)	40	-0.27(0.74)		100.00	0.20 [-0.12, 0.52]
Total (95% CI)	40		40			100.00	0.20 [-0.12, 0.52]

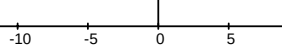
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.21 (P = 0.23)



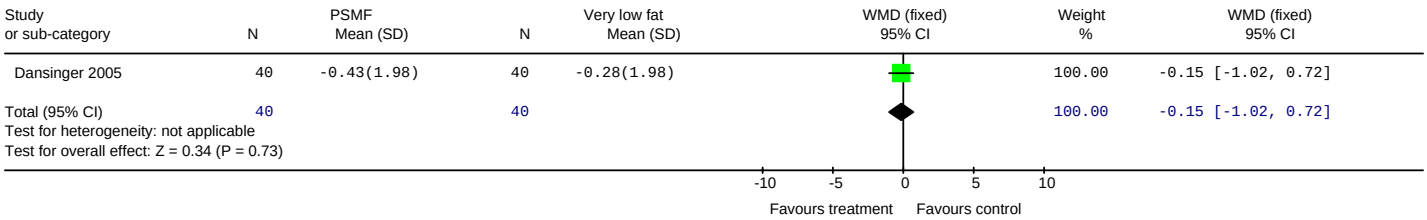
Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 13 Change in FPG mmol/l at 2 months

Study or sub-category	N	PSMF Mean (SD)	N	Very low fat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Dansinger 2005	40	-0.54(1.98)	40	-0.17(1.98)		100.00	-0.37 [-1.24, 0.50]
Total (95% CI)	40		40			100.00	-0.37 [-1.24, 0.50]

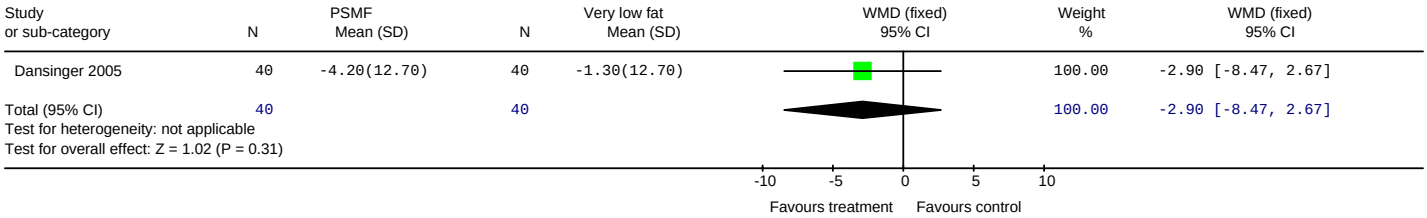
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.84 (P = 0.40)



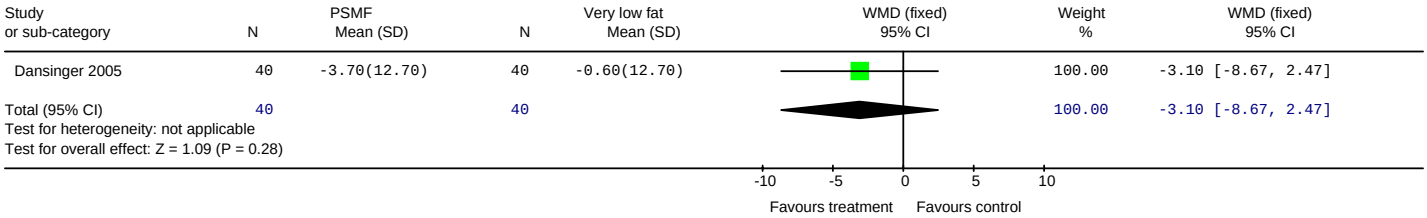
Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 14 Change in FPG mmol/l at 6 months



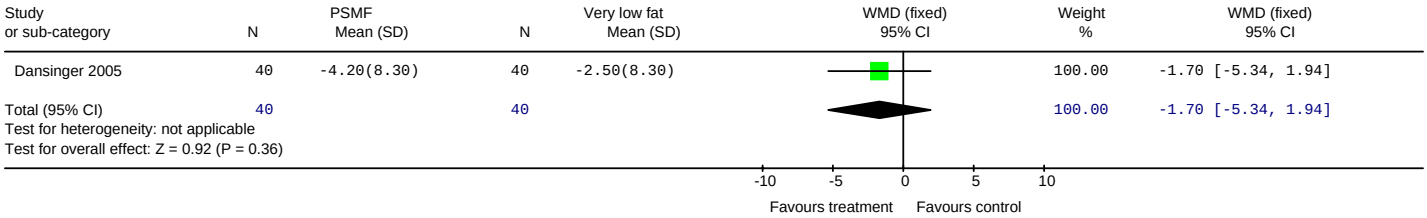
Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 15 Change in SBP mmHg at 2 months



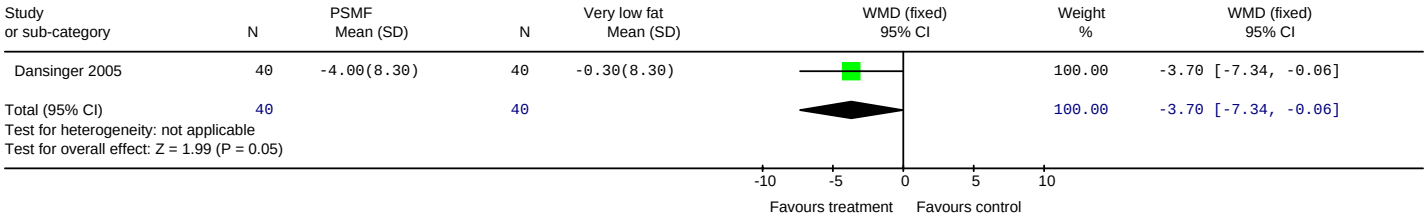
Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 16 Change in SBP mmHg at 6 months



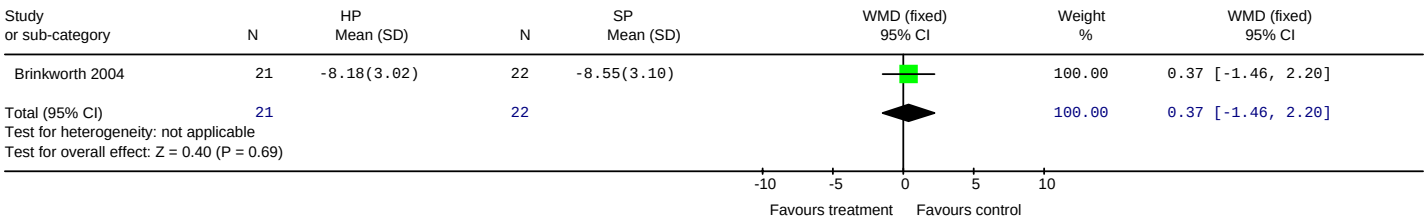
Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 17 Change in DBP mmHg at 2 months



Review: DIET Analyses for adults
Comparison: 13 PSMF vs very low fat diet
Outcome: 18 Change in DBP mmHg at 6 months



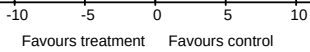
Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 01 Weight change in kg at 16 weeks



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 02 Weight change in kg at 6 months

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Due 2004	23	-9.40(8.58)	23	-5.90(7.58)		100.00	-3.50 [-8.18, 1.18]
Total (95% CI)	23		23			100.00	-3.50 [-8.18, 1.18]

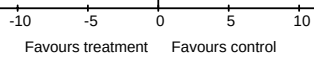
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.47 (P = 0.14)



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 03 Weight change in kg at 12 months

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Due 2004	23	-6.20(7.67)	18	-4.30(7.13)		100.00	-1.90 [-6.45, 2.65]
Total (95% CI)	23		18			100.00	-1.90 [-6.45, 2.65]

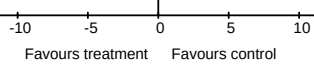
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.82 (P = 0.41)



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 04 Weight change in kg at 68 weeks

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Brinkworth 2004	21	-3.85(5.60)	22	-2.73(3.53)		100.00	-1.12 [-3.93, 1.69]
Total (95% CI)	21		22			100.00	-1.12 [-3.93, 1.69]

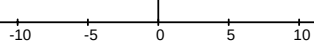
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.78 (P = 0.44)



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 05 Weight change in kg at 24 months

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Due 2004	3	-6.40(7.73)	6	-3.20(6.82)		100.00	-3.20 [-13.51, 7.11]
Total (95% CI)	3		6			100.00	-3.20 [-13.51, 7.11]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.61 (P = 0.54)



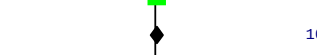
Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 06 Weight change in kg over time

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Brinkworth 2004							
Brinkworth 16 weeks	21	-8.18(3.02)	22	-8.55(3.10)		70.28	0.37 [-1.46, 2.20]
Brinkworth 68 weeks	21	-3.85(5.60)	22	-2.73(3.53)		29.72	-1.12 [-3.93, 1.69]
02 Due 2004							
Due 6 months	23	-9.40(8.58)	23	-5.90(7.58)		40.14	-3.50 [-8.18, 1.18]
Due 12 months	23	-6.20(7.67)	18	-4.30(7.13)		42.51	-1.90 [-6.45, 2.65]
Due 24 months	11	-6.40(7.73)	6	-3.20(6.82)		17.35	-3.20 [-10.32, 3.92]

Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 07 Change in LDLC mmol/l at 16 weeks

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Brinkworth 2004	21	-0.20(0.74)	22	-0.30(0.74)		100.00	0.10 [-0.34, 0.54]
Total (95% CI)	21		22			100.00	0.10 [-0.34, 0.54]

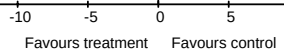
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.44 (P = 0.66)



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 08 Change in LDLC mmol/l at 68 weeks

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Brinkworth 2004	21	0.00(0.74)	22	0.40(0.74)		100.00	-0.40 [-0.84, 0.04]
Total (95% CI)	21		22			100.00	-0.40 [-0.84, 0.04]

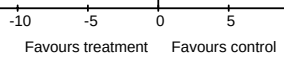
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.77 (P = 0.08)



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 09 Change in FPG mmol/l at 16 weeks

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Brinkworth 2004	21	0.10(3.11)	22	-0.10(3.11)		100.00	0.20 [-1.66, 2.06]
Total (95% CI)	21		22			100.00	0.20 [-1.66, 2.06]

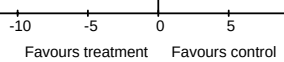
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.21 (P = 0.83)



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 10 Change in FPG mmol/l at 6 months

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Due 2004	23	0.00(3.11)	23	0.00(3.11)		100.00	0.00 [-1.80, 1.80]
Total (95% CI)	23		23			100.00	0.00 [-1.80, 1.80]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 11 Change in FPG mmol/l at 12 months

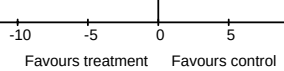
Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Due 2004	23	0.10(3.11)	18	0.30(3.11)		100.00	-0.20 [-2.12, 1.72]
Total (95% CI)	23		18			100.00	-0.20 [-2.12, 1.72]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.20 (P = 0.84)

Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 12 Change in FPG mmol/l at 68 weeks

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Brinkworth 2004	21	0.30(3.11)	22	0.10(3.11)		100.00	0.20 [-1.66, 2.06]
Total (95% CI)	21		22			100.00	0.20 [-1.66, 2.06]

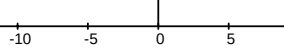
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.21 (P = 0.83)



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 13 Change in SBP mmHg at 16 weeks

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Brinkworth 2004	21	-4.90(12.70)	22	-3.60(12.70)		100.00	-1.30 [-8.89, 6.29]
Total (95% CI)	21		22			100.00	-1.30 [-8.89, 6.29]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.34 (P = 0.74)



Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 14 Change in SBP mmHg at 68 weeks

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Brinkworth 2004	21	-3.20(12.70)	22	-0.60(12.70)		100.00	-2.60 [-10.19, 4.99]
Total (95% CI)	21		22			100.00	-2.60 [-10.19, 4.99]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.67 (P = 0.50)

Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 15 Change in DBP mmHg at 16 weeks

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Brinkworth 2004	21	-2.70(8.30)	22	-0.90(8.30)		100.00	-1.80 [-6.76, 3.16]
Total (95% CI)	21		22			100.00	-1.80 [-6.76, 3.16]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.71 (P = 0.48)

Review: DIET Analyses for adults
Comparison: 14 High protein diet vs standard-medium protein diet
Outcome: 16 Change in DBP mmHg at 68 weeks

Study or sub-category	N	HP Mean (SD)	N	SP Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Brinkworth 2004	21	-2.40(8.30)	22	-1.20(8.30)		100.00	-1.20 [-6.16, 3.76]
Total (95% CI)	21		22			100.00	-1.20 [-6.16, 3.76]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.47 (P = 0.64)

3.2 Behavioural interventions

Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 01 Diet and BT vs usual care
Outcome: 01 Weight change over time

Study or sub-category	N	Diet and BT Mean (SD)	N	Usual care Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Munsch 2003 16 weeks	41	-3.80(6.99)	12	-0.70(6.11)		57.40	-3.10 [-7.17, 0.97]
Munsch 2003 12months	41	-4.70(7.25)	8	-0.40(6.01)		42.60	-4.30 [-9.02, 0.42]

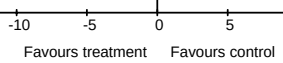
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 02 Diet and BT vs information
Outcome: 01 Weight change in kg at 18 months

Study or sub-category	N	Diet and BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Messier 2004	82	-4.61(7.22)	78	-1.10(6.23)		100.00	-3.51 [-5.60, -1.42]
Total (95% CI)	82		78			100.00	-3.51 [-5.60, -1.42]

Test for heterogeneity: not applicable
Test for overall effect: Z = 3.30 (P = 0.0010)

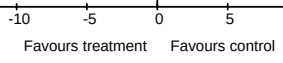
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 01 Weight change in kg at 3 months

Study or sub-category	Active diet and BT N	Active diet and BT Mean (SD)	Passive diet and BT N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Cousin FAM	27	-3.00(6.76)	14	-0.90(6.17)		49.42	-2.10 [-6.22, 2.02]
Cousins IND	32	-2.60(6.65)	13	-0.90(6.17)		50.58	-1.70 [-5.77, 2.37]
Subtotal (95% CI)	59		27			100.00	-1.90 [-4.79, 1.00]
Test for heterogeneity: Chi² = 0.02, df = 1 (P = 0.89), I² = 0%							
Test for overall effect: Z = 1.29 (P = 0.20)							
Total (95% CI)	59		27			100.00	-1.90 [-4.79, 1.00]
Test for heterogeneity: Chi² = 0.02, df = 1 (P = 0.89), I² = 0%							
Test for overall effect: Z = 1.29 (P = 0.20)							



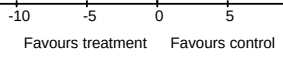
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 02 Weight change in kg at 6 months

Study or sub-category	Active diet and BT N	Active diet and BT Mean (SD)	Passive diet and BT N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Cousin FAM	27	-4.50(7.19)	14	-0.20(5.97)		19.05	-4.30 [-8.44, -0.16]
Cousins IND	32	-3.30(6.85)	13	-0.20(5.97)		20.19	-3.10 [-7.12, 0.92]
Subtotal (95% CI)	59		27			39.24	-3.68 [-6.57, -0.80]
Test for heterogeneity: Chi² = 0.17, df = 1 (P = 0.68), I² = 0%							
Test for overall effect: Z = 2.50 (P = 0.01)							
02 VLCD							
Wing 1998	35	-9.10(6.40)	32	-1.50(2.70)		60.76	-7.60 [-9.92, -5.28]
Subtotal (95% CI)	35		32			60.76	-7.60 [-9.92, -5.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 6.43 (P < 0.00001)							
Total (95% CI)	94		59			100.00	-6.06 [-7.87, -4.26]
Test for heterogeneity: Chi² = 4.47, df = 2 (P = 0.11), I² = 55.3%							
Test for overall effect: Z = 6.58 (P < 0.00001)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 03 Weight change in kg at 12 months

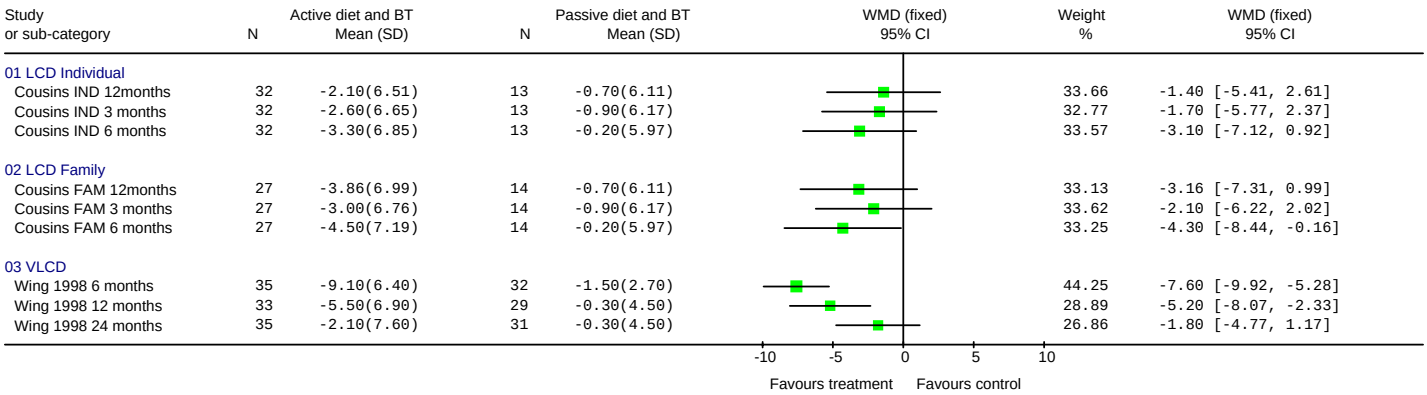
Study or sub-category	Active diet and BT N	Active diet and BT Mean (SD)	Passive diet and BT N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Cousin FAM	27	-3.86(6.99)	14	-0.70(6.11)		24.05	-3.16 [-7.31, 0.99]
Cousins IND	32	-2.10(6.51)	13	-0.70(6.11)		25.66	-1.40 [-5.41, 2.61]
Subtotal (95% CI)	59		27			49.71	-2.25 [-5.14, 0.63]
Test for heterogeneity: Chi² = 0.36, df = 1 (P = 0.55), I² = 0%							
Test for overall effect: Z = 1.53 (P = 0.13)							
02 VLCD							
Wing 1998	33	-5.50(6.90)	29	-0.30(4.50)		50.29	-5.20 [-8.07, -2.33]
Subtotal (95% CI)	33		29			50.29	-5.20 [-8.07, -2.33]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.55 (P = 0.0004)							
Total (95% CI)	92		56			100.00	-3.73 [-5.77, -1.70]
Test for heterogeneity: Chi² = 2.38, df = 2 (P = 0.30), I² = 15.8%							
Test for overall effect: Z = 3.60 (P = 0.0003)							



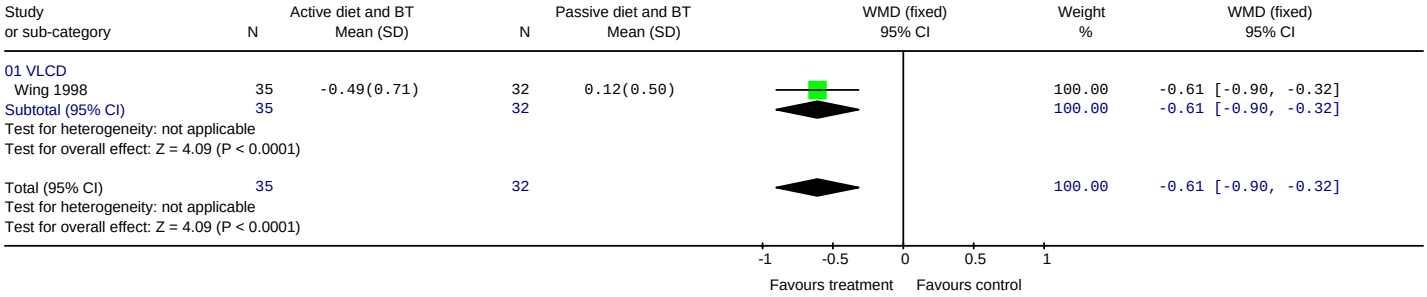
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 04 Weight change in kg at 24 months

Study or sub-category	Active diet and BT N	Active diet and BT Mean (SD)	Passive diet and BT N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-2.10(7.60)	31	-0.30(4.50)		100.00	-1.80 [-4.77, 1.17]
Subtotal (95% CI)	35		31			100.00	-1.80 [-4.77, 1.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.19 (P = 0.24)							
Total (95% CI)	35		31			100.00	-1.80 [-4.77, 1.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.19 (P = 0.24)							

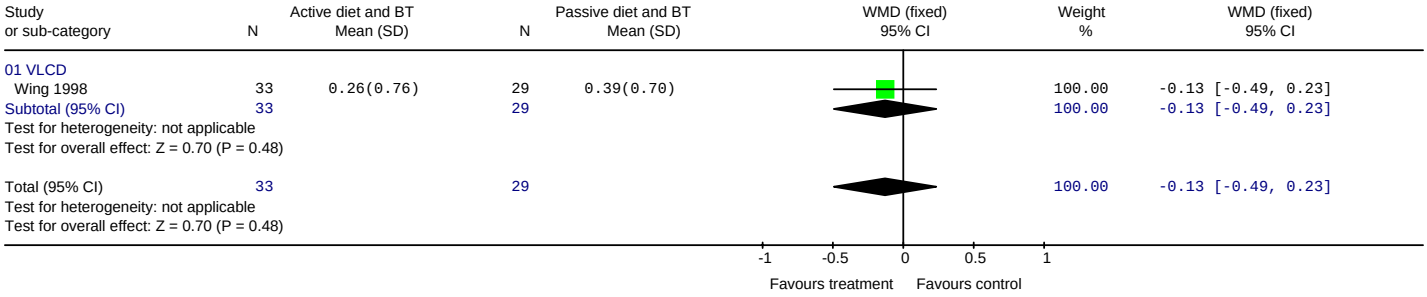
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 05 Weight change over time



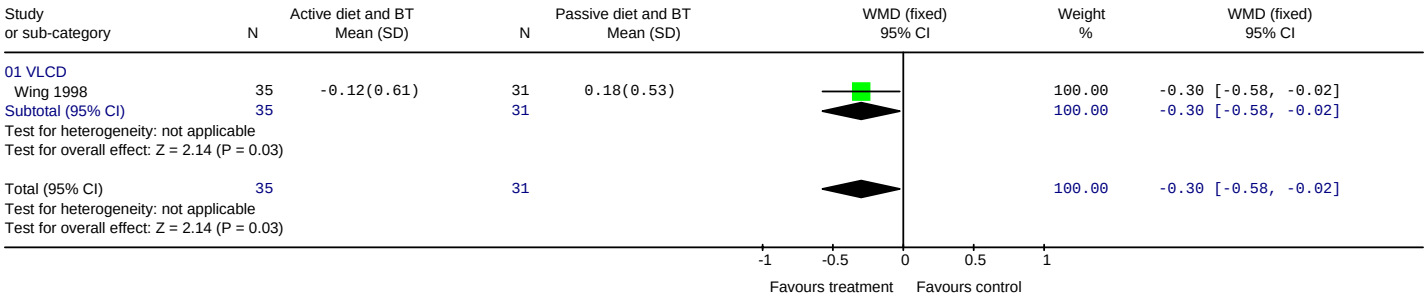
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 06 Change in TC mmol/l at 6 months



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 07 Change in TC mmol/l at 12 months

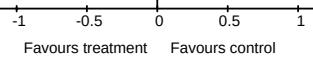


Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 08 Change in TC mmol/l at 24 months



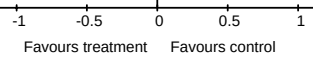
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 09 Change in LDLC mmol/l at 6 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-0.32(0.60)	32	0.08(0.46)		100.00	-0.40 [-0.65, -0.15]
Subtotal (95% CI)	35		32			100.00	-0.40 [-0.65, -0.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.08 (P = 0.002)							
Total (95% CI)	35		32			100.00	-0.40 [-0.65, -0.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.08 (P = 0.002)							



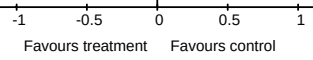
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 10 Change in LDLC mmol/l at 12 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	33	0.12(0.73)	29	0.24(0.66)		100.00	-0.12 [-0.47, 0.23]
Subtotal (95% CI)	33		29			100.00	-0.12 [-0.47, 0.23]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.68 (P = 0.50)							
Total (95% CI)	33		29			100.00	-0.12 [-0.47, 0.23]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.68 (P = 0.50)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 11 Change in LDLC mmol/l at 24 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-0.16(0.63)	31	0.03(0.46)		100.00	-0.19 [-0.45, 0.07]
Subtotal (95% CI)	35		31			100.00	-0.19 [-0.45, 0.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.41 (P = 0.16)							
Total (95% CI)	35		31			100.00	-0.19 [-0.45, 0.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.41 (P = 0.16)							

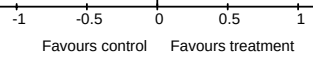


Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 12 Change in HDLC mmol/l at 6 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-0.10(0.17)	32	-0.02(0.11)		100.00	-0.08 [-0.15, -0.01]
Subtotal (95% CI)	35		32			100.00	-0.08 [-0.15, -0.01]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.31 (P = 0.02)							
Total (95% CI)	35		32			100.00	-0.08 [-0.15, -0.01]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.31 (P = 0.02)							

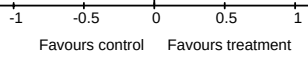
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 13 Change in HDLC mmol/l at 12 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	33	0.10(0.16)	29	0.08(0.16)		100.00	0.02 [-0.06, 0.10]
Subtotal (95% CI)	33		29			100.00	0.02 [-0.06, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.49 (P = 0.62)							
Total (95% CI)	33		29			100.00	0.02 [-0.06, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.49 (P = 0.62)							



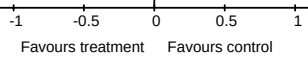
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 14 Change in HDLC mmol/l at 24 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	0.02(0.20)	31	0.04(0.24)		100.00	-0.02 [-0.13, 0.09]
Subtotal (95% CI)	35		31			100.00	-0.02 [-0.13, 0.09]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.37 (P = 0.72)							
Total (95% CI)	35		31			100.00	-0.02 [-0.13, 0.09]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.37 (P = 0.72)							



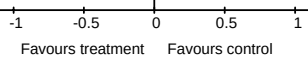
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 15 Change in TG mmol/l at 6 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-0.30(1.45)	32	0.29(0.32)		100.00	-0.59 [-1.08, -0.10]
Subtotal (95% CI)	35		32			100.00	-0.59 [-1.08, -0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.35 (P = 0.02)							
Total (95% CI)	35		32			100.00	-0.59 [-1.08, -0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.35 (P = 0.02)							



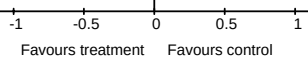
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 16 Change in TG mmol/l at 12 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	33	0.55(3.77)	29	0.40(1.25)		100.00	0.15 [-1.21, 1.51]
Subtotal (95% CI)	33		29			100.00	0.15 [-1.21, 1.51]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.22 (P = 0.83)							
Total (95% CI)	33		29			100.00	0.15 [-1.21, 1.51]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.22 (P = 0.83)							



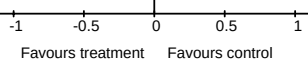
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 17 Change in TG mmol/l at 24 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	0.19(2.42)	31	0.52(1.14)		100.00	-0.33 [-1.23, 0.57]
Subtotal (95% CI)	35		31			100.00	-0.33 [-1.23, 0.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.72 (P = 0.47)							
Total (95% CI)	35		31			100.00	-0.33 [-1.23, 0.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.72 (P = 0.47)							



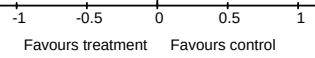
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 18 Change in FPG mmol/l at 6 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-0.20(0.40)	32	0.10(0.50)		100.00	-0.30 [-0.52, -0.08]
Subtotal (95% CI)	35		32			100.00	-0.30 [-0.52, -0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.70 (P = 0.007)							
Total (95% CI)	35		32			100.00	-0.30 [-0.52, -0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.70 (P = 0.007)							



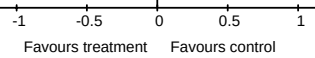
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 19 Change in FPG mmol/l at 12 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	33	0.20(0.80)	29	0.00(0.60)		100.00	0.20 [-0.15, 0.55]
Subtotal (95% CI)	33		29			100.00	0.20 [-0.15, 0.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.12 (P = 0.26)							
Total (95% CI)	33		29			100.00	0.20 [-0.15, 0.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.12 (P = 0.26)							



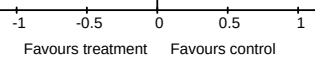
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 20 Change in FPG mmol/l at 24 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	0.30(1.00)	31	0.20(0.40)		100.00	0.10 [-0.26, 0.46]
Subtotal (95% CI)	35		31			100.00	0.10 [-0.26, 0.46]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.54 (P = 0.59)							
Total (95% CI)	35		31			100.00	0.10 [-0.26, 0.46]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.54 (P = 0.59)							



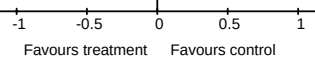
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 21 Change in %HbA1c at 6 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	0.10(0.50)	32	0.20(0.40)		100.00	-0.10 [-0.32, 0.12]
Subtotal (95% CI)	35		32			100.00	-0.10 [-0.32, 0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.91 (P = 0.36)							
Total (95% CI)	35		32			100.00	-0.10 [-0.32, 0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.91 (P = 0.36)							



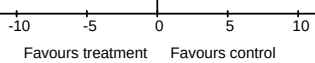
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 22 Change in %HbA1c at 24 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-0.10(0.50)	31	-0.10(0.30)		100.00	0.00 [-0.20, 0.20]
Subtotal (95% CI)	35		31			100.00	0.00 [-0.20, 0.20]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
Total (95% CI)	35		31			100.00	0.00 [-0.20, 0.20]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							



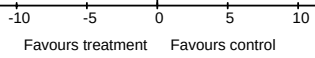
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 23 Change in SBP mmHg at 6 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-10.20(9.20)	32	-2.00(10.50)		100.00	-8.20 [-12.95, -3.45]
Subtotal (95% CI)	35		32			100.00	-8.20 [-12.95, -3.45]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.39 (P = 0.0007)							
Total (95% CI)	35		32			100.00	-8.20 [-12.95, -3.45]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.39 (P = 0.0007)							



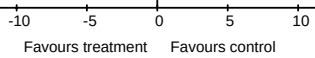
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 24 Change in SBP mmHg at 12 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
02 VLCD							
Wing 1998	33	1.30(8.30)	29	1.10(9.60)		100.00	0.20 [-4.30, 4.70]
Subtotal (95% CI)	33		29			100.00	0.20 [-4.30, 4.70]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.09 (P = 0.93)							
Total (95% CI)	33		29			100.00	0.20 [-4.30, 4.70]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.09 (P = 0.93)							



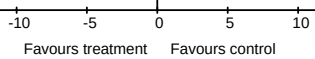
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 25 Change in SBP mmHg at 24 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-0.80(9.40)	31	-1.50(12.00)		100.00	0.70 [-4.55, 5.95]
Subtotal (95% CI)	35		31			100.00	0.70 [-4.55, 5.95]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.26 (P = 0.79)							
Total (95% CI)	35		31			100.00	0.70 [-4.55, 5.95]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.26 (P = 0.79)							



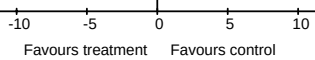
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 26 Change in DBP mmHg at 6 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	-6.20(6.90)	32	-2.20(8.00)		100.00	-4.00 [-7.59, -0.41]
Subtotal (95% CI)	35		32			100.00	-4.00 [-7.59, -0.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.18 (P = 0.03)							
Total (95% CI)	35		32			100.00	-4.00 [-7.59, -0.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.18 (P = 0.03)							



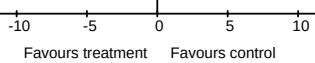
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 27 Change in DBP mmHg at 12 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	33	3.40(8.10)	29	4.90(8.20)		100.00	-1.50 [-5.57, 2.57]
Subtotal (95% CI)	33		29			100.00	-1.50 [-5.57, 2.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.72 (P = 0.47)							
Total (95% CI)	33		29			100.00	-1.50 [-5.57, 2.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.72 (P = 0.47)							



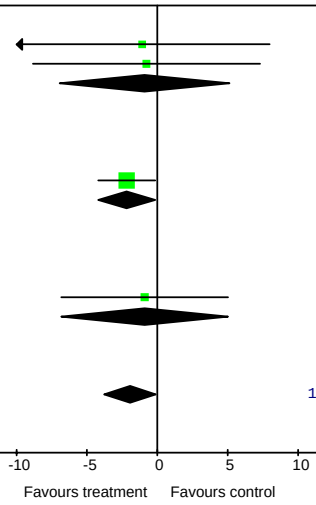
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 03 Active diet and BT vs passive (information only) diet and BT
Outcome: 28 Change in DBP mmHg at 24 months

Study or sub-category	N	Active diet and BT Mean (SD)	N	Passive diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	35	3.00(7.80)	31	2.00(8.00)		100.00	1.00 [-2.82, 4.82]
Subtotal (95% CI)	35		31			100.00	1.00 [-2.82, 4.82]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.51 (P = 0.61)							
Total (95% CI)	35		31			100.00	1.00 [-2.82, 4.82]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.51 (P = 0.61)							



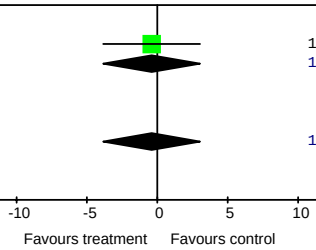
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 01 Weight change in kg at 10 weeks

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Murphy 1982 a	5	-8.16(8.23)	8	-7.08(7.92)		4.06	-1.08 [-10.14, 7.98]
Murphy 1982 b	8	-7.62(8.07)	7	-6.85(7.85)		5.12	-0.77 [-8.84, 7.30]
Subtotal (95% CI)	13		15			9.18	-0.91 [-6.93, 5.12]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.96), I² = 0%							
Test for overall effect: Z = 0.29 (P = 0.77)							
02 LCD, BT, and PA if no weight loss							
Pearce 1981	14	-6.50(2.91)	13	-4.32(2.45)		81.34	-2.18 [-4.20, -0.16]
Subtotal (95% CI)	14		13			81.34	-2.18 [-4.20, -0.16]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.11 (P = 0.03)							
03 Behavioural contracts							
Black 1984	11	-4.61(7.22)	11	-3.71(6.96)		9.49	-0.90 [-6.83, 5.03]
Subtotal (95% CI)	11		11			9.49	-0.90 [-6.83, 5.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.30 (P = 0.77)							
Total (95% CI)	38		39			100.00	-1.94 [-3.77, -0.12]
Test for heterogeneity: Chi² = 0.29, df = 3 (P = 0.96), I² = 0%							
Test for overall effect: Z = 2.08 (P = 0.04)							



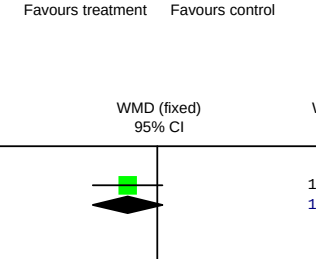
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 02 Weight change in kg at 12 weeks (3 months)

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Cousins 1992	27	-3.00(6.76)	32	-2.60(6.65)		100.00	-0.40 [-3.84, 3.04]
Subtotal (95% CI)	27		32			100.00	-0.40 [-3.84, 3.04]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.23 (P = 0.82)							
Total (95% CI)	27		32			100.00	-0.40 [-3.84, 3.04]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.23 (P = 0.82)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 03 Weight change in kg at 15 weeks

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Murphy 1982 a	5	-9.43(8.59)	7	-7.98(8.17)		44.02	-1.45 [-11.11, 8.21]
Murphy 1982 b	8	-9.66(8.65)	7	-8.30(8.26)		55.98	-1.36 [-9.93, 7.21]
Subtotal (95% CI)	13		14			100.00	-1.40 [-7.81, 5.01]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.99), I² = 0%							
Test for overall effect: Z = 0.43 (P = 0.67)							
Total (95% CI)	13		14			100.00	-1.40 [-7.81, 5.01]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.99), I² = 0%							
Test for overall effect: Z = 0.43 (P = 0.67)							

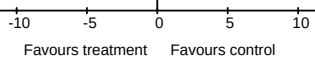


Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 04 Weight change in kg at 16 weeks (4 months)

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Wing 1999	80	-8.80(8.41)	86	-6.70(7.81)		100.00	-2.10 [-4.57, 0.37]
Subtotal (95% CI)	80		86			100.00	-2.10 [-4.57, 0.37]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.66 (P = 0.10)							
Total (95% CI)	80		86			100.00	-2.10 [-4.57, 0.37]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.66 (P = 0.10)							

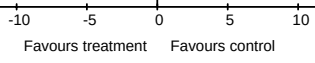
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 05 Weight change in kg at 20 weeks

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Wing 1991 b	20	-8.66(5.08)	23	-9.03(8.26)		100.00	0.37 [-3.67, 4.41]
Subtotal (95% CI)	20		23			100.00	0.37 [-3.67, 4.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.18 (P = 0.86)							
Total (95% CI)	20		23			100.00	0.37 [-3.67, 4.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.18 (P = 0.86)							



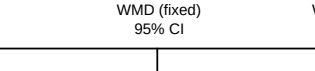
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 06 Weight change in kg at 22 weeks

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Murphy 1982 a	5	-10.34(8.84)	6	-9.39(8.57)		9.52	-0.95 [-11.30, 9.40]
Murphy 1982 b	8	-10.89(9.00)	7	-9.25(8.53)		12.93	-1.64 [-10.52, 7.24]
Subtotal (95% CI)	13		13			22.45	-1.35 [-8.09, 5.39]
Test for heterogeneity: Chi² = 0.01, df = 1 (P = 0.92), I² = 0%							
Test for overall effect: Z = 0.39 (P = 0.70)							
02 LCD, BT, and PA if no weight loss							
Pearce 1981	12	-8.18(4.74)	12	-4.55(4.31)		77.55	-3.63 [-7.25, -0.01]
Subtotal (95% CI)	12		12			77.55	-3.63 [-7.25, -0.01]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.96 (P = 0.05)							
Total (95% CI)	25		25			100.00	-3.12 [-6.31, 0.07]
Test for heterogeneity: Chi² = 0.35, df = 2 (P = 0.84), I² = 0%							
Test for overall effect: Z = 1.91 (P = 0.06)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 07 Weight change in kg at 26 weeks (6 months)

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Cousins 1992	27	-4.50(7.19)	32	-3.30(6.85)		100.00	-1.20 [-4.80, 2.40]
Subtotal (95% CI)	27		32			100.00	-1.20 [-4.80, 2.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.65 (P = 0.51)							
Total (95% CI)	27		32			100.00	-1.20 [-4.80, 2.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.65 (P = 0.51)							

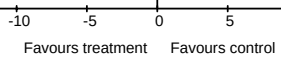


Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 08 Weight change in kg at 36 weeks

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Murphy 1982 a	5	-6.89(7.87)	6	-9.53(8.61)		11.60	2.64 [-7.11, 12.39]
Murphy 1982 b	7	-8.21(8.24)	5	-9.53(8.61)		11.70	1.32 [-8.39, 11.03]
Subtotal (95% CI)	12		11			23.30	1.98 [-4.90, 8.86]
Test for heterogeneity: Chi² = 0.04, df = 1 (P = 0.85), I² = 0%							
Test for overall effect: Z = 0.56 (P = 0.57)							
02 LCD, BT, and PA if no weight loss							
Pearce 1981	12	-7.47(5.08)	12	-3.42(4.37)		76.70	-4.05 [-7.84, -0.26]
Subtotal (95% CI)	12		12			76.70	-4.05 [-7.84, -0.26]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.09 (P = 0.04)							
Total (95% CI)	24		23			100.00	-2.65 [-5.97, 0.67]
Test for heterogeneity: Chi² = 2.30, df = 2 (P = 0.32), I² = 12.9%							
Test for overall effect: Z = 1.56 (P = 0.12)							

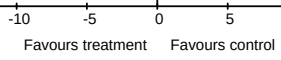
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 09 Weight change in kg at 40 weeks (10 months)

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Wing 1999	80	-7.70(8.09)	86	-4.30(7.13)		100.00	-3.40 [-5.73, -1.07]
Subtotal (95% CI)	80		86			100.00	-3.40 [-5.73, -1.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.86 (P = 0.004)							
Total (95% CI)	80		86			100.00	-3.40 [-5.73, -1.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.86 (P = 0.004)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 10 Weight change in kg at 52 weeks (12 months)

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Cousins 1992	27	-3.80(6.99)	32	-2.10(6.51)		46.20	-1.70 [-5.17, 1.77]
Murphy 1982 a	4	-5.44(7.46)	4	-3.18(6.81)		5.68	-2.26 [-12.16, 7.64]
Murphy 1982 b	8	-8.75(8.39)	6	-3.49(6.90)		8.65	-5.26 [-13.28, 2.76]
Subtotal (95% CI)	39		42			60.53	-2.26 [-5.29, 0.77]
Test for heterogeneity: Chi² = 0.64, df = 2 (P = 0.73), I² = 0%							
Test for overall effect: Z = 1.46 (P = 0.14)							
02 LCD, BT, and PA if no weight loss							
Pearce 1981	12	-8.25(5.38)	12	-2.16(5.97)		26.90	-6.09 [-10.64, -1.54]
Subtotal (95% CI)	12		12			26.90	-6.09 [-10.64, -1.54]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.63 (P = 0.009)							
03 Behavioural contracts							
Black 1984	11	-7.04(7.91)	11	-7.42(8.01)		12.57	0.38 [-6.27, 7.03]
Subtotal (95% CI)	11		11			12.57	0.38 [-6.27, 7.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.11 (P = 0.91)							
Total (95% CI)	62		65			100.00	-2.96 [-5.32, -0.60]
Test for heterogeneity: Chi² = 3.63, df = 4 (P = 0.46), I² = 0%							
Test for overall effect: Z = 2.46 (P = 0.01)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 11 Weight change in kg at 18 months

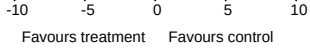
Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Wing 1991 b	20	-3.18(5.31)	23	-5.26(10.39)		16.30	2.08 [-2.76, 6.92]
Wing 1999	80	-4.70(7.25)	86	-3.00(6.76)		83.70	-1.70 [-3.84, 0.44]
Subtotal (95% CI)	100		109			100.00	-1.08 [-3.04, 0.87]
Test for heterogeneity: Chi² = 1.96, df = 1 (P = 0.16), I² = 49.0%							
Test for overall effect: Z = 1.09 (P = 0.28)							
Total (95% CI)	100		109			100.00	-1.08 [-3.04, 0.87]
Test for heterogeneity: Chi² = 1.96, df = 1 (P = 0.16), I² = 49.0%							
Test for overall effect: Z = 1.09 (P = 0.28)							

Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 12 Weight change in kg at 24 months

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Murphy 1982 a	5	-3.36(6.86)	7	-2.59(6.65)		47.44	-0.77 [-8.54, 7.00]
Murphy 1982 b	8	-7.21(7.96)	7	2.54(6.63)		52.56	-9.75 [-17.14, -2.36]
Subtotal (95% CI)	13		14			100.00	-5.49 [-10.84, -0.14]
Test for heterogeneity: Chi² = 2.69, df = 1 (P = 0.10), I² = 62.9%							
Test for overall effect: Z = 2.01 (P = 0.04)							
Total (95% CI)	13		14			100.00	-5.49 [-10.84, -0.14]
Test for heterogeneity: Chi² = 2.69, df = 1 (P = 0.10), I² = 62.9%							
Test for overall effect: Z = 2.01 (P = 0.04)							

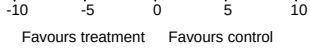
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 13 Weight change in kg at 43 months

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight loss programme and BT							
Rosenthal 1980	11	-4.37(7.15)	9	-3.62(6.94)		100.00	-0.75 [-6.95, 5.45]
Subtotal (95% CI)	11		9			100.00	-0.75 [-6.95, 5.45]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.24 (P = 0.81)							
Total (95% CI)	11		9			100.00	-0.75 [-6.95, 5.45]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.24 (P = 0.81)							



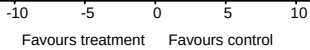
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 14 Weight change in kg at 48 months

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Murphy 1982 a	5	0.73(6.12)	4	-4.20(7.10)		51.91	4.93 [-3.86, 13.72]
Murphy 1982 b	6	-2.87(6.73)	4	5.67(7.52)		48.09	-8.54 [-17.67, 0.59]
Subtotal (95% CI)	11		8			100.00	-1.55 [-7.88, 4.78]
Test for heterogeneity: Chi² = 4.34, df = 1 (P = 0.04), I² = 77.0%							
Test for overall effect: Z = 0.48 (P = 0.63)							
Total (95% CI)	11		8			100.00	-1.55 [-7.88, 4.78]
Test for heterogeneity: Chi² = 4.34, df = 1 (P = 0.04), I² = 77.0%							
Test for overall effect: Z = 0.48 (P = 0.63)							



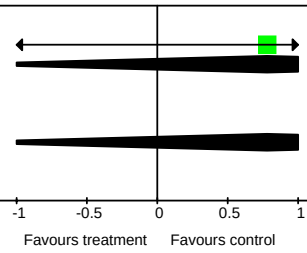
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 15 Weight change over time

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA Cousins							
Cousins 1992 12weeks	27	-3.00(6.76)	32	-2.60(6.65)		34.60	-0.40 [-3.84, 3.04]
Cousins 1992 26weeks	27	-4.50(7.19)	32	-3.30(6.85)		31.46	-1.20 [-4.80, 2.40]
Cousins 1992 12month	27	-3.80(6.99)	32	-2.10(6.51)		33.94	-1.70 [-5.17, 1.77]
02 LCD, BT, and PA Murphy 1991 a							
Murphy a 10 weeks	5	-8.16(8.23)	8	-7.08(7.92)		14.76	-1.08 [-10.14, 7.98]
Murphy a 15 weeks	5	-9.43(8.59)	7	-7.98(8.17)		13.00	-1.45 [-11.11, 8.21]
Murphy a 22 weeks	5	-10.34(8.84)	6	-9.39(8.57)		11.33	-0.95 [-11.30, 9.40]
Murphy a 36 weeks	5	-6.89(7.87)	6	-9.53(8.61)		12.76	2.64 [-7.11, 12.39]
Murphy a 12 months	4	-5.44(7.46)	4	-3.18(6.81)		12.38	-2.26 [-12.16, 7.64]
Murphy a 24 months	5	-3.36(6.86)	7	-2.59(6.65)		20.07	-0.77 [-8.54, 7.00]
Murphy a 48 months	5	0.73(6.12)	4	-4.20(7.10)		15.71	4.93 [-3.86, 13.72]
03 LCD, BT, and PA Murphy 1991 b							
Murphy b 10 weeks	8	-7.62(8.07)	7	-6.85(7.85)		15.65	-0.77 [-8.84, 7.30]
Murphy b 15 weeks	8	-9.66(8.65)	7	-8.30(8.26)		13.88	-1.36 [-9.93, 7.21]
Murphy b 22 weeks	8	-10.89(9.00)	7	-9.25(8.53)		12.92	-1.64 [-10.52, 7.24]
Murphy b 36 weeks	7	-8.21(8.24)	5	-9.53(8.61)		10.81	1.32 [-8.39, 11.03]
Murphy b 12 months	8	-8.75(8.39)	6	-3.49(6.90)		15.84	-5.26 [-13.28, 2.76]
Murphy b 24 months	8	-7.21(7.96)	7	2.54(6.63)		18.67	-9.75 [-17.14, -2.36]
Murphy b 48 months	6	-2.87(6.73)	4	5.67(7.52)		12.23	-8.54 [-17.67, 0.59]
04 LCD, BT, and PA Wing 1991 b							
Wing 1991 b 20 weeks	20	-8.66(5.08)	23	-9.03(8.26)		58.91	0.37 [-3.67, 4.41]
Wing 1991 b 18months	20	-3.18(5.31)	23	-5.26(10.39)		41.09	2.08 [-2.76, 6.92]
05 LCD, BT, and PA Wing 1999							
Wing 1999 16 weeks	80	-8.80(8.41)	86	-6.70(7.81)		28.81	-2.10 [-4.57, 0.37]
Wing 1999 40 weeks	80	-7.70(8.09)	86	-4.30(7.13)		32.57	-3.40 [-5.73, -1.07]
Wing 1999 18 months	80	-4.70(7.25)	86	-3.00(6.76)		38.62	-1.70 [-3.84, 0.44]
06 LCD, BT, and PA if no weight loss							
Pearce 1981 10 weeks	14	-6.50(2.91)	13	-4.32(2.45)		55.71	-2.18 [-4.20, -0.16]
Pearce 1981 22 weeks	12	-8.18(4.74)	12	-4.55(4.31)		17.37	-3.63 [-7.25, -0.01]
Pearce 1981 36 weeks	12	-7.47(5.08)	12	-3.42(4.37)		15.88	-4.05 [-7.84, -0.26]
Pearce 1981 12months	12	-8.25(5.38)	12	-2.16(5.97)		11.04	-6.09 [-10.64, -1.54]
07 Behavioural contracts							
Black 1984 10 weeks	11	-4.61(7.22)	11	-3.71(6.96)		55.75	-0.90 [-6.83, 5.03]
Black 1984 12 months	11	-7.04(7.91)	11	-7.42(8.01)		44.25	0.38 [-6.27, 7.03]



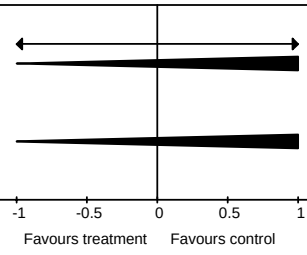
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 16 Change in FPG mmol/l at 20 weeks

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Wing 1991 b	20	-2.78(2.89)	23	-3.56(4.61)		100.00	0.78 [-1.49, 3.05]
Subtotal (95% CI)	20		23			100.00	0.78 [-1.49, 3.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.67 (P = 0.50)							
Total (95% CI)	20		23			100.00	0.78 [-1.49, 3.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.67 (P = 0.50)							



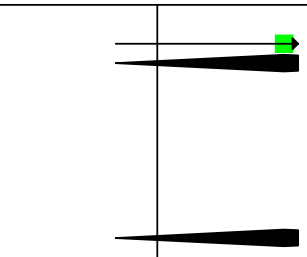
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 17 Change in FPG mmol/l at 72 weeks

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Wing 1991 b	20	-0.61(3.39)	23	-2.00(4.72)		100.00	1.39 [-1.04, 3.82]
Subtotal (95% CI)	20		23			100.00	1.39 [-1.04, 3.82]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.12 (P = 0.26)							
Total (95% CI)	20		23			100.00	1.39 [-1.04, 3.82]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.12 (P = 0.26)							



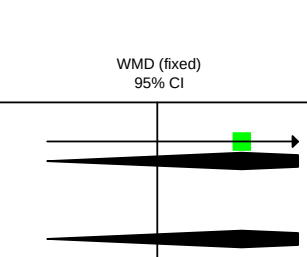
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 18 Change in %HbA1c at 20 weeks

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Wing 1991 b	20	-1.20(1.90)	23	-2.10(2.10)		100.00	0.90 [-0.30, 2.10]
Subtotal (95% CI)	20		23			100.00	0.90 [-0.30, 2.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.48 (P = 0.14)							
02 LCD, BT, and PA							
Subtotal (95% CI)	0		0				Not estimable
Test for heterogeneity: not applicable							
Test for overall effect: not applicable							
Total (95% CI)	20		23			100.00	0.90 [-0.30, 2.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.48 (P = 0.14)							



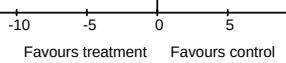
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 04 Family vs individual
Outcome: 19 Change in %HbA1c at 72 weeks

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Wing 1991 b	20	-0.10(1.90)	23	-0.70(2.70)		100.00	0.60 [-0.78, 1.98]
Subtotal (95% CI)	20		23			100.00	0.60 [-0.78, 1.98]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.85 (P = 0.39)							
Total (95% CI)	20		23			100.00	0.60 [-0.78, 1.98]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.85 (P = 0.39)							



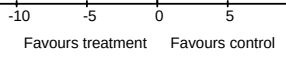
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 05 Group vs individual
Outcome: 01 Weight change in kg at 10 weeks

Study or sub-category	N	Group Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Other							
Straw 1983 a	9	-3.68(2.90)	8	-3.83(3.14)		67.24	0.15 [-2.74, 3.04]
Straw 1983 b	5	-2.59(3.59)	6	-4.76(3.35)		32.76	2.17 [-1.96, 6.30]
Subtotal (95% CI)	14		14			100.00	0.81 [-1.55, 3.18]
Test for heterogeneity: Chi² = 0.62, df = 1 (P = 0.43), I² = 0%							
Test for overall effect: Z = 0.67 (P = 0.50)							
Total (95% CI)	14		14			100.00	0.81 [-1.55, 3.18]
Test for heterogeneity: Chi² = 0.62, df = 1 (P = 0.43), I² = 0%							
Test for overall effect: Z = 0.67 (P = 0.50)							



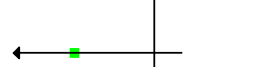
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 05 Group vs individual
Outcome: 02 Weight change in kg at 16 weeks (4 months)

Study or sub-category	N	Group Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Jones 1986	9	-3.95(3.67)	9	-4.79(2.81)		85.27	0.84 [-2.18, 3.86]
Long 1983	10	-4.60(7.22)	8	-8.30(8.26)		14.73	3.70 [-3.57, 10.97]
Subtotal (95% CI)	19		17			100.00	1.26 [-1.53, 4.05]
Test for heterogeneity: Chi² = 0.51, df = 1 (P = 0.48), I² = 0%							
Test for overall effect: Z = 0.89 (P = 0.38)							
Total (95% CI)	19		17			100.00	1.26 [-1.53, 4.05]
Test for heterogeneity: Chi² = 0.51, df = 1 (P = 0.48), I² = 0%							
Test for overall effect: Z = 0.89 (P = 0.38)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 05 Group vs individual
Outcome: 03 Weight change in kg at 12 months

Study or sub-category	N	Group Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Long 1983	7	-0.90(6.17)	7	-8.10(8.21)		20.02	7.20 [-0.41, 14.81]
Subtotal (95% CI)	7		7			20.02	7.20 [-0.41, 14.81]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.85 (P = 0.06)							
02 LCD, BT, and PA							
Hakala 1993	30	-14.80(8.90)	28	-17.00(10.30)		46.93	2.20 [-2.77, 7.17]
Subtotal (95% CI)	30		28			46.93	2.20 [-2.77, 7.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.87 (P = 0.39)							
03 Other							
Straw 1983 a	6	-3.98(7.04)	6	1.69(6.39)		20.03	-5.67 [-13.28, 1.94]
Straw 1983 b	5	-4.99(7.33)	5	-6.94(7.88)		13.02	1.95 [-7.48, 11.38]
Subtotal (95% CI)	11		11			33.05	-2.67 [-8.59, 3.25]
Test for heterogeneity: Chi² = 1.52, df = 1 (P = 0.22), I² = 34.2%							
Test for overall effect: Z = 0.88 (P = 0.38)							
Total (95% CI)	48		46			100.00	1.59 [-1.81, 5.00]
Test for heterogeneity: Chi² = 5.65, df = 3 (P = 0.13), I² = 46.9%							
Test for overall effect: Z = 0.92 (P = 0.36)							

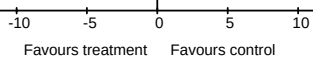


Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 05 Group vs individual
Outcome: 04 Weight change in kg at 18 months

Study or sub-category	N	Group Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Jones 1986	8	-2.33(5.06)	9	-3.07(5.34)		100.00	0.74 [-4.21, 5.69]
Subtotal (95% CI)	8		9			100.00	0.74 [-4.21, 5.69]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.29 (P = 0.77)							
Total (95% CI)	8		9			100.00	0.74 [-4.21, 5.69]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.29 (P = 0.77)							

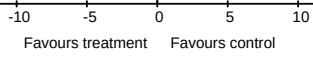
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 05 Group vs individual
Outcome: 05 Weight change in kg at 24 months

Study or sub-category	N	Group Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Hakala 1993	30	-4.20(9.70)	28	-12.30(12.90)		100.00	8.10 [2.19, 14.01]
Subtotal (95% CI)	30		28			100.00	8.10 [2.19, 14.01]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.69 (P = 0.007)							
Total (95% CI)	30		28			100.00	8.10 [2.19, 14.01]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.69 (P = 0.007)							



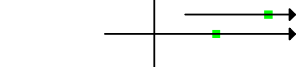
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 05 Group vs individual
Outcome: 06 Weight change in kg at 60 months

Study or sub-category	N	Group Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Hakala 1993	28	-2.40(12.00)	25	-6.80(16.70)		100.00	4.40 [-3.51, 12.31]
Subtotal (95% CI)	28		25			100.00	4.40 [-3.51, 12.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.09 (P = 0.28)							
Total (95% CI)	28		25			100.00	4.40 [-3.51, 12.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.09 (P = 0.28)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 05 Group vs individual
Outcome: 07 Weight change over time

Study or sub-category	N	Family Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Jones 1986 16 weeks	9	-3.95(3.67)	9	-4.79(2.81)		58.72	0.84 [-2.18, 3.86]
Jones 1986 18 months	8	-2.33(5.06)	9	-3.07(5.34)		21.89	0.74 [-4.21, 5.69]
Long 1983 16 weeks	10	-4.60(7.22)	8	-8.30(8.26)		10.14	3.70 [-3.57, 10.97]
Long 1983 12 months	7	-0.90(6.17)	7	-8.10(8.21)		9.25	7.20 [-0.41, 14.81]
02 LCD, BT, and PA							
Hakala 1993 3 months	30	-15.37(5.03)	28	-11.47(5.46)		49.72	-3.90 [-6.61, -1.19]
Hakala 1993 8 months	30	-14.80(8.30)	28	-16.17(8.58)		19.26	1.37 [-2.98, 5.72]
Hakala 1993 12months	30	-14.80(8.90)	28	-17.00(10.30)		14.75	2.20 [-2.77, 7.17]
Hakala 1993 24months	30	-4.20(9.70)	28	-12.30(12.90)		10.45	8.10 [2.19, 14.01]
Hakala 1993 60months	28	-2.40(12.00)	25	-6.80(16.70)		5.82	4.40 [-3.51, 12.31]
03 Other							
Straw 1983a 10 weeks	9	-3.68(2.90)	8	-3.83(3.14)		57.99	0.15 [-2.74, 3.04]
Straw 1983a 12months	6	-3.98(7.04)	6	1.69(6.39)		8.34	-5.67 [-13.28, 1.94]
Straw 1983b 10 weeks	5	-2.59(3.59)	6	-4.76(3.35)		28.25	2.17 [-1.96, 6.30]
Straw 1983b 12months	5	-4.99(7.33)	5	-6.94(7.88)		5.42	1.95 [-7.48, 11.38]

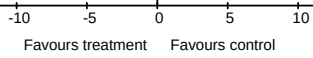


Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 05 Group vs individual
Outcome: 08 Weight change in kg at 3 months

Study or sub-category	N	Group Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Hakala 1993	30	-15.37(5.03)	28	-11.47(5.46)		100.00	-3.90 [-6.61, -1.19]
Subtotal (95% CI)	30		28			100.00	-3.90 [-6.61, -1.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.82 (P = 0.005)							
Total (95% CI)	30		28			100.00	-3.90 [-6.61, -1.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.82 (P = 0.005)							

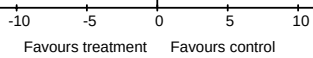
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 05 Group vs individual
Outcome: 09 Weight change in kg at 8 months

Study or sub-category	N	Group Mean (SD)	N	Individual Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD, BT, and PA							
Hakala 1993	30	-14.80(8.30)	28	-16.17(8.58)		100.00	1.37 [-2.98, 5.72]
Subtotal (95% CI)	30		28			100.00	1.37 [-2.98, 5.72]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.62 (P = 0.54)							
Total (95% CI)	30		28			100.00	1.37 [-2.98, 5.72]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.62 (P = 0.54)							



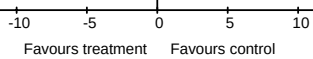
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 01 Weight change in kg at 3 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-8.30(2.64)	15	-10.00(2.75)		100.00	1.70 [-0.17, 3.57]
Subtotal (95% CI)	17		15			100.00	1.70 [-0.17, 3.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.78 (P = 0.08)							
Total (95% CI)	17		15			100.00	1.70 [-0.17, 3.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.78 (P = 0.08)							



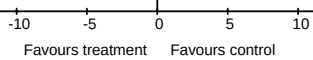
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 02 Weight change in kg at 6 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-10.60(2.64)	15	-12.30(2.75)		100.00	1.70 [-0.17, 3.57]
Subtotal (95% CI)	17		15			100.00	1.70 [-0.17, 3.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.78 (P = 0.08)							
Total (95% CI)	17		15			100.00	1.70 [-0.17, 3.57]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.78 (P = 0.08)							



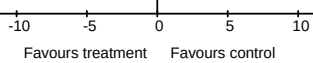
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 03 Weight change in kg at 12 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-7.58(4.04)	15	-6.40(4.49)		100.00	-1.18 [-4.16, 1.80]
Subtotal (95% CI)	17		15			100.00	-1.18 [-4.16, 1.80]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.78 (P = 0.44)							
Total (95% CI)	17		15			100.00	-1.18 [-4.16, 1.80]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.78 (P = 0.44)							



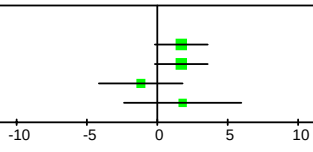
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 04 Weight change in kg at 24 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-6.80(5.77)	15	-8.60(6.20)		100.00	1.80 [-2.37, 5.97]
Subtotal (95% CI)	17		15			100.00	1.80 [-2.37, 5.97]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.85 (P = 0.40)							
Total (95% CI)	17		15			100.00	1.80 [-2.37, 5.97]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.85 (P = 0.40)							



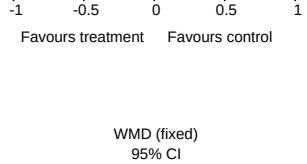
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 05 Weight change over time

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003 3 months	17	-8.30(2.64)	15	-10.00(2.75)		38.48	1.70 [-0.17, 3.57]
Melin 2003 6 months	17	-10.60(2.64)	15	-12.30(2.75)		38.48	1.70 [-0.17, 3.57]
Melin 2003 12 months	17	-7.58(4.04)	15	-6.40(4.49)		15.27	-1.18 [-4.16, 1.80]
Melin 2003 24 months	17	-6.80(5.77)	15	-8.60(6.20)		7.78	1.80 [-2.37, 5.97]



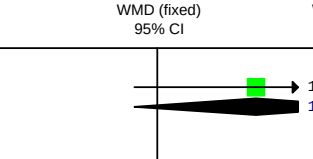
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 06 Change in FPG mmol/l at 3 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-0.35(1.44)	15	-0.90(1.51)		100.00	0.55 [-0.48, 1.58]
Subtotal (95% CI)	17		15			100.00	0.55 [-0.48, 1.58]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.05 (P = 0.29)							
Total (95% CI)	17		15			100.00	0.55 [-0.48, 1.58]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.05 (P = 0.29)							



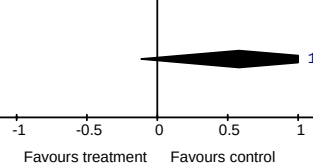
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 07 Change in FPG mmol/l at 6 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-0.20(0.87)	15	-0.60(0.93)		100.00	0.40 [-0.23, 1.03]
Subtotal (95% CI)	17		15			100.00	0.40 [-0.23, 1.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.25 (P = 0.21)							
Total (95% CI)	17		15			100.00	0.40 [-0.23, 1.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.25 (P = 0.21)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 08 Change in FPG mmol/l at 12 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-0.20(1.15)	15	-0.90(1.32)		100.00	0.70 [-0.16, 1.56]
Subtotal (95% CI)	17		15			100.00	0.70 [-0.16, 1.56]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.59 (P = 0.11)							
Total (95% CI)	17		15			100.00	0.70 [-0.16, 1.56]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.59 (P = 0.11)							

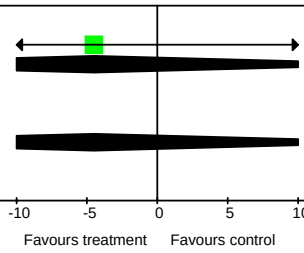


Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 09 Change in FPG mmol/l at 24 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	0.08(0.99)	15	-0.50(1.01)		100.00	0.58 [-0.11, 1.27]
Subtotal (95% CI)	17		15			100.00	0.58 [-0.11, 1.27]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.64 (P = 0.10)							
Total (95% CI)	17		15			100.00	0.58 [-0.11, 1.27]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.64 (P = 0.10)							

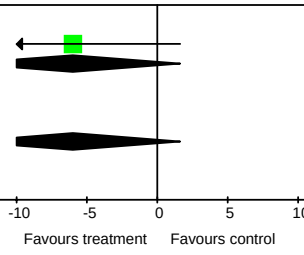
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 10 Change in SBP mmHg at 3 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-6.90(27.42)	15	-2.40(37.88)		100.00	-4.50 [-27.68, 18.68]
Subtotal (95% CI)	17		15			100.00	-4.50 [-27.68, 18.68]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.38 (P = 0.70)							
Total (95% CI)	17		15			100.00	-4.50 [-27.68, 18.68]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.38 (P = 0.70)							



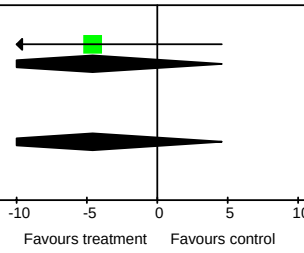
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 11 Change in SBP mmHg at 6 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-8.10(10.72)	15	-2.10(11.23)		100.00	-6.00 [-13.63, 1.63]
Subtotal (95% CI)	17		15			100.00	-6.00 [-13.63, 1.63]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.54 (P = 0.12)							
Total (95% CI)	17		15			100.00	-6.00 [-13.63, 1.63]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.54 (P = 0.12)							



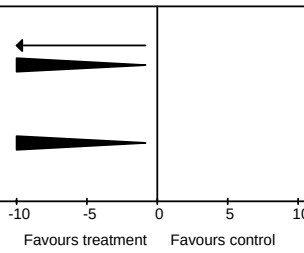
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 12 Change in SBP mmHg at 12 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-5.00(12.37)	15	-0.40(13.94)		100.00	-4.60 [-13.78, 4.58]
Subtotal (95% CI)	17		15			100.00	-4.60 [-13.78, 4.58]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.98 (P = 0.33)							
Total (95% CI)	17		15			100.00	-4.60 [-13.78, 4.58]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.98 (P = 0.33)							



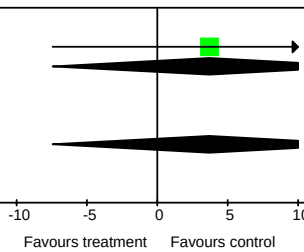
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 13 Change in SBP mmHg at 24 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-9.80(17.11)	15	2.20(15.10)		100.00	-12.00 [-23.16, -0.84]
Subtotal (95% CI)	17		15			100.00	-12.00 [-23.16, -0.84]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.11 (P = 0.04)							
Total (95% CI)	17		15			100.00	-12.00 [-23.16, -0.84]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.11 (P = 0.04)							



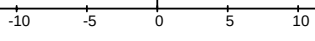
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 14 Change in DBP mmHg at 3 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-3.50(13.19)	15	-7.20(18.20)		100.00	3.70 [-7.44, 14.84]
Subtotal (95% CI)	17		15			100.00	3.70 [-7.44, 14.84]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.65 (P = 0.52)							
Total (95% CI)	17		15			100.00	3.70 [-7.44, 14.84]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.65 (P = 0.52)							



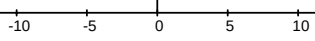
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 15 Change in DBP mmHg at 6 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-5.20(8.04)	15	-5.00(8.40)		100.00	-0.20 [-5.92, 5.52]
Subtotal (95% CI)	17		15			100.00	-0.20 [-5.92, 5.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.07 (P = 0.95)							
Total (95% CI)	17		15			100.00	-0.20 [-5.92, 5.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.07 (P = 0.95)							



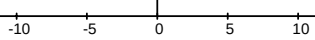
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 16 Change in DBP mmHg at 12 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-2.40(8.25)	15	-3.30(8.91)		100.00	0.90 [-5.08, 6.88]
Subtotal (95% CI)	17		15			100.00	0.90 [-5.08, 6.88]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.30 (P = 0.77)							
Total (95% CI)	17		15			100.00	0.90 [-5.08, 6.88]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.30 (P = 0.77)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 06 Intensive BT vs less intensive BT
Outcome: 17 Change in DBP mmHg at 24 months

Study or sub-category	N	INT BT and diet Mean (SD)	N	STD BT and diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Melin 2003	17	-6.60(9.57)	15	1.30(8.44)		100.00	-7.90 [-14.14, -1.66]
Subtotal (95% CI)	17		15			100.00	-7.90 [-14.14, -1.66]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.48 (P = 0.01)							
Total (95% CI)	17		15			100.00	-7.90 [-14.14, -1.66]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.48 (P = 0.01)							

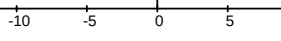


Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 07 Diet and BT vs diet alone
Outcome: 01 Weight change in kg at 16 weeks

Study or sub-category	N	Diet and BT Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Jones 1986 c	7	-8.74(2.35)	9	-3.95(3.67)		46.16	-4.79 [-7.75, -1.83]
Jones 1986 d	9	-4.52(3.66)	9	-4.79(2.81)		44.59	0.27 [-2.74, 3.28]
Long 1983	10	-6.90(7.87)	10	-4.60(7.22)		9.25	-2.30 [-8.92, 4.32]
Subtotal (95% CI)	26		28			100.00	-2.30 [-4.32, -0.29]
Test for heterogeneity: Chi² = 5.50, df = 2 (P = 0.06), I² = 63.7%							
Test for overall effect: Z = 2.24 (P = 0.02)							
Total (95% CI)	26		28			100.00	-2.30 [-4.32, -0.29]
Test for heterogeneity: Chi² = 5.50, df = 2 (P = 0.06), I² = 63.7%							
Test for overall effect: Z = 2.24 (P = 0.02)							

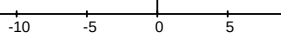
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 07 Diet and BT vs diet alone
Outcome: 02 Weight change in kg at 6 months

Study or sub-category	N	Diet and BT Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 PSMF							
Wadden 1989	31	-16.80(6.68)	23	-13.10(4.80)		100.00	-3.70 [-6.76, -0.64]
Subtotal (95% CI)	31		23			100.00	-3.70 [-6.76, -0.64]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.37 (P = 0.02)							
Total (95% CI)	31		23			100.00	-3.70 [-6.76, -0.64]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.37 (P = 0.02)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 07 Diet and BT vs diet alone
Outcome: 03 Weight change in kg at 12 months

Study or sub-category	N	Diet and BT Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Long 1983	9	-7.70(8.09)	7	-0.90(6.17)		37.85	-6.80 [-13.79, 0.19]
Subtotal (95% CI)	9		7			37.85	-6.80 [-13.79, 0.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.91 (P = 0.06)							
02 PSMF							
Wadden 1989	19	-12.89(8.91)	15	-4.70(7.31)		62.15	-8.19 [-13.64, -2.74]
Subtotal (95% CI)	19		15			62.15	-8.19 [-13.64, -2.74]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.94 (P = 0.003)							
Total (95% CI)	28		22			100.00	-7.66 [-11.96, -3.36]
Test for heterogeneity: Chi² = 0.09, df = 1 (P = 0.76), I² = 0%							
Test for overall effect: Z = 3.49 (P = 0.0005)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 07 Diet and BT vs diet alone
Outcome: 04 Weight change in kg at 18 months

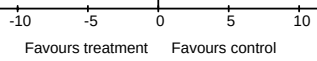
Study or sub-category	N	Diet and BT Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Jones 1986 c	7	-7.79(5.21)	8	-2.33(5.06)		63.11	-5.46 [-10.67, -0.25]
Jones 1986 d	7	-5.06(7.91)	9	-3.07(5.34)		36.89	-1.99 [-8.81, 4.83]
Subtotal (95% CI)	14		17			100.00	-4.18 [-8.32, -0.04]
Test for heterogeneity: Chi² = 0.63, df = 1 (P = 0.43), I² = 0%							
Test for overall effect: Z = 1.98 (P = 0.05)							
Total (95% CI)	14		17			100.00	-4.18 [-8.32, -0.04]
Test for heterogeneity: Chi² = 0.63, df = 1 (P = 0.43), I² = 0%							
Test for overall effect: Z = 1.98 (P = 0.05)							

Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 07 Diet and BT vs diet alone
Outcome: 05 Weight change in kg at 36 months

Study or sub-category	N	Diet and BT Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 PSMF							
Wadden 1989	19	-5.11(8.28)	15	-2.20(8.50)		100.00	-2.91 [-8.60, 2.78]
Subtotal (95% CI)	19		15			100.00	-2.91 [-8.60, 2.78]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.00 (P = 0.32)							
Total (95% CI)	19		15			100.00	-2.91 [-8.60, 2.78]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.00 (P = 0.32)							

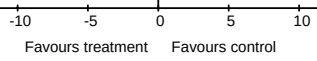
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 07 Diet and BT vs diet alone
Outcome: 06 Weight change in kg at 60 months

Study or sub-category	N	Diet and BT Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 PSMF							
Wadden 1989	22	2.90(11.26)	18	1.00(6.79)		100.00	1.90 [-3.75, 7.55]
Subtotal (95% CI)	22		18			100.00	1.90 [-3.75, 7.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.66 (P = 0.51)							
Total (95% CI)	22		18			100.00	1.90 [-3.75, 7.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.66 (P = 0.51)							



Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 07 Diet and BT vs diet alone
Outcome: 07 Weight change over time

Study or sub-category	N	Diet and BT Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Jones c 16 weeks	7	-8.74(2.35)	9	-3.95(3.67)		34.99	-4.79 [-7.75, -1.83]
Jones c 18 months	7	-7.79(5.21)	8	-2.33(5.06)		11.30	-5.46 [-10.67, -0.25]
Jones d 16 weeks	9	-4.52(3.66)	9	-4.79(2.81)		33.80	0.27 [-2.74, 3.28]
Jones d 18 months	7	-5.06(7.91)	9	-3.07(5.34)		6.61	-1.99 [-8.81, 4.83]
Long 1983 16 weeks	10	-6.90(7.87)	10	-4.60(7.22)		7.01	-2.30 [-8.92, 4.32]
Long 1983 12 months	9	-7.70(8.09)	7	-0.90(6.17)		6.29	-6.80 [-13.79, 0.19]
02 PSMF							
Wadden 1989 6 months	31	-16.80(6.68)	23	-13.10(4.80)		52.68	-3.70 [-6.76, -0.64]
Wadden 1989 12months	19	-12.89(8.91)	15	-4.70(7.31)		16.61	-8.19 [-13.64, -2.74]
Wadden 1989 36months	19	-5.11(8.28)	15	-2.20(8.50)		15.26	-2.91 [-8.60, 2.78]
Wadden 1989 60months	22	2.90(11.26)	18	1.00(6.79)		15.45	1.90 [-3.75, 7.55]



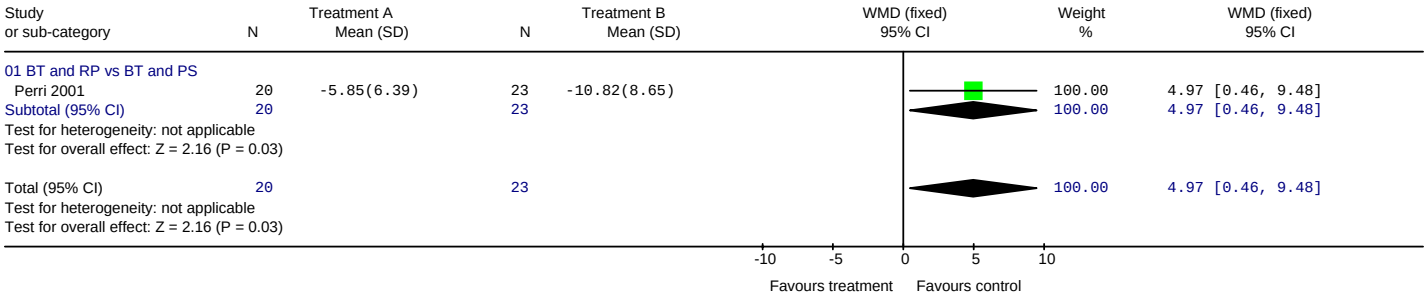
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 08 Comparison of different BT
Outcome: 01 Weight change in kg at 20 weeks

Study or sub-category	N	Treatment A Mean (SD)	N	Treatment B Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 BT and RP vs BT and PS							
Perri 2001	20	-8.41(4.55)	23	-9.28(5.21)		100.00	0.87 [-2.05, 3.79]
Subtotal (95% CI)	20		23			100.00	0.87 [-2.05, 3.79]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.58 (P = 0.56)							
Total (95% CI)	20		23			100.00	0.87 [-2.05, 3.79]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.58 (P = 0.56)							

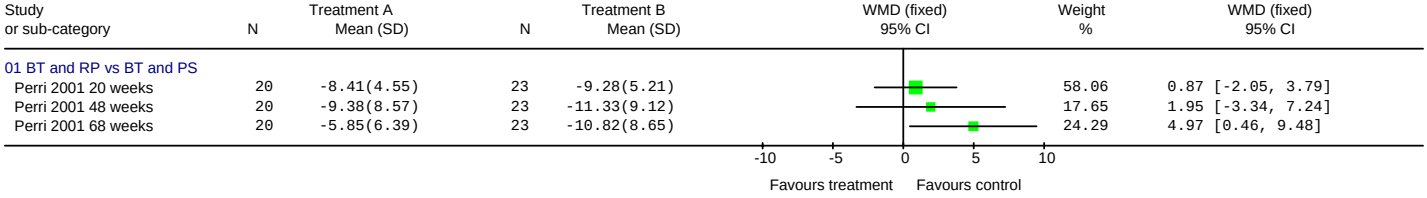
Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 08 Comparison of different BT
Outcome: 02 Weight change in kg at 48 weeks

Study or sub-category	N	Treatment A Mean (SD)	N	Treatment B Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 BT and RP vs BT and PS							
Perri 2001	20	-9.38(8.57)	23	-11.33(9.12)		100.00	1.95 [-3.34, 7.24]
Subtotal (95% CI)	20		23			100.00	1.95 [-3.34, 7.24]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.72 (P = 0.47)							
Total (95% CI)	20		23			100.00	1.95 [-3.34, 7.24]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.72 (P = 0.47)							

Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 08 Comparison of different BT
Outcome: 03 Weight change in kg at 68 weeks

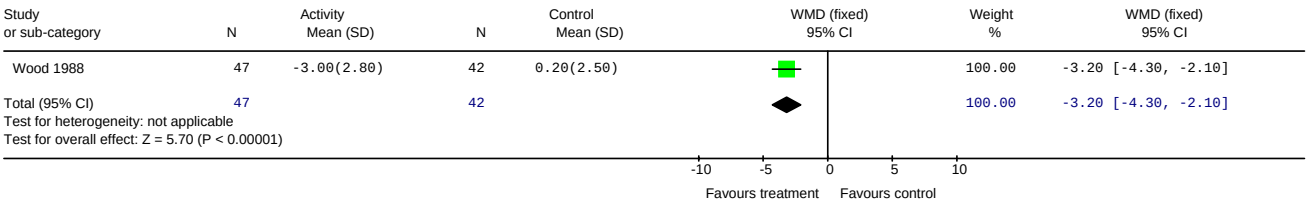


Review: BEHAVIOUR THERAPY Analyses for adults
Comparison: 08 Comparison of different BT
Outcome: 04 Weight change over time

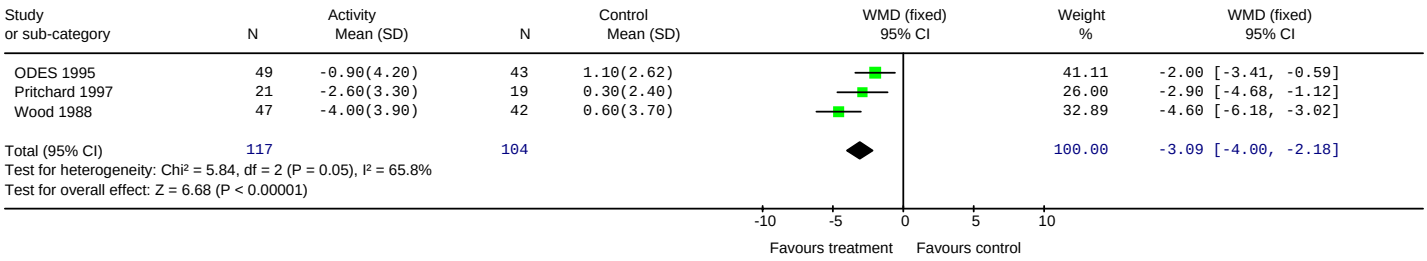


3.3 *Physical activity interventions*

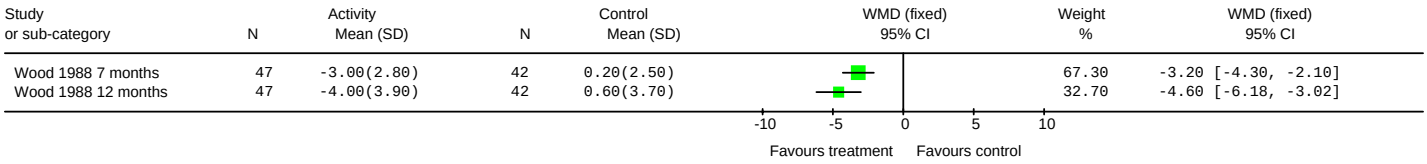
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 01 Weight change in kg at 7 months



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 02 Weight change in kg at 12 months



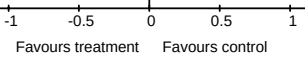
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 03 Weight change over time



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 04 Change in total cholesterol in mmol/l at 7 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	47	-0.21(0.63)	42	-0.21(0.48)		100.00	0.00 [-0.23, 0.23]
Total (95% CI)	47		42			100.00	0.00 [-0.23, 0.23]

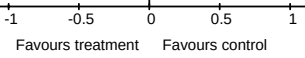
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 05 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	49	-0.20(0.56)	43	-0.16(0.59)		56.43	-0.04 [-0.28, 0.20]
Wood 1988	47	-0.25(0.64)	42	-0.23(0.65)		43.57	-0.02 [-0.29, 0.25]
Total (95% CI)	96		85			100.00	-0.03 [-0.21, 0.15]

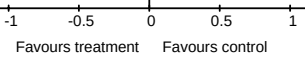
Test for heterogeneity: Chi² = 0.01, df = 1 (P = 0.91), I² = 0%
Test for overall effect: Z = 0.35 (P = 0.73)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 06 Change in LDL cholesterol in mmol/l at 7 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	47	-0.11(0.54)	42	-0.15(0.46)		100.00	0.04 [-0.17, 0.25]
Total (95% CI)	47		42			100.00	0.04 [-0.17, 0.25]

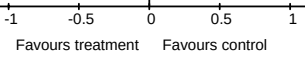
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.38 (P = 0.71)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 07 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	49	-0.13(0.49)	43	-0.22(0.59)		58.88	0.09 [-0.13, 0.31]
Wood 1988	47	-0.25(0.61)	42	-0.21(0.67)		41.12	-0.04 [-0.31, 0.23]
Total (95% CI)	96		85			100.00	0.04 [-0.13, 0.21]

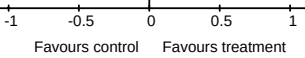
Test for heterogeneity: Chi² = 0.53, df = 1 (P = 0.46), I² = 0%
Test for overall effect: Z = 0.42 (P = 0.68)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 08 Change in HDL cholesterol in mmol/l at 7 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	47	0.09(0.21)	41	0.00(0.10)		100.00	0.09 [0.02, 0.16]
Total (95% CI)	47		41			100.00	0.09 [0.02, 0.16]

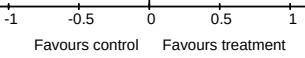
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.62 (P = 0.009)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 09 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	49	0.04(0.14)	43	0.02(0.10)		55.02	0.02 [-0.03, 0.07]
Wood 1988	47	0.11(0.15)	41	-0.02(0.11)		44.98	0.13 [0.08, 0.18]
Total (95% CI)	96		84			100.00	0.07 [0.03, 0.11]

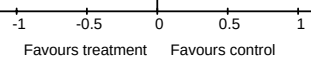
Test for heterogeneity: Chi² = 8.60, df = 1 (P = 0.003), I² = 88.4%
Test for overall effect: Z = 3.72 (P = 0.0002)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 10 Change in triglycerides in mmol/l at 7 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	47	-0.25(0.61)	42	-0.01(0.51)		100.00	-0.24 [-0.47, -0.01]
Total (95% CI)	47		42			100.00	-0.24 [-0.47, -0.01]

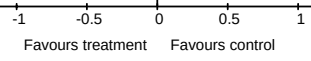
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.02 (P = 0.04)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 11 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	49	-0.24(0.70)	43	0.17(0.92)		32.89	-0.41 [-0.75, -0.07]
Wood 1988	47	-0.16(0.53)	42	0.08(0.60)		67.11	-0.24 [-0.48, 0.00]
Total (95% CI)	96		85			100.00	-0.30 [-0.49, -0.10]

Test for heterogeneity: Chi² = 0.65, df = 1 (P = 0.42), I² = 0%
Test for overall effect: Z = 2.99 (P = 0.003)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 12 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	49	-0.09(0.42)	43	0.07(0.46)		100.00	-0.16 [-0.34, 0.02]
Total (95% CI)	49		43			100.00	-0.16 [-0.34, 0.02]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.73 (P = 0.08)

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 13 Change in DBP in mmHg at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	49	-2.70(7.00)	43	-0.70(8.52)		55.83	-2.00 [-5.21, 1.21]
Wood 1988	42	-4.10(8.00)	35	-2.60(8.10)		44.17	-1.50 [-5.11, 2.11]
Total (95% CI)	91		78			100.00	-1.78 [-4.18, 0.62]

Test for heterogeneity: Chi² = 0.04, df = 1 (P = 0.84), I² = 0%
Test for overall effect: Z = 1.45 (P = 0.15)

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 01 Physical activity vs control
Outcome: 14 Change in SBP in mmHg at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	49	-2.20(7.70)	43	-0.50(11.15)		46.11	-1.70 [-5.67, 2.27]
Wood 1988	42	-6.60(8.40)	35	-4.10(8.00)		53.89	-2.50 [-6.17, 1.17]
Total (95% CI)	91		78			100.00	-2.13 [-4.83, 0.56]

Test for heterogeneity: Chi² = 0.08, df = 1 (P = 0.77), I² = 0%
Test for overall effect: Z = 1.55 (P = 0.12)

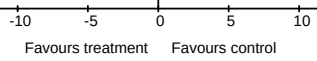
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 02 Physical activity vs information
Outcome: 01 Weight change in kg at 18 months

Study or sub-category	N	Activity Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Messier 2004	80	-3.46(6.89)	78	-1.10(6.23)		100.00	-2.36 [-4.41, -0.31]
Total (95% CI)	80		78			100.00	-2.36 [-4.41, -0.31]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.26 (P = 0.02)

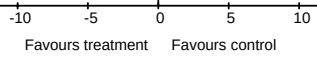
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 01 Weight change in kg at 7 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Wood 1988	47	-3.00(2.80)	42	-7.60(3.90)		100.00	4.60 [3.17, 6.03]
Subtotal (95% CI)	47		42			100.00	4.60 [3.17, 6.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 6.32 (P < 0.00001)							
Total (95% CI)	47		42			100.00	4.60 [3.17, 6.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 6.32 (P < 0.00001)							



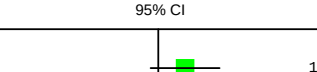
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	49	-0.90(4.20)	52	-4.00(5.05)		32.61	3.10 [1.29, 4.91]
Pritchard 1997	21	-2.60(3.30)	18	-6.40(3.30)		24.69	3.80 [1.72, 5.88]
Wood 1988	47	-4.00(3.90)	42	-7.20(3.70)		42.70	3.20 [1.62, 4.78]
Subtotal (95% CI)	117		112			100.00	3.32 [2.28, 4.35]
Test for heterogeneity: Chi² = 0.28, df = 2 (P = 0.87), I² = 0%							
Test for overall effect: Z = 6.30 (P < 0.00001)							
Total (95% CI)	117		112			100.00	3.32 [2.28, 4.35]
Test for heterogeneity: Chi² = 0.28, df = 2 (P = 0.87), I² = 0%							
Test for overall effect: Z = 6.30 (P < 0.00001)							



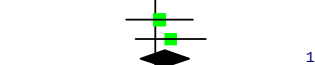
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 03 Weight change over time

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/deficit or low fat diet							
Wood 1988 7 months	47	-3.00(2.80)	42	-7.60(3.90)		55.12	4.60 [3.17, 6.03]
Wood 1988 12 months	47	-4.00(3.90)	42	-7.20(3.70)		44.88	3.20 [1.62, 4.78]



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 04 Change in total cholesterol in mmol/l at 7 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Wood 1988	47	-0.21(0.63)	42	-0.40(0.55)		100.00	0.19 [-0.06, 0.44]
Subtotal (95% CI)	47		42			100.00	0.19 [-0.06, 0.44]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.52 (P = 0.13)							
Total (95% CI)	47		42			100.00	0.19 [-0.06, 0.44]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.52 (P = 0.13)							

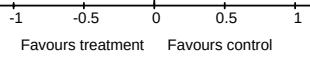


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 05 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	49	-0.20(0.56)	52	-0.23(0.65)		52.70	0.03 [-0.21, 0.27]
Wood 1988	47	-0.25(0.64)	42	-0.36(0.56)		47.30	0.11 [-0.14, 0.36]
Subtotal (95% CI)	96		94			100.00	0.07 [-0.10, 0.24]
Test for heterogeneity: Chi² = 0.21, df = 1 (P = 0.65), I² = 0%							
Test for overall effect: Z = 0.78 (P = 0.44)							
Total (95% CI)	96		94			100.00	0.07 [-0.10, 0.24]
Test for heterogeneity: Chi² = 0.21, df = 1 (P = 0.65), I² = 0%							
Test for overall effect: Z = 0.78 (P = 0.44)							

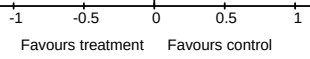
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 06 Change in LDL cholesterol in mmol/l at 7 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Wood 1988	47	-0.11(0.54)	42	-0.27(0.59)		100.00	0.16 [-0.08, 0.40]
Subtotal (95% CI)	47		42			100.00	0.16 [-0.08, 0.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.33 (P = 0.18)							
Total (95% CI)	47		42			100.00	0.16 [-0.08, 0.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.33 (P = 0.18)							



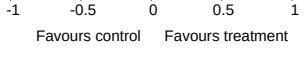
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 07 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	49	-0.13(0.49)	52	-0.18(0.72)		54.30	0.05 [-0.19, 0.29]
Wood 1988	47	-0.25(0.61)	42	-0.31(0.64)		45.70	0.06 [-0.20, 0.32]
Subtotal (95% CI)	96		94			100.00	0.05 [-0.12, 0.23]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.96), I² = 0%							
Test for overall effect: Z = 0.61 (P = 0.54)							
Total (95% CI)	96		94			100.00	0.05 [-0.12, 0.23]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.96), I² = 0%							
Test for overall effect: Z = 0.61 (P = 0.54)							



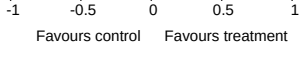
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 08 Change in HDL cholesterol in mmol/l at 7 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Wood 1988	47	0.09(0.21)	41	0.06(0.14)		100.00	0.03 [-0.04, 0.10]
Subtotal (95% CI)	47		41			100.00	0.03 [-0.04, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.80 (P = 0.43)							
Total (95% CI)	47		41			100.00	0.03 [-0.04, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.80 (P = 0.43)							



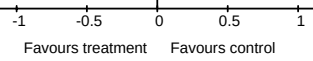
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 09 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	49	0.04(0.14)	52	0.05(0.12)		61.97	-0.01 [-0.06, 0.04]
Wood 1988	47	0.11(0.15)	41	0.12(0.16)		38.03	-0.01 [-0.08, 0.06]
Subtotal (95% CI)	96		93			100.00	-0.01 [-0.05, 0.03]
Test for heterogeneity: Chi² = 2.89E-32, df = 1 (P = 1.00), I² = 0%							
Test for overall effect: Z = 0.49 (P = 0.63)							
Total (95% CI)	96		93			100.00	-0.01 [-0.05, 0.03]
Test for heterogeneity: Chi² = 2.89E-32, df = 1 (P = 1.00), I² = 0%							
Test for overall effect: Z = 0.49 (P = 0.63)							



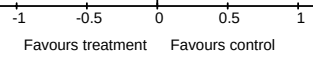
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 10 Change in triglycerides in mmol/l at 7 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Wood 1988	47	-0.25(0.61)	42	-0.40(0.60)		100.00	0.15 [-0.10, 0.40]
Subtotal (95% CI)	47		42			100.00	0.15 [-0.10, 0.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.17 (P = 0.24)							
Total (95% CI)	47		42			100.00	0.15 [-0.10, 0.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.17 (P = 0.24)							



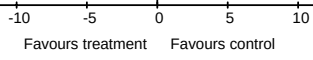
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 11 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	49	-0.24(0.70)	52	-0.23(1.01)		38.22	-0.01 [-0.35, 0.33]
Wood 1988	47	-0.16(0.53)	42	-0.27(0.72)		61.78	0.11 [-0.16, 0.38]
Subtotal (95% CI)	96		94			100.00	0.06 [-0.14, 0.27]
Test for heterogeneity: Chi² = 0.30, df = 1 (P = 0.58), I² = 0%							
Test for overall effect: Z = 0.60 (P = 0.55)							
Total (95% CI)	96		94			100.00	0.06 [-0.14, 0.27]
Test for heterogeneity: Chi² = 0.30, df = 1 (P = 0.58), I² = 0%							
Test for overall effect: Z = 0.60 (P = 0.55)							



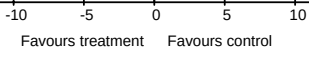
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 12 Change in DBP in mmHg at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	49	-2.70(7.00)	52	-3.40(7.21)		59.40	0.70 [-2.07, 3.47]
Wood 1988	42	-4.10(8.00)	38	-5.60(7.30)		40.60	1.50 [-1.85, 4.85]
Subtotal (95% CI)	91		90			100.00	1.02 [-1.11, 3.16]
Test for heterogeneity: Chi² = 0.13, df = 1 (P = 0.72), I² = 0%							
Test for overall effect: Z = 0.94 (P = 0.35)							
Total (95% CI)	91		90			100.00	1.02 [-1.11, 3.16]
Test for heterogeneity: Chi² = 0.13, df = 1 (P = 0.72), I² = 0%							
Test for overall effect: Z = 0.94 (P = 0.35)							



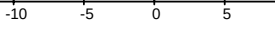
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 13 Change in SBP in mmHg at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	49	-2.20(7.70)	52	-6.40(10.10)		51.16	4.20 [0.71, 7.69]
Wood 1988	42	-6.60(8.40)	38	-5.70(7.90)		48.84	-0.90 [-4.47, 2.67]
Subtotal (95% CI)	91		90			100.00	1.71 [-0.79, 4.21]
Test for heterogeneity: Chi² = 4.01, df = 1 (P = 0.05), I² = 75.0%							
Test for overall effect: Z = 1.34 (P = 0.18)							
Total (95% CI)	91		90			100.00	1.71 [-0.79, 4.21]
Test for heterogeneity: Chi² = 4.01, df = 1 (P = 0.05), I² = 75.0%							
Test for overall effect: Z = 1.34 (P = 0.18)							



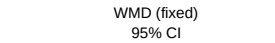
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 03 Physical activity vs diet
Outcome: 14 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	49	-0.09(0.42)	52	-0.21(0.50)		100.00	0.12 [-0.06, 0.30]
Subtotal (95% CI)	49		52			100.00	0.12 [-0.06, 0.30]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.31 (P = 0.19)							
Total (95% CI)	49		52			100.00	0.12 [-0.06, 0.30]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.31 (P = 0.19)							



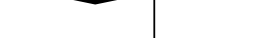
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 15 Change in body fat % at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-3.70(3.40)	38	-4.60(4.50)		100.00	0.90 [-0.86, 2.66]
Total (95% CI)	42		38			100.00	0.90 [-0.86, 2.66]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.00 (P = 0.32)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 16 Change in calories/day at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-169.00(602.00)	38	-306.00(448.00)		100.00	137.00 [-94.16, 368.16]
Total (95% CI)	42		38			100.00	137.00 [-94.16, 368.16]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.16 (P = 0.25)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 17 Change in fat in g/day at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-2.20(5.50)	38	2.00(7.20)		100.00	-4.20 [-7.03, -1.37]
Total (95% CI)	42		38			100.00	-4.20 [-7.03, -1.37]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.91 (P = 0.004)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 18 Change in saturated fat in g/day at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-0.90(2.90)	38	-1.00(3.00)		100.00	0.10 [-1.20, 1.40]
Total (95% CI)	42		38			100.00	0.10 [-1.20, 1.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.15 (P = 0.88)							

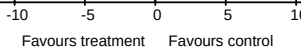
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 19 Change in polyunsaturated fat in g/day at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	0.00(2.50)	38	-0.20(2.30)		100.00	0.20 [-0.85, 1.25]
Total (95% CI)	42		38			100.00	0.20 [-0.85, 1.25]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.37 (P = 0.71)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 20 Change in monunsaturated fat in g/kcal at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-1.10(2.60)	38	-0.80(3.40)		100.00	-0.30 [-1.64, 1.04]
Total (95% CI)	42		38			100.00	-0.30 [-1.64, 1.04]

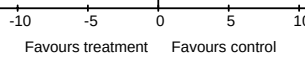
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.44 (P = 0.66)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 21 Change in alcohol in g/day at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-3.30(1.60)	38	-4.80(13.00)		100.00	1.50 [-2.66, 5.66]
Total (95% CI)	42		38			100.00	1.50 [-2.66, 5.66]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.71 (P = 0.48)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 22 Change in calcium in mg/day at 12 months

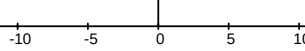
Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-25.00(316.00)	38	-111.00(333.00)		100.00	86.00 [-56.63, 228.63]
Total (95% CI)	42		38			100.00	86.00 [-56.63, 228.63]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.18 (P = 0.24)

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 23 Change in potassium in mg/day at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-215.00(758.00)	38	-208.00(823.00)		100.00	-7.00 [-354.88, 340.88]
Total (95% CI)	42		38			100.00	-7.00 [-354.88, 340.88]

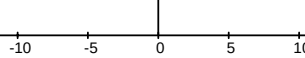
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.04 (P = 0.97)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 24 Change in sodium in mg/day at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wood 1988	42	-111.00(1083.00)	38	-148.00(856.00)		100.00	37.00 [-388.85, 462.85]
Total (95% CI)	42		38			100.00	37.00 [-388.85, 462.85]

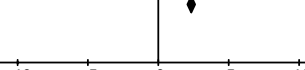
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.17 (P = 0.86)



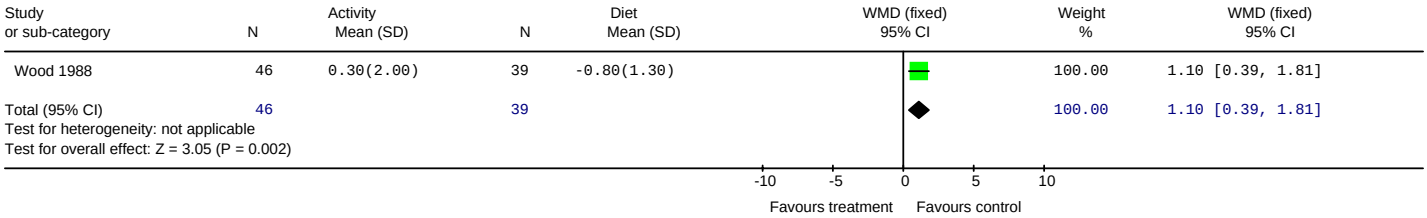
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 25 Change in VO2 max in ml/kg/min at 12 months

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
ODES 1995	49	4.00(0.70)	52	1.70(0.72)		98.05	2.30 [2.02, 2.58]
Wood 1988	46	4.10(5.90)	41	0.00(3.20)		1.95	4.10 [2.13, 6.07]
Total (95% CI)	95		93			100.00	2.34 [2.06, 2.61]

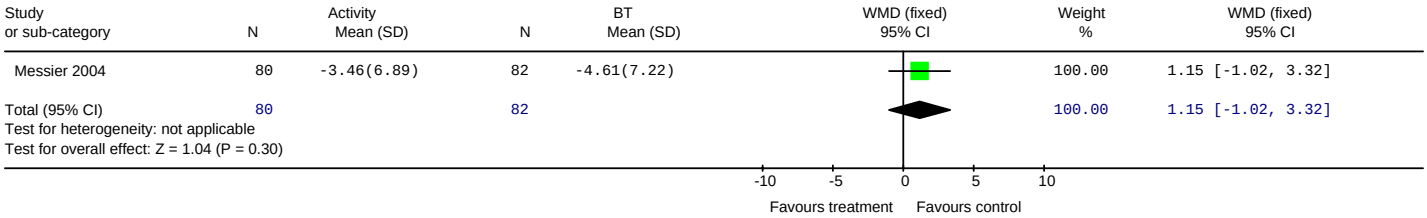
Test for heterogeneity: Chi² = 3.16, df = 1 (P = 0.08), I² = 68.3%
Test for overall effect: Z = 16.69 (P < 0.00001)



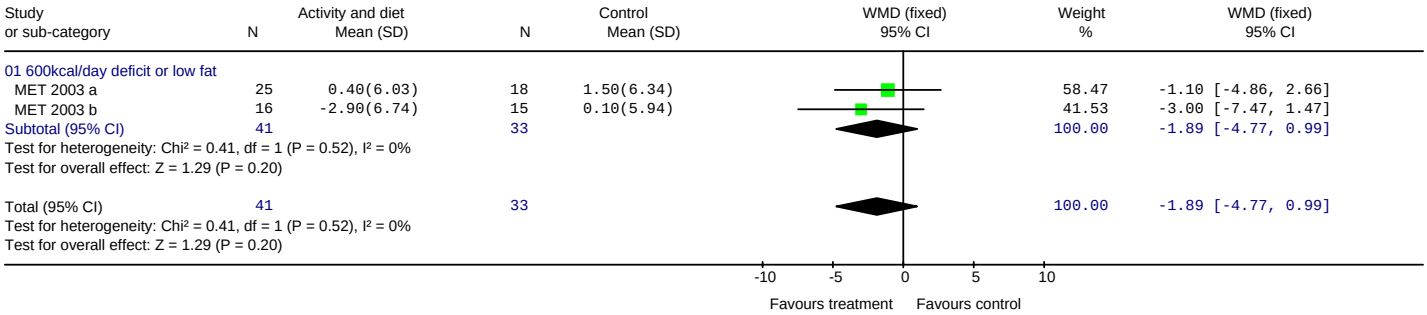
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 04 Physical activity vs diet (CALCULATIONS ONLY)
Outcome: 26 Change in treadmill test duration in min at 12 months



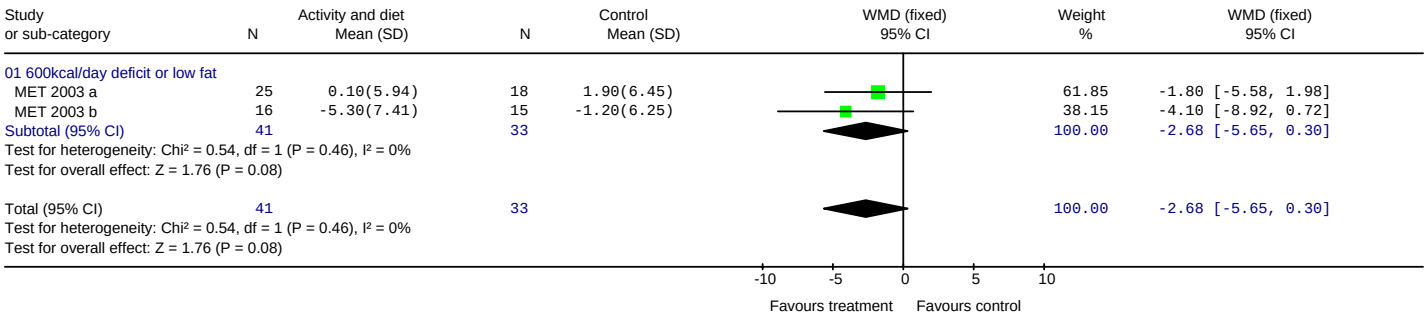
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 05 Physical activity vs diet and behaviour therapy
Outcome: 01 Weight change in kg at 18 months



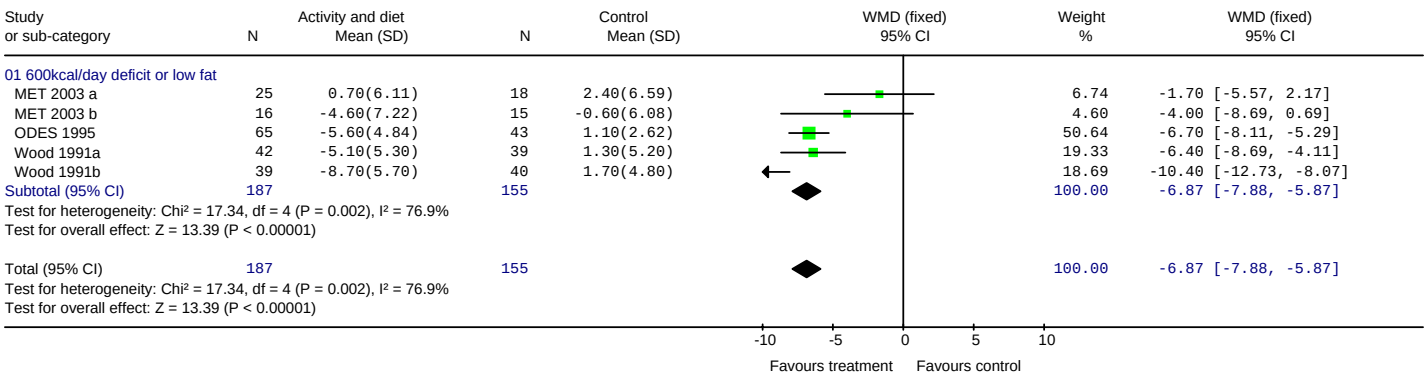
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 01 Weight change in kg at 4 months



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 02 Weight change in kg at 9 months

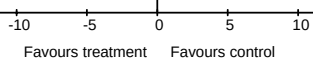


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 03 Weight change in kg at 12 months



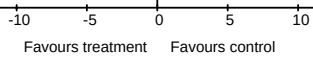
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 04 Weight change in kg at 16 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
MET 2003 a	25	0.60(6.08)	18	2.90(6.74)		59.42	-2.30 [-6.22, 1.62]
MET 2003 b	16	-5.20(7.39)	15	-0.50(6.06)		40.58	-4.70 [-9.45, 0.05]
Subtotal (95% CI)	41		33			100.00	-3.27 [-6.30, -0.25]
Test for heterogeneity: Chi² = 0.58, df = 1 (P = 0.44), I² = 0%							
Test for overall effect: Z = 2.12 (P = 0.03)							
Total (95% CI)	41		33			100.00	-3.27 [-6.30, -0.25]
Test for heterogeneity: Chi² = 0.58, df = 1 (P = 0.44), I² = 0%							
Test for overall effect: Z = 2.12 (P = 0.03)							



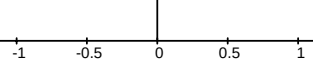
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 05 Weight change over time

Study or sub-category	N	Activity Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/deficit or low fat diet							
MET 2003 a 4 months	25	0.40(6.03)	18	1.50(6.34)		15.50	-1.10 [-4.86, 2.66]
MET 2003 a 9 months	25	0.10(5.94)	18	1.90(6.45)		15.36	-1.80 [-5.58, 1.98]
MET 2003 a 12 months	25	0.70(6.11)	18	2.40(6.59)		14.64	-1.70 [-5.57, 2.17]
MET 2003 a 16 months	25	0.60(6.08)	18	2.90(6.74)		14.28	-2.30 [-6.22, 1.62]
MET 2003 b 4 months	16	-2.90(6.74)	15	0.10(5.94)		11.01	-3.00 [-7.47, 1.47]
MET 2003 b 9 months	16	-5.30(7.41)	15	-1.20(6.25)		9.47	-4.10 [-8.92, 0.72]
MET 2003 b 12 months	16	-4.60(7.22)	15	-0.60(6.08)		9.99	-4.00 [-8.69, 0.69]
MET 2003 b 16 months	16	-5.20(7.39)	15	-0.50(6.06)		9.75	-4.70 [-9.45, 0.05]



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 06 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-0.48(0.89)	43	-0.16(0.59)		29.76	-0.32 [-0.60, -0.04]
Wood 1991a	42	-0.28(0.52)	39	-0.03(0.47)		49.88	-0.25 [-0.47, -0.03]
Wood 1991b	39	-0.38(0.87)	40	-0.14(0.64)		20.36	-0.24 [-0.58, 0.10]
Subtotal (95% CI)	146		122			100.00	-0.27 [-0.42, -0.12]
Test for heterogeneity: Chi² = 0.19, df = 2 (P = 0.91), I² = 0%							
Test for overall effect: Z = 3.46 (P = 0.0005)							
Total (95% CI)	146		122			100.00	-0.27 [-0.42, -0.12]
Test for heterogeneity: Chi² = 0.19, df = 2 (P = 0.91), I² = 0%							
Test for overall effect: Z = 3.46 (P = 0.0005)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 07 Change in LDL cholesterol in mmol/l at 12 months

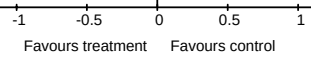
Study or sub-category	N	Activity and diet Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-0.39(0.81)	43	-0.22(0.59)		27.07	-0.17 [-0.43, 0.09]
Wood 1991a	42	-0.29(0.46)	39	-0.03(0.41)		52.67	-0.26 [-0.45, -0.07]
Wood 1991b	39	-0.27(0.78)	40	-0.20(0.59)		20.26	-0.07 [-0.38, 0.24]
Subtotal (95% CI)	146		122			100.00	-0.20 [-0.33, -0.06]
Test for heterogeneity: Chi² = 1.13, df = 2 (P = 0.57), I² = 0%							
Test for overall effect: Z = 2.81 (P = 0.005)							
Total (95% CI)	146		122			100.00	-0.20 [-0.33, -0.06]
Test for heterogeneity: Chi² = 1.13, df = 2 (P = 0.57), I² = 0%							
Test for overall effect: Z = 2.81 (P = 0.005)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 08 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	0.13(0.15)	43	0.02(0.10)		59.78	0.11 [0.06, 0.16]
Wood 1991a	42	0.02(0.18)	39	-0.05(0.24)		15.39	0.07 [-0.02, 0.16]
Wood 1991b	39	0.14(0.18)	40	-0.05(0.15)		24.83	0.19 [0.12, 0.26]
Subtotal (95% CI)	146		122			100.00	0.12 [0.09, 0.16]
Test for heterogeneity: Chi² = 4.76, df = 2 (P = 0.09), I² = 58.0%							
Test for overall effect: Z = 6.65 (P < 0.00001)							
Total (95% CI)	146		122			100.00	0.12 [0.09, 0.16]
Test for heterogeneity: Chi² = 4.76, df = 2 (P = 0.09), I² = 58.0%							
Test for overall effect: Z = 6.65 (P < 0.00001)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 09 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-0.58(0.97)	43	0.17(0.92)		11.11	-0.75 [-1.11, -0.39]
Wood 1991a	42	-0.02(0.26)	39	0.13(0.37)		74.10	-0.15 [-0.29, -0.01]
Wood 1991b	39	-0.48(0.75)	40	0.18(0.67)		14.79	-0.66 [-0.97, -0.35]
Subtotal (95% CI)	146		122			100.00	-0.29 [-0.41, -0.17]
Test for heterogeneity: Chi² = 15.36, df = 2 (P = 0.0005), I² = 87.0%							
Test for overall effect: Z = 4.74 (P < 0.00001)							
Total (95% CI)	146		122			100.00	-0.29 [-0.41, -0.17]
Test for heterogeneity: Chi² = 15.36, df = 2 (P = 0.0005), I² = 87.0%							
Test for overall effect: Z = 4.74 (P < 0.00001)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 10 Change in fasting plasma glucose in mmol/l at 12 months

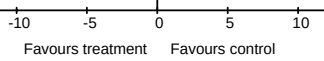
Study or sub-category	N	Activity and diet Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-0.26(0.64)	43	0.07(0.46)		100.00	-0.33 [-0.54, -0.12]
Subtotal (95% CI)	65		43			100.00	-0.33 [-0.54, -0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.12 (P = 0.002)							
Total (95% CI)	65		43			100.00	-0.33 [-0.54, -0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.12 (P = 0.002)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 11 Change in DBP in mmHg at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-5.20(7.26)	43	-0.70(8.52)		20.23	-4.50 [-7.60, -1.40]
Wood 1991a	42	-2.00(4.10)	39	0.90(5.30)		45.11	-2.90 [-4.97, -0.83]
Wood 1991b	39	-4.90(5.70)	40	2.10(5.00)		34.67	-7.00 [-9.37, -4.63]
Subtotal (95% CI)	146		122			100.00	-4.64 [-6.04, -3.25]
Test for heterogeneity: Chi² = 6.53, df = 2 (P = 0.04), I² = 69.4%							
Test for overall effect: Z = 6.53 (P < 0.00001)							
Total (95% CI)	146		122			100.00	-4.64 [-6.04, -3.25]
Test for heterogeneity: Chi² = 6.53, df = 2 (P = 0.04), I² = 69.4%							
Test for overall effect: Z = 6.53 (P < 0.00001)							

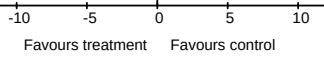
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 06 Physical activity and diet vs control (no treatment)
Outcome: 12 Change in SBP in mmHg at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-5.90(8.87)	43	-0.50(11.15)		25.74	-5.40 [-9.37, -1.43]
Wood 1991a	42	-3.60(7.70)	39	-0.20(6.60)		41.76	-3.40 [-6.52, -0.28]
Wood 1991b	39	-5.40(8.30)	40	0.10(7.70)		32.50	-5.50 [-9.03, -1.97]
Subtotal (95% CI)	146		122			100.00	-4.60 [-6.61, -2.58]
Test for heterogeneity: Chi² = 0.97, df = 2 (P = 0.61), I² = 0%							
Test for overall effect: Z = 4.47 (P < 0.00001)							
Total (95% CI)	146		122			100.00	-4.60 [-6.61, -2.58]
Test for heterogeneity: Chi² = 0.97, df = 2 (P = 0.61), I² = 0%							
Test for overall effect: Z = 4.47 (P < 0.00001)							



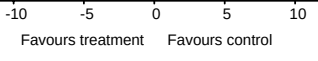
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	256	-4.50(5.00)	250	-1.00(3.70)		100.00	-3.50 [-4.27, -2.73]
Subtotal (95% CI)	256		250			100.00	-3.50 [-4.27, -2.73]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 8.97 (P < 0.00001)							
Total (95% CI)	256		250			100.00	-3.50 [-4.27, -2.73]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 8.97 (P < 0.00001)							



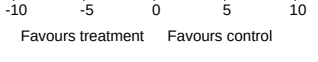
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 02 Weight change in kg at 24 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	244	-3.50(5.50)	226	-0.80(4.40)		100.00	-2.70 [-3.60, -1.80]
Subtotal (95% CI)	244		226			100.00	-2.70 [-3.60, -1.80]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.90 (P < 0.00001)							
Total (95% CI)	244		226			100.00	-2.70 [-3.60, -1.80]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.90 (P < 0.00001)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 03 Weight change in kg at 36 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	231	-3.50(5.10)	203	-0.90(5.40)		100.00	-2.60 [-3.59, -1.61]
Subtotal (95% CI)	231		203			100.00	-2.60 [-3.59, -1.61]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.14 (P < 0.00001)							
Total (95% CI)	231		203			100.00	-2.60 [-3.59, -1.61]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.14 (P < 0.00001)							

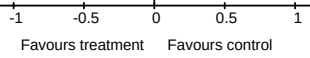


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 04 Weight change over time

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/deficit or low fat diet							
FDPS 12 months	256	-4.50(5.00)	250	-1.00(3.70)		43.07	-3.50 [-4.27, -2.73]
FDPS 24 months	244	-3.50(5.50)	226	-0.80(4.40)		31.31	-2.70 [-3.60, -1.80]
FDPS 36 months	231	-3.50(5.10)	203	-0.90(5.40)		25.62	-2.60 [-3.59, -1.61]

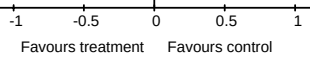
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 05 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	256	-0.10(0.70)	250	-0.10(0.70)		100.00	0.00 [-0.12, 0.12]
Subtotal (95% CI)	256		250			100.00	0.00 [-0.12, 0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
Total (95% CI)	256		250			100.00	0.00 [-0.12, 0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							



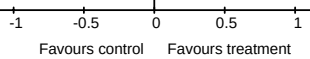
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 06 Change in total cholesterol in mmol/l at 36 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	231	-0.10(0.90)	203	0.10(0.80)		100.00	-0.20 [-0.36, -0.04]
Subtotal (95% CI)	231		203			100.00	-0.20 [-0.36, -0.04]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.45 (P = 0.01)							
Total (95% CI)	231		203			100.00	-0.20 [-0.36, -0.04]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.45 (P = 0.01)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 07 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	256	0.05(0.19)	250	0.02(0.17)		100.00	0.03 [0.00, 0.06]
Subtotal (95% CI)	256		250			100.00	0.03 [0.00, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.87 (P = 0.06)							
Total (95% CI)	256		250			100.00	0.03 [0.00, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.87 (P = 0.06)							

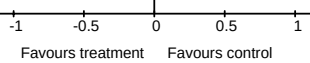


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 08 Change in HDL cholesterol in mmol/l at 36 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	231	0.14(0.20)	203	0.11(0.19)		100.00	0.03 [-0.01, 0.07]
Subtotal (95% CI)	231		203			100.00	0.03 [-0.01, 0.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.60 (P = 0.11)							
Total (95% CI)	231		203			100.00	0.03 [-0.01, 0.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.60 (P = 0.11)							

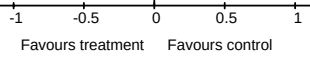
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 09 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	256	-0.20(0.60)	250	0.00(0.70)		100.00	-0.20 [-0.31, -0.09]
Subtotal (95% CI)	256		250			100.00	-0.20 [-0.31, -0.09]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.45 (P = 0.0006)							
Total (95% CI)	256		250			100.00	-0.20 [-0.31, -0.09]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.45 (P = 0.0006)							



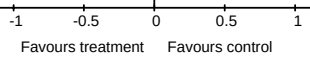
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 10 Change in triglycerides in mmol/l at 36 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	231	-0.10(0.60)	203	0.00(0.80)		100.00	-0.10 [-0.23, 0.03]
Subtotal (95% CI)	231		203			100.00	-0.10 [-0.23, 0.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.46 (P = 0.15)							
Total (95% CI)	231		203			100.00	-0.10 [-0.23, 0.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.46 (P = 0.15)							



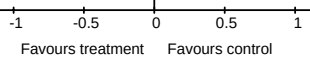
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 11 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	256	-0.20(0.70)	250	0.00(0.70)		100.00	-0.20 [-0.32, -0.08]
Subtotal (95% CI)	256		250			100.00	-0.20 [-0.32, -0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.21 (P = 0.001)							
Total (95% CI)	256		250			100.00	-0.20 [-0.32, -0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.21 (P = 0.001)							



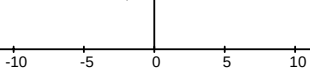
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 07 Physical activity and diet vs information
Outcome: 12 Change in fasting plasma glucose in mmol/l at 36 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
FDPS 2003	231	0.00(0.70)	203	0.10(0.70)		100.00	-0.10 [-0.23, 0.03]
Subtotal (95% CI)	231		203			100.00	-0.10 [-0.23, 0.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.48 (P = 0.14)							
Total (95% CI)	231		203			100.00	-0.10 [-0.23, 0.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.48 (P = 0.14)							



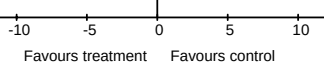
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-5.60(4.84)	52	-4.00(5.05)		49.37	-1.60 [-3.41, 0.21]
Wood 1991a	42	-5.10(5.30)	31	-4.10(5.50)		25.54	-1.00 [-3.51, 1.51]
Wood 1991b	39	-8.70(5.70)	40	-5.10(5.80)		25.09	-3.60 [-6.14, -1.06]
Subtotal (95% CI)	146		123			100.00	-1.95 [-3.22, -0.68]
Test for heterogeneity: Chi² = 2.32, df = 2 (P = 0.31), I² = 13.8%							
Test for overall effect: Z = 3.01 (P = 0.003)							
Total (95% CI)	146		123			100.00	-1.95 [-3.22, -0.68]
Test for heterogeneity: Chi² = 2.32, df = 2 (P = 0.31), I² = 13.8%							
Test for overall effect: Z = 3.01 (P = 0.003)							



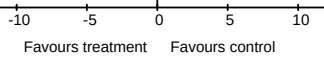
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 02 Weight change in kg at 18 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Pavlou 1989 1ab	10	-9.19(8.52)	11	-3.57(6.93)		16.41	-5.62 [-12.30, 1.06]
Pavlou 1989 2ab	5	-11.83(9.26)	6	-5.75(7.54)		7.16	-6.08 [-16.19, 4.03]
Subtotal (95% CI)	15		17			23.57	-5.76 [-11.34, -0.18]
Test for heterogeneity: Chi² = 0.01, df = 1 (P = 0.94), I² = 0%							
Test for overall effect: Z = 2.02 (P = 0.04)							
02 PSMF							
Pavlou 1989 1cd	16	-8.64(8.36)	16	-1.13(6.23)		28.07	-7.51 [-12.62, -2.40]
Pavlou 1989 1ef	10	-9.68(8.65)	13	-0.93(6.18)		18.30	-8.75 [-15.08, -2.42]
Pavlou 1989 2cd	5	-14.04(9.89)	5	-7.29(7.98)		5.90	-6.75 [-17.89, 4.39]
Subtotal (95% CI)	31		34			52.28	-7.86 [-11.60, -4.11]
Test for heterogeneity: Chi² = 0.13, df = 2 (P = 0.94), I² = 0%							
Test for overall effect: Z = 4.11 (P < 0.0001)							
03 VLCD							
Pavlou 1989 1gh	18	-12.40(9.42)	16	-3.45(6.89)		24.15	-8.95 [-14.46, -3.44]
Subtotal (95% CI)	18		16			24.15	-8.95 [-14.46, -3.44]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.18 (P = 0.001)							
Total (95% CI)	64		67			100.00	-7.63 [-10.33, -4.92]
Test for heterogeneity: Chi² = 0.80, df = 5 (P = 0.98), I² = 0%							
Test for overall effect: Z = 5.52 (P < 0.00001)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 03 Weight change in kg at 36 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Pavlou 1989 2ab	5	-10.67(8.93)	6	-3.25(6.83)		54.55	-7.42 [-16.97, 2.13]
Subtotal (95% CI)	5		6			54.55	-7.42 [-16.97, 2.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.52 (P = 0.13)							
02 PSMF							
Pavlou 1989 2cd	5	-13.00(9.59)	5	-3.83(7.10)		45.45	-9.17 [-19.63, 1.29]
Subtotal (95% CI)	5		5			45.45	-9.17 [-19.63, 1.29]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.72 (P = 0.09)							
Total (95% CI)	10		11			100.00	-8.22 [-15.27, -1.16]
Test for heterogeneity: Chi² = 0.06, df = 1 (P = 0.81), I² = 0%							
Test for overall effect: Z = 2.28 (P = 0.02)							

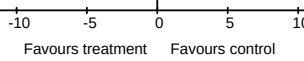


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 04 Weight change over time

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Pavlou 2ab 18 months	5	-11.83(9.26)	6	-5.75(7.54)		47.12	-6.08 [-16.19, 4.03]
Pavlou 2ab 36 months	5	-10.67(8.93)	6	-3.25(6.83)		52.88	-7.42 [-16.97, 2.13]
02 PSMF							
Pavlou 2cd 18 months	5	-14.04(9.89)	5	-7.29(7.98)		46.85	-6.75 [-17.89, 4.39]
Pavlou 2cd 36 months	5	-13.00(9.59)	5	-3.83(7.10)		53.15	-9.17 [-19.63, 1.29]

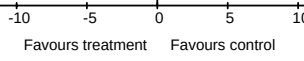
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 05 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-0.48(0.89)	52	-0.23(0.65)		34.66	-0.25 [-0.53, 0.03]
Wood 1991a	42	-0.28(0.52)	31	-0.39(0.61)		38.17	0.11 [-0.16, 0.38]
Wood 1991b	39	-0.38(0.87)	40	-0.42(0.51)		27.17	0.04 [-0.28, 0.36]
Subtotal (95% CI)	146		123			100.00	-0.03 [-0.20, 0.13]
Test for heterogeneity: Chi² = 3.63, df = 2 (P = 0.16), I² = 44.9%							
Test for overall effect: Z = 0.40 (P = 0.69)							
Total (95% CI)	146		123			100.00	-0.03 [-0.20, 0.13]
Test for heterogeneity: Chi² = 3.63, df = 2 (P = 0.16), I² = 44.9%							
Test for overall effect: Z = 0.40 (P = 0.69)							



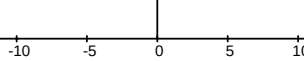
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 06 Change in total cholesterol in mmol/l at 12 weeks

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Mixed diet							
Pavlou 1989 1	54	-0.40(0.73)	56	-0.40(0.75)		100.00	0.00 [-0.28, 0.28]
Subtotal (95% CI)	54		56			100.00	0.00 [-0.28, 0.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
Total (95% CI)	54		56			100.00	0.00 [-0.28, 0.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							



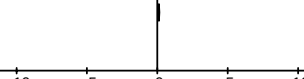
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 07 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-0.39(0.81)	52	-0.18(0.72)		32.64	-0.21 [-0.49, 0.07]
Wood 1991a	42	-0.29(0.46)	31	-0.28(0.63)		36.70	-0.01 [-0.27, 0.25]
Wood 1991b	39	-0.27(0.78)	40	-0.39(0.48)		30.66	0.12 [-0.17, 0.41]
Subtotal (95% CI)	146		123			100.00	-0.04 [-0.19, 0.12]
Test for heterogeneity: Chi² = 2.69, df = 2 (P = 0.26), I² = 25.5%							
Test for overall effect: Z = 0.44 (P = 0.66)							
Total (95% CI)	146		123			100.00	-0.04 [-0.19, 0.12]
Test for heterogeneity: Chi² = 2.69, df = 2 (P = 0.26), I² = 25.5%							
Test for overall effect: Z = 0.44 (P = 0.66)							



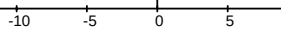
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 08 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	0.13(0.15)	52	0.05(0.12)		62.03	0.08 [0.03, 0.13]
Wood 1991a	42	0.02(0.18)	31	-0.15(0.26)		13.09	0.17 [0.06, 0.28]
Wood 1991b	39	0.14(0.18)	40	0.02(0.17)		24.88	0.12 [0.04, 0.20]
Subtotal (95% CI)	146		123			100.00	0.10 [0.06, 0.14]
Test for heterogeneity: Chi² = 2.55, df = 2 (P = 0.28), I² = 21.6%							
Test for overall effect: Z = 5.17 (P < 0.00001)							
Total (95% CI)	146		123			100.00	0.10 [0.06, 0.14]
Test for heterogeneity: Chi² = 2.55, df = 2 (P = 0.28), I² = 21.6%							
Test for overall effect: Z = 5.17 (P < 0.00001)							



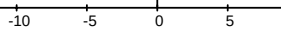
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 09 Change in HDL cholesterol in mmol/l at 12 weeks

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Mixed diet							
Pavlou 1989 1	54	-0.20(0.15)	56	-0.10(0.15)		100.00	-0.10 [-0.16, -0.04]
Subtotal (95% CI)	54		56			100.00	-0.10 [-0.16, -0.04]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.50 (P = 0.0005)							
Total (95% CI)	54		56			100.00	-0.10 [-0.16, -0.04]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.50 (P = 0.0005)							



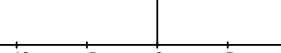
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 10 Change in triglycerides in mmol/l at 12 weeks

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Mixed diet							
Pavlou 1989 1	54	-0.33(0.73)	56	-0.48(1.50)		100.00	0.15 [-0.29, 0.59]
Subtotal (95% CI)	54		56			100.00	0.15 [-0.29, 0.59]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.67 (P = 0.50)							
Total (95% CI)	54		56			100.00	0.15 [-0.29, 0.59]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.67 (P = 0.50)							



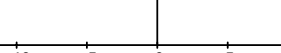
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 11 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-0.58(0.97)	52	-0.23(1.01)		11.96	-0.35 [-0.71, 0.01]
Wood 1991a	42	-0.02(0.26)	31	0.09(0.36)		70.41	-0.11 [-0.26, 0.04]
Wood 1991b	39	-0.48(0.75)	40	-0.12(0.59)		17.63	-0.36 [-0.66, -0.06]
Subtotal (95% CI)	146		123			100.00	-0.18 [-0.31, -0.06]
Test for heterogeneity: Chi² = 3.09, df = 2 (P = 0.21), I² = 35.3%							
Test for overall effect: Z = 2.86 (P = 0.004)							
Total (95% CI)	146		123			100.00	-0.18 [-0.31, -0.06]
Test for heterogeneity: Chi² = 3.09, df = 2 (P = 0.21), I² = 35.3%							
Test for overall effect: Z = 2.86 (P = 0.004)							



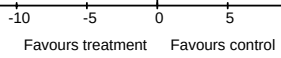
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 12 Change in DBP in mmHg at 6 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Mixed diet							
Pavlou 1989 1	54	-11.50(8.30)	56	-2.70(8.30)		100.00	-8.80 [-11.90, -5.70]
Subtotal (95% CI)	54		56			100.00	-8.80 [-11.90, -5.70]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.56 (P < 0.00001)							
Total (95% CI)	54		56			100.00	-8.80 [-11.90, -5.70]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.56 (P < 0.00001)							



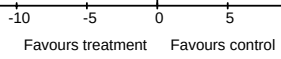
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 13 Change in SBP in mmHd at 6 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Mixed diet							
Pavlou 1989 1	54	-6.30(12.70)	56	-3.90(12.70)		100.00	-2.40 [-7.15, 2.35]
Subtotal (95% CI)	54		56			100.00	-2.40 [-7.15, 2.35]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.99 (P = 0.32)							
Total (95% CI)	54		56			100.00	-2.40 [-7.15, 2.35]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.99 (P = 0.32)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 14 Change in DBP in mmHg at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-5.20(7.26)	52	-3.40(7.21)		29.39	-1.80 [-4.44, 0.84]
Wood 1991a	42	-2.00(4.10)	31	-2.20(5.10)		42.93	0.20 [-1.98, 2.38]
Wood 1991b	39	-4.90(5.70)	40	-2.40(6.60)		27.68	-2.50 [-5.22, 0.22]
Subtotal (95% CI)	146		123			100.00	-1.14 [-2.56, 0.29]
Test for heterogeneity: Chi² = 2.65, df = 2 (P = 0.27), I² = 24.6%							
Test for overall effect: Z = 1.56 (P = 0.12)							
Total (95% CI)	146		123			100.00	-1.14 [-2.56, 0.29]
Test for heterogeneity: Chi² = 2.65, df = 2 (P = 0.27), I² = 24.6%							
Test for overall effect: Z = 1.56 (P = 0.12)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 15 Change in DBP in mmHg at 18 months

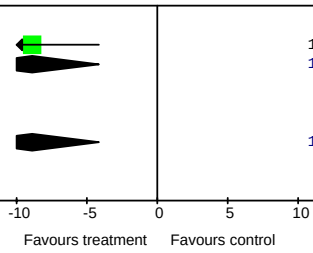
Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Mixed diet							
Pavlou 1989 1	54	-10.40(8.30)	56	1.70(8.30)		100.00	-12.10 [-15.20, -9.00]
Subtotal (95% CI)	54		56			100.00	-12.10 [-15.20, -9.00]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 7.64 (P < 0.00001)							
Total (95% CI)	54		56			100.00	-12.10 [-15.20, -9.00]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 7.64 (P < 0.00001)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 16 Change in SBP in mmHg at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-5.90(8.87)	52	-6.40(10.10)		31.61	0.50 [-2.99, 3.99]
Wood 1991a	42	-3.60(7.70)	31	-4.10(6.00)		38.97	0.50 [-2.64, 3.64]
Wood 1991b	39	-5.40(8.30)	40	-4.10(8.10)		29.43	-1.30 [-4.92, 2.32]
Subtotal (95% CI)	146		123			100.00	-0.03 [-1.99, 1.93]
Test for heterogeneity: Chi² = 0.67, df = 2 (P = 0.71), I² = 0%							
Test for overall effect: Z = 0.03 (P = 0.98)							
Total (95% CI)	146		123			100.00	-0.03 [-1.99, 1.93]
Test for heterogeneity: Chi² = 0.67, df = 2 (P = 0.71), I² = 0%							
Test for overall effect: Z = 0.03 (P = 0.98)							

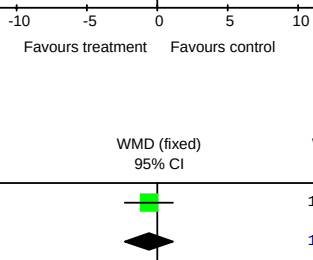
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 17 Change in SBP in mmHg at 18 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Mixed diet							
Pavlou 1989 1	54	-7.70(12.70)	56	1.20(12.70)		100.00	-8.90 [-13.65, -4.15]
Subtotal (95% CI)	54		56			100.00	-8.90 [-13.65, -4.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.67 (P = 0.0002)							
Total (95% CI)	54		56			100.00	-8.90 [-13.65, -4.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.67 (P = 0.0002)							



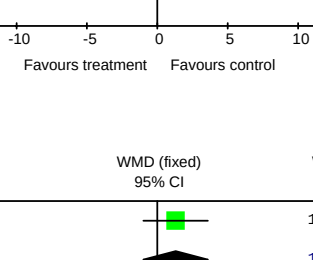
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 08 Physical activity and diet vs diet
Outcome: 18 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Activity and diet Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
ODES 1995	65	-0.26(0.64)	52	-0.21(0.50)		100.00	-0.05 [-0.26, 0.16]
Subtotal (95% CI)	65		52			100.00	-0.05 [-0.26, 0.16]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.47 (P = 0.64)							
Total (95% CI)	65		52			100.00	-0.05 [-0.26, 0.16]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.47 (P = 0.64)							



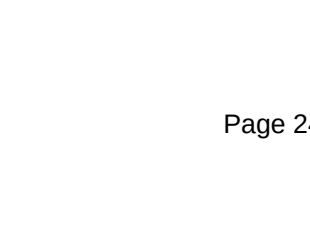
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 01 Weight change in kg at 6 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	33	-2.10(4.20)	32	-1.50(2.70)		100.00	-0.60 [-2.31, 1.11]
Total (95% CI)	33		32			100.00	-0.60 [-2.31, 1.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.69 (P = 0.49)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 02 Weight change in kg at 12 months

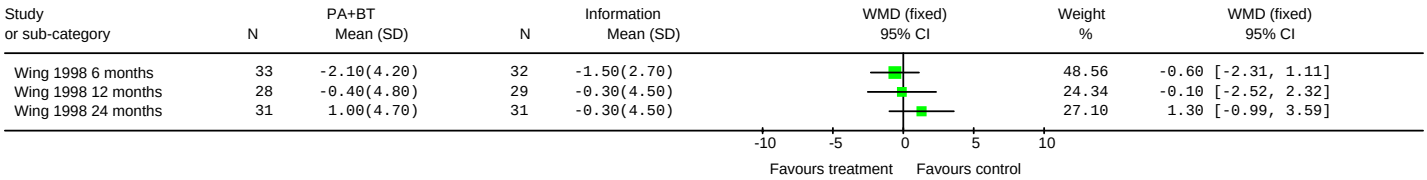
Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	28	-0.40(4.80)	29	-0.30(4.50)		100.00	-0.10 [-2.52, 2.32]
Total (95% CI)	28		29			100.00	-0.10 [-2.52, 2.32]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.08 (P = 0.94)							



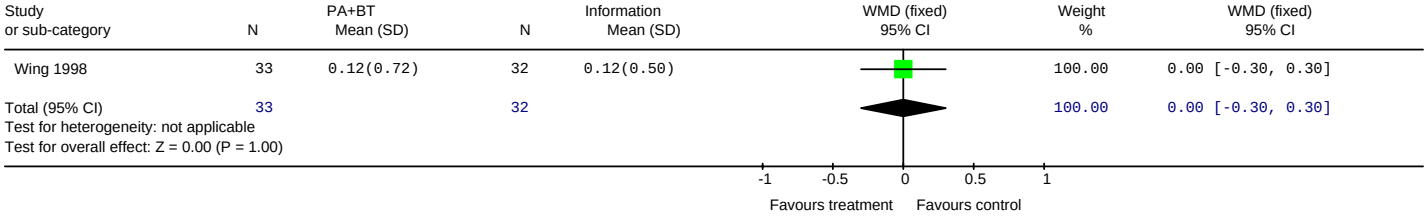
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 03 Weight change in kg at 24 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	31	1.00(4.70)	31	-0.30(4.50)		100.00	1.30 [-0.99, 3.59]
Total (95% CI)	31		31			100.00	1.30 [-0.99, 3.59]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.11 (P = 0.27)							

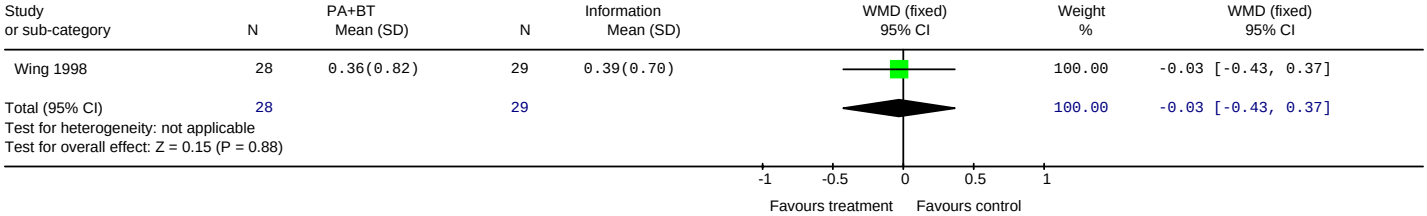
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 04 Weight change over time



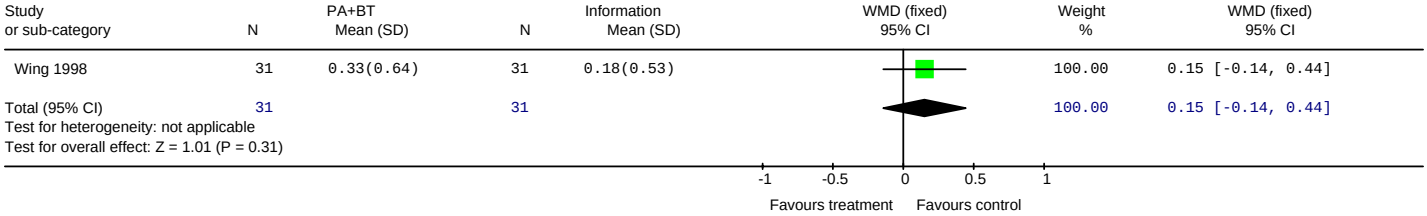
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 05 Change in total cholesterol in mmol/l at 6 months



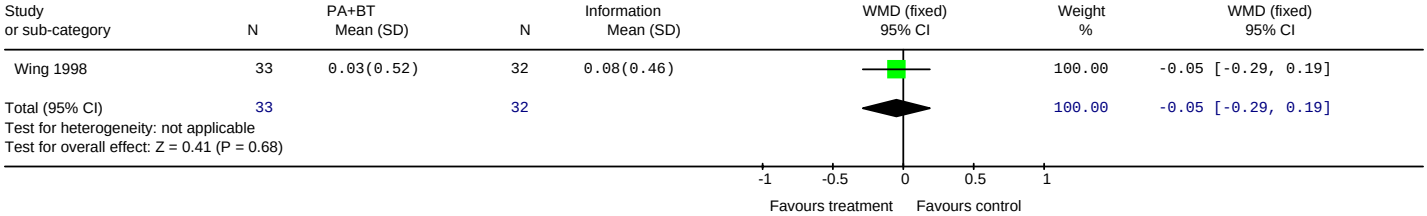
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 06 Change in total cholesterol in mmol/l at 12 months



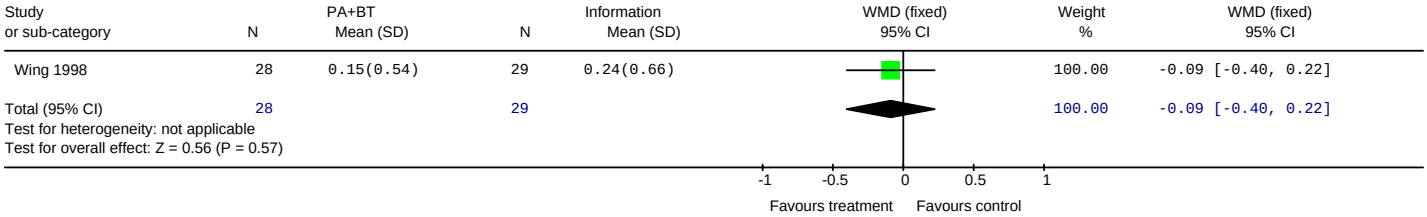
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 07 Change in total cholesterol in mmol/l at 24 months



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 08 Change in LDL cholesterol in mmol/l at 6 months



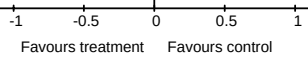
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 09 Change in LDL cholesterol in mmol/l at 12 months



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 10 Change in LDL cholesterol on mmol/l at 24 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	31	0.22(0.61)	31	0.03(0.46)		100.00	0.19 [-0.08, 0.46]
Total (95% CI)	31		31			100.00	0.19 [-0.08, 0.46]

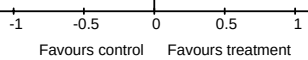
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.38 (P = 0.17)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 11 Change in HDL cholesterol in mmol/l at 6 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	33	0.02(0.16)	32	-0.02(0.11)		100.00	0.04 [-0.03, 0.11]
Total (95% CI)	33		32			100.00	0.04 [-0.03, 0.11]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.18 (P = 0.24)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 12 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	28	0.16(0.18)	29	0.08(0.16)		100.00	0.08 [-0.01, 0.17]
Total (95% CI)	28		29			100.00	0.08 [-0.01, 0.17]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.77 (P = 0.08)

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 13 Change in HDL cholesterol in mmol/l at 24 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	31	0.05(0.17)	31	0.04(0.24)		100.00	0.01 [-0.09, 0.11]
Total (95% CI)	31		31			100.00	0.01 [-0.09, 0.11]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.19 (P = 0.85)

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 14 Change in triglycerides in mmol/l at 6 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	33	0.12(1.64)	32	0.29(0.32)		100.00	-0.17 [-0.74, 0.40]
Total (95% CI)	33		32			100.00	-0.17 [-0.74, 0.40]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.58 (P = 0.56)

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 15 Change in triglycerides in mmol/l at 12 months

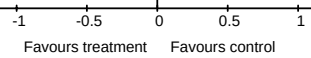
Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	28	0.26(2.19)	29	0.40(1.25)		100.00	-0.14 [-1.07, 0.79]
Total (95% CI)	28		29			100.00	-0.14 [-1.07, 0.79]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.30 (P = 0.77)

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 16 Change in triglycerides in mmol/l at 24 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	31	0.33(1.46)	31	0.52(1.14)		100.00	-0.19 [-0.84, 0.46]
Total (95% CI)	31		31			100.00	-0.19 [-0.84, 0.46]

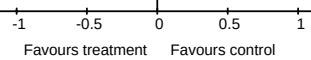
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.57 (P = 0.57)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 17 Change in fasting plasma glucose in mmol/l at 6 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	33	0.00(0.70)	32	0.10(0.50)		100.00	-0.10 [-0.40, 0.20]
Total (95% CI)	33		32			100.00	-0.10 [-0.40, 0.20]

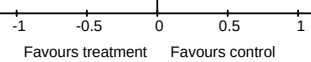
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.66 (P = 0.51)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 18 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	28	0.10(0.70)	29	0.00(0.60)		100.00	0.10 [-0.24, 0.44]
Total (95% CI)	28		29			100.00	0.10 [-0.24, 0.44]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.58 (P = 0.56)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 19 Change in fasting plasma glucose in mmol/l at 24 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	31	0.40(0.90)	31	0.20(0.40)		100.00	0.20 [-0.15, 0.55]
Total (95% CI)	31		31			100.00	0.20 [-0.15, 0.55]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.13 (P = 0.26)

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 20 Change in %HbA1c at 6 months

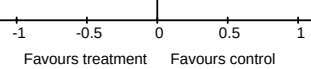
Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	33	0.10(0.30)	32	0.20(0.40)		100.00	-0.10 [-0.27, 0.07]
Total (95% CI)	33		32			100.00	-0.10 [-0.27, 0.07]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.14 (P = 0.26)

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 21 Change in %HbA1c at 24 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	31	-0.10(0.50)	31	-0.10(0.30)		100.00	0.00 [-0.21, 0.21]
Total (95% CI)	31		31			100.00	0.00 [-0.21, 0.21]

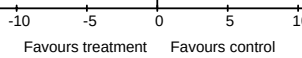
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 22 Change in DBP in mmHg at 6 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	33	-1.70(12.20)	32	-2.20(8.00)		100.00	0.50 [-4.50, 5.50]
Total (95% CI)	33		32			100.00	0.50 [-4.50, 5.50]

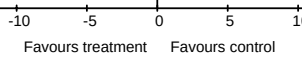
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.20 (P = 0.84)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 23 Change in DBP in mmHg at 12 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	28	0.90(9.70)	29	4.90(8.20)		100.00	-4.00 [-8.67, 0.67]
Total (95% CI)	28		29			100.00	-4.00 [-8.67, 0.67]

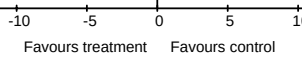
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.68 (P = 0.09)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 24 Change in DBP in mmHg at 24 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	31	2.00(8.00)	31	2.00(8.00)		100.00	0.00 [-3.98, 3.98]
Total (95% CI)	31		31			100.00	0.00 [-3.98, 3.98]

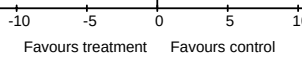
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 25 Change in SBP in mmHg at 6 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	33	-2.40(18.90)	32	-2.00(10.50)		100.00	-0.40 [-7.80, 7.00]
Total (95% CI)	33		32			100.00	-0.40 [-7.80, 7.00]

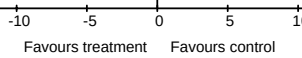
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.11 (P = 0.92)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 26 Change in SBP in mmHg at 12 months

Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	28	1.10(15.80)	29	1.10(9.60)		100.00	0.00 [-6.82, 6.82]
Total (95% CI)	28		29			100.00	0.00 [-6.82, 6.82]

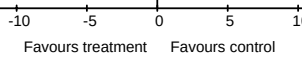
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 09 Physical activity and BT vs information (passive BT)
Outcome: 27 Change in SBP in mmHg at 24 months

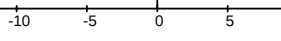
Study or sub-category	N	PA+BT Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wing 1998	31	0.90(13.90)	31	-1.50(12.00)		100.00	2.40 [-4.06, 8.86]
Total (95% CI)	31		31			100.00	2.40 [-4.06, 8.86]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.73 (P = 0.47)



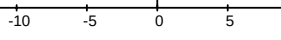
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 01 Weight change in kg at 16 weeks

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Ost 1976	11	-9.35(4.47)	11	-3.51(4.04)		100.00	-5.84 [-9.40, -2.28]
Subtotal (95% CI)	11		11			100.00	-5.84 [-9.40, -2.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.21 (P = 0.001)							
Total (95% CI)	11		11			100.00	-5.84 [-9.40, -2.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.21 (P = 0.001)							



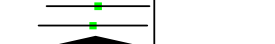
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 02 Weight change in kg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP II 2001	565	-4.40(7.16)	561	0.10(5.94)		100.00	-4.50 [-5.27, -3.73]
Subtotal (95% CI)	565		561			100.00	-4.50 [-5.27, -3.73]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 11.48 (P < 0.00001)							
Total (95% CI)	565		561			100.00	-4.50 [-5.27, -3.73]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 11.48 (P < 0.00001)							



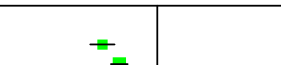
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 03 Weight change in kg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Ost 1976	11	-4.60(6.20)	11	-2.40(5.30)		1.45	-2.20 [-7.02, 2.62]
TOHP II 2001	545	-3.33(6.86)	551	0.53(6.06)		57.29	-3.86 [-4.63, -3.09]
TONE 1998	133	-5.36(4.56)	125	-0.48(3.24)		36.47	-4.88 [-5.84, -3.92]
Subtotal (95% CI)	689		687			95.22	-4.23 [-4.82, -3.63]
Test for heterogeneity: Chi² = 3.33, df = 2 (P = 0.19), I² = 40.0%							
Test for overall effect: Z = 13.93 (P < 0.00001)							
02 LCD							
Jalkanen 1991	24	-4.00(7.05)	25	0.00(5.92)		2.52	-4.00 [-7.65, -0.35]
Jeffery 1993	24	-5.87(7.58)	27	-1.51(6.34)		2.26	-4.36 [-8.22, -0.50]
Subtotal (95% CI)	48		52			4.78	-4.17 [-6.82, -1.52]
Test for heterogeneity: Chi² = 0.02, df = 1 (P = 0.89), I² = 0%							
Test for overall effect: Z = 3.08 (P = 0.002)							
Total (95% CI)	737		739			100.00	-4.22 [-4.80, -3.64]
Test for heterogeneity: Chi² = 3.35, df = 4 (P = 0.50), I² = 0%							
Test for overall effect: Z = 14.26 (P < 0.00001)							



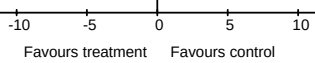
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 04 Weight change in kg at 18 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP I 1992	293	-3.83(6.12)	235	0.07(4.01)		25.49	-3.90 [-4.77, -3.03]
TOHP II 2001	545	-2.00(5.80)	551	0.70(4.20)		53.38	-2.70 [-3.30, -2.10]
TONE 1998	131	-4.77(4.52)	122	-0.21(3.44)		19.78	-4.56 [-5.55, -3.57]
Subtotal (95% CI)	969		908			98.65	-3.38 [-3.82, -2.94]
Test for heterogeneity: Chi² = 11.81, df = 2 (P = 0.003), I² = 83.1%							
Test for overall effect: Z = 15.02 (P < 0.00001)							
02 LCD							
Jeffery 1993	24	-5.55(7.49)	27	-0.62(6.09)		1.35	-4.93 [-8.71, -1.15]
Subtotal (95% CI)	24		27			1.35	-4.93 [-8.71, -1.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.56 (P = 0.01)							
Total (95% CI)	993		935			100.00	-3.40 [-3.84, -2.97]
Test for heterogeneity: Chi² = 12.45, df = 3 (P = 0.006), I² = 75.9%							
Test for overall effect: Z = 15.22 (P < 0.00001)							



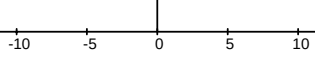
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 05 Weight change in kg at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP II 2001	545	-1.22(6.26)	551	1.17(6.25)		69.81	-2.39 [-3.13, -1.65]
TONE 1998	104	-4.58(4.55)	95	-0.09(3.53)		30.19	-4.49 [-5.62, -3.36]
Subtotal (95% CI)	649		646			100.00	-3.02 [-3.64, -2.41]
Test for heterogeneity: Chi² = 9.32, df = 1 (P = 0.002), I² = 89.3%							
Test for overall effect: Z = 9.58 (P < 0.00001)							
Total (95% CI)	649		646			100.00	-3.02 [-3.64, -2.41]
Test for heterogeneity: Chi² = 9.32, df = 1 (P = 0.002), I² = 89.3%							
Test for overall effect: Z = 9.58 (P < 0.00001)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 06 Weight change in kg at 30 months

Study or sub-category	N	Activity Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TONE 1998	60	-4.99(4.11)	53	-0.05(4.17)		84.18	-4.94 [-6.47, -3.41]
Subtotal (95% CI)	60		53			84.18	-4.94 [-6.47, -3.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 6.33 (P < 0.00001)							
02 LCD							
Jeffery 1993	24	-3.05(6.78)	27	0.25(5.99)		15.82	-3.30 [-6.83, 0.23]
Subtotal (95% CI)	24		27			15.82	-3.30 [-6.83, 0.23]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.83 (P = 0.07)							
Total (95% CI)	84		80			100.00	-4.68 [-6.08, -3.28]
Test for heterogeneity: Chi² = 0.70, df = 1 (P = 0.40), I² = 0%							
Test for overall effect: Z = 6.53 (P < 0.00001)							

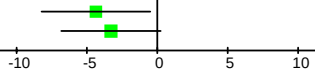


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 07 Weight change in kg at 36 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP II 2001	547	-0.20(5.90)	554	1.80(5.30)		100.00	-2.00 [-2.66, -1.34]
Subtotal (95% CI)	547		554			100.00	-2.00 [-2.66, -1.34]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.91 (P < 0.00001)							
Total (95% CI)	547		554			100.00	-2.00 [-2.66, -1.34]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.91 (P < 0.00001)							

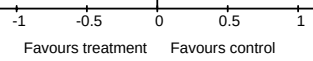
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 08 Weight change over time

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Ost 1976 - 600kcal/deficit or low fat							
Ost 1976 4 months	11	-9.35(4.47)	11	-3.51(4.04)		64.70	-5.84 [-9.40, -2.28]
Ost 1976 12 months	11	-4.60(6.20)	11	-2.40(5.30)		35.30	-2.20 [-7.02, 2.62]
02 TONE 1998 - 600kcal/deficit or low fat							
TONE 12 months	133	-5.36(4.56)	125	-0.48(3.24)		32.55	-4.88 [-5.84, -3.92]
TONE 18 months	131	-4.77(4.52)	122	-0.21(3.44)		30.93	-4.56 [-5.55, -3.57]
TONE 24 months	104	-4.58(4.55)	95	-0.09(3.53)		23.69	-4.49 [-5.62, -3.36]
TONE 30 months	60	-4.99(4.11)	53	-0.05(4.17)		12.83	-4.94 [-6.47, -3.41]
03 TOHP II 2001 - 600kcal/deficit or low fat							
TOHP II 6 months	565	-4.40(7.16)	561	0.10(5.94)		16.46	-4.50 [-5.27, -3.73]
TOHP II 12 months	545	-3.33(6.86)	551	0.53(6.06)		16.53	-3.86 [-4.63, -3.09]
TOHP II 18 months	545	-2.00(5.80)	551	0.70(4.20)		26.97	-2.70 [-3.30, -2.10]
TOHP II 24 months	545	-1.22(6.26)	551	1.17(6.25)		17.71	-2.39 [-3.13, -1.65]
TOHP II 36 months	557	-0.20(5.90)	554	1.80(5.30)		22.34	-2.00 [-2.66, -1.34]
04 Jeffery 1993 - LCD							
Jeffery 1993 12month	24	-5.87(7.58)	27	-1.51(6.34)		45.52	-4.36 [-8.22, -0.50]
Jeffery 1993 30month	24	-3.05(6.78)	27	0.25(5.99)		54.48	-3.30 [-6.83, 0.23]



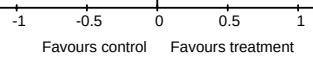
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 09 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Jalkanen 1991	22	-0.20(1.08)	22	0.20(1.08)		100.00	-0.40 [-1.04, 0.24]
Subtotal (95% CI)	22		22			100.00	-0.40 [-1.04, 0.24]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.23 (P = 0.22)							
Total (95% CI)	22		22			100.00	-0.40 [-1.04, 0.24]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.23 (P = 0.22)							



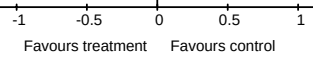
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 10 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Jalkanen 1991	22	0.10(0.29)	22	0.00(0.29)		100.00	0.10 [-0.07, 0.27]
Subtotal (95% CI)	22		22			100.00	0.10 [-0.07, 0.27]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.14 (P = 0.25)							
Total (95% CI)	22		22			100.00	0.10 [-0.07, 0.27]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.14 (P = 0.25)							



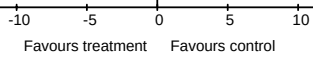
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 12 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 LCD							
Jalkanen 1991	22	-0.50(0.96)	22	0.00(0.96)		100.00	-0.50 [-1.07, 0.07]
Subtotal (95% CI)	22		22			100.00	-0.50 [-1.07, 0.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.73 (P = 0.08)							
Total (95% CI)	22		22			100.00	-0.50 [-1.07, 0.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.73 (P = 0.08)							



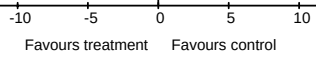
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 13 Change in DBP in mmHg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP I 1992	299	-6.30(6.92)	239	-3.70(6.18)		100.00	-2.60 [-3.71, -1.49]
Subtotal (95% CI)	299		239			100.00	-2.60 [-3.71, -1.49]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.60 (P < 0.00001)							
Total (95% CI)	299		239			100.00	-2.60 [-3.71, -1.49]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.60 (P < 0.00001)							



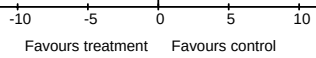
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 14 Change in DBP in mmHg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP I 1992	287	-5.40(8.47)	237	-3.10(7.70)		91.84	-2.30 [-3.69, -0.91]
Subtotal (95% CI)	287		237			91.84	-2.30 [-3.69, -0.91]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.25 (P = 0.001)							
02 LCD							
Jalkanen 1991	24	-11.00(8.30)	25	-11.00(8.30)		8.16	0.00 [-4.65, 4.65]
Subtotal (95% CI)	24		25			8.16	0.00 [-4.65, 4.65]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
Total (95% CI)	311		262			100.00	-2.11 [-3.44, -0.78]
Test for heterogeneity: Chi² = 0.86, df = 1 (P = 0.35), I² = 0%							
Test for overall effect: Z = 3.12 (P = 0.002)							



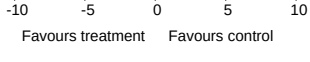
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 15 Change in DBP in mmHg at 18 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP I 1992	308	-6.16(5.88)	256	-3.91(6.12)		34.12	-2.25 [-3.25, -1.25]
TOHP II 2001	533	-4.50(6.10)	525	-3.20(5.80)		65.88	-1.30 [-2.02, -0.58]
Subtotal (95% CI)	841		781			100.00	-1.62 [-2.21, -1.04]
Test for heterogeneity: Chi² = 2.30, df = 1 (P = 0.13), I² = 56.5%							
Test for overall effect: Z = 5.47 (P < 0.00001)							
Total (95% CI)	841		781			100.00	-1.62 [-2.21, -1.04]
Test for heterogeneity: Chi² = 2.30, df = 1 (P = 0.13), I² = 56.5%							
Test for overall effect: Z = 5.47 (P < 0.00001)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 16 Change in DBP in mmHg at 36 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP II 2001	527	-3.20(6.50)	514	-2.40(7.00)		100.00	-0.80 [-1.62, 0.02]
Subtotal (95% CI)	527		514			100.00	-0.80 [-1.62, 0.02]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.91 (P = 0.06)							
Total (95% CI)	527		514			100.00	-0.80 [-1.62, 0.02]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.91 (P = 0.06)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 17 Change in SBP in mmHg at 6 months

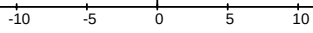
Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP I 1992	299	-6.50(8.65)	239	-2.70(7.73)		100.00	-3.80 [-5.19, -2.41]
Subtotal (95% CI)	299		239			100.00	-3.80 [-5.19, -2.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.37 (P < 0.00001)							
Total (95% CI)	299		239			100.00	-3.80 [-5.19, -2.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.37 (P < 0.00001)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 18 Change in SBP in mmHg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP I 1992	287	-5.80(6.78)	237	-3.80(6.16)		97.63	-2.00 [-3.11, -0.89]
Subtotal (95% CI)	287		237			97.63	-2.00 [-3.11, -0.89]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.53 (P = 0.0004)							
02 LCD							
Jalkanen 1991	24	-8.00(12.70)	25	-15.00(12.70)		2.37	7.00 [-0.11, 14.11]
Subtotal (95% CI)	24		25			2.37	7.00 [-0.11, 14.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.93 (P = 0.05)							
Total (95% CI)	311		262			100.00	-1.79 [-2.88, -0.69]
Test for heterogeneity: Chi² = 6.00, df = 1 (P = 0.01), I² = 83.3%							
Test for overall effect: Z = 3.19 (P = 0.001)							

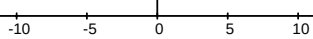
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 19 Change in SBP in mmHg at 18 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP I 1992	308	-5.35(7.19)	256	-2.45(7.37)		35.64	-2.90 [-4.11, -1.69]
TOHP II 2001	533	-3.60(7.90)	525	-1.80(7.00)		64.36	-1.80 [-2.70, -0.90]
Subtotal (95% CI)	841		781			100.00	-2.19 [-2.91, -1.47]
Test for heterogeneity: Chi² = 2.05, df = 1 (P = 0.15), I² = 51.2%							
Test for overall effect: Z = 5.96 (P < 0.00001)							
Total (95% CI)	841		781			100.00	-2.19 [-2.91, -1.47]
Test for heterogeneity: Chi² = 2.05, df = 1 (P = 0.15), I² = 51.2%							
Test for overall effect: Z = 5.96 (P < 0.00001)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 10 Physical activity, diet, and behaviour therapy vs control
Outcome: 20 Change in SBP in mmHg at 36 months

Study or sub-category	N	Combined Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
TOHP II 2001	527	-0.80(8.70)	514	0.60(8.50)		100.00	-1.40 [-2.44, -0.36]
Subtotal (95% CI)	527		514			100.00	-1.40 [-2.44, -0.36]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.63 (P = 0.009)							
Total (95% CI)	527		514			100.00	-1.40 [-2.44, -0.36]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.63 (P = 0.009)							

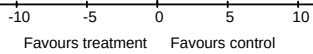


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 01 Weight change in kg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Narayan 1998	45	1.00(6.20)	45	0.50(6.06)		56.17	0.50 [-2.03, 3.03]
Subtotal (95% CI)	45		45			56.17	0.50 [-2.03, 3.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.39 (P = 0.70)							
02 VLCD							
Wing 1998	31	-10.30(7.70)	32	-1.50(2.70)		43.83	-8.80 [-11.67, -5.93]
Subtotal (95% CI)	31		32			43.83	-8.80 [-11.67, -5.93]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 6.02 (P < 0.00001)							
Total (95% CI)	76		77			100.00	-3.58 [-5.47, -1.68]
Test for heterogeneity: Chi² = 22.70, df = 1 (P < 0.00001), I² = 95.6%							
Test for overall effect: Z = 3.69 (P = 0.0002)							

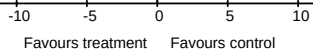
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Djuric 2002a	9	-8.00(5.50)	6	0.85(6.00)		1.82	-8.85 [-14.85, -2.85]
Lindahl 1999	93	-5.40(4.44)	93	-0.50(2.75)		57.93	-4.90 [-5.96, -3.84]
Mayer-Davis 2004	49	-2.20(6.54)	56	-0.30(6.00)		11.21	-1.90 [-4.31, 0.51]
Narayan 1998	45	2.50(6.62)	45	0.80(6.14)		9.38	1.70 [-0.94, 4.34]
Wolf 2004	73	-2.40(6.59)	71	0.60(6.08)		15.23	-3.00 [-5.07, -0.93]
Subtotal (95% CI)	269		271			95.57	-3.67 [-4.50, -2.85]
Test for heterogeneity: Chi² = 26.41, df = 4 (P < 0.0001), I² = 84.9%							
Test for overall effect: Z = 8.71 (P < 0.00001)							
02 VLCD							
Wing 1998	30	-7.40(9.70)	29	-0.30(4.50)		4.43	-7.10 [-10.94, -3.26]
Subtotal (95% CI)	30		29			4.43	-7.10 [-10.94, -3.26]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.63 (P = 0.0003)							
Total (95% CI)	299		300			100.00	-3.82 [-4.63, -3.02]
Test for heterogeneity: Chi² = 29.34, df = 5 (P < 0.0001), I² = 83.0%							
Test for overall effect: Z = 9.28 (P < 0.00001)							



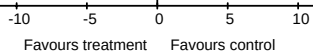
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 03 Weight change in kg at 18 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Messier 2004	76	-5.20(7.37)	78	-1.10(6.23)		100.00	-4.10 [-6.26, -1.94]
Subtotal (95% CI)	76		78			100.00	-4.10 [-6.26, -1.94]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.72 (P = 0.0002)							
Total (95% CI)	76		78			100.00	-4.10 [-6.26, -1.94]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.72 (P = 0.0002)							



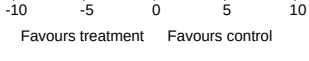
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 04 Weight change in kg at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-2.50(8.40)	31	-0.30(4.50)		100.00	-2.20 [-5.51, 1.11]
Subtotal (95% CI)	32		31			100.00	-2.20 [-5.51, 1.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.30 (P = 0.19)							
Total (95% CI)	32		31			100.00	-2.20 [-5.51, 1.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.30 (P = 0.19)							



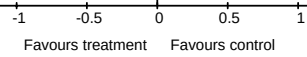
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 05 Weight change over time

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Narayan 1998 - 600kcal/deficit or low fat							
Narayan 6 months	45	1.00(6.20)	45	0.50(6.06)		52.03	0.50 [-2.03, 3.03]
Narayan 12 months	45	2.50(6.62)	45	0.80(6.14)		47.97	1.70 [-0.94, 4.34]
02 Wing 1998 - VLCD							
Wing 1998 6 months	31	-10.30(7.70)	32	-1.50(2.70)		43.35	-8.80 [-11.67, -5.93]
Wing 1998 12 months	30	-7.40(9.70)	29	-0.30(4.50)		24.19	-7.10 [-10.94, -3.26]
Wing 1998 24 months	32	-2.50(8.40)	31	-0.30(4.50)		32.46	-2.20 [-5.51, 1.11]



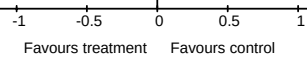
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 06 Change in total cholesterol in mmol/l at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Mayer-Davis 2004	49	0.00(1.08)	56	-0.16(1.08)		24.31	0.16 [-0.25, 0.57]
Narayan 1998	45	0.00(1.08)	45	-0.10(1.08)		20.93	0.10 [-0.35, 0.55]
Subtotal (95% CI)	94		101			45.24	0.13 [-0.17, 0.44]
Test for heterogeneity: Chi² = 0.04, df = 1 (P = 0.85), I² = 0%							
Test for overall effect: Z = 0.85 (P = 0.39)							
02 VLCD							
Wing 1998	31	-0.33(0.61)	32	0.12(0.50)		54.76	-0.45 [-0.73, -0.17]
Subtotal (95% CI)	31		32			54.76	-0.45 [-0.73, -0.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.20 (P = 0.001)							
Total (95% CI)	125		133			100.00	-0.19 [-0.39, 0.02]
Test for heterogeneity: Chi² = 7.78, df = 2 (P = 0.02), I² = 74.3%							
Test for overall effect: Z = 1.79 (P = 0.07)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 07 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Lindahl 1999	93	-0.21(0.70)	93	-0.06(0.49)		71.00	-0.15 [-0.32, 0.02]
Narayan 1998	45	0.20(1.08)	45	0.10(1.08)		10.75	0.10 [-0.35, 0.55]
Subtotal (95% CI)	138		138			81.75	-0.12 [-0.28, 0.04]
Test for heterogeneity: Chi² = 1.05, df = 1 (P = 0.31), I² = 4.5%							
Test for overall effect: Z = 1.42 (P = 0.16)							
02 VLCD							
Wing 1998	30	0.32(0.64)	29	0.39(0.70)		18.25	-0.07 [-0.41, 0.27]
Subtotal (95% CI)	30		29			18.25	-0.07 [-0.41, 0.27]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.40 (P = 0.69)							
Total (95% CI)	168		167			100.00	-0.11 [-0.25, 0.04]
Test for heterogeneity: Chi² = 1.11, df = 2 (P = 0.58), I² = 0%							
Test for overall effect: Z = 1.45 (P = 0.15)							

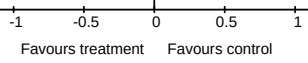


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 08 Change in total cholesterol in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.09(0.67)	31	0.18(0.53)		100.00	-0.09 [-0.39, 0.21]
Subtotal (95% CI)	32		31			100.00	-0.09 [-0.39, 0.21]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.59 (P = 0.55)							
Total (95% CI)	32		31			100.00	-0.09 [-0.39, 0.21]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.59 (P = 0.55)							

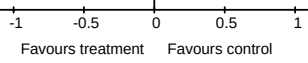
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 09 Change in LDL cholesterol in mmol/l at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Mayer-Davis 2004	49	-0.09(0.74)	56	-0.18(0.74)		45.46	0.09 [-0.19, 0.37]
Subtotal (95% CI)	49		56			45.46	0.09 [-0.19, 0.37]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.62 (P = 0.53)							
02 VLCD							
Wing 1998	31	-0.13(0.58)	32	0.08(0.46)		54.54	-0.21 [-0.47, 0.05]
Subtotal (95% CI)	31		32			54.54	-0.21 [-0.47, 0.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.59 (P = 0.11)							
Total (95% CI)	80		88			100.00	-0.07 [-0.26, 0.12]
Test for heterogeneity: Chi² = 2.34, df = 1 (P = 0.13), I² = 57.3%							
Test for overall effect: Z = 0.75 (P = 0.45)							



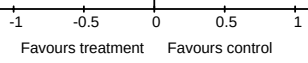
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 10 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	0.14(0.54)	29	0.24(0.66)		100.00	-0.10 [-0.41, 0.21]
Subtotal (95% CI)	30		29			100.00	-0.10 [-0.41, 0.21]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.64 (P = 0.52)							
Total (95% CI)	30		29			100.00	-0.10 [-0.41, 0.21]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.64 (P = 0.52)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 11 Change in LDL cholesterol on mmol/l at 24 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.12(0.52)	31	0.03(0.46)		100.00	0.09 [-0.15, 0.33]
Subtotal (95% CI)	32		31			100.00	0.09 [-0.15, 0.33]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.73 (P = 0.47)							
Total (95% CI)	32		31			100.00	0.09 [-0.15, 0.33]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.73 (P = 0.47)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 12 Change in HDL cholesterol in mmol/l at 6 months

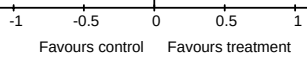
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
02 VLCD							
Wing 1998	31	-0.06(0.16)	32	-0.02(0.11)		100.00	-0.04 [-0.11, 0.03]
Subtotal (95% CI)	31		32			100.00	-0.04 [-0.11, 0.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.15 (P = 0.25)							
Total (95% CI)	31		32			100.00	-0.04 [-0.11, 0.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.15 (P = 0.25)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 13 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	0.12(0.20)	29	0.08(0.16)		100.00	0.04 [-0.05, 0.13]
Subtotal (95% CI)	30		29			100.00	0.04 [-0.05, 0.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.85 (P = 0.40)							
Total (95% CI)	30		29			100.00	0.04 [-0.05, 0.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.85 (P = 0.40)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 14 Change in HDL cholesterol in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.02(0.21)	31	0.04(0.24)		100.00	-0.02 [-0.13, 0.09]
Subtotal (95% CI)	32		31			100.00	-0.02 [-0.13, 0.09]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.35 (P = 0.73)							
Total (95% CI)	32		31			100.00	-0.02 [-0.13, 0.09]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.35 (P = 0.73)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 15 Change in triglycerides in mmol/l at 6 months

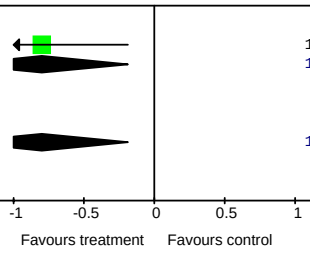
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Mayer-Davis 2004	49	0.01(0.96)	56	0.01(0.96)		66.82	0.00 [-0.37, 0.37]
Subtotal (95% CI)	49		56			66.82	0.00 [-0.37, 0.37]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
02 VLCD							
Wing 1998	31	-0.69(1.45)	32	0.29(0.32)		33.18	-0.98 [-1.50, -0.46]
Subtotal (95% CI)	31		32			33.18	-0.98 [-1.50, -0.46]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.68 (P = 0.0002)							
Total (95% CI)	80		88			100.00	-0.33 [-0.63, -0.02]
Test for heterogeneity: Chi² = 9.04, df = 1 (P = 0.003), I² = 88.9%							
Test for overall effect: Z = 2.12 (P = 0.03)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 16 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Lindahl 1999	93	-0.16(0.59)	93	-0.09(0.59)		95.08	-0.07 [-0.24, 0.10]
Subtotal (95% CI)	93		93			95.08	-0.07 [-0.24, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.81 (P = 0.42)							
02 VLCD							
Wing 1998	30	0.33(1.65)	29	0.40(1.25)		4.92	-0.07 [-0.82, 0.68]
Subtotal (95% CI)	30		29			4.92	-0.07 [-0.82, 0.68]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.18 (P = 0.85)							
Total (95% CI)	123		122			100.00	-0.07 [-0.24, 0.10]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 1.00), I² = 0%							
Test for overall effect: Z = 0.83 (P = 0.41)							

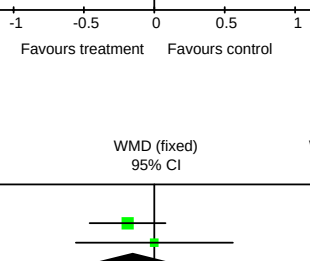
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 17 Change in triglycerides in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-0.28(1.33)	31	0.52(1.14)		100.00	-0.80 [-1.41, -0.19]
Subtotal (95% CI)	32		31			100.00	-0.80 [-1.41, -0.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.57 (P = 0.01)							
Total (95% CI)	32		31			100.00	-0.80 [-1.41, -0.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.57 (P = 0.01)							



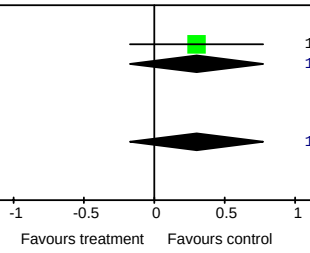
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 18 Change in fasting plasma glucose in mmol/l at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Narayan 1998	45	0.10(1.98)	45	0.10(1.98)		6.93	0.00 [-0.82, 0.82]
Subtotal (95% CI)	45		45			6.93	0.00 [-0.82, 0.82]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
02 VLCD							
Wing 1998	31	-0.20(0.40)	32	0.10(0.50)		93.07	-0.30 [-0.52, -0.08]
Subtotal (95% CI)	31		32			93.07	-0.30 [-0.52, -0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.63 (P = 0.008)							
Total (95% CI)	76		77			100.00	-0.28 [-0.49, -0.06]
Test for heterogeneity: Chi² = 0.48, df = 1 (P = 0.49), I² = 0%							
Test for overall effect: Z = 2.54 (P = 0.01)							



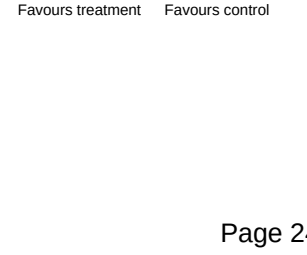
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 19 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Lindahl 1999	93	-0.50(0.68)	93	-0.31(1.14)		46.57	-0.19 [-0.46, 0.08]
Narayan 1998	45	0.10(1.35)	45	0.10(1.35)		10.89	0.00 [-0.56, 0.56]
Subtotal (95% CI)	138		138			57.47	-0.15 [-0.40, 0.09]
Test for heterogeneity: Chi² = 0.36, df = 1 (P = 0.55), I² = 0%							
Test for overall effect: Z = 1.24 (P = 0.21)							
02 VLCD							
Wing 1998	30	0.00(0.50)	29	0.00(0.60)		42.53	0.00 [-0.28, 0.28]
Subtotal (95% CI)	30		29			42.53	0.00 [-0.28, 0.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
Total (95% CI)	168		167			100.00	-0.09 [-0.27, 0.10]
Test for heterogeneity: Chi² = 1.02, df = 2 (P = 0.60), I² = 0%							
Test for overall effect: Z = 0.94 (P = 0.35)							



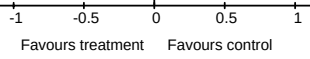
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 20 Change in fasting plasma glucose in mmol/l at 24 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.50(1.30)	31	0.20(0.40)		100.00	0.30 [-0.17, 0.77]
Subtotal (95% CI)	32		31			100.00	0.30 [-0.17, 0.77]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.25 (P = 0.21)							
Total (95% CI)	32		31			100.00	0.30 [-0.17, 0.77]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.25 (P = 0.21)							



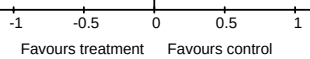
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 22 Change in %HbA1c at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Mayer-Davis 2004	49	-1.56(0.76)	56	-1.12(0.76)		22.15	-0.44 [-0.73, -0.15]
Subtotal (95% CI)	49		56			22.15	-0.44 [-0.73, -0.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.96 (P = 0.003)							
02 VLCD							
Wing 1998	31	0.03(0.20)	32	0.20(0.40)		77.85	-0.17 [-0.33, -0.01]
Subtotal (95% CI)	31		32			77.85	-0.17 [-0.33, -0.01]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.14 (P = 0.03)							
Total (95% CI)	80		88			100.00	-0.23 [-0.37, -0.09]
Test for heterogeneity: Chi² = 2.57, df = 1 (P = 0.11), I² = 61.1%							
Test for overall effect: Z = 3.28 (P = 0.001)							



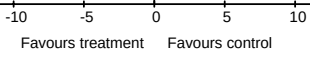
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 23 Change in %HbA1c at 24 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.04(1.08)	31	-0.10(0.30)		100.00	0.14 [-0.25, 0.53]
Subtotal (95% CI)	32		31			100.00	0.14 [-0.25, 0.53]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.71 (P = 0.48)							
Total (95% CI)	32		31			100.00	0.14 [-0.25, 0.53]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.71 (P = 0.48)							



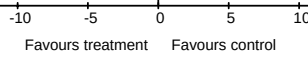
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 24 Change in DBP in mmHg at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Mayer-Davis 2004	49	-0.49(8.30)	56	-2.65(8.30)		42.71	2.16 [-1.02, 5.34]
Narayan 1998	45	2.50(8.30)	45	0.10(8.30)		36.77	2.40 [-1.03, 5.83]
Subtotal (95% CI)	94		101			79.49	2.27 [-0.06, 4.60]
Test for heterogeneity: Chi² = 0.01, df = 1 (P = 0.92), I² = 0%							
Test for overall effect: Z = 1.91 (P = 0.06)							
02 VLCD							
Wing 1998	31	-6.90(10.40)	32	-2.20(8.00)		20.51	-4.70 [-9.29, -0.11]
Subtotal (95% CI)	31		32			20.51	-4.70 [-9.29, -0.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.01 (P = 0.04)							
Total (95% CI)	125		133			100.00	0.84 [-1.24, 2.92]
Test for heterogeneity: Chi² = 7.05, df = 2 (P = 0.03), I² = 71.6%							
Test for overall effect: Z = 0.79 (P = 0.43)							



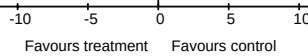
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 25 Change in DBP in mmHg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Lindahl 1999	93	-3.20(7.41)	93	-0.80(7.41)		63.24	-2.40 [-4.53, -0.27]
Narayan 1998	45	1.10(8.30)	45	-1.00(8.30)		24.39	2.10 [-1.33, 5.53]
Subtotal (95% CI)	138		138			87.63	-1.15 [-2.96, 0.66]
Test for heterogeneity: Chi² = 4.77, df = 1 (P = 0.03), I² = 79.0%							
Test for overall effect: Z = 1.24 (P = 0.21)							
02 VLCD							
Wing 1998	28	-1.00(10.20)	29	4.90(8.20)		12.37	-5.90 [-10.71, -1.09]
Subtotal (95% CI)	28		29			12.37	-5.90 [-10.71, -1.09]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.40 (P = 0.02)							
Total (95% CI)	166		167			100.00	-1.74 [-3.43, -0.04]
Test for heterogeneity: Chi² = 8.05, df = 2 (P = 0.02), I² = 75.2%							
Test for overall effect: Z = 2.01 (P = 0.04)							



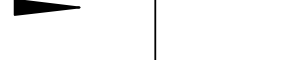
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 26 Change in DBP in mmHg at 24 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-0.20(10.50)	31	2.00(8.00)		100.00	-2.20 [-6.80, 2.40]
Subtotal (95% CI)	32		31			100.00	-2.20 [-6.80, 2.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.94 (P = 0.35)							
Total (95% CI)	32		31			100.00	-2.20 [-6.80, 2.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.94 (P = 0.35)							



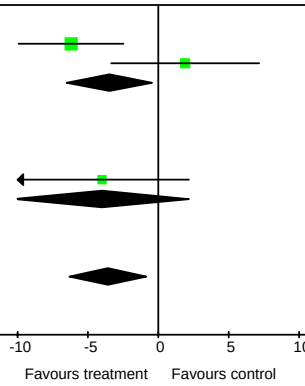
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 27 Change in SBP in mmHg at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Mayer-Davis 2004	49	-3.31(12.70)	56	-9.52(12.70)		35.31	6.21 [1.34, 11.08]
Narayan 1998	45	2.50(12.70)	45	5.20(12.70)		30.40	-2.70 [-7.95, 2.55]
Subtotal (95% CI)	94		101			65.71	2.09 [-1.48, 5.66]
Test for heterogeneity: Chi² = 5.95, df = 1 (P = 0.01), I² = 83.2%							
Test for overall effect: Z = 1.15 (P = 0.25)							
02 VLCD							
Wing 1998	31	-12.30(9.50)	32	-2.00(10.50)		34.29	-10.30 [-15.24, -5.36]
Subtotal (95% CI)	31		32			34.29	-10.30 [-15.24, -5.36]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.09 (P < 0.0001)							
Total (95% CI)	125		133			100.00	-2.16 [-5.05, 0.73]
Test for heterogeneity: Chi² = 21.82, df = 2 (P < 0.0001), I² = 90.8%							
Test for overall effect: Z = 1.46 (P = 0.14)							



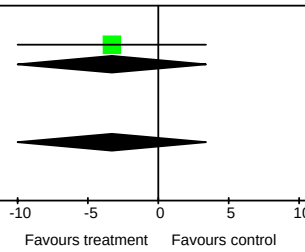
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 28 Change in SBP in mmHg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Information Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Lindahl 1999	93	-4.90(14.81)	93	1.30(10.79)		53.52	-6.20 [-9.92, -2.48]
Narayan 1998	45	6.00(12.70)	45	4.10(12.70)		26.96	1.90 [-3.35, 7.15]
Subtotal (95% CI)	138		138			80.48	-3.49 [-6.52, -0.45]
Test for heterogeneity: Chi² = 6.09, df = 1 (P = 0.01), I² = 83.6%							
Test for overall effect: Z = 2.25 (P = 0.02)							
02 VLCD							
Wing 1998	30	-2.90(14.20)	29	1.10(9.60)		19.52	-4.00 [-10.17, 2.17]
Subtotal (95% CI)	30		29			19.52	-4.00 [-10.17, 2.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.27 (P = 0.20)							
Total (95% CI)	168		167			100.00	-3.59 [-6.31, -0.86]
Test for heterogeneity: Chi² = 6.11, df = 2 (P = 0.05), I² = 67.3%							
Test for overall effect: Z = 2.58 (P = 0.010)							



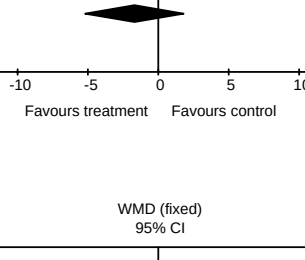
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 11 Physical activity, diet, and behaviour therapy vs information
Outcome: 29 Change in SBP in mmHg at 24 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-4.80(15.00)	31	-1.50(12.00)		100.00	-3.30 [-10.00, 3.40]
Subtotal (95% CI)	32		31			100.00	-3.30 [-10.00, 3.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.97 (P = 0.33)							
Total (95% CI)	32		31			100.00	-3.30 [-10.00, 3.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.97 (P = 0.33)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 01 Weight change in kg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Blonk 1994	27	-2.90(6.74)	26	-1.20(6.25)		100.00	-1.70 [-5.20, 1.80]
Subtotal (95% CI)	27		26			100.00	-1.70 [-5.20, 1.80]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.95 (P = 0.34)							
Total (95% CI)	27		26			100.00	-1.70 [-5.20, 1.80]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.95 (P = 0.34)							

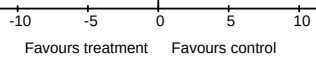


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Blonk 1994	27	-2.74(6.69)	26	-2.07(6.50)		100.00	-0.67 [-4.22, 2.88]
Subtotal (95% CI)	27		26			100.00	-0.67 [-4.22, 2.88]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.37 (P = 0.71)							
Total (95% CI)	27		26			100.00	-0.67 [-4.22, 2.88]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.37 (P = 0.71)							

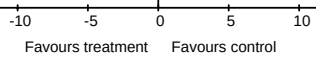
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 03 Weight change in kg at 18 months

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Blonk 1994	27	-3.14(6.80)	26	-1.08(6.22)		100.00	-2.06 [-5.57, 1.45]
Subtotal (95% CI)	27		26			100.00	-2.06 [-5.57, 1.45]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.15 (P = 0.25)							
Total (95% CI)	27		26			100.00	-2.06 [-5.57, 1.45]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.15 (P = 0.25)							



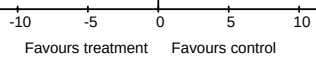
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 04 Weight change in kg at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Blonk 1994	27	-3.50(6.91)	26	-2.10(6.51)		100.00	-1.40 [-5.01, 2.21]
Subtotal (95% CI)	27		26			100.00	-1.40 [-5.01, 2.21]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.76 (P = 0.45)							
Total (95% CI)	27		26			100.00	-1.40 [-5.01, 2.21]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.76 (P = 0.45)							



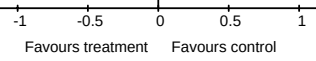
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 05 Weight change over time

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Blonk 1994 6 months	27	-2.90(6.74)	26	-1.20(6.25)		33.72	-1.70 [-5.20, 1.80]
Blonk 1994 12 months	27	-2.74(6.69)	26	-2.07(6.50)		32.72	-0.67 [-4.22, 2.88]
Blonk 1994 18 months	27	-3.14(6.80)	26	-1.08(6.22)		33.56	-2.06 [-5.57, 1.45]



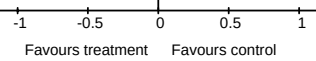
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 06 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Blonk 1994	27	-0.20(5.97)	26	0.10(5.94)		100.00	-0.30 [-3.51, 2.91]
Subtotal (95% CI)	27		26			100.00	-0.30 [-3.51, 2.91]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.18 (P = 0.85)							
Total (95% CI)	27		26			100.00	-0.30 [-3.51, 2.91]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.18 (P = 0.85)							



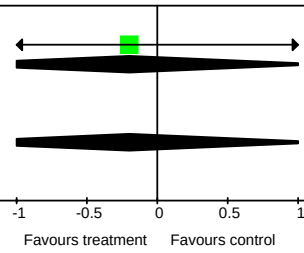
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 07 Change in %HbA1c at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Blonk 1994	27	-0.39(2.58)	26	-0.01(2.58)		100.00	-0.38 [-1.77, 1.01]
Subtotal (95% CI)	27		26			100.00	-0.38 [-1.77, 1.01]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.54 (P = 0.59)							
Total (95% CI)	27		26			100.00	-0.38 [-1.77, 1.01]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.54 (P = 0.59)							



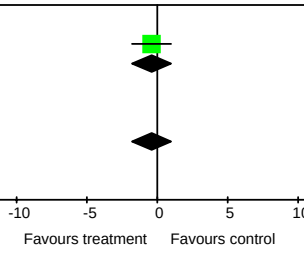
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 08 Change in %HbA1c at 18 months

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Blonk 1994	27	-0.30(2.58)	26	-0.10(2.58)		100.00	-0.20 [-1.59, 1.19]
Subtotal (95% CI)	27		26			100.00	-0.20 [-1.59, 1.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.28 (P = 0.78)							
Total (95% CI)	27		26			100.00	-0.20 [-1.59, 1.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.28 (P = 0.78)							



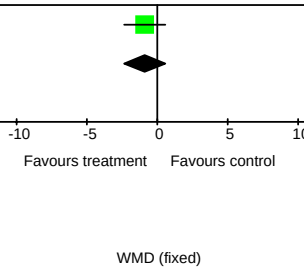
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 09 Change in %HbA1c at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Blonk 1994	27	-0.01(2.58)	26	0.40(2.58)		100.00	-0.41 [-1.80, 0.98]
Subtotal (95% CI)	27		26			100.00	-0.41 [-1.80, 0.98]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.58 (P = 0.56)							
Total (95% CI)	27		26			100.00	-0.41 [-1.80, 0.98]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.58 (P = 0.56)							



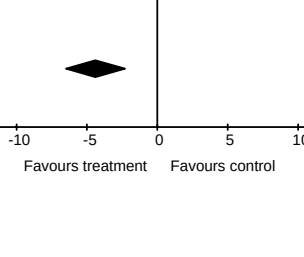
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 12 Physical activity, diet, and behaviour therapy vs diet
Outcome: 10 Change in %HbA1c at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Blonk 1994	27	-1.00(2.70)	26	-0.10(2.70)		100.00	-0.90 [-2.35, 0.55]
Total (95% CI)	27		26			100.00	-0.90 [-2.35, 0.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.21 (P = 0.23)							



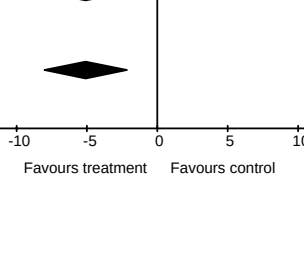
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 01 Weight change in kg at 12 weeks

Study or sub-category	N	Combined Mean (SD)	N	BT alone Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Bacon 2002	23	-3.70(4.70)	29	0.70(2.30)		100.00	-4.40 [-6.50, -2.30]
Subtotal (95% CI)	23		29			100.00	-4.40 [-6.50, -2.30]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.12 (P < 0.0001)							
Total (95% CI)	23		29			100.00	-4.40 [-6.50, -2.30]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.12 (P < 0.0001)							



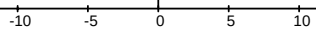
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 02 Weight change in kg at 24 weeks

Study or sub-category	N	Combined Mean (SD)	N	BT alone Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Bacon 2002	23	-4.60(6.50)	29	0.50(3.40)		100.00	-5.10 [-8.03, -2.17]
Subtotal (95% CI)	23		29			100.00	-5.10 [-8.03, -2.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.41 (P = 0.0006)							
Total (95% CI)	23		29			100.00	-5.10 [-8.03, -2.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.41 (P = 0.0006)							



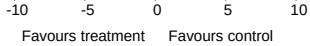
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 03 Weight change in kg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	BT alone Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Bacon 2002	23	-5.90(6.30)	29	-0.10(4.80)		100.00	-5.80 [-8.91, -2.69]
Subtotal (95% CI)	23		29			100.00	-5.80 [-8.91, -2.69]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.65 (P = 0.0003)							
Total (95% CI)	23		29			100.00	-5.80 [-8.91, -2.69]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.65 (P = 0.0003)							



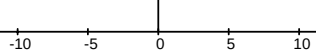
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 04 Weight change over time

Study or sub-category	N	Combined Mean (SD)	N	BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Bacon 12 weeks	23	-3.70(4.70)	29	0.70(2.30)		50.90	-4.40 [-6.50, -2.30]
Bacon 24 weeks	23	-4.60(6.50)	29	0.50(3.40)		26.02	-5.10 [-8.03, -2.17]
Bacon 12 months	23	-5.90(6.30)	29	-0.10(4.80)		23.08	-5.80 [-8.91, -2.69]



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 05 Change in LDL cholesterol in mmol/l at 12 weeks

Study or sub-category	N	Combined Mean (SD)	N	BT alone Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Bacon 2002	23	-0.29(0.74)	29	0.07(0.74)		100.00	-0.36 [-0.76, 0.04]
Total (95% CI)	23		29			100.00	-0.36 [-0.76, 0.04]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.74 (P = 0.08)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 06 Change in LDL cholesterol in mmol/l at 24 weeks

Study or sub-category	N	Combined Mean (SD)	N	BT alone Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Bacon 2002	23	-0.10(0.74)	29	0.17(0.74)		100.00	-0.27 [-0.67, 0.13]
Total (95% CI)	23		29			100.00	-0.27 [-0.67, 0.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.31 (P = 0.19)							

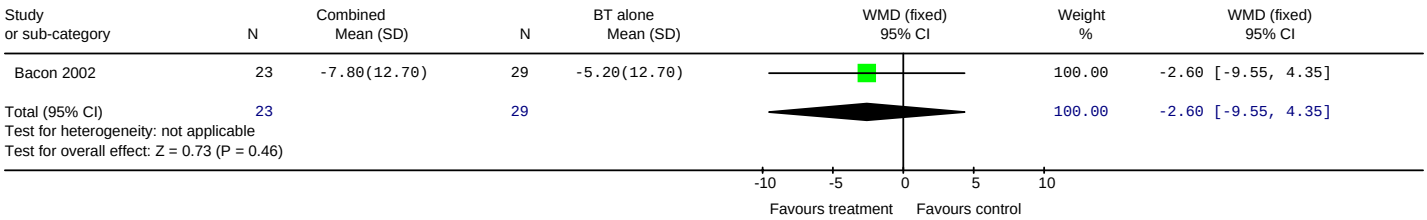
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 07 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	BT alone Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Bacon 2002	23	-0.31(0.74)	29	-0.23(0.74)		100.00	-0.08 [-0.48, 0.32]
Total (95% CI)	23		29			100.00	-0.08 [-0.48, 0.32]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.39 (P = 0.70)							

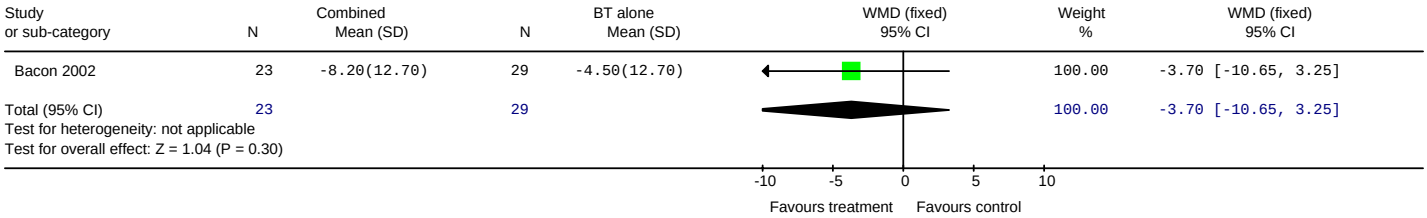
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 08 Change in SBP in mmHg at 12 weeks

Study or sub-category	N	Combined Mean (SD)	N	BT alone Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Bacon 2002	23	-1.70(12.70)	29	2.70(12.70)		100.00	-4.40 [-11.35, 2.55]
Total (95% CI)	23		29			100.00	-4.40 [-11.35, 2.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.24 (P = 0.21)							

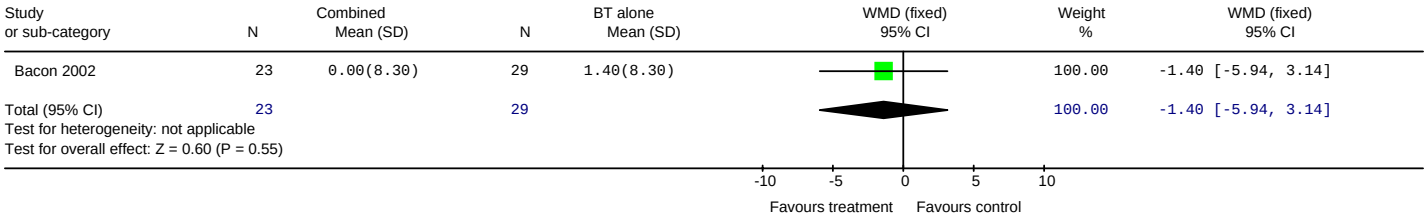
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 09 Change in SBP in mmHg at 24 weeks



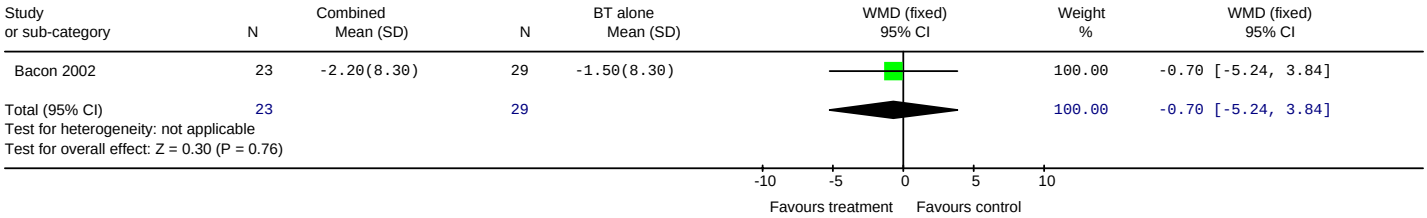
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 10 Change in SBP in mmHg at 12 months



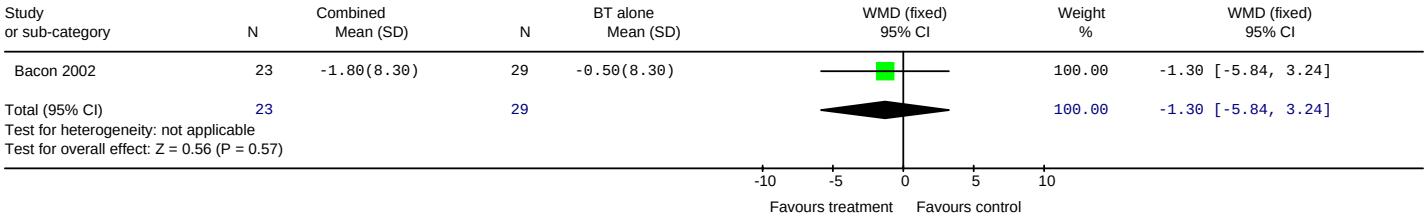
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 11 Change in DBP in mmHg at 12 weeks



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 12 Change in DBP in mmHg at 24 weeks



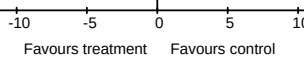
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 13 Physical activity, diet, and behaviour therapy vs behaviour therapy
Outcome: 13 Change in DBP in mmHg at 12 months



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 14 Physical activity, diet and behaviour therapy vs physical activity
Outcome: 01 Weight change in kg at 18 months

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 01 Weight change in kg at 2 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wadden 1998 aerobic	21	-10.10(3.70)	7	-11.40(3.50)		34.32	1.30 [-1.74, 4.34]
Wadden 1998 mixed	17	-10.90(3.40)	7	-11.40(3.50)		33.92	0.50 [-2.56, 3.56]
Wadden 1998 strength	18	-10.00(3.90)	7	-11.40(3.50)		31.76	1.40 [-1.76, 4.56]
Subtotal (95% CI)	56		21			100.00	1.06 [-0.72, 2.84]
Test for heterogeneity: Chi² = 0.20, df = 2 (P = 0.91), I² = 0%							
Test for overall effect: Z = 1.17 (P = 0.24)							
Total (95% CI)	56		21			100.00	1.06 [-0.72, 2.84]
Test for heterogeneity: Chi² = 0.20, df = 2 (P = 0.91), I² = 0%							
Test for overall effect: Z = 1.17 (P = 0.24)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 02 Weight change in kg at 10 weeks

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Wing 1988	13	-9.30(8.55)	15	-5.60(7.50)		100.00	-3.70 [-9.70, 2.30]
Subtotal (95% CI)	13		15			100.00	-3.70 [-9.70, 2.30]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.21 (P = 0.23)							
Total (95% CI)	13		15			100.00	-3.70 [-9.70, 2.30]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.21 (P = 0.23)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 03 Weight change in kg at 4 months

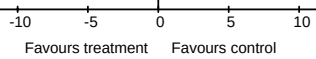
Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Sikand 1988	11	-21.80(12.08)	10	-17.50(10.87)		100.00	-4.30 [-14.12, 5.52]
Subtotal (95% CI)	11		10			100.00	-4.30 [-14.12, 5.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.86 (P = 0.39)							
Total (95% CI)	11		10			100.00	-4.30 [-14.12, 5.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.86 (P = 0.39)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 04 Weight change in kg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wadden 1998 aerobic	21	-15.80(6.80)	7	-17.70(5.70)		20.55	1.90 [-3.23, 7.03]
Wadden 1998 mixed	17	-18.60(7.30)	7	-17.70(5.70)		18.09	-0.90 [-6.37, 4.57]
Wadden 1998 strength	18	-17.80(8.80)	7	-17.70(5.70)		15.73	-0.10 [-5.96, 5.76]
Wing 1998	31	-10.30(7.70)	35	-9.10(6.40)		45.63	-1.20 [-4.64, 2.24]
Subtotal (95% CI)	87		56			100.00	-0.34 [-2.66, 1.99]
Test for heterogeneity: Chi² = 1.02, df = 3 (P = 0.80), I² = 0%							
Test for overall effect: Z = 0.28 (P = 0.78)							
Total (95% CI)	87		56			100.00	-0.34 [-2.66, 1.99]
Test for heterogeneity: Chi² = 1.02, df = 3 (P = 0.80), I² = 0%							
Test for overall effect: Z = 0.28 (P = 0.78)							

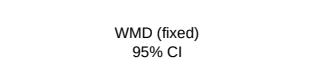
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 05 Weight change in kg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Foreyt 1993	27	-8.13(8.24)	29	-6.32(7.70)		24.72	-1.81 [-5.99, 2.37]
Wing 1988	13	-7.90(8.15)	15	-3.80(6.99)		13.47	-4.10 [-9.77, 1.57]
Subtotal (95% CI)	40		44			38.19	-2.62 [-5.98, 0.75]
Test for heterogeneity: Chi² = 0.41, df = 1 (P = 0.52), I² = 0%							
Test for overall effect: Z = 1.52 (P = 0.13)							
02 VLCD							
Wadden 1998 aerobic	21	-13.50(9.10)	7	-15.30(5.30)		14.16	1.80 [-3.73, 7.33]
Wadden 1998 mixed	17	-16.60(9.80)	7	-15.30(5.30)		11.66	-1.30 [-7.39, 4.79]
Wadden 1998 strength	18	-17.30(10.30)	7	-15.30(5.30)		11.38	-2.00 [-8.17, 4.17]
Wing 1998	30	-7.40(9.70)	33	-5.50(6.90)		24.61	-1.90 [-6.09, 2.29]
Subtotal (95% CI)	86		54			61.81	-0.96 [-3.60, 1.69]
Test for heterogeneity: Chi² = 1.27, df = 3 (P = 0.74), I² = 0%							
Test for overall effect: Z = 0.71 (P = 0.48)							
Total (95% CI)	126		98			100.00	-1.59 [-3.67, 0.49]
Test for heterogeneity: Chi² = 2.25, df = 5 (P = 0.81), I² = 0%							
Test for overall effect: Z = 1.50 (P = 0.13)							



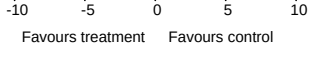
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 06 Weight change in kg at 18 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Messier 2004	76	-5.20(7.37)	82	-4.61(7.22)		100.00	-0.59 [-2.87, 1.69]
Subtotal (95% CI)	76		82			100.00	-0.59 [-2.87, 1.69]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.51 (P = 0.61)							
Total (95% CI)	76		82			100.00	-0.59 [-2.87, 1.69]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.51 (P = 0.61)							



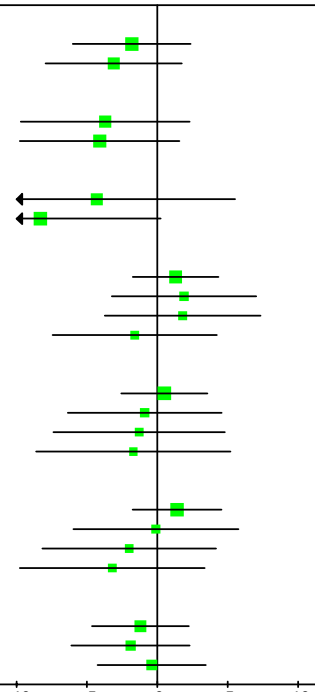
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 07 Weight change in kg at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Foreyt 1993	21	-2.20(6.70)	15	0.90(7.70)		21.64	-3.10 [-7.94, 1.74]
Subtotal (95% CI)	21		15			21.64	-3.10 [-7.94, 1.74]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.26 (P = 0.21)							
02 VLCD							
Sikand 1988	7	-9.10(9.20)	8	-0.80(7.40)		6.96	-8.30 [-16.83, 0.23]
Wadden 1998 aerobic	21	-8.50(8.20)	7	-6.90(6.30)		14.85	-1.60 [-7.44, 4.24]
Wadden 1998 mixed	17	-8.60(10.70)	7	-6.90(6.30)		10.62	-1.70 [-8.60, 5.20]
Wadden 1998 strength	18	-10.10(10.00)	7	-6.90(6.30)		11.74	-3.20 [-9.77, 3.37]
Wing 1998	32	-2.50(8.40)	35	-2.10(7.60)		34.18	-0.40 [-4.25, 3.45]
Subtotal (95% CI)	95		64			78.36	-1.92 [-4.47, 0.62]
Test for heterogeneity: Chi² = 2.91, df = 4 (P = 0.57), I² = 0%							
Test for overall effect: Z = 1.48 (P = 0.14)							
Total (95% CI)	116		79			100.00	-2.18 [-4.43, 0.07]
Test for heterogeneity: Chi² = 3.09, df = 5 (P = 0.69), I² = 0%							
Test for overall effect: Z = 1.90 (P = 0.06)							



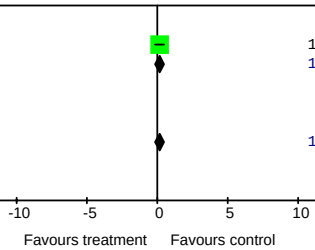
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 08 Weight change over time

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Foreyt - 600kcal deficit or low fat							
Foreyt 1993 12months	27	-8.13(8.24)	29	-6.32(7.70)		57.19	-1.81 [-5.99, 2.37]
Foreyt 1993 24months	21	-2.20(6.70)	15	0.90(7.70)		42.81	-3.10 [-7.94, 1.74]
02 Wing 1988 - 600kcal deficit or low fat							
Wing 1988 10 weeks	13	-9.30(8.55)	15	-5.60(7.50)		47.16	-3.70 [-9.70, 2.30]
Wing 1988 12 months	13	-7.90(8.15)	15	-3.80(6.99)		52.84	-4.10 [-9.77, 1.57]
03 Sikand - VLCD							
Sikand 1988 4 months	11	-21.80(12.08)	10	-17.50(10.87)		43.02	-4.30 [-14.12, 5.52]
Sikand 1988 24months	7	-9.10(9.20)	8	-0.80(7.40)		56.98	-8.30 [-16.83, 0.23]
04 Wadden aerobic - VLCD							
Wadden aer 2 months	21	-10.10(3.70)	7	-11.40(3.50)		51.99	1.30 [-1.74, 4.34]
Wadden aer 6 months	21	-15.80(6.80)	7	-17.70(5.70)		18.25	1.90 [-3.23, 7.03]
Wadden aer 12 months	21	-13.50(9.10)	7	-15.30(5.30)		15.69	1.80 [-3.73, 7.33]
Wadden aer 24 months	21	-8.50(8.20)	7	-6.90(6.30)		14.07	-1.60 [-7.44, 4.24]
05 Wadden mixed - VLCD							
Wadden mix 2 months	17	-10.90(3.40)	7	-11.40(3.50)		56.82	0.50 [-2.56, 3.56]
Wadden mix 6 months	17	-18.60(7.30)	7	-17.70(5.70)		17.76	-0.90 [-6.37, 4.57]
Wadden mix 12 months	17	-16.60(9.80)	7	-15.30(5.30)		14.29	-1.30 [-7.39, 4.79]
Wadden mix 24 months	17	-8.60(10.70)	7	-6.90(6.30)		11.13	-1.70 [-8.60, 5.20]
06 Wadden strength - VLCD							
Wadden str 2 months	18	-10.00(3.90)	7	-11.40(3.50)		56.08	1.40 [-1.76, 4.56]
Wadden str 6 months	18	-17.80(8.80)	7	-17.70(5.70)		16.27	-0.10 [-5.96, 5.76]
Wadden str 12 months	18	-17.30(10.30)	7	-15.30(5.30)		14.69	-2.00 [-8.17, 4.17]
Wadden str 24 months	18	-10.10(10.00)	7	-6.90(6.30)		12.96	-3.20 [-9.77, 3.37]
07 Wing 1998 - VLCD							
Wing 1998 6 months	31	-10.30(7.70)	35	-9.10(6.40)		40.44	-1.20 [-4.64, 2.24]
Wing 1998 12 months	30	-7.40(9.70)	33	-5.50(6.90)		27.23	-1.90 [-6.09, 2.29]
Wing 1998 24 months	32	-2.50(8.40)	35	-2.10(7.60)		32.34	-0.40 [-4.25, 3.45]



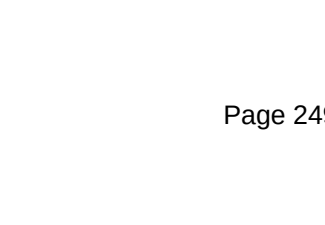
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 09 Change in total cholesterol in mmol/l at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
02 VLCD							
Wing 1998	31	-0.33(0.61)	35	-0.49(0.71)		100.00	0.16 [-0.16, 0.48]
Subtotal (95% CI)	31		35			100.00	0.16 [-0.16, 0.48]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.98 (P = 0.32)							
Total (95% CI)	31		35			100.00	0.16 [-0.16, 0.48]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.98 (P = 0.32)							



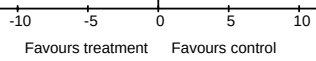
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 10 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	0.32(0.64)	33	0.26(0.76)		100.00	0.06 [-0.29, 0.41]
Subtotal (95% CI)	30		33			100.00	0.06 [-0.29, 0.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.34 (P = 0.73)							
Total (95% CI)	30		33			100.00	0.06 [-0.29, 0.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.34 (P = 0.73)							



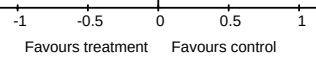
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 11 Change in total cholesterol in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.09(0.67)	35	-0.12(0.61)		100.00	0.21 [-0.10, 0.52]
Subtotal (95% CI)	32		35			100.00	0.21 [-0.10, 0.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.34 (P = 0.18)							
Total (95% CI)	32		35			100.00	0.21 [-0.10, 0.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.34 (P = 0.18)							



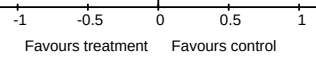
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 12 Change in LDL cholesterol in mmol/l at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-0.13(0.58)	35	-0.32(0.60)		100.00	0.19 [-0.09, 0.47]
Subtotal (95% CI)	31		35			100.00	0.19 [-0.09, 0.47]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.31 (P = 0.19)							
Total (95% CI)	31		35			100.00	0.19 [-0.09, 0.47]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.31 (P = 0.19)							



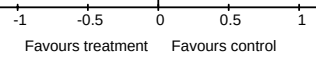
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 13 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	0.14(0.54)	33	0.12(0.73)		100.00	0.02 [-0.30, 0.34]
Subtotal (95% CI)	30		33			100.00	0.02 [-0.30, 0.34]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.12 (P = 0.90)							
Total (95% CI)	30		33			100.00	0.02 [-0.30, 0.34]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.12 (P = 0.90)							



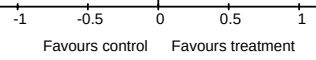
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 14 Change in LDL cholesterol on mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.12(0.52)	35	-0.16(0.63)		100.00	0.28 [0.00, 0.56]
Subtotal (95% CI)	32		35			100.00	0.28 [0.00, 0.56]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.99 (P = 0.05)							
Total (95% CI)	32		35			100.00	0.28 [0.00, 0.56]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.99 (P = 0.05)							



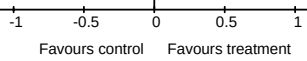
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 15 Change in HDL cholesterol in mmol/l at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-0.06(0.16)	35	-0.10(0.17)		100.00	0.04 [-0.04, 0.12]
Subtotal (95% CI)	31		35			100.00	0.04 [-0.04, 0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.98 (P = 0.32)							
Total (95% CI)	31		35			100.00	0.04 [-0.04, 0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.98 (P = 0.32)							



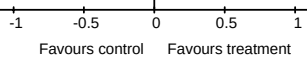
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 16 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Wing 1988	13	0.06(0.29)	15	0.10(0.29)		14.87	-0.04 [-0.26, 0.18]
Subtotal (95% CI)	13		15			14.87	-0.04 [-0.26, 0.18]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.36 (P = 0.72)							
02 VLCD							
Wing 1998	30	0.12(0.20)	33	0.10(0.16)		85.13	0.02 [-0.07, 0.11]
Subtotal (95% CI)	30		33			85.13	0.02 [-0.07, 0.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.44 (P = 0.66)							
Total (95% CI)	43		48			100.00	0.01 [-0.07, 0.09]
Test for heterogeneity: Chi² = 0.25, df = 1 (P = 0.61), I² = 0%							
Test for overall effect: Z = 0.26 (P = 0.79)							



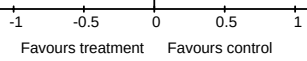
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 17 Change in HDL cholesterol in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.02(0.21)	35	0.02(0.20)		100.00	0.00 [-0.10, 0.10]
Subtotal (95% CI)	32		35			100.00	0.00 [-0.10, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
Total (95% CI)	32		35			100.00	0.00 [-0.10, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 18 Change in triglycerides in mmol/l at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-0.69(1.45)	35	-0.30(1.45)		100.00	-0.39 [-1.09, 0.31]
Subtotal (95% CI)	31		35			100.00	-0.39 [-1.09, 0.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.09 (P = 0.28)							
Total (95% CI)	31		35			100.00	-0.39 [-1.09, 0.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.09 (P = 0.28)							

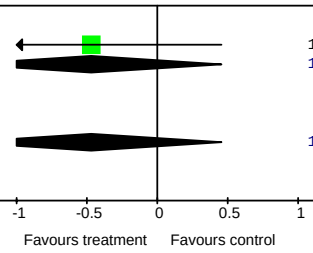


Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 19 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Wing 1988	13	-0.64(0.96)	15	0.03(0.96)		79.76	-0.67 [-1.38, 0.04]
Subtotal (95% CI)	13		15			79.76	-0.67 [-1.38, 0.04]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.84 (P = 0.07)							
02 VLCD							
Wing 1998	30	0.33(1.65)	33	0.55(3.77)		20.24	-0.22 [-1.64, 1.20]
Subtotal (95% CI)	30		33			20.24	-0.22 [-1.64, 1.20]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.30 (P = 0.76)							
Total (95% CI)	43		48			100.00	-0.58 [-1.22, 0.06]
Test for heterogeneity: Chi² = 0.31, df = 1 (P = 0.58), I² = 0%							
Test for overall effect: Z = 1.78 (P = 0.07)							

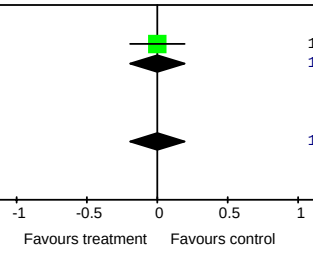
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 20 Change in triglycerides in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-0.28(1.33)	35	0.19(2.42)		100.00	-0.47 [-1.39, 0.45]
Subtotal (95% CI)	32		35			100.00	-0.47 [-1.39, 0.45]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.00 (P = 0.32)							
Total (95% CI)	32		35			100.00	-0.47 [-1.39, 0.45]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.00 (P = 0.32)							



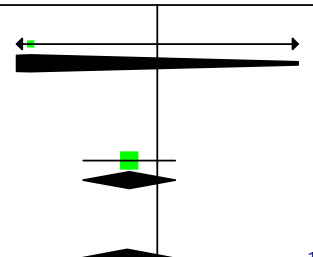
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 21 Change in fasting plasma glucose in mmol/l at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-0.20(0.40)	35	-0.20(0.40)		100.00	0.00 [-0.19, 0.19]
Subtotal (95% CI)	31		35			100.00	0.00 [-0.19, 0.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
Total (95% CI)	31		35			100.00	0.00 [-0.19, 0.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							



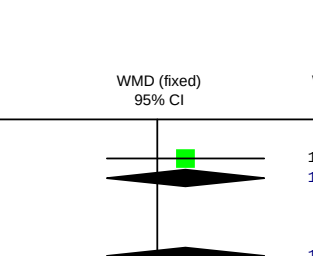
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 22 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Wood 1988	13	-1.70(3.11)	15	-0.80(3.11)		1.96	-0.90 [-3.21, 1.41]
Subtotal (95% CI)	13		15			1.96	-0.90 [-3.21, 1.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.76 (P = 0.45)							
02 VLCD							
Wing 1998	30	0.00(0.50)	33	0.20(0.80)		98.04	-0.20 [-0.53, 0.13]
Subtotal (95% CI)	30		33			98.04	-0.20 [-0.53, 0.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.20 (P = 0.23)							
Total (95% CI)	43		48			100.00	-0.21 [-0.54, 0.11]
Test for heterogeneity: Chi² = 0.35, df = 1 (P = 0.56), I² = 0%							
Test for overall effect: Z = 1.30 (P = 0.19)							



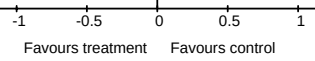
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 23 Change in fasting plasma glucose in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.50(1.30)	35	0.30(1.00)		100.00	0.20 [-0.36, 0.76]
Subtotal (95% CI)	32		35			100.00	0.20 [-0.36, 0.76]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.70 (P = 0.48)							
Total (95% CI)	32		35			100.00	0.20 [-0.36, 0.76]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.70 (P = 0.48)							



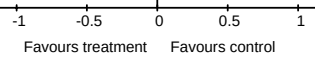
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 24 Change in %HbA1c at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	0.03(0.20)	35	0.10(0.50)		100.00	-0.07 [-0.25, 0.11]
Subtotal (95% CI)	31		35			100.00	-0.07 [-0.25, 0.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.76 (P = 0.45)							
Total (95% CI)	31		35			100.00	-0.07 [-0.25, 0.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.76 (P = 0.45)							



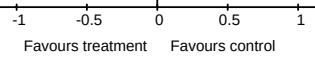
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 25 Change in %HbA1c at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600kcal/day deficit or low fat							
Wing 1988	13	-1.40(2.58)	15	-0.80(2.58)		100.00	-0.60 [-2.52, 1.32]
Subtotal (95% CI)	13		15			100.00	-0.60 [-2.52, 1.32]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.61 (P = 0.54)							
Total (95% CI)	13		15			100.00	-0.60 [-2.52, 1.32]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.61 (P = 0.54)							



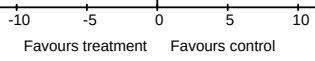
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 26 Change in %HbA1c at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.04(1.08)	35	-0.10(0.50)		100.00	0.14 [-0.27, 0.55]
Subtotal (95% CI)	32		35			100.00	0.14 [-0.27, 0.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.67 (P = 0.50)							
Total (95% CI)	32		35			100.00	0.14 [-0.27, 0.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.67 (P = 0.50)							



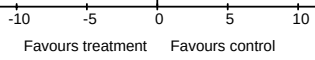
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 27 Change in DBP in mmHg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-6.90(10.40)	35	-6.20(6.90)		100.00	-0.70 [-5.02, 3.62]
Subtotal (95% CI)	31		35			100.00	-0.70 [-5.02, 3.62]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.32 (P = 0.75)							
Total (95% CI)	31		35			100.00	-0.70 [-5.02, 3.62]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.32 (P = 0.75)							



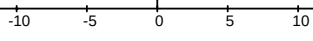
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 28 Change in DBP in mmHg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	28	-1.00(10.20)	33	3.40(8.10)		100.00	-4.40 [-9.08, 0.28]
Subtotal (95% CI)	28		33			100.00	-4.40 [-9.08, 0.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.84 (P = 0.07)							
Total (95% CI)	28		33			100.00	-4.40 [-9.08, 0.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.84 (P = 0.07)							



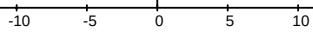
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 29 Change in DBP in mmHg at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-0.20(10.50)	35	3.00(7.80)		100.00	-3.20 [-7.66, 1.26]
Subtotal (95% CI)	32		35			100.00	-3.20 [-7.66, 1.26]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.41 (P = 0.16)							
Total (95% CI)	32		35			100.00	-3.20 [-7.66, 1.26]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.41 (P = 0.16)							



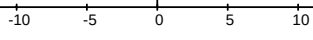
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 30 Change in SBP in mmHg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-12.30(9.50)	35	-10.20(9.20)		100.00	-2.10 [-6.62, 2.42]
Subtotal (95% CI)	31		35			100.00	-2.10 [-6.62, 2.42]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.91 (P = 0.36)							
Total (95% CI)	31		35			100.00	-2.10 [-6.62, 2.42]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.91 (P = 0.36)							



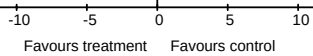
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 31 Change in SBP in mmHg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	-2.90(14.20)	33	1.30(8.30)		100.00	-4.20 [-10.02, 1.62]
Subtotal (95% CI)	30		33			100.00	-4.20 [-10.02, 1.62]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.42 (P = 0.16)							
Total (95% CI)	30		33			100.00	-4.20 [-10.02, 1.62]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.42 (P = 0.16)							



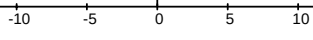
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 32 Change in SBP in mmHg at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-4.80(15.00)	35	-0.80(9.40)		100.00	-4.00 [-10.06, 2.06]
Subtotal (95% CI)	32		35			100.00	-4.00 [-10.06, 2.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.29 (P = 0.20)							
Total (95% CI)	32		35			100.00	-4.00 [-10.06, 2.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.29 (P = 0.20)							



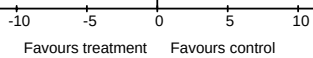
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 33 Change in fasting plasma glucose in mmol/l at 10 weeks

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Wing 1988	13	-3.20(3.11)	15	-3.40(3.11)		100.00	0.20 [-2.11, 2.51]
Subtotal (95% CI)	13		15			100.00	0.20 [-2.11, 2.51]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.17 (P = 0.87)							
Total (95% CI)	13		15			100.00	0.20 [-2.11, 2.51]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.17 (P = 0.87)							



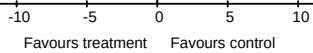
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 34 Change in %HbA1c at 10 weeks

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Wing 1988	13	-2.40(2.70)	15	-1.90(2.70)		100.00	-0.50 [-2.51, 1.51]
Subtotal (95% CI)	13		15			100.00	-0.50 [-2.51, 1.51]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.49 (P = 0.63)							
Total (95% CI)	13		15			100.00	-0.50 [-2.51, 1.51]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.49 (P = 0.63)							



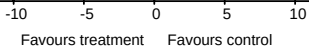
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 35 Change in DBP in mmHg at 10 weeks

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Wing 1988	13	3.00(8.30)	15	1.00(8.30)		100.00	2.00 [-4.16, 8.16]
Subtotal (95% CI)	13		15			100.00	2.00 [-4.16, 8.16]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.64 (P = 0.52)							
Total (95% CI)	13		15			100.00	2.00 [-4.16, 8.16]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.64 (P = 0.52)							



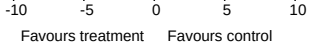
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 15 Physical activity, diet, and behaviour therapy vs diet and BT
Outcome: 36 Change in SBP in mmHg at 10 weeks

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 600 kcal/day deficit or low fat							
Wing 1988	13	-2.00(12.70)	15	-6.00(12.70)		100.00	4.00 [-5.43, 13.43]
Subtotal (95% CI)	13		15			100.00	4.00 [-5.43, 13.43]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.83 (P = 0.41)							
Total (95% CI)	13		15			100.00	4.00 [-5.43, 13.43]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.83 (P = 0.41)							



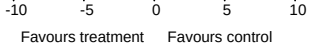
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 01 Weight change in kg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-10.30(7.70)	33	-2.10(4.20)		100.00	-8.20 [-11.27, -5.13]
Subtotal (95% CI)	31		33			100.00	-8.20 [-11.27, -5.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.24 (P < 0.00001)							
Total (95% CI)	31		33			100.00	-8.20 [-11.27, -5.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.24 (P < 0.00001)							



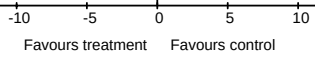
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	-7.40(9.70)	28	-0.40(4.80)		100.00	-7.00 [-10.90, -3.10]
Subtotal (95% CI)	30		28			100.00	-7.00 [-10.90, -3.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.52 (P = 0.0004)							
Total (95% CI)	30		28			100.00	-7.00 [-10.90, -3.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.52 (P = 0.0004)							



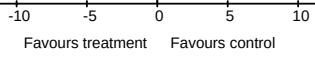
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 03 Weight change in kg at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-2.50(8.40)	31	1.00(4.70)		100.00	-3.50 [-6.85, -0.15]
Subtotal (95% CI)	32		31			100.00	-3.50 [-6.85, -0.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.05 (P = 0.04)							
Total (95% CI)	32		31			100.00	-3.50 [-6.85, -0.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.05 (P = 0.04)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 04 Weight change over time

Study or sub-category	N	Combined Mean (SD)	N	Diet and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Wing 1998 - VLCD							
Wing 1998 6 months	31	-10.30(7.70)	33	-2.10(4.20)		40.70	-8.20 [-11.27, -5.13]
Wing 1998 12 months	30	-7.40(9.70)	28	-0.40(4.80)		25.16	-7.00 [-10.90, -3.10]
Wing 1998 24 months	32	-2.50(8.40)	31	1.00(4.70)		34.14	-3.50 [-6.85, -0.15]



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 05 Change in total cholesterol in mmol/l at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-0.33(0.61)	33	0.12(0.72)		100.00	-0.45 [-0.78, -0.12]
Subtotal (95% CI)	31		33			100.00	-0.45 [-0.78, -0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.70 (P = 0.007)							
Total (95% CI)	31		33			100.00	-0.45 [-0.78, -0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.70 (P = 0.007)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 06 Change in total cholesterol in mmol/l at 12 months

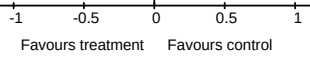
Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	0.32(0.64)	28	0.36(0.82)		100.00	-0.04 [-0.42, 0.34]
Subtotal (95% CI)	30		28			100.00	-0.04 [-0.42, 0.34]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.21 (P = 0.84)							
Total (95% CI)	30		28			100.00	-0.04 [-0.42, 0.34]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.21 (P = 0.84)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 07 Change in total cholesterol in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.09(0.67)	31	0.33(0.64)		100.00	-0.24 [-0.56, 0.08]
Subtotal (95% CI)	32		31			100.00	-0.24 [-0.56, 0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.45 (P = 0.15)							
Total (95% CI)	32		31			100.00	-0.24 [-0.56, 0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.45 (P = 0.15)							

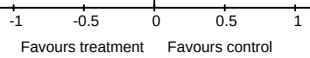
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 08 Change in LDL cholesterol in mmol/l at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-0.13(0.58)	33	0.03(0.52)		100.00	-0.16 [-0.43, 0.11]
Subtotal (95% CI)	31		33			100.00	-0.16 [-0.43, 0.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.16 (P = 0.25)							
Total (95% CI)	31		33			100.00	-0.16 [-0.43, 0.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.16 (P = 0.25)							



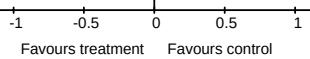
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 09 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	0.14(0.54)	28	0.15(0.54)		100.00	-0.01 [-0.29, 0.27]
Subtotal (95% CI)	30		28			100.00	-0.01 [-0.29, 0.27]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.07 (P = 0.94)							
Total (95% CI)	30		28			100.00	-0.01 [-0.29, 0.27]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.07 (P = 0.94)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 10 Change in LDL cholesterol on mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.12(0.52)	31	0.22(0.61)		100.00	-0.10 [-0.38, 0.18]
Subtotal (95% CI)	32		31			100.00	-0.10 [-0.38, 0.18]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.70 (P = 0.48)							
Total (95% CI)	32		31			100.00	-0.10 [-0.38, 0.18]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.70 (P = 0.48)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 11 Change in HDL cholesterol in mmol/l at 6 months

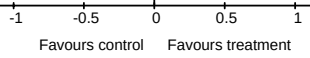
Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-0.06(0.16)	33	0.02(0.16)		100.00	-0.08 [-0.16, 0.00]
Subtotal (95% CI)	31		33			100.00	-0.08 [-0.16, 0.00]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.00 (P = 0.05)							
Total (95% CI)	31		33			100.00	-0.08 [-0.16, 0.00]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.00 (P = 0.05)							

Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 12 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	0.12(0.20)	28	0.16(0.18)		100.00	-0.04 [-0.14, 0.06]
Subtotal (95% CI)	30		28			100.00	-0.04 [-0.14, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.80 (P = 0.42)							
Total (95% CI)	30		28			100.00	-0.04 [-0.14, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.80 (P = 0.42)							

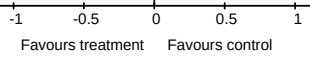
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 13 Change in HDL cholesterol in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.02(0.21)	31	0.05(0.17)		100.00	-0.03 [-0.12, 0.06]
Subtotal (95% CI)	32		31			100.00	-0.03 [-0.12, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.62 (P = 0.53)							
Total (95% CI)	32		31			100.00	-0.03 [-0.12, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.62 (P = 0.53)							



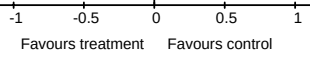
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 14 Change in triglycerides in mmol/l at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-0.69(1.45)	33	0.12(1.64)		100.00	-0.81 [-1.57, -0.05]
Subtotal (95% CI)	31		33			100.00	-0.81 [-1.57, -0.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.10 (P = 0.04)							
Total (95% CI)	31		33			100.00	-0.81 [-1.57, -0.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.10 (P = 0.04)							



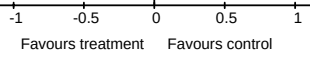
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 15 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	0.33(1.65)	28	0.26(2.19)		100.00	0.07 [-0.93, 1.07]
Subtotal (95% CI)	30		28			100.00	0.07 [-0.93, 1.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.14 (P = 0.89)							
Total (95% CI)	30		28			100.00	0.07 [-0.93, 1.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.14 (P = 0.89)							



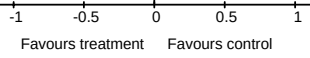
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 16 Change in triglycerides in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-0.28(1.33)	31	0.33(1.46)		100.00	-0.61 [-1.30, 0.08]
Subtotal (95% CI)	32		31			100.00	-0.61 [-1.30, 0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.73 (P = 0.08)							
Total (95% CI)	32		31			100.00	-0.61 [-1.30, 0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.73 (P = 0.08)							



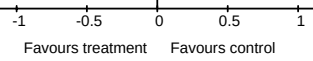
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 17 Change in fasting plasma glucose in mmol/l at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-0.20(0.40)	33	0.00(0.70)		100.00	-0.20 [-0.48, 0.08]
Subtotal (95% CI)	31		33			100.00	-0.20 [-0.48, 0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.41 (P = 0.16)							
Total (95% CI)	31		33			100.00	-0.20 [-0.48, 0.08]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.41 (P = 0.16)							



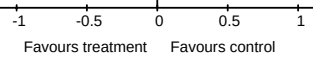
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 18 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	0.00(0.50)	28	0.10(0.70)		100.00	-0.10 [-0.42, 0.22]
Subtotal (95% CI)	30		28			100.00	-0.10 [-0.42, 0.22]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.62 (P = 0.53)							
Total (95% CI)	30		28			100.00	-0.10 [-0.42, 0.22]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.62 (P = 0.53)							



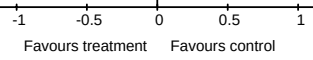
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 19 Change in fasting plasma glucose in mmol/l at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.50(1.30)	31	0.40(0.90)		100.00	0.10 [-0.45, 0.65]
Subtotal (95% CI)	32		31			100.00	0.10 [-0.45, 0.65]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.36 (P = 0.72)							
Total (95% CI)	32		31			100.00	0.10 [-0.45, 0.65]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.36 (P = 0.72)							



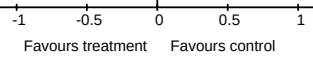
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 20 Change in %HbA1c at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	0.03(0.20)	33	0.10(0.30)		100.00	-0.07 [-0.19, 0.05]
Subtotal (95% CI)	31		33			100.00	-0.07 [-0.19, 0.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.10 (P = 0.27)							
Total (95% CI)	31		33			100.00	-0.07 [-0.19, 0.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.10 (P = 0.27)							



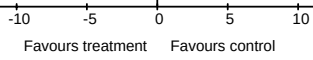
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 21 Change in %HbA1c at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	0.04(1.08)	31	-0.10(0.50)		100.00	0.14 [-0.27, 0.55]
Subtotal (95% CI)	32		31			100.00	0.14 [-0.27, 0.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.66 (P = 0.51)							
Total (95% CI)	32		31			100.00	0.14 [-0.27, 0.55]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.66 (P = 0.51)							



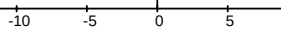
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 22 Change in DBP in mmHg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-6.90(10.40)	33	-1.70(12.20)		100.00	-5.20 [-10.74, 0.34]
Subtotal (95% CI)	31		33			100.00	-5.20 [-10.74, 0.34]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.84 (P = 0.07)							
Total (95% CI)	31		33			100.00	-5.20 [-10.74, 0.34]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.84 (P = 0.07)							



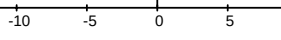
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 23 Change in DBP in mmHg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	28	-1.00(10.20)	28	0.90(9.70)		100.00	-1.90 [-7.11, 3.31]
Subtotal (95% CI)	28		28			100.00	-1.90 [-7.11, 3.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.71 (P = 0.48)							
Total (95% CI)	28		28			100.00	-1.90 [-7.11, 3.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.71 (P = 0.48)							



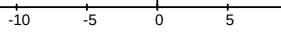
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 24 Change in DBP in mmHg at 24 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-0.20(10.50)	31	2.00(8.00)		100.00	-2.20 [-6.80, 2.40]
Subtotal (95% CI)	32		31			100.00	-2.20 [-6.80, 2.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.94 (P = 0.35)							
Total (95% CI)	32		31			100.00	-2.20 [-6.80, 2.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.94 (P = 0.35)							



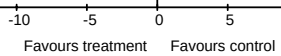
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 25 Change in SBP in mmHg at 6 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	31	-12.30(9.50)	33	-2.40(18.90)		100.00	-9.90 [-17.16, -2.64]
Subtotal (95% CI)	31		33			100.00	-9.90 [-17.16, -2.64]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.67 (P = 0.008)							
Total (95% CI)	31		33			100.00	-9.90 [-17.16, -2.64]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.67 (P = 0.008)							



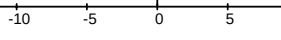
Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 26 Change in SBP in mmHg at 12 months

Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	30	-2.90(14.20)	28	1.10(15.80)		100.00	-4.00 [-11.75, 3.75]
Subtotal (95% CI)	30		28			100.00	-4.00 [-11.75, 3.75]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.01 (P = 0.31)							
Total (95% CI)	30		28			100.00	-4.00 [-11.75, 3.75]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.01 (P = 0.31)							



Review: PHYSICAL ACTIVITY Analyses for adults
Comparison: 16 Physical activity, diet, and behaviour therapy vs activity and BT
Outcome: 27 Change in SBP in mmHg at 24 months

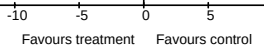
Study or sub-category	N	Combined Mean (SD)	N	Activity and BT Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 VLCD							
Wing 1998	32	-4.80(15.00)	31	0.90(13.90)		100.00	-5.70 [-12.84, 1.44]
Subtotal (95% CI)	32		31			100.00	-5.70 [-12.84, 1.44]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.57 (P = 0.12)							
Total (95% CI)	32		31			100.00	-5.70 [-12.84, 1.44]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.57 (P = 0.12)							



3.4 Orlistat

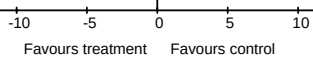
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 01 Weight change in kg at 6 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Derosa 2003	25	-5.10(7.36)	23	-4.20(7.10)		9.59	-0.90 [-4.99, 3.19]
Hauptman 2000	210	-5.46(7.46)	212	-1.97(6.47)		90.41	-3.49 [-4.82, -2.16]
Subtotal (95% CI)	235		235			100.00	-3.24 [-4.51, -1.97]
Test for heterogeneity: Chi² = 1.39, df = 1 (P = 0.24), I² = 28.1%							
Test for overall effect: Z = 5.01 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	1.72(6.40)	212	1.21(6.26)		100.00	0.51 [-0.70, 1.72]
Subtotal (95% CI)	210		212			100.00	0.51 [-0.70, 1.72]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.83 (P = 0.41)							



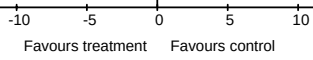
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-5.40(6.40)	265	-2.70(6.40)		6.44	-2.70 [-3.79, -1.61]
Broom 2002a	259	-5.80(8.50)	263	-2.30(6.40)		4.56	-3.50 [-4.79, -2.21]
Davidson 1999	657	-8.76(9.48)	223	-5.81(10.01)		3.38	-2.95 [-4.45, -1.45]
Derosa 2003	25	-8.60(8.35)	23	-7.60(8.07)		0.35	-1.00 [-5.65, 3.65]
Finer 2000	110	-3.29(6.85)	108	-1.31(6.29)		2.50	-1.98 [-3.73, -0.23]
Hauptman 2000	210	-5.40(7.44)	212	-1.41(6.31)		4.39	-3.99 [-5.31, -2.67]
Hollander 1998	156	-3.84(5.00)	151	-1.43(5.10)		5.97	-2.41 [-3.54, -1.28]
Kelley 2002	266	-3.89(4.40)	269	-1.27(4.59)		13.13	-2.62 [-3.38, -1.86]
Krempf 2003	346	-5.95(7.60)	350	-3.05(6.78)		6.65	-2.90 [-3.97, -1.83]
Lindgarde 2000	190	-4.20(7.03)	186	-2.90(6.74)		3.93	-1.30 [-2.69, 0.09]
Miles 2002	250	-4.70(4.74)	254	-1.80(4.78)		11.03	-2.90 [-3.73, -2.07]
Rossner 2000	241	-8.13(8.22)	236	-5.23(7.40)		3.87	-2.90 [-4.30, -1.50]
Sjostrom 1998	343	-8.10(8.21)	340	-3.90(7.02)		5.81	-4.20 [-5.35, -3.05]
Swinburn 2005	170	-4.70(7.70)	169	-0.90(4.20)		4.38	-3.80 [-5.12, -2.48]
Torgerson 2004	1650	-10.60(8.91)	1637	-6.20(7.67)		23.60	-4.40 [-4.97, -3.83]
Subtotal (95% CI)	5140		4686			100.00	-3.27 [-3.55, -3.00]
Test for heterogeneity: Chi² = 38.06, df = 14 (P = 0.0005), I² = 63.2%							
Test for overall effect: Z = 23.25 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	2.92(6.74)	212	2.49(6.62)		37.00	0.43 [-0.84, 1.70]
Hill 1999	113	2.62(6.66)	121	4.40(7.16)		19.17	-1.78 [-3.55, -0.01]
Rossner 2000	241	2.15(6.52)	236	2.17(6.53)		43.83	-0.02 [-1.19, 1.15]
Subtotal (95% CI)	564		569			100.00	-0.19 [-0.97, 0.58]
Test for heterogeneity: Chi² = 4.09, df = 2 (P = 0.13), I² = 51.1%							
Test for overall effect: Z = 0.48 (P = 0.63)							



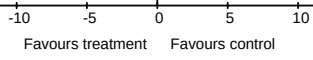
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 03 Weight change in kg at 18 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hauptman 2000	210	-3.68(6.96)	212	-0.02(5.97)		40.29	-3.66 [-4.90, -2.42]
Krempf 2003	346	-5.05(7.34)	350	-1.35(6.30)		59.71	-3.70 [-4.72, -2.68]
Subtotal (95% CI)	556		562			100.00	-3.68 [-4.47, -2.90]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.96), I² = 0%							
Test for overall effect: Z = 9.19 (P < 0.00001)							



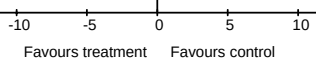
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 04 Weight change at 24 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hauptman 2000	210	-2.48(6.62)	212	1.08(6.22)		52.66	-3.56 [-4.79, -2.33]
Rossner 2000	241	-5.98(7.61)	236	-3.06(6.78)		47.34	-2.92 [-4.21, -1.63]
Subtotal (95% CI)	451		448			100.00	-3.26 [-4.15, -2.37]
Test for heterogeneity: Chi² = 0.50, df = 1 (P = 0.48), I² = 0%							
Test for overall effect: Z = 7.18 (P < 0.00001)							



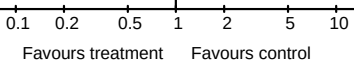
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 05 Weight change in kg at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Torgerson 2004	1650	-5.80(7.56)	1637	-3.00(6.76)		100.00	-2.80 [-3.29, -2.31]
Subtotal (95% CI)	1650		1637			100.00	-2.80 [-3.29, -2.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 11.20 (P < 0.00001)							
02 Weight maintenance							
Subtotal (95% CI)	0		0				Not estimable
Test for heterogeneity: not applicable							
Test for overall effect: not applicable							



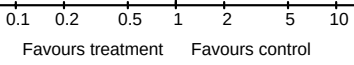
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 06 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Bakris 2002	54/100	76/100		8.53	0.71 [0.57, 0.88]
Broom 2002a	44/100	76/100		8.53	0.58 [0.45, 0.74]
Davidson 1999	34/100	56/100		6.29	0.61 [0.44, 0.84]
Finer 2000	65/100	79/100		8.87	0.82 [0.69, 0.98]
Hauptman 2000	49/100	69/100		7.74	0.71 [0.56, 0.90]
Hollander 1998	51/100	77/100		8.64	0.66 [0.53, 0.83]
Kelley 2002	67/100	87/100		9.76	0.77 [0.66, 0.90]
Krempf 2003	34/100	54/100		6.06	0.63 [0.45, 0.87]
Lindgarde 2000	46/100	59/100		6.62	0.78 [0.60, 1.02]
Miles 2002	61/100	84/100		9.43	0.73 [0.61, 0.87]
Rossner 2000	36/100	68/100		7.63	0.53 [0.39, 0.71]
Sjostrom 1998	31/100	51/100		5.72	0.61 [0.43, 0.86]
Torgerson 2004	27/100	55/100		6.17	0.49 [0.34, 0.71]
Subtotal (95% CI)	1300	1300		100.00	0.67 [0.63, 0.72]
Total events: 599 (Orlistat + diet), 891 (Placebo + diet)					
Test for heterogeneity: Chi² = 17.93, df = 12 (P = 0.12), I² = 33.1%					
Test for overall effect: Z = 11.52 (P < 0.00001)					



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 07 Failure to achieve at least 10% loss of initial body weight at 12 months

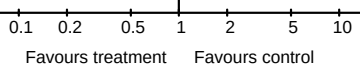
Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Broom 2002a	80/100	89/100		8.62	0.90 [0.80, 1.01]
Davidson 1999	61/100	75/100		7.27	0.81 [0.67, 0.99]
Finer 2000	84/100	94/100		9.11	0.89 [0.81, 0.99]
Hauptman 2000	71/100	89/100		8.62	0.80 [0.69, 0.92]
Hollander 1998	82/100	91/100		8.82	0.90 [0.81, 1.01]
Kelley 2002	90/100	96/100		9.30	0.94 [0.87, 1.01]
Krempf 2003	67/100	75/100		7.27	0.89 [0.75, 1.07]
Lindgarde 2000	81/100	85/100		8.24	0.95 [0.84, 1.08]
Miles 2002	86/100	96/100		9.30	0.90 [0.82, 0.98]
Rossner 2000	62/100	81/100		7.85	0.77 [0.64, 0.92]
Sjostrom 1998	61/100	82/100		7.95	0.74 [0.62, 0.89]
Torgerson 2004	59/100	79/100		7.66	0.75 [0.62, 0.91]
Subtotal (95% CI)	1200	1200		100.00	0.86 [0.82, 0.89]
Total events: 884 (Orlistat + diet), 1032 (Placebo + diet)					
Test for heterogeneity: Chi² = 18.42, df = 11 (P = 0.07), I² = 40.3%					
Test for overall effect: Z = 7.60 (P < 0.00001)					



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 08 Failure to complete at 12 months

Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Bakris 2002	42/100	61/100		13.22	0.69 [0.52, 0.91]
Broom 2002a	30/100	40/100		8.67	0.75 [0.51, 1.10]
Davidson 1999	31/100	41/100		8.88	0.76 [0.52, 1.10]
Derosa 2003	7/100	0/100		0.11	15.00 [0.87, 259.16]
Finer 2000	36/100	42/100		9.10	0.86 [0.61, 1.21]
Hauptman 2000	28/100	42/100		9.10	0.67 [0.45, 0.98]
Hollander 1998	15/100	28/100		6.07	0.54 [0.31, 0.94]
Kelley 2002	48/100	52/100		11.27	0.92 [0.70, 1.22]
Lindgarde 2000	16/100	12/100		2.60	1.33 [0.67, 2.67]
Miles 2002	35/100	44/100		9.53	0.80 [0.56, 1.13]
Rossner 2000	26/100	35/100		7.58	0.74 [0.49, 1.14]
Sjostrom 1998	18/100	24/100		5.20	0.75 [0.44, 1.29]
Swinburn 2005	22/100	19/100		4.12	1.16 [0.67, 2.00]
Torgerson 2004	10/100	21/100		4.55	0.48 [0.24, 0.96]
Subtotal (95% CI)	1400	1400		100.00	0.79 [0.71, 0.88]

Total events: 364 (Orlistat + diet), 461 (Placebo + diet)
Test for heterogeneity: Chi² = 15.31, df = 13 (P = 0.29), I² = 15.1%
Test for overall effect: Z = 4.17 (P < 0.0001)



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 09 Change in SBP in mmHg at 6 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Derosa 2003	25	-2.00(12.70)	23	-2.00(12.70)		100.00	0.00 [-7.19, 7.19]
Total (95% CI)	25		23			100.00	0.00 [-7.19, 7.19]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)

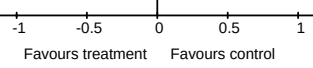
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 10 Change in DBP in mmHg at 6 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Derosa 2003	25	-1.00(8.30)	23	0.00(8.30)		100.00	-1.00 [-5.70, 3.70]
Total (95% CI)	25		23			100.00	-1.00 [-5.70, 3.70]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.42 (P = 0.68)

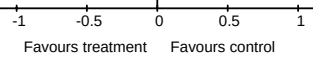
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 11 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-0.36(0.94)	265	-0.04(0.79)		8.91	-0.32 [-0.47, -0.17]
Broom 2002a	259	-0.12(1.08)	263	0.16(1.08)		5.65	-0.28 [-0.47, -0.09]
Finer 2000	110	-0.05(0.76)	108	0.30(0.68)		5.30	-0.35 [-0.54, -0.16]
Hauptman 2000	210	-0.04(1.08)	212	0.30(1.08)		4.57	-0.34 [-0.55, -0.13]
Hollander 1998	156	-0.05(0.60)	151	0.41(0.70)		9.09	-0.46 [-0.61, -0.31]
Kelley 2002	266	-0.30(1.08)	276	0.08(1.08)		5.86	-0.38 [-0.56, -0.20]
Lindgarde 2000	190	0.03(1.08)	186	0.26(1.08)		4.07	-0.23 [-0.45, -0.01]
Miles 2002	250	-0.27(1.08)	254	0.06(1.08)		5.45	-0.33 [-0.52, -0.14]
Rossner 2000	241	-0.35(1.08)	236	-0.05(1.08)		5.16	-0.30 [-0.49, -0.11]
Sjostrom 1998	343	-0.08(1.08)	340	0.23(1.08)		7.39	-0.31 [-0.47, -0.15]
Swinburn 2005	170	-0.08(0.73)	169	0.16(0.68)		8.60	-0.24 [-0.39, -0.09]
Torgerson 2004	1487	-0.51(1.08)	1295	-0.08(1.08)		29.96	-0.43 [-0.51, -0.35]
Subtotal (95% CI)	3949		3755			100.00	-0.36 [-0.40, -0.31]
Test for heterogeneity: Chi² = 10.44, df = 11 (P = 0.49), I² = 0%							
Test for overall effect: Z = 15.92 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	0.29(1.08)	212	0.14(1.08)		38.83	0.15 [-0.06, 0.36]
Hill 1999	87	0.08(1.08)	102	0.17(1.08)		17.28	-0.09 [-0.40, 0.22]
Rossner 2000	241	0.38(1.08)	236	0.36(1.08)		43.89	0.02 [-0.17, 0.21]
Subtotal (95% CI)	538		550			100.00	0.05 [-0.08, 0.18]
Test for heterogeneity: Chi² = 1.78, df = 2 (P = 0.41), I² = 0%							
Test for overall effect: Z = 0.79 (P = 0.43)							



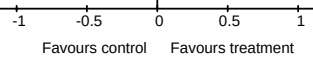
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 12 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-0.31(0.76)	265	-0.11(0.70)		6.74	-0.20 [-0.32, -0.08]
Broom 2002a	259	-0.30(0.74)	263	-0.02(0.74)		6.44	-0.28 [-0.41, -0.15]
Finer 2000	110	-0.11(0.63)	108	0.21(0.53)		4.35	-0.32 [-0.47, -0.17]
Hauptman 2000	210	-0.12(0.74)	212	0.25(0.74)		5.21	-0.37 [-0.51, -0.23]
Hollander 1998	156	-0.12(0.50)	151	0.22(0.70)		5.57	-0.34 [-0.48, -0.20]
Kelley 2002	266	-0.38(0.74)	276	-0.08(0.74)		6.68	-0.30 [-0.42, -0.18]
Lindgarde 2000	190	-0.22(0.74)	186	0.07(0.74)		4.64	-0.29 [-0.44, -0.14]
Miles 2002	250	-0.25(0.74)	254	-0.05(0.74)		6.22	-0.20 [-0.33, -0.07]
Rossner 2000	241	-0.33(0.74)	236	-0.06(0.74)		5.88	-0.27 [-0.40, -0.14]
Sjostrom 1998	343	-0.09(0.74)	340	0.13(0.74)		8.43	-0.22 [-0.33, -0.11]
Swinburn 2005	170	-0.12(0.65)	169	0.11(0.62)		5.68	-0.23 [-0.37, -0.09]
Torgerson 2004	1487	-0.42(0.74)	1295	-0.06(0.74)		34.16	-0.36 [-0.42, -0.30]
Subtotal (95% CI)	3949		3755			100.00	-0.30 [-0.33, -0.27]
Test for heterogeneity: Chi² = 14.02, df = 11 (P = 0.23), I² = 21.5%							
Test for overall effect: Z = 18.25 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	0.18(0.74)	212	0.11(0.74)		38.83	0.07 [-0.07, 0.21]
Hill 1999	87	-0.05(0.74)	102	0.12(0.74)		17.28	-0.17 [-0.38, 0.04]
Rossner 2000	241	0.37(0.74)	236	0.34(0.74)		43.89	0.03 [-0.10, 0.16]
Subtotal (95% CI)	538		550			100.00	0.01 [-0.08, 0.10]
Test for heterogeneity: Chi² = 3.56, df = 2 (P = 0.17), I² = 43.8%							
Test for overall effect: Z = 0.24 (P = 0.81)							



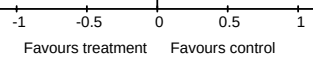
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 13 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Finer 2000	110	0.15(0.23)	108	0.16(0.21)		4.96	-0.01 [-0.07, 0.05]
Hauptman 2000	210	0.06(0.29)	212	0.11(0.29)		5.53	-0.05 [-0.11, 0.01]
Hollander 1998	156	0.06(0.20)	151	0.06(0.20)		8.46	0.00 [-0.04, 0.04]
Kelley 2002	266	0.02(0.29)	276	0.05(0.29)		7.10	-0.03 [-0.08, 0.02]
Lindgarde 2000	190	0.03(0.29)	186	0.08(0.29)		4.93	-0.05 [-0.11, 0.01]
Miles 2002	250	0.09(0.29)	254	0.10(0.29)		6.61	-0.01 [-0.06, 0.04]
Rossner 2000	241	0.08(0.29)	236	0.15(0.29)		6.25	-0.07 [-0.12, -0.02]
Sjostrom 1998	343	0.10(0.29)	340	0.10(0.29)		8.95	0.00 [-0.04, 0.04]
Swinburn 2005	170	0.04(0.18)	169	0.08(0.19)		10.91	-0.04 [-0.08, 0.00]
Torgerson 2004	1487	0.04(0.29)	1295	0.10(0.29)		36.30	-0.06 [-0.08, -0.04]
Subtotal (95% CI)	3423		3227			100.00	-0.04 [-0.05, -0.03]
Test for heterogeneity: Chi² = 13.62, df = 9 (P = 0.14), I² = 33.9%							
Test for overall effect: Z = 5.88 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	0.01(0.29)	212	-0.02(0.29)		38.72	0.03 [-0.03, 0.09]
Hill 1999	89	-0.04(0.29)	103	0.00(0.29)		17.52	-0.04 [-0.12, 0.04]
Rossner 2000	241	0.04(0.29)	236	0.01(0.29)		43.76	0.03 [-0.02, 0.08]
Subtotal (95% CI)	540		551			100.00	0.02 [-0.02, 0.05]
Test for heterogeneity: Chi² = 2.29, df = 2 (P = 0.32), I² = 12.8%							
Test for overall effect: Z = 1.01 (P = 0.31)							



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 14 Change in triglycerides in mmol/l at 12 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	0.44(0.96)	263	0.17(0.96)		7.09	0.27 [0.11, 0.43]
Hauptman 2000	210	0.06(0.96)	212	-0.10(0.96)		5.73	0.16 [-0.02, 0.34]
Hollander 1998	156	0.02(0.80)	151	0.28(1.00)		4.67	-0.26 [-0.46, -0.06]
Kelley 2002	266	0.18(0.96)	276	0.31(0.96)		7.35	-0.13 [-0.29, 0.03]
Lindgarde 2000	190	0.18(0.96)	186	0.04(0.96)		5.10	0.14 [-0.05, 0.33]
Miles 2002	250	-0.25(0.96)	254	0.03(0.96)		6.84	-0.28 [-0.45, -0.11]
Rossner 2000	241	-0.09(0.96)	236	-0.08(0.96)		6.47	-0.01 [-0.18, 0.16]
Sjostrom 1998	343	-0.07(0.96)	340	0.06(0.96)		9.27	-0.13 [-0.27, 0.01]
Swinburn 2005	170	0.01(0.73)	169	-0.06(0.57)		9.89	0.07 [-0.07, 0.21]
Torgerson 2004	1487	-0.12(0.96)	1295	-0.12(0.96)		37.58	0.00 [-0.07, 0.07]
Subtotal (95% CI)	3572		3382			100.00	-0.01 [-0.06, 0.03]
Test for heterogeneity: Chi² = 38.62, df = 9 (P < 0.0001), I² = 76.7%							
Test for overall effect: Z = 0.50 (P = 0.62)							
02 Weight maintenance							
Hauptman 2000	210	0.15(0.96)	212	0.05(0.96)		38.72	0.10 [-0.08, 0.28]
Hill 1999	89	0.02(0.96)	103	0.14(0.96)		17.52	-0.12 [-0.39, 0.15]
Rossner 2000	241	-0.01(0.96)	236	0.03(0.96)		43.76	-0.04 [-0.21, 0.13]
Subtotal (95% CI)	540		551			100.00	0.00 [-0.11, 0.11]
Test for heterogeneity: Chi² = 2.10, df = 2 (P = 0.35), I² = 4.7%							
Test for overall effect: Z = 0.00 (P = 1.00)							



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 15 Change in HbA1c% at 12 months

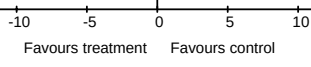
Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	0.08(0.43)	263	0.19(0.58)		33.98	-0.11 [-0.20, -0.02]
Hollander 1998	156	-0.15(1.00)	151	0.32(1.10)		4.70	-0.47 [-0.71, -0.23]
Kelley 2002	266	-0.62(0.76)	276	-0.27(0.76)		15.88	-0.35 [-0.48, -0.22]
Lindgarde 2000	190	-0.25(0.78)	186	-0.05(0.51)		14.72	-0.20 [-0.33, -0.07]
Miles 2002	250	-0.75(0.76)	254	-0.41(0.76)		14.77	-0.34 [-0.47, -0.21]
Swinburn 2005	170	-0.04(0.60)	169	0.15(0.60)		15.94	-0.19 [-0.32, -0.06]
Subtotal (95% CI)	1291		1299			100.00	-0.23 [-0.28, -0.17]
Test for heterogeneity: Chi² = 17.77, df = 5 (P = 0.003), I² = 71.9%							
Test for overall effect: Z = 8.65 (P < 0.00001)							
02 Weight maintenance							
Subtotal (95% CI)	0		0				Not estimable
Test for heterogeneity: not applicable							
Test for overall effect: not applicable							

Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 16 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	-0.19(1.26)	263	0.06(1.02)		11.11	-0.25 [-0.45, -0.05]
Hauptman 2000	210	0.03(1.35)	212	0.11(1.35)		6.49	-0.08 [-0.34, 0.18]
Hollander 1998	156	0.04(1.60)	151	0.70(1.80)		2.96	-0.66 [-1.04, -0.28]
Kelley 2002	266	-1.63(1.98)	276	-1.08(1.98)		3.87	-0.55 [-0.88, -0.22]
Lindgarde 2000	190	-0.46(1.35)	186	0.08(1.35)		5.78	-0.54 [-0.81, -0.27]
Miles 2002	250	-2.00(1.98)	254	-0.70(1.98)		3.60	-1.30 [-1.65, -0.95]
Rossner 2000	241	0.01(1.35)	236	0.10(1.35)		7.33	-0.09 [-0.33, 0.15]
Sjostrom 1998	343	-0.21(1.35)	340	-0.06(1.35)		10.50	-0.15 [-0.35, 0.05]
Swinburn 2005	170	-0.19(1.13)	169	0.29(1.42)		5.77	-0.48 [-0.75, -0.21]
Torgerson 2004	1487	0.10(1.35)	1295	0.20(1.35)		42.58	-0.10 [-0.20, 0.00]
Subtotal (95% CI)	3572		3382			100.00	-0.24 [-0.31, -0.18]
Test for heterogeneity: Chi² = 62.84, df = 9 (P < 0.00001), I² = 85.7%							
Test for overall effect: Z = 7.30 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	0.13(1.35)	212	0.13(1.35)		46.94	0.00 [-0.26, 0.26]
Rossner 2000	241	0.03(1.35)	236	-0.12(1.35)		53.06	0.15 [-0.09, 0.39]
Subtotal (95% CI)	451		448			100.00	0.08 [-0.10, 0.26]
Test for heterogeneity: Chi² = 0.69, df = 1 (P = 0.41), I² = 0%							
Test for overall effect: Z = 0.88 (P = 0.38)							

Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 17 Change in DBP in mmHg at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-11.40(8.30)	265	-9.20(8.40)		6.86	-2.20 [-3.62, -0.78]
Broom 2002a	259	-5.50(8.30)	263	-3.10(8.30)		6.81	-2.40 [-3.82, -0.98]
Davidson 1999	657	-1.00(8.30)	223	1.30(8.30)		8.69	-2.30 [-3.56, -1.04]
Derosa 2003	25	-4.00(8.30)	23	-2.00(8.30)		0.63	-2.00 [-6.70, 2.70]
Hauptman 2000	210	-1.00(8.30)	212	2.00(8.30)		5.51	-3.00 [-4.58, -1.42]
Hollander 1998	156	-1.01(8.00)	151	0.23(8.90)		3.85	-1.24 [-3.14, 0.66]
Kelley 2002	266	-2.30(8.30)	276	-1.00(8.30)		7.07	-1.30 [-2.70, 0.10]
Lindgarde 2000	190	-0.90(8.30)	186	-1.30(8.30)		4.91	0.40 [-1.28, 2.08]
Rossner 2000	241	-0.90(8.30)	236	-1.30(8.30)		6.22	0.40 [-1.09, 1.89]
Sjostrom 1998	343	-2.10(8.30)	340	0.20(8.30)		8.91	-2.30 [-3.54, -1.06]
Swinburn 2005	170	-2.96(8.01)	169	-1.37(8.59)		4.42	-1.59 [-3.36, 0.18]
Torgerson 2004	1487	-3.60(8.30)	1295	-2.60(8.30)		36.13	-1.00 [-1.62, -0.38]
Subtotal (95% CI)	4271		3639			100.00	-1.42 [-1.80, -1.05]
Test for heterogeneity: Chi² = 22.78, df = 11 (P = 0.02), I² = 51.7%							
Test for overall effect: Z = 7.51 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	2.00(8.30)	212	2.00(8.30)		46.94	0.00 [-1.58, 1.58]
Rossner 2000	241	1.30(8.30)	236	1.30(8.30)		53.06	0.00 [-1.49, 1.49]
Subtotal (95% CI)	451		448			100.00	0.00 [-1.09, 1.09]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 1.00), I² = 0%							
Test for overall effect: Z = 0.00 (P = 1.00)							

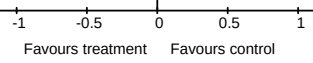


Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 18 Change in SBP in mmHg at 12 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-13.30(15.20)	265	-11.00(15.00)		4.74	-2.30 [-4.87, 0.27]
Broom 2002a	259	-6.00(12.70)	263	-2.30(12.70)		6.57	-3.70 [-5.88, -1.52]
Davidson 1999	657	-0.80(12.70)	223	1.00(12.70)		8.39	-1.80 [-3.73, 0.13]
Derosa 2003	25	-6.00(12.70)	23	-4.00(12.70)		0.60	-2.00 [-9.19, 5.19]
Hauptman 2000	210	2.00(12.70)	212	3.00(12.70)		5.32	-1.00 [-3.42, 1.42]
Hollander 1998	156	0.21(12.80)	151	4.15(14.20)		3.41	-3.94 [-6.97, -0.91]
Kelley 2002	266	-1.20(12.70)	276	-0.90(12.70)		6.82	-0.30 [-2.44, 1.84]
Lindgarde 2000	190	-0.50(12.70)	186	-0.90(12.70)		4.74	0.40 [-2.17, 2.97]
Miles 2002	250	-2.10(12.70)	254	-0.30(12.70)		6.35	-1.80 [-4.02, 0.42]
Rossner 2000	241	-2.70(12.70)	236	-1.90(12.70)		6.01	-0.80 [-3.08, 1.48]
Sjostrom 1998	343	-2.00(12.70)	340	1.00(12.70)		8.60	-3.00 [-4.90, -1.10]
Swinburn 2005	170	-4.05(13.00)	169	-0.51(14.70)		3.58	-3.54 [-6.49, -0.59]
Torgerson 2004	1487	-7.30(12.70)	1295	-5.20(12.70)		34.88	-2.10 [-3.05, -1.15]
Subtotal (95% CI)	4521		3893			100.00	-1.98 [-2.54, -1.42]
Test for heterogeneity: Chi² = 13.68, df = 12 (P = 0.32), I² = 12.3%							
Test for overall effect: Z = 6.96 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	2.00(12.70)	212	2.00(12.70)		46.94	0.00 [-2.42, 2.42]
Rossner 2000	241	2.10(12.70)	236	3.10(12.70)		53.06	-1.00 [-3.28, 1.28]
Subtotal (95% CI)	451		448			100.00	-0.53 [-2.19, 1.13]
Test for heterogeneity: Chi² = 0.35, df = 1 (P = 0.56), I² = 0%							
Test for overall effect: Z = 0.63 (P = 0.53)							

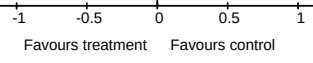
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 19 Change in total cholesterol in mmol/l at 24 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	106	0.11(1.08)	89	0.21(1.08)		17.71	-0.10 [-0.40, 0.20]
Hauptman 2000	210	0.25(1.08)	212	0.44(1.08)		38.63	-0.19 [-0.40, 0.02]
Rossner 2000	241	0.03(1.08)	236	0.31(1.08)		43.66	-0.28 [-0.47, -0.09]
Subtotal (95% CI)	557		537			100.00	-0.21 [-0.34, -0.09]
Test for heterogeneity: Chi² = 1.04, df = 2 (P = 0.60), I² = 0%							
Test for overall effect: Z = 3.26 (P = 0.001)							



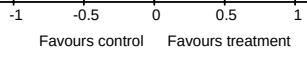
Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 20 Change in LDL cholesterol in mmol/l at 24 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	104	0.05(0.74)	88	0.04(0.74)		17.50	0.01 [-0.20, 0.22]
Hauptman 2000	210	0.06(0.74)	212	0.36(0.74)		38.73	-0.30 [-0.44, -0.16]
Rossner 2000	241	0.04(0.74)	236	0.28(0.74)		43.77	-0.24 [-0.37, -0.11]
Subtotal (95% CI)	555		536			100.00	-0.22 [-0.31, -0.13]
Test for heterogeneity: Chi² = 5.92, df = 2 (P = 0.05), I² = 66.2%							
Test for overall effect: Z = 4.90 (P < 0.00001)							



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 21 Change in HDL cholesterol in mmol/l at 24 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	106	0.11(0.29)	89	0.15(0.29)		17.71	-0.04 [-0.12, 0.04]
Hauptman 2000	210	0.07(0.29)	212	0.09(0.29)		38.63	-0.02 [-0.08, 0.04]
Rossner 2000	241	0.12(0.29)	236	0.16(0.29)		43.66	-0.04 [-0.09, 0.01]
Subtotal (95% CI)	557		537			100.00	-0.03 [-0.07, 0.00]
Test for heterogeneity: Chi² = 0.31, df = 2 (P = 0.86), I² = 0%							
Test for overall effect: Z = 1.84 (P = 0.07)							



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 22 Change in triglycerides in mmol/l at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	106	-0.07(0.96)	89	0.15(0.96)		17.71	-0.22 [-0.49, 0.05]
Hauptman 2000	210	0.21(0.96)	212	-0.05(0.96)		38.63	0.26 [0.08, 0.44]
Rossner 2000	241	-0.10(0.96)	236	-0.05(0.96)		43.66	-0.05 [-0.22, 0.12]
Subtotal (95% CI)	557		537			100.00	0.04 [-0.07, 0.15]
Test for heterogeneity: Chi² = 10.14, df = 2 (P = 0.006), I² = 80.3%							
Test for overall effect: Z = 0.68 (P = 0.50)							

-1 -0.5 0 0.5 1
Favours treatment Favours control

Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 23 Change in fasting plasma glucose in mmol/l at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	106	0.06(0.31)	89	0.26(0.38)		76.23	-0.20 [-0.30, -0.10]
Hauptman 2000	210	0.16(1.35)	212	0.24(1.35)		11.16	-0.08 [-0.34, 0.18]
Rossner 2000	241	0.04(1.35)	236	-0.02(1.35)		12.61	0.06 [-0.18, 0.30]
Subtotal (95% CI)	557		537			100.00	-0.15 [-0.24, -0.07]
Test for heterogeneity: Chi² = 4.15, df = 2 (P = 0.13), I² = 51.8%							
Test for overall effect: Z = 3.50 (P = 0.0005)							

-1 -0.5 0 0.5 1
Favours treatment Favours control

Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 24 Change in DBP mmHg at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hauptman 2000	210	1.00(8.30)	212	4.00(8.30)		46.94	-3.00 [-4.58, -1.42]
Rossner 2000	241	0.40(8.30)	236	0.00(8.30)		53.06	0.40 [-1.09, 1.89]
Subtotal (95% CI)	451		448			100.00	-1.20 [-2.28, -0.11]
Test for heterogeneity: Chi² = 9.39, df = 1 (P = 0.002), I² = 89.4%							
Test for overall effect: Z = 2.16 (P = 0.03)							

-10 -5 0 5 10
Favours treatment Favours control

Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 25 Change in SBP mmHg at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hauptman 2000	210	4.00(12.70)	212	5.00(12.70)		46.94	-1.00 [-3.42, 1.42]
Rossner 2000	241	-0.60(12.70)	236	1.20(12.70)		53.06	-1.80 [-4.08, 0.48]
Subtotal (95% CI)	451		448			100.00	-1.42 [-3.08, 0.24]
Test for heterogeneity: Chi² = 0.22, df = 1 (P = 0.64), I² = 0%							
Test for overall effect: Z = 1.68 (P = 0.09)							

-10 -5 0 5 10
Favours treatment Favours control

Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 26 Change in total cholesterol in mmol/l at 48 months

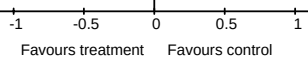
Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	-0.46(1.08)	567	-0.13(1.08)		100.00	-0.33 [-0.44, -0.22]
Total (95% CI)	851		567			100.00	-0.33 [-0.44, -0.22]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.64 (P < 0.00001)							

-1 -0.5 0 0.5 1
Favours treatment Favours control

Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 27 Change in LDL cholesterol in mmol/l at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	-0.47(0.74)	567	-0.19(0.74)		100.00	-0.28 [-0.36, -0.20]
Total (95% CI)	851		567			100.00	-0.28 [-0.36, -0.20]

Test for heterogeneity: not applicable
Test for overall effect: Z = 6.98 (P < 0.00001)



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 28 Change in HDL cholesterol in mmol/l at 48 months

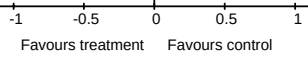
Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	0.08(0.29)	567	0.11(0.29)		100.00	-0.03 [-0.06, 0.00]
Total (95% CI)	851		567			100.00	-0.03 [-0.06, 0.00]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.91 (P = 0.06)

Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 29 Change in triglycerides in mmol/l at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	0.05(0.96)	567	0.06(0.96)		100.00	-0.01 [-0.11, 0.09]
Total (95% CI)	851		567			100.00	-0.01 [-0.11, 0.09]

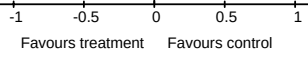
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.19 (P = 0.85)



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 30 Change in fasting plasma glucose in mmol/l at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	0.10(1.98)	567	0.20(1.98)		100.00	-0.10 [-0.31, 0.11]
Total (95% CI)	851		567			100.00	-0.10 [-0.31, 0.11]

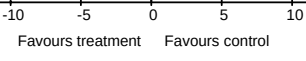
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.93 (P = 0.35)



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 31 Change in DBP in mmHg at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	-2.60(8.30)	567	-1.90(8.30)		100.00	-0.70 [-1.58, 0.18]
Total (95% CI)	851		567			100.00	-0.70 [-1.58, 0.18]

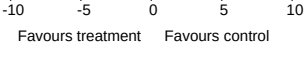
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.56 (P = 0.12)



Review: Orlistat UPDATE adults only
Comparison: 01 Orlistat 360mg/day + diet vs placebo + diet (all studies)
Outcome: 32 Change in SBP in mmHg at 48 months

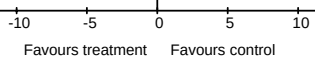
Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	-4.90(12.70)	567	-3.40(12.70)		100.00	-1.50 [-2.85, -0.15]
Total (95% CI)	851		567			100.00	-1.50 [-2.85, -0.15]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.18 (P = 0.03)



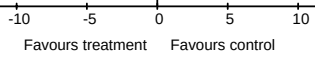
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 01 Weight change in kg at 6 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Derosa 2003	25	-5.10(7.36)	23	-4.20(7.10)		9.59	-0.90 [-4.99, 3.19]
Hauptman 2000	210	-5.46(7.46)	212	-1.97(6.47)		90.41	-3.49 [-4.82, -2.16]
Subtotal (95% CI)	235		235			100.00	-3.24 [-4.51, -1.97]
Test for heterogeneity: Chi² = 1.39, df = 1 (P = 0.24), I² = 28.1%							
Test for overall effect: Z = 5.01 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	1.72(6.40)	212	1.21(6.26)		100.00	0.51 [-0.70, 1.72]
Subtotal (95% CI)	210		212			100.00	0.51 [-0.70, 1.72]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.83 (P = 0.41)							



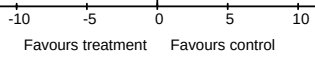
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	-5.80(8.50)	263	-2.30(6.40)		7.19	-3.50 [-4.79, -2.21]
Davidson 1999	657	-8.76(9.48)	223	-5.81(10.01)		5.33	-2.95 [-4.45, -1.45]
Derosa 2003	25	-8.60(8.35)	23	-7.60(8.07)		0.56	-1.00 [-5.65, 3.65]
Finer 2000	110	-3.29(6.85)	108	-1.31(6.29)		3.94	-1.98 [-3.73, -0.23]
Hauptman 2000	210	-5.40(7.44)	212	-1.41(6.31)		6.93	-3.99 [-5.31, -2.67]
Krempf 2003	346	-5.95(7.60)	350	-3.05(6.78)		10.48	-2.90 [-3.97, -1.83]
Lindgarde 2000	190	-4.20(7.03)	186	-2.90(6.74)		6.20	-1.30 [-2.69, 0.09]
Rossner 2000	241	-8.13(8.22)	236	-5.23(7.40)		6.10	-2.90 [-4.30, -1.50]
Sjostrom 1998	343	-8.10(8.21)	340	-3.90(7.02)		9.16	-4.20 [-5.35, -3.05]
Swinburn 2005	170	-4.70(7.70)	169	-0.90(4.20)		6.90	-3.80 [-5.12, -2.48]
Torgerson 2004	1650	-10.60(8.91)	1637	-6.20(7.67)		37.20	-4.40 [-4.97, -3.83]
Subtotal (95% CI)	4201		3747			100.00	-3.61 [-3.96, -3.27]
Test for heterogeneity: Chi² = 27.43, df = 10 (P = 0.002), I² = 63.5%							
Test for overall effect: Z = 20.44 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	2.92(6.74)	212	2.49(6.62)		37.00	0.43 [-0.84, 1.70]
Hill 1999	113	2.62(6.66)	121	4.40(7.16)		19.17	-1.78 [-3.55, -0.01]
Rossner 2000	241	2.15(6.52)	236	2.17(6.53)		43.83	-0.02 [-1.19, 1.15]
Subtotal (95% CI)	564		569			100.00	-0.19 [-0.97, 0.58]
Test for heterogeneity: Chi² = 4.09, df = 2 (P = 0.13), I² = 51.1%							
Test for overall effect: Z = 0.48 (P = 0.63)							



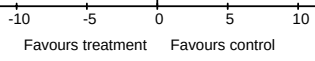
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 03 Weight change in kg at 18 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hauptman 2000	210	-3.68(6.96)	212	-0.02(5.97)		40.29	-3.66 [-4.90, -2.42]
Krempf 2003	346	-5.05(7.34)	350	-1.35(6.30)		59.71	-3.70 [-4.72, -2.68]
Subtotal (95% CI)	556		562			100.00	-3.68 [-4.47, -2.90]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.96), I² = 0%							
Test for overall effect: Z = 9.19 (P < 0.00001)							



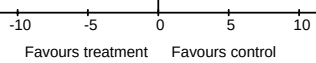
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 04 Weight change at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hauptman 2000	210	-2.48(6.62)	212	1.08(6.22)		52.66	-3.56 [-4.79, -2.33]
Rossner 2000	241	-5.98(7.61)	236	-3.06(6.78)		47.34	-2.92 [-4.21, -1.63]
Subtotal (95% CI)	451		448			100.00	-3.26 [-4.15, -2.37]
Test for heterogeneity: Chi² = 0.50, df = 1 (P = 0.48), I² = 0%							
Test for overall effect: Z = 7.18 (P < 0.00001)							



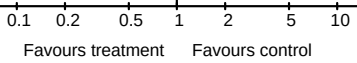
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 05 Weight change in kg at 48 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Torgerson 2004	1650	-5.80(7.56)	1637	-3.00(6.76)		100.00	-2.80 [-3.29, -2.31]
Subtotal (95% CI)	1650		1637			100.00	-2.80 [-3.29, -2.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 11.20 (P < 0.00001)							
02 Weight maintenance							
Subtotal (95% CI)	0		0				Not estimable
Test for heterogeneity: not applicable							
Test for overall effect: not applicable							



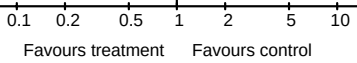
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 06 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Broom 2002a	44/100	76/100		13.40	0.58 [0.45, 0.74]
Davidson 1999	34/100	56/100		9.88	0.61 [0.44, 0.84]
Finer 2000	65/100	79/100		13.93	0.82 [0.69, 0.98]
Hauptman 2000	49/100	69/100		12.17	0.71 [0.56, 0.90]
Krempf 2003	34/100	54/100		9.52	0.63 [0.45, 0.87]
Lindgarde 2000	46/100	59/100		10.41	0.78 [0.60, 1.02]
Rossner 2000	36/100	68/100		11.99	0.53 [0.39, 0.71]
Sjostrom 1998	31/100	51/100		8.99	0.61 [0.43, 0.86]
Torgerson 2004	27/100	55/100		9.70	0.49 [0.34, 0.71]
Subtotal (95% CI)	900	900		100.00	0.65 [0.59, 0.71]
Total events: 366 (Orlistat + diet), 567 (Placebo + diet)					
Test for heterogeneity: Chi² = 14.74, df = 8 (P = 0.06), I² = 45.7%					
Test for overall effect: Z = 9.33 (P < 0.00001)					



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 07 Failure to achieve at least 10% loss of initial body weight at 12 months

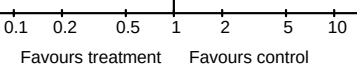
Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Broom 2002a	80/100	89/100		11.88	0.90 [0.80, 1.01]
Davidson 1999	61/100	75/100		10.01	0.81 [0.67, 0.99]
Finer 2000	84/100	94/100		12.55	0.89 [0.81, 0.99]
Hauptman 2000	71/100	89/100		11.88	0.80 [0.69, 0.92]
Krempf 2003	67/100	75/100		10.01	0.89 [0.75, 1.07]
Lindgarde 2000	81/100	85/100		11.35	0.95 [0.84, 1.08]
Rossner 2000	62/100	81/100		10.81	0.77 [0.64, 0.92]
Sjostrom 1998	61/100	82/100		10.95	0.74 [0.62, 0.89]
Torgerson 2004	59/100	79/100		10.55	0.75 [0.62, 0.91]
Subtotal (95% CI)	900	900		100.00	0.84 [0.79, 0.88]
Total events: 626 (Orlistat + diet), 749 (Placebo + diet)					
Test for heterogeneity: Chi² = 12.20, df = 8 (P = 0.14), I² = 34.4%					
Test for overall effect: Z = 6.81 (P < 0.00001)					



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 08 Failure to complete at 12 months

Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Broom 2002a	30/100	40/100		14.47	0.75 [0.51, 1.10]
Davidson 1999	31/100	41/100		14.83	0.76 [0.52, 1.10]
Derosa 2003	7/100	0/100		0.18	15.00 [0.87, 259.16]
Finer 2000	36/100	42/100		15.19	0.86 [0.61, 1.21]
Hauptman 2000	28/100	42/100		15.19	0.67 [0.45, 0.98]
Lindgarde 2000	16/100	12/100		4.34	1.33 [0.67, 2.67]
Rossner 2000	26/100	35/100		12.66	0.74 [0.49, 1.14]
Sjostrom 1998	18/100	24/100		8.68	0.75 [0.44, 1.29]
Swinburn 2005	22/100	19/100		6.87	1.16 [0.67, 2.00]
Torgerson 2004	10/100	21/100		7.59	0.48 [0.24, 0.96]
Subtotal (95% CI)	1000	1000		100.00	0.81 [0.70, 0.94]

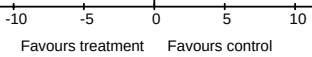
Total events: 224 (Orlistat + diet), 276 (Placebo + diet)
Test for heterogeneity: Chi² = 11.45, df = 9 (P = 0.25), I² = 21.4%
Test for overall effect: Z = 2.76 (P = 0.006)



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 09 Change in SBP mmHg at 6 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Derosa 2003	25	-2.00(12.70)	23	-2.00(12.70)		100.00	0.00 [-7.19, 7.19]
Total (95% CI)	25		23			100.00	0.00 [-7.19, 7.19]

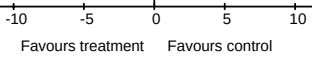
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 10 Change in DBP mmHg at 6 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Derosa 2003	25	-1.00(8.30)	23	0.00(8.30)		100.00	-1.00 [-5.70, 3.70]
Total (95% CI)	25		23			100.00	-1.00 [-5.70, 3.70]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.42 (P = 0.68)



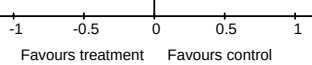
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 11 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	-0.12(1.08)	263	0.16(1.08)		7.99	-0.28 [-0.47, -0.09]
Finer 2000	110	-0.05(0.76)	108	0.30(0.68)		7.49	-0.35 [-0.54, -0.16]
Hauptman 2000	210	-0.04(1.08)	212	0.30(1.08)		6.46	-0.34 [-0.55, -0.13]
Lindgarde 2000	190	0.03(1.08)	186	0.26(1.08)		5.75	-0.23 [-0.45, -0.01]
Rossner 2000	241	-0.35(1.08)	236	-0.05(1.08)		7.30	-0.30 [-0.49, -0.11]
Sjostrom 1998	343	-0.08(1.08)	340	0.23(1.08)		10.45	-0.31 [-0.47, -0.15]
Swinburn 2005	170	-0.08(0.73)	169	0.16(0.68)		12.17	-0.24 [-0.39, -0.09]
Torgerson 2004	1487	-0.51(1.08)	1295	-0.08(1.08)		42.38	-0.43 [-0.51, -0.35]
Subtotal (95% CI)	3010		2809			100.00	-0.35 [-0.40, -0.30]

Test for heterogeneity: Chi² = 8.07, df = 7 (P = 0.33), I² = 13.2%
Test for overall effect: Z = 13.08 (P < 0.00001)

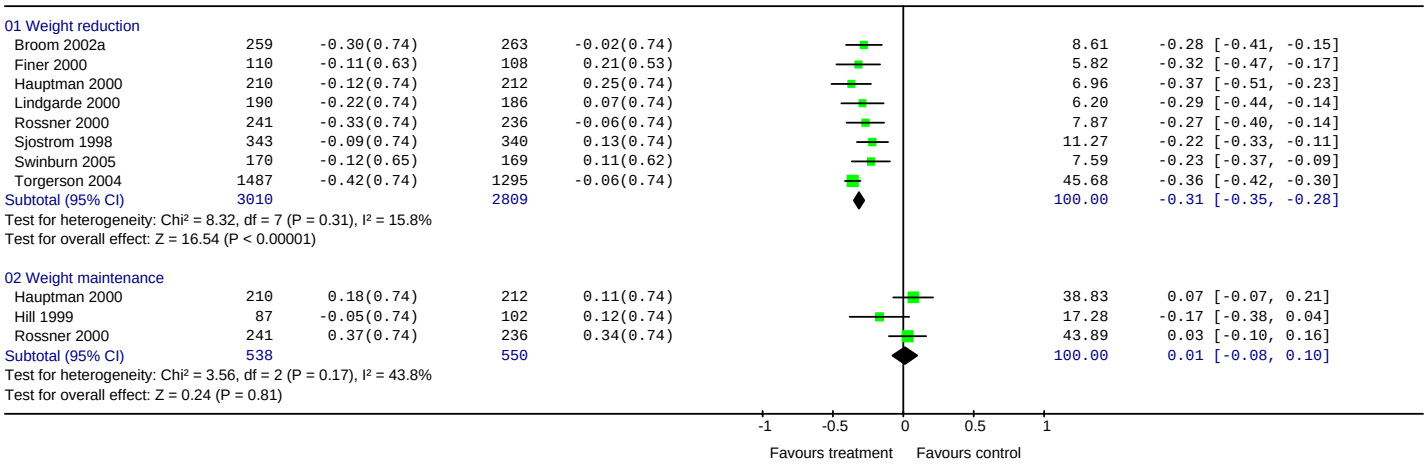
02 Weight maintenance							
Hauptman 2000	210	0.29(1.08)	212	0.14(1.08)		38.83	0.15 [-0.06, 0.36]
Hill 1999	87	0.08(1.08)	102	0.17(1.08)		17.28	-0.09 [-0.40, 0.22]
Rossner 2000	241	0.38(1.08)	236	0.36(1.08)		43.89	0.02 [-0.17, 0.21]
Subtotal (95% CI)	538		550			100.00	0.05 [-0.08, 0.18]

Test for heterogeneity: Chi² = 1.78, df = 2 (P = 0.41), I² = 0%
Test for overall effect: Z = 0.79 (P = 0.43)



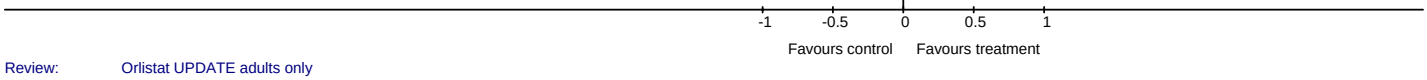
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 12 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	-0.30(0.74)	263	-0.02(0.74)		8.61	-0.28 [-0.41, -0.15]
Finer 2000	110	-0.11(0.63)	108	0.21(0.53)		5.82	-0.32 [-0.47, -0.17]
Hauptman 2000	210	-0.12(0.74)	212	0.25(0.74)		6.96	-0.37 [-0.51, -0.23]
Lindgarde 2000	190	-0.22(0.74)	186	0.07(0.74)		6.20	-0.29 [-0.44, -0.14]
Rossner 2000	241	-0.33(0.74)	236	-0.06(0.74)		7.87	-0.27 [-0.40, -0.14]
Sjostrom 1998	343	-0.09(0.74)	340	0.13(0.74)		11.27	-0.22 [-0.33, -0.11]
Swinburn 2005	170	-0.12(0.65)	169	0.11(0.62)		7.59	-0.23 [-0.37, -0.09]
Torgerson 2004	1487	-0.42(0.74)	1295	-0.06(0.74)		45.68	-0.36 [-0.42, -0.30]
Subtotal (95% CI)	3010		2809			100.00	-0.31 [-0.35, -0.28]
Test for heterogeneity: Chi² = 8.32, df = 7 (P = 0.31), I² = 15.8%							
Test for overall effect: Z = 16.54 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	0.18(0.74)	212	0.11(0.74)		38.83	0.07 [-0.07, 0.21]
Hill 1999	87	-0.05(0.74)	102	0.12(0.74)		17.28	-0.17 [-0.38, 0.04]
Rossner 2000	241	0.37(0.74)	236	0.34(0.74)		43.89	0.03 [-0.10, 0.16]
Subtotal (95% CI)	538		550			100.00	0.01 [-0.08, 0.10]
Test for heterogeneity: Chi² = 3.56, df = 2 (P = 0.17), I² = 43.8%							
Test for overall effect: Z = 0.24 (P = 0.81)							



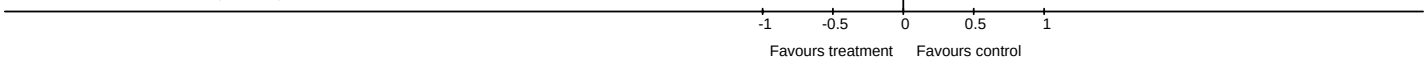
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 13 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Finer 2000	110	0.15(0.23)	108	0.16(0.21)		6.37	-0.01 [-0.07, 0.05]
Hauptman 2000	210	0.06(0.29)	212	0.11(0.29)		7.11	-0.05 [-0.11, 0.01]
Lindgarde 2000	190	0.03(0.29)	186	0.08(0.29)		6.33	-0.05 [-0.11, 0.01]
Rossner 2000	241	0.08(0.29)	236	0.15(0.29)		8.03	-0.07 [-0.12, -0.02]
Sjostrom 1998	343	0.10(0.29)	340	0.10(0.29)		11.50	0.00 [-0.04, 0.04]
Swinburn 2005	170	0.04(0.18)	169	0.08(0.19)		14.02	-0.04 [-0.08, 0.00]
Torgerson 2004	1487	0.04(0.29)	1295	0.10(0.29)		46.63	-0.06 [-0.08, -0.04]
Subtotal (95% CI)	2751		2546			100.00	-0.05 [-0.06, -0.03]
Test for heterogeneity: Chi² = 8.30, df = 6 (P = 0.22), I² = 27.8%							
Test for overall effect: Z = 6.19 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	0.01(0.29)	212	-0.02(0.29)		38.72	0.03 [-0.03, 0.09]
Hill 1999	89	-0.04(0.29)	103	0.00(0.29)		17.52	-0.04 [-0.12, 0.04]
Rossner 2000	241	0.04(0.29)	236	0.01(0.29)		43.76	0.03 [-0.02, 0.08]
Subtotal (95% CI)	540		551			100.00	0.02 [-0.02, 0.05]
Test for heterogeneity: Chi² = 2.29, df = 2 (P = 0.32), I² = 12.8%							
Test for overall effect: Z = 1.01 (P = 0.31)							



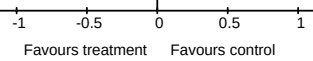
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 14 Change in triglycerides in mmol/l at 12 months

Study or sub-category	Orlistat + diet N	Orlistat + diet Mean (SD)	Placebo + diet N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	0.44(0.96)	263	0.17(0.96)		8.73	0.27 [0.11, 0.43]
Hauptman 2000	210	0.06(0.96)	212	-0.10(0.96)		7.06	0.16 [-0.02, 0.34]
Lindgarde 2000	190	0.18(0.96)	186	0.04(0.96)		6.29	0.14 [-0.05, 0.33]
Rossner 2000	241	-0.09(0.96)	236	-0.08(0.96)		7.98	-0.01 [-0.18, 0.16]
Sjostrom 1998	343	-0.07(0.96)	340	0.06(0.96)		11.43	-0.13 [-0.27, 0.01]
Swinburn 2005	170	0.01(0.73)	169	-0.06(0.57)		12.19	0.07 [-0.07, 0.21]
Torgerson 2004	1487	-0.12(0.96)	1295	-0.12(0.96)		46.32	0.00 [-0.07, 0.07]
Subtotal (95% CI)	2900		2701			100.00	0.04 [-0.01, 0.09]
Test for heterogeneity: Chi² = 17.20, df = 6 (P = 0.009), I² = 65.1%							
Test for overall effect: Z = 1.47 (P = 0.14)							
02 Weight maintenance							
Hauptman 2000	210	0.15(0.96)	212	0.05(0.96)		38.72	0.10 [-0.08, 0.28]
Hill 1999	89	0.02(0.96)	103	0.14(0.96)		17.52	-0.12 [-0.39, 0.15]
Rossner 2000	241	-0.01(0.96)	236	0.03(0.96)		43.76	-0.04 [-0.21, 0.13]
Subtotal (95% CI)	540		551			100.00	0.00 [-0.11, 0.11]
Test for heterogeneity: Chi² = 2.10, df = 2 (P = 0.35), I² = 4.7%							
Test for overall effect: Z = 0.00 (P = 1.00)							



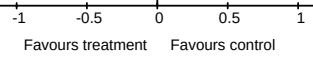
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 15 Change in HbA1c% at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	0.08(0.43)	263	0.19(0.58)		52.57	-0.11 [-0.20, -0.02]
Lindgarde 2000	190	-0.25(0.78)	186	-0.05(0.51)		22.77	-0.20 [-0.33, -0.07]
Swinburn 2005	170	-0.04(0.60)	169	0.15(0.60)		24.66	-0.19 [-0.32, -0.06]
Subtotal (95% CI)	619		618			100.00	-0.15 [-0.21, -0.09]
Test for heterogeneity: Chi² = 1.72, df = 2 (P = 0.42), I² = 0%							
Test for overall effect: Z = 4.64 (P < 0.00001)							
02 Weight maintenance							
Subtotal (95% CI)	0		0				Not estimable
Test for heterogeneity: not applicable							
Test for overall effect: not applicable							



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 16 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	-0.19(1.26)	263	0.06(1.02)		12.41	-0.25 [-0.45, -0.05]
Hauptman 2000	210	0.03(1.35)	212	0.11(1.35)		7.25	-0.08 [-0.34, 0.18]
Lindgarde 2000	190	-0.46(1.35)	186	0.08(1.35)		6.45	-0.54 [-0.81, -0.27]
Rossner 2000	241	0.01(1.35)	236	0.10(1.35)		8.19	-0.09 [-0.33, 0.15]
Sjostrom 1998	343	-0.21(1.35)	340	-0.06(1.35)		11.73	-0.15 [-0.35, 0.05]
Swinburn 2005	170	-0.19(1.13)	169	0.29(1.42)		6.44	-0.48 [-0.75, -0.21]
Torgerson 2004	1487	0.10(1.35)	1295	0.20(1.35)		47.54	-0.10 [-0.20, 0.00]
Subtotal (95% CI)	2900		2701			100.00	-0.18 [-0.24, -0.11]
Test for heterogeneity: Chi² = 15.40, df = 6 (P = 0.02), I² = 61.0%							
Test for overall effect: Z = 4.95 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	0.13(1.35)	212	0.13(1.35)		46.94	0.00 [-0.26, 0.26]
Rossner 2000	241	0.03(1.35)	236	-0.12(1.35)		53.06	0.15 [-0.09, 0.39]
Subtotal (95% CI)	451		448			100.00	0.08 [-0.10, 0.26]
Test for heterogeneity: Chi² = 0.69, df = 1 (P = 0.41), I² = 0%							
Test for overall effect: Z = 0.88 (P = 0.38)							

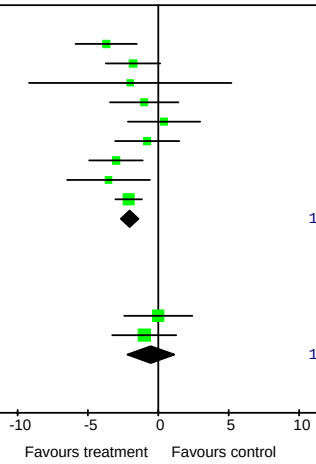


Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 17 Change in DBP in mmHg at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	-5.50(8.30)	263	-3.10(8.30)		8.28	-2.40 [-3.82, -0.98]
Davidson 1999	657	-1.00(8.30)	223	1.30(8.30)		10.57	-2.30 [-3.56, -1.04]
Derosa 2003	25	-4.00(8.30)	23	-2.00(8.30)		0.76	-2.00 [-6.70, 2.70]
Hauptman 2000	210	-1.00(8.30)	212	2.00(8.30)		6.70	-3.00 [-4.58, -1.42]
Lindgarde 2000	190	-0.90(8.30)	186	-1.30(8.30)		5.97	0.40 [-1.28, 2.08]
Rossner 2000	241	-0.90(8.30)	236	-1.30(8.30)		7.57	0.40 [-1.09, 1.89]
Sjostrom 1998	343	-2.10(8.30)	340	0.20(8.30)		10.84	-2.30 [-3.54, -1.06]
Swinburn 2005	170	-2.96(8.01)	169	-1.37(8.59)		5.37	-1.59 [-3.36, 0.18]
Torgerson 2004	1487	-3.60(8.30)	1295	-2.60(8.30)		43.94	-1.00 [-1.62, -0.38]
Subtotal (95% CI)	3582		2947			100.00	-1.38 [-1.79, -0.97]
Test for heterogeneity: Chi² = 21.51, df = 8 (P = 0.006), I² = 62.8%							
Test for overall effect: Z = 6.59 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	2.00(8.30)	212	2.00(8.30)		46.94	0.00 [-1.58, 1.58]
Rossner 2000	241	1.30(8.30)	236	1.30(8.30)		53.06	0.00 [-1.49, 1.49]
Subtotal (95% CI)	451		448			100.00	0.00 [-1.09, 1.09]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 1.00), I² = 0%							
Test for overall effect: Z = 0.00 (P = 1.00)							

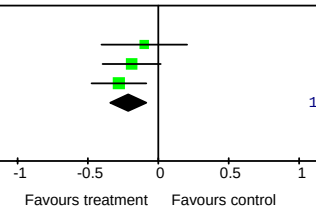
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 18 Change in SBP in mmHg at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002a	259	-6.00(12.70)	263	-2.30(12.70)		8.36	-3.70 [-5.88, -1.52]
Davidson 1999	657	-0.80(12.70)	223	1.00(12.70)		10.66	-1.80 [-3.73, 0.13]
Derosa 2003	25	-6.00(12.70)	23	-4.00(12.70)		0.77	-2.00 [-9.19, 5.19]
Hauptman 2000	210	2.00(12.70)	212	3.00(12.70)		6.76	-1.00 [-3.42, 1.42]
Lindgarde 2000	190	-0.50(12.70)	186	-0.90(12.70)		6.02	0.40 [-2.17, 2.97]
Rossner 2000	241	-2.70(12.70)	236	-1.90(12.70)		7.64	-0.80 [-3.08, 1.48]
Sjostrom 1998	343	-2.00(12.70)	340	1.00(12.70)		10.93	-3.00 [-4.90, -1.10]
Swinburn 2005	170	-4.05(13.00)	169	-0.51(14.70)		4.54	-3.54 [-6.49, -0.59]
Torgerson 2004	1487	-7.30(12.70)	1295	-5.20(12.70)		44.33	-2.10 [-3.05, -1.15]
Subtotal (95% CI)	3582		2947			100.00	-2.04 [-2.67, -1.41]
Test for heterogeneity: Chi² = 9.58, df = 8 (P = 0.30), I² = 16.5%							
Test for overall effect: Z = 6.35 (P < 0.00001)							
02 Weight maintenance							
Hauptman 2000	210	2.00(12.70)	212	2.00(12.70)		46.94	0.00 [-2.42, 2.42]
Rossner 2000	241	2.10(12.70)	236	3.10(12.70)		53.06	-1.00 [-3.28, 1.28]
Subtotal (95% CI)	451		448			100.00	-0.53 [-2.19, 1.13]
Test for heterogeneity: Chi² = 0.35, df = 1 (P = 0.56), I² = 0%							
Test for overall effect: Z = 0.63 (P = 0.53)							



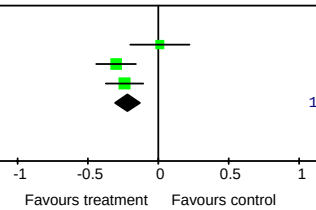
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 19 Change in total cholesterol in mmol/l at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	106	0.11(1.08)	89	0.21(1.08)		17.71	-0.10 [-0.40, 0.20]
Hauptman 2000	210	0.25(1.08)	212	0.44(1.08)		38.63	-0.19 [-0.40, 0.02]
Rossner 2000	241	0.03(1.08)	236	0.31(1.08)		43.66	-0.28 [-0.47, -0.09]
Subtotal (95% CI)	557		537			100.00	-0.21 [-0.34, -0.09]
Test for heterogeneity: Chi² = 1.04, df = 2 (P = 0.60), I² = 0%							
Test for overall effect: Z = 3.26 (P = 0.001)							



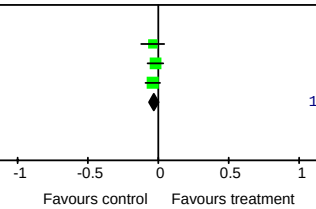
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 20 Change in LDL cholesterol in mmol/l at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	104	0.05(0.74)	88	0.04(0.74)		17.50	0.01 [-0.20, 0.22]
Hauptman 2000	210	0.06(0.74)	212	0.36(0.74)		38.73	-0.30 [-0.44, -0.16]
Rossner 2000	241	0.04(0.74)	236	0.28(0.74)		43.77	-0.24 [-0.37, -0.11]
Subtotal (95% CI)	555		536			100.00	-0.22 [-0.31, -0.13]
Test for heterogeneity: Chi² = 5.92, df = 2 (P = 0.05), I² = 66.2%							
Test for overall effect: Z = 4.90 (P < 0.00001)							



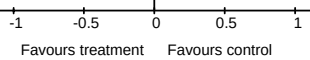
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 21 Change in HDL cholesterol in mmol/l at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	106	0.11(0.29)	89	0.15(0.29)		17.71	-0.04 [-0.12, 0.04]
Hauptman 2000	210	0.07(0.29)	212	0.09(0.29)		38.63	-0.02 [-0.08, 0.04]
Rossner 2000	241	0.12(0.29)	236	0.16(0.29)		43.66	-0.04 [-0.09, 0.01]
Subtotal (95% CI)	557		537			100.00	-0.03 [-0.07, 0.00]
Test for heterogeneity: Chi² = 0.31, df = 2 (P = 0.86), I² = 0%							
Test for overall effect: Z = 1.84 (P = 0.07)							



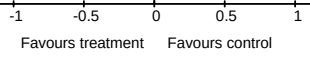
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 22 Change in triglycerides in mmol/l at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	106	-0.07(0.96)	89	0.15(0.96)		17.71	-0.22 [-0.49, 0.05]
Hauptman 2000	210	0.21(0.96)	212	-0.05(0.96)		38.63	0.26 [0.08, 0.44]
Rossner 2000	241	-0.10(0.96)	236	-0.05(0.96)		43.66	-0.05 [-0.22, 0.12]
Subtotal (95% CI)	557		537			100.00	0.04 [-0.07, 0.15]
Test for heterogeneity: Chi² = 10.14, df = 2 (P = 0.006), I² = 80.3%							
Test for overall effect: Z = 0.68 (P = 0.50)							



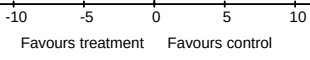
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 23 Change in fasting plasma glucose in mmol/l at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Davidson 1999	106	0.06(0.31)	89	0.26(0.38)		76.23	-0.20 [-0.30, -0.10]
Hauptman 2000	210	0.16(1.35)	212	0.24(1.35)		11.16	-0.08 [-0.34, 0.18]
Rossner 2000	241	0.04(1.35)	236	-0.02(1.35)		12.61	0.06 [-0.18, 0.30]
Subtotal (95% CI)	557		537			100.00	-0.15 [-0.24, -0.07]
Test for heterogeneity: Chi² = 4.15, df = 2 (P = 0.13), I² = 51.8%							
Test for overall effect: Z = 3.50 (P = 0.0005)							



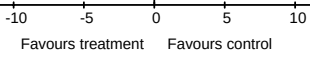
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 24 Change in DBP mmHg at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hauptman 2000	210	1.00(8.30)	212	4.00(8.30)		46.94	-3.00 [-4.58, -1.42]
Rossner 2000	241	0.40(8.30)	236	0.00(8.30)		53.06	0.40 [-1.09, 1.89]
Subtotal (95% CI)	451		448			100.00	-1.20 [-2.28, -0.11]
Test for heterogeneity: Chi² = 9.39, df = 1 (P = 0.002), I² = 89.4%							
Test for overall effect: Z = 2.16 (P = 0.03)							



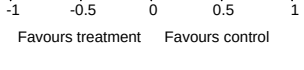
Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 25 Change in SBP mmHg at 24 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hauptman 2000	210	4.00(12.70)	212	5.00(12.70)		46.94	-1.00 [-3.42, 1.42]
Rossner 2000	241	-0.60(12.70)	236	1.20(12.70)		53.06	-1.80 [-4.08, 0.48]
Subtotal (95% CI)	451		448			100.00	-1.42 [-3.08, 0.24]
Test for heterogeneity: Chi² = 0.22, df = 1 (P = 0.64), I² = 0%							
Test for overall effect: Z = 1.68 (P = 0.09)							



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 26 Change in total cholesterol in mmol/l at 48 months

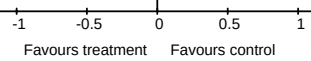
Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	-0.46(1.08)	567	-0.13(1.08)		100.00	-0.33 [-0.44, -0.22]
Total (95% CI)	851		567			100.00	-0.33 [-0.44, -0.22]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 5.64 (P < 0.00001)							



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 27 Change in LDL cholesterol in mmol/l at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	-0.47(0.74)	567	-0.19(0.74)		100.00	-0.28 [-0.36, -0.20]
Total (95% CI)	851		567			100.00	-0.28 [-0.36, -0.20]

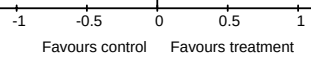
Test for heterogeneity: not applicable
Test for overall effect: Z = 6.98 (P < 0.00001)



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 28 Change in HDL cholesterol in mmol/l at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	0.08(0.29)	567	0.11(0.29)		100.00	-0.03 [-0.06, 0.00]
Total (95% CI)	851		567			100.00	-0.03 [-0.06, 0.00]

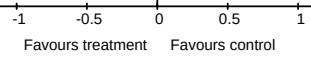
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.91 (P = 0.06)



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 29 Change in triglycerides in mmol/l at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	0.05(0.96)	567	0.06(0.96)		100.00	-0.01 [-0.11, 0.09]
Total (95% CI)	851		567			100.00	-0.01 [-0.11, 0.09]

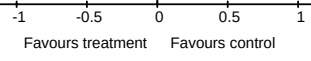
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.19 (P = 0.85)



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 30 Change in fasting plasma glucose in mmol/l at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	0.10(1.98)	567	0.20(1.98)		100.00	-0.10 [-0.31, 0.11]
Total (95% CI)	851		567			100.00	-0.10 [-0.31, 0.11]

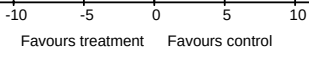
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.93 (P = 0.35)



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 31 Change in DBP in mmHg at 48 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	-2.60(8.30)	567	-1.90(8.30)		100.00	-0.70 [-1.58, 0.18]
Total (95% CI)	851		567			100.00	-0.70 [-1.58, 0.18]

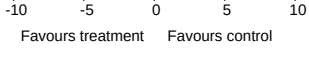
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.56 (P = 0.12)



Review: Orlistat UPDATE adults only
Comparison: 02 Orlistat 360mg/day + diet vs placebo + diet (no specific comorbidities, or mixed)
Outcome: 32 Change in SBP in mmHg at 48 months

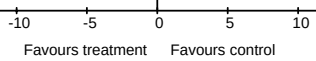
Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Torgerson 2004	851	-4.90(12.70)	567	-3.40(12.70)		100.00	-1.50 [-2.85, -0.15]
Total (95% CI)	851		567			100.00	-1.50 [-2.85, -0.15]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.18 (P = 0.03)



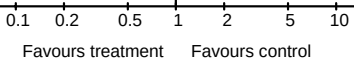
Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hollander 1998	156	-3.84(5.00)	151	-1.43(5.10)		19.80	-2.41 [-3.54, -1.28]
Kelley 2002	266	-3.89(4.40)	269	-1.27(4.59)		43.58	-2.62 [-3.38, -1.86]
Miles 2002	250	-4.70(4.74)	254	-1.80(4.78)		36.62	-2.90 [-3.73, -2.07]
Subtotal (95% CI)	672		674			100.00	-2.68 [-3.18, -2.18]
Test for heterogeneity: Chi² = 0.51, df = 2 (P = 0.77), I² = 0%							
Test for overall effect: Z = 10.45 (P < 0.00001)							
02 Weight maintenance							
Subtotal (95% CI)	0		0				Not estimable
Test for heterogeneity: not applicable							
Test for overall effect: not applicable							



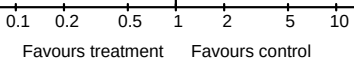
Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 02 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Hollander 1998	51/100	77/100		31.05	0.66 [0.53, 0.83]
Kelley 2002	67/100	87/100		35.08	0.77 [0.66, 0.90]
Miles 2002	61/100	84/100		33.87	0.73 [0.61, 0.87]
Subtotal (95% CI)	300	300		100.00	0.72 [0.65, 0.80]
Total events: 179 (Orlistat + diet), 248 (Placebo + diet)					
Test for heterogeneity: Chi² = 1.25, df = 2 (P = 0.54), I² = 0%					
Test for overall effect: Z = 6.04 (P < 0.00001)					



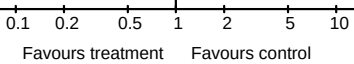
Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 03 Failure to achieve at least 10% loss of initial body weight at 12 months

Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Hollander 1998	82/100	91/100		32.16	0.90 [0.81, 1.01]
Kelley 2002	90/100	96/100		33.92	0.94 [0.87, 1.01]
Miles 2002	86/100	96/100		33.92	0.90 [0.82, 0.98]
Subtotal (95% CI)	300	300		100.00	0.91 [0.86, 0.96]
Total events: 258 (Orlistat + diet), 283 (Placebo + diet)					
Test for heterogeneity: Chi² = 0.70, df = 2 (P = 0.70), I² = 0%					
Test for overall effect: Z = 3.41 (P = 0.0007)					



Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 04 Failure to complete at 12 months

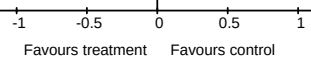
Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Hollander 1998	15/100	28/100		22.58	0.54 [0.31, 0.94]
Kelley 2002	48/100	52/100		41.94	0.92 [0.70, 1.22]
Miles 2002	35/100	44/100		35.48	0.80 [0.56, 1.13]
Subtotal (95% CI)	300	300		100.00	0.79 [0.64, 0.97]
Total events: 98 (Orlistat + diet), 124 (Placebo + diet)					
Test for heterogeneity: Chi² = 3.04, df = 2 (P = 0.22), I² = 34.2%					
Test for overall effect: Z = 2.25 (P = 0.02)					



Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 05 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hollander 1998	156	-0.05(0.60)	151	0.41(0.70)		44.55	-0.46 [-0.61, -0.31]
Kelley 2002	266	-0.30(1.08)	276	0.08(1.08)		28.73	-0.38 [-0.56, -0.20]
Miles 2002	250	-0.27(1.08)	254	0.06(1.08)		26.72	-0.33 [-0.52, -0.14]
Subtotal (95% CI)	672		681			100.00	-0.40 [-0.50, -0.30]

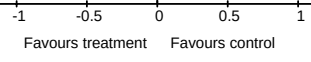
Test for heterogeneity: Chi² = 1.22, df = 2 (P = 0.54), I² = 0%
Test for overall effect: Z = 8.09 (P < 0.00001)



Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 06 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hollander 1998	156	-0.12(0.50)	151	0.22(0.70)		30.17	-0.34 [-0.48, -0.20]
Kelley 2002	266	-0.38(0.74)	276	-0.08(0.74)		36.18	-0.30 [-0.42, -0.18]
Miles 2002	250	-0.25(0.74)	254	-0.05(0.74)		33.65	-0.20 [-0.33, -0.07]
Subtotal (95% CI)	672		681			100.00	-0.28 [-0.35, -0.20]

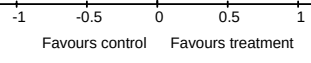
Test for heterogeneity: Chi² = 2.31, df = 2 (P = 0.31), I² = 13.5%
Test for overall effect: Z = 7.28 (P < 0.00001)



Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 07 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hollander 1998	156	0.06(0.20)	151	0.06(0.20)		38.16	0.00 [-0.04, 0.04]
Kelley 2002	266	0.02(0.29)	276	0.05(0.29)		32.04	-0.03 [-0.08, 0.02]
Miles 2002	250	0.09(0.29)	254	0.10(0.29)		29.80	-0.01 [-0.06, 0.04]
Subtotal (95% CI)	672		681			100.00	-0.01 [-0.04, 0.02]

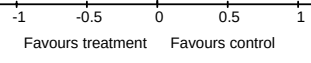
Test for heterogeneity: Chi² = 0.80, df = 2 (P = 0.67), I² = 0%
Test for overall effect: Z = 0.89 (P = 0.37)



Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 08 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hollander 1998	156	0.02(0.80)	151	0.28(1.00)		24.74	-0.26 [-0.46, -0.06]
Kelley 2002	266	0.18(0.96)	276	0.31(0.96)		38.99	-0.13 [-0.29, 0.03]
Miles 2002	250	-0.25(0.96)	254	0.03(0.96)		36.27	-0.28 [-0.45, -0.11]
Subtotal (95% CI)	672		681			100.00	-0.22 [-0.32, -0.12]

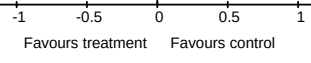
Test for heterogeneity: Chi² = 1.83, df = 2 (P = 0.40), I² = 0%
Test for overall effect: Z = 4.20 (P < 0.0001)



Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 09 Change in HbA1c% at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hollander 1998	156	-0.15(1.00)	151	0.32(1.10)		13.28	-0.47 [-0.71, -0.23]
Kelley 2002	266	-0.62(0.76)	276	-0.27(0.76)		44.93	-0.35 [-0.48, -0.22]
Miles 2002	250	-0.75(0.76)	254	-0.41(0.76)		41.79	-0.34 [-0.47, -0.21]
Subtotal (95% CI)	672		681			100.00	-0.36 [-0.45, -0.28]

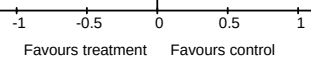
Test for heterogeneity: Chi² = 0.95, df = 2 (P = 0.62), I² = 0%
Test for overall effect: Z = 8.27 (P < 0.00001)



Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 10 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hollander 1998	156	0.04(1.60)	151	0.70(1.80)		28.37	-0.66 [-1.04, -0.28]
Kelley 2002	266	-1.63(1.98)	276	-1.08(1.98)		37.11	-0.55 [-0.88, -0.22]
Miles 2002	250	-2.00(1.98)	254	-0.70(1.98)		34.52	-1.30 [-1.65, -0.95]
Subtotal (95% CI)	672		681			100.00	-0.84 [-1.04, -0.64]

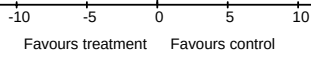
Test for heterogeneity: Chi² = 10.56, df = 2 (P = 0.005), I² = 81.1%
Test for overall effect: Z = 8.11 (P < 0.00001)



Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 11 Change in DBP in mmHg at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hollander 1998	156	-1.01(8.00)	151	0.23(8.90)		35.24	-1.24 [-3.14, 0.66]
Kelley 2002	266	-2.30(8.30)	276	-1.00(8.30)		64.77	-1.30 [-2.70, 0.10]
Subtotal (95% CI)	422		427			100.00	-1.28 [-2.40, -0.15]

Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.96), I² = 0%
Test for overall effect: Z = 2.23 (P = 0.03)



Review: Orlistat UPDATE adults only
Comparison: 03 Orlistat 360mg/day + diet vs placebo + diet (diabetes only)
Outcome: 12 Change in SBP in mmHg at 12 months

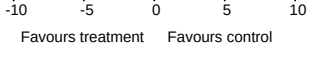
Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Hollander 1998	156	0.21(12.80)	151	4.15(14.20)		20.55	-3.94 [-6.97, -0.91]
Kelley 2002	266	-1.20(12.70)	276	-0.90(12.70)		41.16	-0.30 [-2.44, 1.84]
Miles 2002	250	-2.10(12.70)	254	-0.30(12.70)		38.29	-1.80 [-4.02, 0.42]
Subtotal (95% CI)	672		681			100.00	-1.62 [-2.99, -0.25]

Test for heterogeneity: Chi² = 3.74, df = 2 (P = 0.15), I² = 46.6%
Test for overall effect: Z = 2.32 (P = 0.02)

Review: Orlistat UPDATE adults only
Comparison: 04 Orlistat 360mg/day + diet vs placebo + diet (hypertension only)
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-5.40(6.40)	265	-2.70(6.40)		100.00	-2.70 [-3.79, -1.61]
Subtotal (95% CI)	267		265			100.00	-2.70 [-3.79, -1.61]

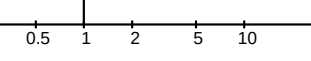
Test for heterogeneity: not applicable
Test for overall effect: Z = 4.87 (P < 0.00001)



Review: Orlistat UPDATE adults only
Comparison: 04 Orlistat 360mg/day + diet vs placebo + diet (hypertension only)
Outcome: 02 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Bakris 2002	54/100	76/100		100.00	0.71 [0.57, 0.88]
Subtotal (95% CI)	100	100		100.00	0.71 [0.57, 0.88]

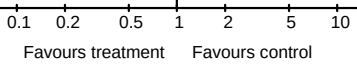
Total events: 54 (Orlistat + diet), 76 (Placebo + diet)
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.16 (P = 0.002)



Review: Orlistat UPDATE adults only
Comparison: 04 Orlistat 360mg/day + diet vs placebo + diet (hypertension only)
Outcome: 03 Failure to complete at 12 months

Study or sub-category	Orlistat + diet n/N	Placebo + diet n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Bakris 2002	42/100	61/100		100.00	0.69 [0.52, 0.91]
Subtotal (95% CI)	100	100		100.00	0.69 [0.52, 0.91]

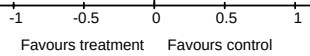
Total events: 42 (Orlistat + diet), 61 (Placebo + diet)
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.63 (P = 0.009)



Review: Orlistat UPDATE adults only
Comparison: 04 Orlistat 360mg/day + diet vs placebo + diet (hypertension only)
Outcome: 04 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-0.36(0.94)	265	-0.04(0.79)		100.00	-0.32 [-0.47, -0.17]
Subtotal (95% CI)	267		265			100.00	-0.32 [-0.47, -0.17]

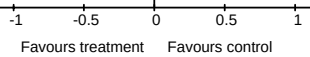
Test for heterogeneity: not applicable
Test for overall effect: Z = 4.25 (P < 0.0001)



Review: Orlistat UPDATE adults only
Comparison: 04 Orlistat 360mg/day + diet vs placebo + diet (hypertension only)
Outcome: 05 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-0.31(0.76)	265	-0.11(0.70)		100.00	-0.20 [-0.32, -0.08]
Subtotal (95% CI)	267		265			100.00	-0.20 [-0.32, -0.08]

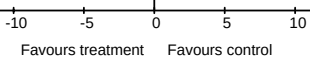
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.16 (P = 0.002)



Review: Orlistat UPDATE adults only
Comparison: 04 Orlistat 360mg/day + diet vs placebo + diet (hypertension only)
Outcome: 06 Change in DBP in mmHg at 12 months

Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-11.40(8.30)	265	-9.20(8.40)		100.00	-2.20 [-3.62, -0.78]
Subtotal (95% CI)	267		265			100.00	-2.20 [-3.62, -0.78]

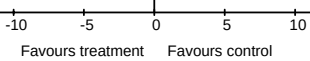
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.04 (P = 0.002)



Review: Orlistat UPDATE adults only
Comparison: 04 Orlistat 360mg/day + diet vs placebo + diet (hypertension only)
Outcome: 07 Change in SBP in mmHg at 12 months

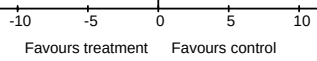
Study or sub-category	N	Orlistat + diet Mean (SD)	N	Placebo + diet Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Bakris 2002	267	-13.30(15.20)	265	-11.00(15.00)		100.00	-2.30 [-4.87, 0.27]
Subtotal (95% CI)	267		265			100.00	-2.30 [-4.87, 0.27]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.76 (P = 0.08)



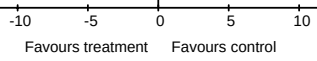
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 01 Weight change in kg at 6 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-4.40(7.16)	71	-2.60(6.65)		100.00	-1.80 [-4.12, 0.52]
Subtotal (95% CI)	66		71			100.00	-1.80 [-4.12, 0.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.52 (P = 0.13)							
Total (95% CI)	66		71			100.00	-1.80 [-4.12, 0.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.52 (P = 0.13)							



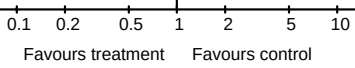
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo-orlistat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-4.97(5.40)	71	-4.28(5.82)		100.00	-0.69 [-2.57, 1.19]
Subtotal (95% CI)	66		71			100.00	-0.69 [-2.57, 1.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.72 (P = 0.47)							
Total (95% CI)	66		71			100.00	-0.69 [-2.57, 1.19]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.72 (P = 0.47)							



Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 03 Failure to achieve at least 5% loss of initial body weight at 6 months

Study or sub-category	Orlistat n/N	Placebo n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Broom 2002b	37/66	58/71		100.00	0.69 [0.54, 0.87]
Subtotal (95% CI)	66	71		100.00	0.69 [0.54, 0.87]
Total events: 37 (Orlistat), 58 (Placebo)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 3.07 (P = 0.002)					
02 Weight maintenance					
Subtotal (95% CI)	0	0			Not estimable
Total events: 0 (Orlistat), 0 (Placebo)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					

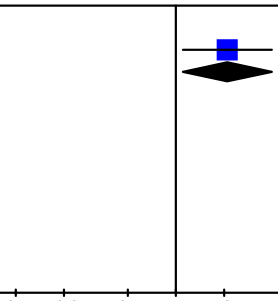


Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 04 Failure to achieve at least 10% loss of initial body weight at 6 months

Study or sub-category	Orlistat n/N	Placebo n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Broom 2002b	61/66	68/71		100.00	0.97 [0.89, 1.05]
Subtotal (95% CI)	66	71		100.00	0.97 [0.89, 1.05]
Total events: 61 (Orlistat), 68 (Placebo)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 0.82 (P = 0.41)					
02 Weight maintenance					
Subtotal (95% CI)	0	0			Not estimable
Total events: 0 (Orlistat), 0 (Placebo)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					

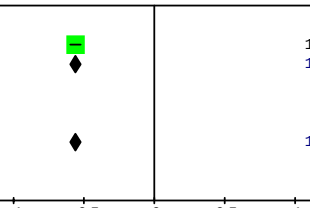
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 05 Failure to complete at 6 months

Study or sub-category	Orlistat n/N	Placebo-orlistat n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Broom 2002b	23/71	11/71		100.00	2.09 [1.10, 3.96]
Subtotal (95% CI)	71	71		100.00	2.09 [1.10, 3.96]
Total events: 23 (Orlistat), 11 (Placebo-orlistat)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 2.26 (P = 0.02)					
02 Weight maintenance					
Subtotal (95% CI)	0	0			Not estimable
Total events: 0 (Orlistat), 0 (Placebo-orlistat)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					



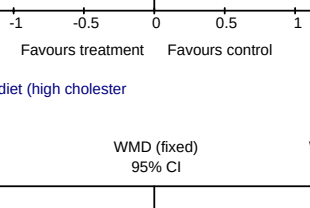
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 06 Change in total cholesterol in mmol/l at 6 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-0.83(0.12)	71	-0.27(0.10)		100.00	-0.56 [-0.60, -0.52]
Subtotal (95% CI)	66		71			100.00	-0.56 [-0.60, -0.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 29.55 (P < 0.00001)							
Total (95% CI)	66		71			100.00	-0.56 [-0.60, -0.52]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 29.55 (P < 0.00001)							



Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 07 Change in LDL cholesterol in mmol/l at 6 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-0.71(0.12)	71	-0.31(0.12)		100.00	-0.40 [-0.44, -0.36]
Subtotal (95% CI)	66		71			100.00	-0.40 [-0.44, -0.36]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 19.49 (P < 0.00001)							
Total (95% CI)	66		71			100.00	-0.40 [-0.44, -0.36]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 19.49 (P < 0.00001)							

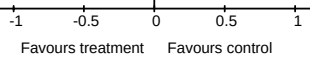


Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 08 Change in HDL cholesterol in mmol/l at 6 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-0.19(0.10)	71	-0.11(0.03)		100.00	-0.08 [-0.11, -0.05]
Subtotal (95% CI)	66		71			100.00	-0.08 [-0.11, -0.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 6.24 (P < 0.00001)							
Total (95% CI)	66		71			100.00	-0.08 [-0.11, -0.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 6.24 (P < 0.00001)							

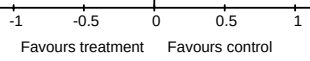
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 09 Change in triglycerides in mmol/l at 6 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-0.15(0.25)	71	-0.42(0.26)		100.00	0.27 [0.18, 0.36]
Subtotal (95% CI)	66		71			100.00	0.27 [0.18, 0.36]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 6.20 (P < 0.00001)							
Total (95% CI)	66		71			100.00	0.27 [0.18, 0.36]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 6.20 (P < 0.00001)							



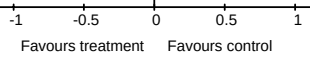
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 10 Change in fasting plasma glucose in mmol/l at 6 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo-orlistat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-0.41(1.98)	71	0.12(1.98)		100.00	-0.53 [-1.19, 0.13]
Subtotal (95% CI)	66		71			100.00	-0.53 [-1.19, 0.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.57 (P = 0.12)							
Total (95% CI)	66		71			100.00	-0.53 [-1.19, 0.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.57 (P = 0.12)							



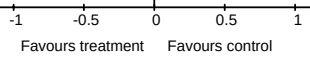
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 11 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo-orlistat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-0.96(1.04)	71	-0.67(1.04)		100.00	-0.29 [-0.64, 0.06]
Subtotal (95% CI)	66		71			100.00	-0.29 [-0.64, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.63 (P = 0.10)							
Total (95% CI)	66		71			100.00	-0.29 [-0.64, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.63 (P = 0.10)							



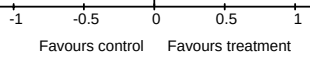
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 12 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo-orlistat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-0.91(1.00)	71	-0.40(1.05)		100.00	-0.51 [-0.85, -0.17]
Subtotal (95% CI)	66		71			100.00	-0.51 [-0.85, -0.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.91 (P = 0.004)							
Total (95% CI)	66		71			100.00	-0.51 [-0.85, -0.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.91 (P = 0.004)							



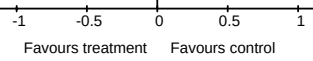
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 13 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo-orlistat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-0.29(0.45)	71	-0.23(0.29)		100.00	-0.06 [-0.19, 0.07]
Subtotal (95% CI)	66		71			100.00	-0.06 [-0.19, 0.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.92 (P = 0.36)							
Total (95% CI)	66		71			100.00	-0.06 [-0.19, 0.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.92 (P = 0.36)							



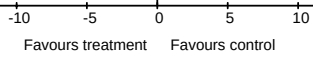
Review: Orlistat UPDATE adults only
Comparison: 05 Orlistat 360mg/day+diet vs placebo (24 weeks)+diet then orlistat 360mg/day (28 weeks) +diet (high cholester
Outcome: 14 Change in fasting plasma glucose in mmol/l at 12 months

Study or sub-category	N	Orlistat Mean (SD)	N	Placebo-orlistat Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Broom 2002b	66	-0.40(1.35)	71	-0.10(1.35)		100.00	-0.30 [-0.75, 0.15]
Subtotal (95% CI)	66		71			100.00	-0.30 [-0.75, 0.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.30 (P = 0.19)							
Total (95% CI)	66		71			100.00	-0.30 [-0.75, 0.15]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.30 (P = 0.19)							



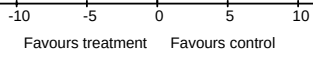
Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 01 Weight change in kg at 6 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-5.20(7.39)	52	-1.00(6.20)		100.00	-4.20 [-6.77, -1.63]
Total (95% CI)	56		52			100.00	-4.20 [-6.77, -1.63]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.21 (P = 0.001)							



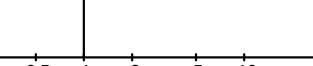
Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-5.60(7.50)	52	-0.30(6.00)		100.00	-5.30 [-7.85, -2.75]
Total (95% CI)	56		52			100.00	-5.30 [-7.85, -2.75]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.07 (P < 0.0001)							



Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 03 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Intervention n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Poston 2003	40/100	88/100		100.00	0.45 [0.35, 0.58]
Subtotal (95% CI)	100	100		100.00	0.45 [0.35, 0.58]
Total events: 40 (Intervention), 88 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 6.16 (P < 0.00001)					

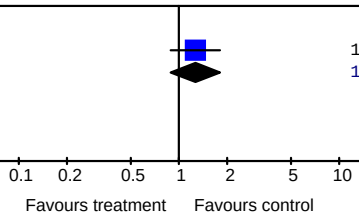


Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 04 Failure to achieve at least 10% loss of initial body weight at 12 months

Study or sub-category	Intervention n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Poston 2003	69/100	93/100		100.00	0.74 [0.64, 0.86]
Subtotal (95% CI)	100	100		100.00	0.74 [0.64, 0.86]
Total events: 69 (Intervention), 93 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 4.12 (P < 0.0001)					

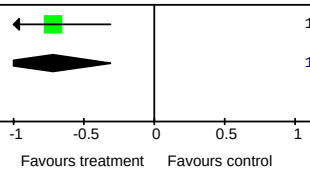
Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 05 Failure to complete at 12 months

Study or sub-category	Intervention n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Poston 2003	43/100	34/100		100.00	1.26 [0.89, 1.80]
Subtotal (95% CI)	100	100		100.00	1.26 [0.89, 1.80]
Total events: 43 (Intervention), 34 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 1.30 (P = 0.19)					



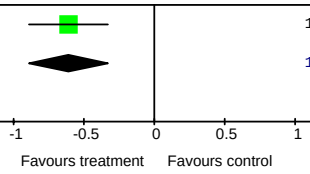
Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 06 Change in total cholesterol in mmol/l at 6 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-0.74(1.08)	52	-0.02(1.08)		100.00	-0.72 [-1.13, -0.31]
Total (95% CI)	56		52			100.00	-0.72 [-1.13, -0.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.46 (P = 0.0005)							



Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 07 Change in LDL cholesterol in mmol/l at 6 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-0.58(0.74)	52	0.03(0.74)		100.00	-0.61 [-0.89, -0.33]
Total (95% CI)	56		52			100.00	-0.61 [-0.89, -0.33]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.28 (P < 0.0001)							

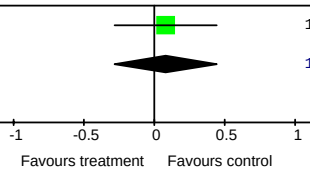


Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 08 Change in HDL cholesterol in mmol/l at 6 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-0.20(0.29)	52	-0.06(0.29)		100.00	-0.14 [-0.25, -0.03]
Total (95% CI)	56		52			100.00	-0.14 [-0.25, -0.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.51 (P = 0.01)							

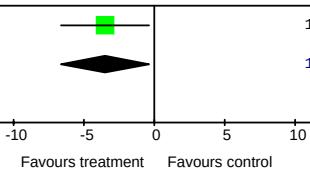
Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 09 Change in triglycerides in mmol/l at 6 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	0.09(0.96)	52	0.01(0.96)		100.00	0.08 [-0.28, 0.44]
Total (95% CI)	56		52			100.00	0.08 [-0.28, 0.44]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.43 (P = 0.67)							



Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 10 Change in DBP in mmHg at 6 months

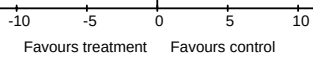
Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-6.80(8.30)	52	-3.30(8.30)		100.00	-3.50 [-6.63, -0.37]
Total (95% CI)	56		52			100.00	-3.50 [-6.63, -0.37]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.19 (P = 0.03)							



Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 11 Change in SBP in mmHg at 6 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-7.20(12.70)	52	-2.80(12.70)		100.00	-4.40 [-9.19, 0.39]
Total (95% CI)	56		52			100.00	-4.40 [-9.19, 0.39]

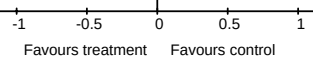
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.80 (P = 0.07)



Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 12 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-0.35(1.08)	52	0.16(1.08)		100.00	-0.51 [-0.92, -0.10]
Total (95% CI)	56		52			100.00	-0.51 [-0.92, -0.10]

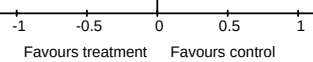
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.45 (P = 0.01)



Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 13 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-0.47(0.74)	52	-0.10(0.74)		100.00	-0.37 [-0.65, -0.09]
Total (95% CI)	56		52			100.00	-0.37 [-0.65, -0.09]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.60 (P = 0.009)



Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 14 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	0.00(0.29)	52	0.06(0.29)		100.00	-0.06 [-0.17, 0.05]
Total (95% CI)	56		52			100.00	-0.06 [-0.17, 0.05]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.07 (P = 0.28)

Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 15 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	0.27(0.96)	52	0.51(0.96)		100.00	-0.24 [-0.60, 0.12]
Total (95% CI)	56		52			100.00	-0.24 [-0.60, 0.12]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.30 (P = 0.19)

Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 16 Change in DBP in mmHg at 12 months

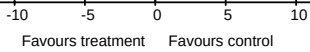
Study or sub-category	N	Intervention Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-4.30(8.30)	52	-3.70(8.30)		100.00	-0.60 [-3.73, 2.53]
Total (95% CI)	56		52			100.00	-0.60 [-3.73, 2.53]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.38 (P = 0.71)

Review: Orlistat UPDATE adults only
Comparison: 06 Orlistat 360mg/day + lifestyle modification vs control (no intervention) (no specific comorbidities)
Outcome: 17 Change in SBP in mmHg at 12 months

Study or sub-category	Intervention N	Intervention Mean (SD)	Control N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Poston 2003	56	-4.10(12.70)	52	-3.00(12.70)		100.00	-1.10 [-5.89, 3.69]
Total (95% CI)	56		52			100.00	-1.10 [-5.89, 3.69]

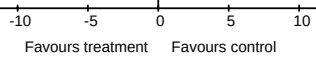
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.45 (P = 0.65)



Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 01 Weight change in kg at 12 months

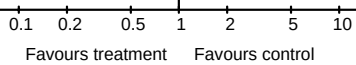
Study or sub-category	Orlistat + 1000kcal N	Orlistat + 1000kcal Mean (SD)	Orlistat + 500kcal N	Orlistat + 500kcal Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Toplak 2005	154	-9.52(7.52)	141	-8.62(6.61)		100.00	-0.90 [-2.51, 0.71]
Total (95% CI)	154		141			100.00	-0.90 [-2.51, 0.71]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.09 (P = 0.27)



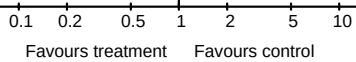
Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 02 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Orlistat + 1000kcal n/N	Orlistat + 500kcal n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
Toplak 2005	15/100	16/100		100.00	0.94 [0.49, 1.79]



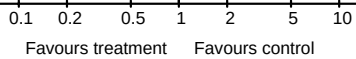
Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 03 Failure to achieve at least 10% loss of initial body weight at 12 months

Study or sub-category	Orlistat + 1000kcal n/N	Orlistat + 500kcal n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
Toplak 2005	47/100	50/100		100.00	0.94 [0.71, 1.25]



Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 04 Failure to complete at 12 months

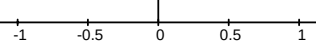
Study or sub-category	Orlistat + 1000kcal n/N	Orlistat + 500kcal n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
Toplak 2005	35/100	42/100		100.00	0.83 [0.59, 1.19]



Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 05 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	Orlistat + 1000kcal N	Orlistat + 1000kcal Mean (SD)	Orlistat + 500kcal N	Orlistat + 500kcal Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Toplak 2005	154	-0.39(1.08)	141	-0.34(1.08)		100.00	-0.05 [-0.30, 0.20]
Total (95% CI)	154		141			100.00	-0.05 [-0.30, 0.20]

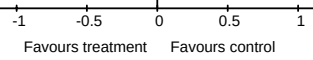
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.40 (P = 0.69)



Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 06 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + 1000kcal Mean (SD)	N	Orlistat + 500 kcal Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Toplak 2005	154	-0.37(0.74)	141	-0.34(0.74)		100.00	-0.03 [-0.20, 0.14]
Total (95% CI)	154		141			100.00	-0.03 [-0.20, 0.14]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.35 (P = 0.73)



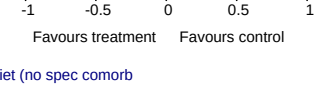
Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 07 Change in HDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Orlistat + 1000kcal Mean (SD)	N	Orlistat + 500kcal Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Toplak 2005	154	0.09(0.29)	141	0.05(0.29)		100.00	0.04 [-0.03, 0.11]
Total (95% CI)	154		141			100.00	0.04 [-0.03, 0.11]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.18 (P = 0.24)

Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 08 Change in FPG in mmol/l at 12 months

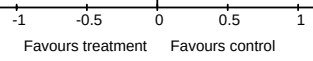
Study or sub-category	N	Orlistat + 1000kcal Mean (SD)	N	Orlistat + 500kcal Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Toplak 2005	154	-0.20(0.60)	141	0.00(1.90)		100.00	-0.20 [-0.53, 0.13]



Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 09 Change in triglycerides in mmol/l at 12 months

Study or sub-category	N	Orlistat + 1000kcal Mean (SD)	N	Orlistat + 500kcal Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Toplak 2005	154	0.04(0.96)	141	0.00(0.96)		100.00	0.04 [-0.18, 0.26]
Total (95% CI)	154		141			100.00	0.04 [-0.18, 0.26]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.36 (P = 0.72)



Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 10 Change in DBP in mmHg at 12 months

Study or sub-category	N	Orlistat + 1000kcal Mean (SD)	N	Orlistat + 500kcal Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Toplak 2005	154	-3.80(8.50)	141	-2.60(9.60)		100.00	-1.20 [-3.28, 0.88]

Review: Orlistat UPDATE adults only
Comparison: 07 Orlistat 360mg/day+1000kcal/day deficit diet vs orlistat 360mg/day+500kcal/day deficit diet (no spec comorb
Outcome: 11 Change in SBP in mmHg at 12 months

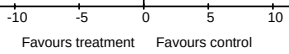
Study or sub-category	N	Orlistat + 1000kcal Mean (SD)	N	Orlistat + 500kcal Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Toplak 2005	154	-6.00(13.90)	141	-6.00(13.00)		100.00	0.00 [-3.07, 3.07]

3.5 *Sibutramine*

Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	Sibutramine Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Apfelbaum 1999	81	-5.20(7.50)	78	0.50(5.70)		10.77	-5.70 [-7.77, -3.63]
McMahon 2000	142	-4.40(7.16)	69	-0.50(6.06)		13.39	-3.90 [-5.75, -2.05]
NEW Kaukua 2004	102	-7.10(7.92)	108	-2.60(6.65)		11.68	-4.50 [-6.48, -2.52]
NEW McMahon 2002	145	-4.50(7.19)	72	-0.40(6.03)		13.88	-4.10 [-5.92, -2.28]
NEW McNulty 2003a	68	-5.50(4.95)	32	-0.20(4.00)		13.90	-5.30 [-7.12, -3.48]
NEW McNulty 2003b	62	-8.00(7.09)	32	-0.20(4.00)		9.12	-7.80 [-10.04, -5.56]
Smith 2001a	154	-4.40(7.16)	79	-1.60(6.37)		14.13	-2.80 [-4.60, -1.00]
Smith 2001b	153	-6.41(7.73)	78	-1.60(6.37)		13.13	-4.81 [-6.68, -2.94]
Subtotal (95% CI)	907		548			100.00	-4.71 [-5.38, -4.03]

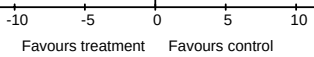
Test for heterogeneity: Chi² = 14.10, df = 7 (P = 0.05), I² = 50.4%
Test for overall effect: Z = 13.61 (P < 0.00001)



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 02 Weight change in kg at 15 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Apfelbaum 1999	81	-0.90(6.17)	78	2.80(6.71)		100.00	-3.70 [-5.71, -1.69]
Subtotal (95% CI)	81		78			100.00	-3.70 [-5.71, -1.69]

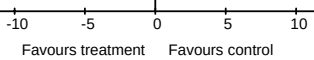
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.62 (P = 0.0003)



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 03 Weight change in kg at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	350	2.80(6.00)	114	6.20(4.60)		100.00	-3.40 [-4.45, -2.35]
Subtotal (95% CI)	350		114			100.00	-3.40 [-4.45, -2.35]

Test for heterogeneity: not applicable
Test for overall effect: Z = 6.33 (P < 0.00001)



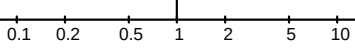
Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 04 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Apfelbaum 1999	14/100	45/100		7.98	0.31 [0.18, 0.53]
McMahon 2000	60/100	91/100		16.13	0.66 [0.56, 0.78]
NEW McMahon 2002	57/100	92/100		16.31	0.62 [0.52, 0.74]
NEW McNulty 2003a	54/100	88/100		15.60	0.61 [0.51, 0.75]
NEW McNulty 2003b	35/100	88/100		15.60	0.40 [0.30, 0.52]
Smith 2001a	61/100	80/100		14.18	0.76 [0.63, 0.92]
Smith 2001b	43/100	80/100		14.18	0.54 [0.42, 0.69]
Subtotal (95% CI)	700	700		100.00	0.57 [0.53, 0.63]

Total events: 324 (Treatment), 564 (Control)
Test for heterogeneity: Chi² = 24.78, df = 6 (P = 0.0004), I² = 75.8%
Test for overall effect: Z = 12.88 (P < 0.00001)

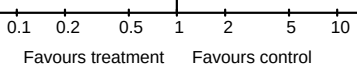
02 Weight maintenance					
STORM 2000	16/100	45/100		100.00	0.36 [0.22, 0.59]
Subtotal (95% CI)	100	100		100.00	0.36 [0.22, 0.59]

Total events: 16 (Treatment), 45 (Control)
Test for heterogeneity: not applicable
Test for overall effect: Z = 4.06 (P < 0.0001)



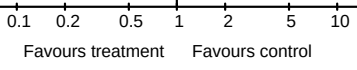
Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 05 Failure to achieve at least 10% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Apfelbaum 1999	46/100	77/100		11.74	0.60 [0.47, 0.76]
McMahon 2000	87/100	96/100		14.63	0.91 [0.83, 0.99]
NEW McMahon 2002	87/100	97/100		14.79	0.90 [0.83, 0.97]
NEW McNulty 2003a	86/100	100/100		15.24	0.86 [0.79, 0.93]
NEW McNulty 2003b	73/100	100/100		15.24	0.73 [0.65, 0.82]
Smith 2001a	81/100	93/100		14.18	0.87 [0.78, 0.97]
Smith 2001b	66/100	93/100		14.18	0.71 [0.61, 0.83]
Subtotal (95% CI)	700	700		100.00	0.80 [0.77, 0.84]
Total events: 526 (Treatment), 656 (Control)					
Test for heterogeneity: Chi² = 30.81, df = 6 (P < 0.0001), I² = 80.5%					
Test for overall effect: Z = 9.57 (P < 0.00001)					
02 Weight maintenance					
STORM 2000	45/100	73/100		100.00	0.62 [0.48, 0.79]
Subtotal (95% CI)	100	100		100.00	0.62 [0.48, 0.79]
Total events: 45 (Treatment), 73 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 3.83 (P = 0.0001)					



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 06 Failure to complete at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Apfelbaum 1999	34/100	42/100		13.68	0.81 [0.57, 1.16]
McMahon 2000	47/100	45/100		14.66	1.04 [0.77, 1.41]
NEW Kaukua 2004	8/100	11/100		3.58	0.73 [0.31, 1.73]
NEW McMahon 2002	43/100	51/100		16.61	0.84 [0.63, 1.13]
NEW McNulty 2003a	28/100	28/100		9.12	1.00 [0.64, 1.56]
NEW McNulty 2003b	21/100	28/100		9.12	0.75 [0.46, 1.23]
Smith 2001a	49/100	51/100		16.61	0.96 [0.73, 1.27]
Smith 2001b	42/100	51/100		16.61	0.82 [0.61, 1.11]
Subtotal (95% CI)	800	800		100.00	0.89 [0.78, 1.00]
Total events: 272 (Treatment), 307 (Control)					
Test for heterogeneity: Chi² = 2.98, df = 7 (P = 0.89), I² = 0%					
Test for overall effect: Z = 1.89 (P = 0.06)					

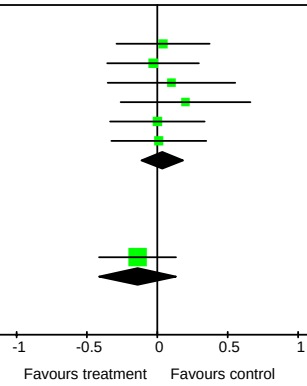


Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 07 Change in DBP (mmHg) at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Apfelbaum 1999	73	1.50(2.00)	68	-1.90(2.20)		100.00	3.40 [2.70, 4.10]
Subtotal (95% CI)	73		68			100.00	3.40 [2.70, 4.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 9.58 (P < 0.00001)							

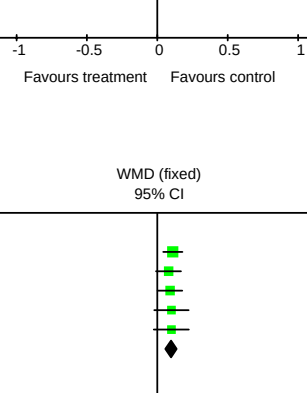
Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 08 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	133	-0.03(1.08)	59	-0.07(1.08)		19.91	0.04 [-0.29, 0.37]
NEW McMahon 2002	129	-0.09(1.08)	63	-0.06(1.08)		20.62	-0.03 [-0.36, 0.30]
NEW McNulty 2003a	68	-0.10(1.08)	32	-0.20(1.08)		10.60	0.10 [-0.35, 0.55]
NEW McNulty 2003b	62	0.00(1.08)	32	-0.20(1.08)		10.28	0.20 [-0.26, 0.66]
Smith 2001a	122	0.08(1.08)	59	0.08(1.08)		19.38	0.00 [-0.34, 0.34]
Smith 2001b	123	0.09(1.08)	58	0.08(1.08)		19.20	0.01 [-0.33, 0.35]
Subtotal (95% CI)	637		303			100.00	0.03 [-0.11, 0.18]
Test for heterogeneity: Chi² = 0.79, df = 5 (P = 0.98), I² = 0%							
Test for overall effect: Z = 0.46 (P = 0.64)							
02 Weight maintenance							
STORM 2000	265	0.12(1.08)	77	0.26(1.08)		100.00	-0.14 [-0.41, 0.13]
Subtotal (95% CI)	265		77			100.00	-0.14 [-0.41, 0.13]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.00 (P = 0.32)							



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 09 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Apfelbaum 1999	81	0.41(0.65)	78	0.57(0.62)		30.45	-0.16 [-0.36, 0.04]
McMahon 2000	131	-0.09(0.74)	58	-0.11(0.74)		22.68	0.02 [-0.21, 0.25]
NEW McMahon 2002	122	-0.11(0.74)	60	-0.10(0.74)		22.69	-0.01 [-0.24, 0.22]
NEW McNulty 2003a	68	-0.20(0.74)	32	-0.20(0.74)		12.28	0.00 [-0.31, 0.31]
NEW McNulty 2003b	62	-0.10(0.74)	32	-0.20(0.74)		11.91	0.10 [-0.22, 0.42]
Subtotal (95% CI)	464		260			100.00	-0.03 [-0.14, 0.07]
Test for heterogeneity: Chi² = 2.56, df = 4 (P = 0.63), I² = 0%							
Test for overall effect: Z = 0.62 (P = 0.53)							
02 Weight maintenance							
STORM 2000	265	-0.11(0.74)	77	0.04(0.74)		100.00	-0.15 [-0.34, 0.04]
Subtotal (95% CI)	265		77			100.00	-0.15 [-0.34, 0.04]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.57 (P = 0.12)							

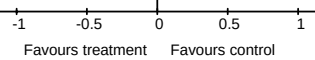


Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 10 Change in HDL cholesterol (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Apfelbaum 1999	81	0.34(0.23)	78	0.23(0.21)		35.38	0.11 [0.04, 0.18]
McMahon 2000	133	0.14(0.29)	59	0.06(0.29)		20.95	0.08 [-0.01, 0.17]
NEW McMahon 2002	129	0.12(0.29)	63	0.03(0.29)		21.70	0.09 [0.00, 0.18]
NEW McNulty 2003a	68	0.10(0.29)	32	0.00(0.29)		11.15	0.10 [-0.02, 0.22]
NEW McNulty 2003b	62	0.10(0.29)	32	0.00(0.29)		10.82	0.10 [-0.02, 0.22]
Subtotal (95% CI)	473		264			100.00	0.10 [0.06, 0.14]
Test for heterogeneity: Chi² = 0.31, df = 4 (P = 0.99), I² = 0%							
Test for overall effect: Z = 4.68 (P < 0.00001)							
02 Weight maintenance							
STORM 2000	265	0.22(0.29)	77	0.09(0.29)		100.00	0.13 [0.06, 0.20]
Subtotal (95% CI)	265		77			100.00	0.13 [0.06, 0.20]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.46 (P = 0.0005)							

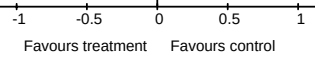
Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 11 Change in triglycerides mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Apfelbaum 1999	81	-0.05(0.42)	78	0.11(0.54)		43.26	-0.16 [-0.31, -0.01]
McMahon 2000	133	-0.19(0.96)	59	-0.01(0.96)		11.35	-0.18 [-0.47, 0.11]
NEW McMahon 2002	129	-0.31(0.96)	63	-0.08(0.96)		11.75	-0.23 [-0.52, 0.06]
NEW McNulty 2003a	68	-0.20(0.96)	32	0.10(0.96)		6.04	-0.30 [-0.70, 0.10]
NEW McNulty 2003b	62	-0.20(0.96)	32	0.10(0.96)		5.86	-0.30 [-0.71, 0.11]
Smith 2001a	122	-0.26(0.96)	57	-0.21(0.96)		10.79	-0.05 [-0.35, 0.25]
Smith 2001b	123	-0.44(0.96)	58	-0.21(0.96)		10.95	-0.23 [-0.53, 0.07]
Subtotal (95% CI)	718		379			100.00	-0.18 [-0.28, -0.08]
Test for heterogeneity: Chi² = 1.67, df = 6 (P = 0.95), I² = 0%							
Test for overall effect: Z = 3.62 (P = 0.0003)							
02 Weight maintenance							
STORM 2000	265	-0.01(0.96)	77	0.25(0.96)		100.00	-0.26 [-0.50, -0.02]
Subtotal (95% CI)	265		77			100.00	-0.26 [-0.50, -0.02]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.09 (P = 0.04)							



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 12 Change in HbA 1c % at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW McNulty 2003a	68	-0.56(2.20)	32	-0.22(1.92)		47.33	-0.34 [-1.19, 0.51]
NEW McNulty 2003b	62	-0.32(1.80)	32	-0.22(1.92)		52.67	-0.10 [-0.90, 0.70]
Subtotal (95% CI)	130		64			100.00	-0.21 [-0.80, 0.37]
Test for heterogeneity: Chi² = 0.16, df = 1 (P = 0.69), I² = 0%							
Test for overall effect: Z = 0.72 (P = 0.47)							
02 Weight maintenance							
STORM 2000	265	0.16(0.71)	770	0.23(0.71)		100.00	-0.07 [-0.17, 0.03]
Subtotal (95% CI)	265		770			100.00	-0.07 [-0.17, 0.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.38 (P = 0.17)							

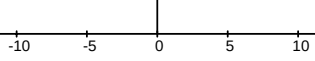


Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 13 Change in fasting plasma glucose (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	133	0.23(1.35)	59	0.31(1.35)		25.23	-0.08 [-0.49, 0.33]
NEW McNulty 2003a	68	-0.30(1.35)	32	0.20(1.35)		13.43	-0.50 [-1.07, 0.07]
NEW McNulty 2003b	62	-0.10(1.35)	32	0.20(1.35)		13.03	-0.30 [-0.88, 0.28]
Smith 2001a	122	-0.21(1.35)	57	-0.16(1.35)		23.98	-0.05 [-0.47, 0.37]
Smith 2001b	123	-0.19(1.35)	58	-0.16(1.35)		24.33	-0.03 [-0.45, 0.39]
Subtotal (95% CI)	508		238			100.00	-0.15 [-0.35, 0.06]
Test for heterogeneity: Chi² = 2.36, df = 4 (P = 0.67), I² = 0%							
Test for overall effect: Z = 1.37 (P = 0.17)							
02 Weight maintenance							
STORM 2000	265	0.13(1.35)	77	0.14(1.35)		100.00	-0.01 [-0.35, 0.33]
Subtotal (95% CI)	265		77			100.00	-0.01 [-0.35, 0.33]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.06 (P = 0.95)							

Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 14 Change in SBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	142	2.70(12.70)	69	1.50(12.70)		16.83	1.20 [-2.45, 4.85]
NEW Kaukua 2004	102	4.10(12.70)	108	3.60(12.70)		19.01	0.50 [-2.94, 3.94]
NEW McMahon 2002	145	3.80(12.70)	72	1.10(12.70)		17.43	2.70 [-0.89, 6.29]
NEW McNulty 2003a	68	4.40(15.67)	32	-0.20(16.00)		5.03	4.60 [-2.08, 11.28]
NEW McNulty 2003b	62	-1.50(15.75)	32	-0.20(16.00)		4.87	-1.30 [-8.09, 5.49]
Smith 2001a	154	1.00(12.70)	76	-0.50(12.70)		18.44	1.50 [-1.99, 4.99]
Smith 2001b	149	0.30(12.70)	77	-0.50(12.70)		18.39	0.80 [-2.69, 4.29]
Subtotal (95% CI)	822		466			100.00	1.36 [-0.14, 2.86]
Test for heterogeneity: Chi² = 2.38, df = 6 (P = 0.88), I² = 0%							
Test for overall effect: Z = 1.78 (P = 0.08)							



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 15 Change in DBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	142	2.00(8.30)	69	-1.30(8.30)		16.14	3.30 [0.91, 5.69]
NEW Kaukua 2004	102	1.70(8.30)	108	-0.20(8.30)		18.23	1.90 [-0.35, 4.15]
NEW McMahon 2002	145	3.00(8.30)	72	-0.10(8.30)		16.72	3.10 [0.75, 5.45]
NEW McNulty 2003a	68	3.30(9.07)	32	0.50(8.80)		6.59	2.80 [-0.93, 6.53]
NEW McNulty 2003b	62	0.40(7.87)	32	0.50(8.80)		7.00	-0.10 [-3.72, 3.52]
Smith 2001a	154	1.60(8.30)	76	-0.90(8.30)		17.68	2.50 [0.22, 4.78]
Smith 2001b	149	-0.10(8.30)	77	-0.90(8.30)		17.64	0.80 [-1.48, 3.08]
Subtotal (95% CI)	822		466			100.00	2.16 [1.20, 3.12]

Test for heterogeneity: Chi² = 4.60, df = 6 (P = 0.60), I² = 0%
Test for overall effect: Z = 4.41 (P < 0.0001)

Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 16 Change in total cholesterol (mmol/l) at 18 months

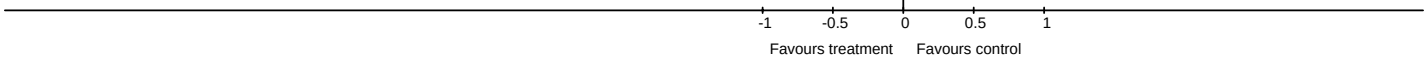
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	0.15(1.08)	62	0.34(1.08)		100.00	-0.19 [-0.49, 0.11]
Subtotal (95% CI)	222		62			100.00	-0.19 [-0.49, 0.11]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.22 (P = 0.22)

Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 17 Change in LDL cholesterol (mmol/l) at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	-0.06(0.74)	62	0.10(0.74)		100.00	-0.16 [-0.37, 0.05]
Subtotal (95% CI)	222		62			100.00	-0.16 [-0.37, 0.05]

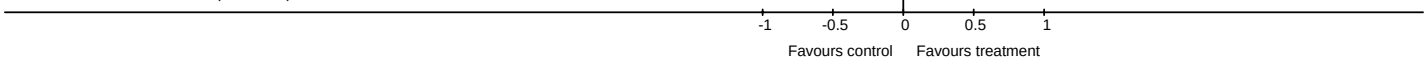
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.51 (P = 0.13)



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 18 Change in HDL cholesterol (mmol/l) at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	0.24(0.29)	62	0.11(0.29)		100.00	0.13 [0.05, 0.21]
Subtotal (95% CI)	222		62			100.00	0.13 [0.05, 0.21]

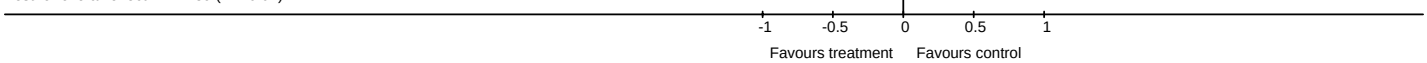
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.12 (P = 0.002)



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 19 Change in triglycerides (mmol/l) at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	-0.05(0.96)	62	0.28(0.96)		100.00	-0.33 [-0.60, -0.06]
Subtotal (95% CI)	222		62			100.00	-0.33 [-0.60, -0.06]

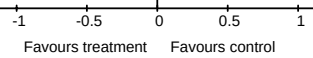
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.39 (P = 0.02)



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 20 Change in HbA 1c% at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	0.00(0.71)	62	0.16(0.71)		100.00	-0.16 [-0.36, 0.04]
Subtotal (95% CI)	222		62			100.00	-0.16 [-0.36, 0.04]

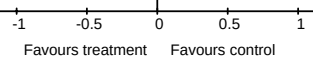
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.57 (P = 0.12)



Review: Sibutramine UPDATE adults only
Comparison: 01 Sibutramine and diet vs placebo and diet (all studies)
Outcome: 21 Change in fasting plasma glucose (mmol/l) at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	0.14(1.35)	62	0.26(1.35)		100.00	-0.12 [-0.50, 0.26]
Subtotal (95% CI)	222		62			100.00	-0.12 [-0.50, 0.26]

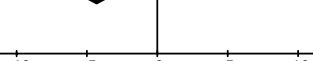
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.62 (P = 0.54)



Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	Sibutramine Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Apfelbaum 1999	81	-5.20(7.50)	78	0.50(5.70)		28.31	-5.70 [-7.77, -3.63]
Smith 2001a	154	-4.40(7.16)	79	-1.60(6.37)		37.15	-2.80 [-4.60, -1.00]
Smith 2001b	153	-6.41(7.73)	78	-1.60(6.37)		34.53	-4.81 [-6.68, -2.94]
Subtotal (95% CI)	388		235			100.00	-4.32 [-5.41, -3.22]

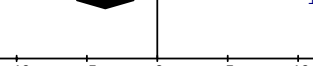
Test for heterogeneity: Chi² = 4.71, df = 2 (P = 0.10), I² = 57.5%
Test for overall effect: Z = 7.69 (P < 0.00001)



Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 02 Weight change in kg at 15 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Apfelbaum 1999	81	-0.90(6.17)	78	2.80(6.71)		100.00	-3.70 [-5.71, -1.69]
Subtotal (95% CI)	81		78			100.00	-3.70 [-5.71, -1.69]

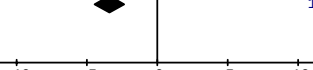
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.62 (P = 0.0003)



Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 03 Weight change in kg at 18 months

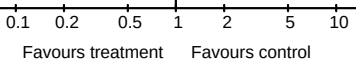
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	350	2.80(6.00)	114	6.20(4.60)		100.00	-3.40 [-4.45, -2.35]
Subtotal (95% CI)	350		114			100.00	-3.40 [-4.45, -2.35]

Test for heterogeneity: not applicable
Test for overall effect: Z = 6.33 (P < 0.00001)



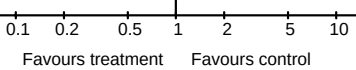
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 04 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Apfelbaum 1999	14/100	45/100		21.95	0.31 [0.18, 0.53]
Smith 2001a	61/100	80/100		39.02	0.76 [0.63, 0.92]
Smith 2001b	43/100	80/100		39.02	0.54 [0.42, 0.69]
Subtotal (95% CI)	300	300		100.00	0.58 [0.49, 0.67]
Total events: 118 (Treatment), 205 (Control)					
Test for heterogeneity: Chi² = 14.33, df = 2 (P = 0.0008), I² = 86.0%					
Test for overall effect: Z = 7.16 (P < 0.00001)					
02 Weight maintenance					
STORM 2000	16/100	45/100		100.00	0.36 [0.22, 0.59]
Subtotal (95% CI)	100	100		100.00	0.36 [0.22, 0.59]
Total events: 16 (Treatment), 45 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 4.06 (P < 0.0001)					



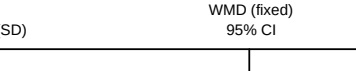
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 05 Failure to achieve at least 10% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Apfelbaum 1999	46/100	77/100		29.28	0.60 [0.47, 0.76]
Smith 2001a	81/100	93/100		35.36	0.87 [0.78, 0.97]
Smith 2001b	66/100	93/100		35.36	0.71 [0.61, 0.83]
Subtotal (95% CI)	300	300		100.00	0.73 [0.67, 0.80]
Total events: 193 (Treatment), 263 (Control)					
Test for heterogeneity: Chi² = 12.54, df = 2 (P = 0.002), I² = 84.0%					
Test for overall effect: Z = 6.60 (P < 0.00001)					
02 Weight maintenance					
STORM 2000	45/100	73/100		100.00	0.62 [0.48, 0.79]
Subtotal (95% CI)	100	100		100.00	0.62 [0.48, 0.79]
Total events: 45 (Treatment), 73 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 3.83 (P = 0.0001)					



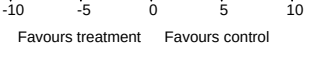
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 06 Failure to complete at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Apfelbaum 1999	34/100	42/100		29.17	0.81 [0.57, 1.16]
Smith 2001a	49/100	51/100		35.42	0.96 [0.73, 1.27]
Smith 2001b	42/100	51/100		35.42	0.82 [0.61, 1.11]
Subtotal (95% CI)	300	300		100.00	0.87 [0.73, 1.04]
Total events: 125 (Treatment), 144 (Control)					
Test for heterogeneity: Chi² = 0.78, df = 2 (P = 0.68), I² = 0%					
Test for overall effect: Z = 1.56 (P = 0.12)					



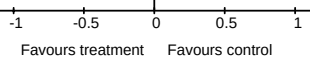
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 07 Change in DBP (mmHg) at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Apfelbaum 1999	73	1.50(2.00)	68	-1.90(2.20)		100.00	3.40 [2.70, 4.10]
Subtotal (95% CI)	73		68			100.00	3.40 [2.70, 4.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 9.58 (P < 0.00001)							



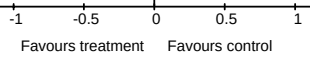
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 08 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	Treatment N	Treatment Mean (SD)	Control N	Control Mean (SD)	Weight %	WMD (fixed) 95% CI
01 Weight reduction						
Smith 2001a	122	0.08(1.08)	59	0.08(1.08)	50.22	0.00 [-0.34, 0.34]
Smith 2001b	123	0.09(1.08)	58	0.08(1.08)	49.78	0.01 [-0.33, 0.35]
Subtotal (95% CI)	245		117		100.00	0.00 [-0.23, 0.24]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.97), I² = 0%						
Test for overall effect: Z = 0.04 (P = 0.97)						
02 Weight maintenance						
STORM 2000	265	0.12(1.08)	77	0.26(1.08)	100.00	-0.14 [-0.41, 0.13]
Subtotal (95% CI)	265		77		100.00	-0.14 [-0.41, 0.13]
Test for heterogeneity: not applicable						
Test for overall effect: Z = 1.00 (P = 0.32)						



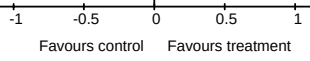
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 09 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	Treatment N	Treatment Mean (SD)	Control N	Control Mean (SD)	Weight %	WMD (fixed) 95% CI
01 Weight reduction						
Apfelbaum 1999	81	0.41(0.65)	78	0.57(0.62)	100.00	-0.16 [-0.36, 0.04]
Subtotal (95% CI)	81		78		100.00	-0.16 [-0.36, 0.04]
Test for heterogeneity: not applicable						
Test for overall effect: Z = 1.59 (P = 0.11)						
02 Weight maintenance						
STORM 2000	265	-0.11(0.74)	77	0.04(0.74)	100.00	-0.15 [-0.34, 0.04]
Subtotal (95% CI)	265		77		100.00	-0.15 [-0.34, 0.04]
Test for heterogeneity: not applicable						
Test for overall effect: Z = 1.57 (P = 0.12)						



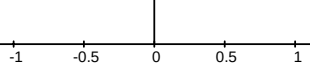
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 10 Change in HDL cholesterol (mmol/l) at 12 months

Study or sub-category	Treatment N	Treatment Mean (SD)	Control N	Control Mean (SD)	Weight %	WMD (fixed) 95% CI
01 Weight reduction						
Apfelbaum 1999	81	0.34(0.23)	78	0.23(0.21)	100.00	0.11 [0.04, 0.18]
Subtotal (95% CI)	81		78		100.00	0.11 [0.04, 0.18]
Test for heterogeneity: not applicable						
Test for overall effect: Z = 3.15 (P = 0.002)						
02 Weight maintenance						
STORM 2000	265	0.22(0.29)	77	0.09(0.29)	100.00	0.13 [0.06, 0.20]
Subtotal (95% CI)	265		77		100.00	0.13 [0.06, 0.20]
Test for heterogeneity: not applicable						
Test for overall effect: Z = 3.46 (P = 0.0005)						



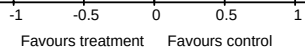
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 11 Change in triglycerides mmol/l at 12 months

Study or sub-category	Treatment N	Treatment Mean (SD)	Control N	Control Mean (SD)	Weight %	WMD (fixed) 95% CI
01 Weight reduction						
Apfelbaum 1999	81	-0.05(0.42)	78	0.11(0.54)	66.56	-0.16 [-0.31, -0.01]
Smith 2001a	122	-0.26(0.96)	57	-0.21(0.96)	16.60	-0.05 [-0.35, 0.25]
Smith 2001b	123	-0.44(0.96)	58	-0.21(0.96)	16.84	-0.23 [-0.53, 0.07]
Subtotal (95% CI)	326		193		100.00	-0.15 [-0.28, -0.03]
Test for heterogeneity: Chi² = 0.71, df = 2 (P = 0.70), I² = 0%						
Test for overall effect: Z = 2.45 (P = 0.01)						
02 Weight maintenance						
STORM 2000	265	-0.01(0.96)	77	0.25(0.96)	100.00	-0.26 [-0.50, -0.02]
Subtotal (95% CI)	265		77		100.00	-0.26 [-0.50, -0.02]
Test for heterogeneity: not applicable						
Test for overall effect: Z = 2.09 (P = 0.04)						



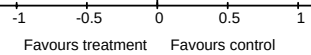
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 12 Change in HbA 1c % at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	265	0.16(0.71)	770	0.23(0.71)		100.00	-0.07 [-0.17, 0.03]
Subtotal (95% CI)	265		770			100.00	-0.07 [-0.17, 0.03]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.38 (P = 0.17)							



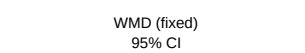
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 13 Change in fasting plasma glucose (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Smith 2001a	122	-0.21(1.35)	57	-0.16(1.35)		49.64	-0.05 [-0.47, 0.37]
Smith 2001b	123	-0.19(1.35)	58	-0.16(1.35)		50.36	-0.03 [-0.45, 0.39]
Subtotal (95% CI)	245		115			100.00	-0.04 [-0.34, 0.26]
Test for heterogeneity: Chi² = 0.00, df = 1 (P = 0.95), I² = 0%							
Test for overall effect: Z = 0.26 (P = 0.79)							
02 Weight maintenance							
STORM 2000	265	0.13(1.35)	77	0.14(1.35)		100.00	-0.01 [-0.35, 0.33]
Subtotal (95% CI)	265		77			100.00	-0.01 [-0.35, 0.33]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.06 (P = 0.95)							



Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 14 Change in SBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Smith 2001a	154	1.00(12.70)	76	-0.50(12.70)		50.06	1.50 [-1.99, 4.99]
Smith 2001b	149	0.30(12.70)	77	-0.50(12.70)		49.94	0.80 [-2.69, 4.29]
Subtotal (95% CI)	303		153			100.00	1.15 [-1.32, 3.62]
Test for heterogeneity: Chi² = 0.08, df = 1 (P = 0.78), I² = 0%							
Test for overall effect: Z = 0.91 (P = 0.36)							



Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 15 Change in DBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
Smith 2001a	154	1.60(8.30)	76	-0.90(8.30)		50.06	2.50 [0.22, 4.78]
Smith 2001b	149	-0.10(8.30)	77	-0.90(8.30)		49.94	0.80 [-1.48, 3.08]
Subtotal (95% CI)	303		153			100.00	1.65 [0.04, 3.26]
Test for heterogeneity: Chi² = 1.07, df = 1 (P = 0.30), I² = 6.2%							
Test for overall effect: Z = 2.01 (P = 0.04)							

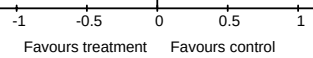
Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 16 Change in total cholesterol (mmol/l) at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	0.15(1.08)	62	0.34(1.08)		100.00	-0.19 [-0.49, 0.11]
Subtotal (95% CI)	222		62			100.00	-0.19 [-0.49, 0.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.22 (P = 0.22)							

Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 17 Change in LDL cholesterol (mmol/l) at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	-0.06(0.74)	62	0.10(0.74)		100.00	-0.16 [-0.37, 0.05]
Subtotal (95% CI)	222		62			100.00	-0.16 [-0.37, 0.05]

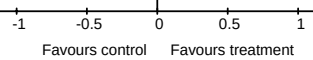
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.51 (P = 0.13)



Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 18 Change in HDL cholesterol (mmol/l) at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	0.24(0.29)	62	0.11(0.29)		100.00	0.13 [0.05, 0.21]
Subtotal (95% CI)	222		62			100.00	0.13 [0.05, 0.21]

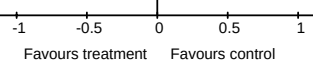
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.12 (P = 0.002)



Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 19 Change in triglycerides (mmol/l) at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	-0.05(0.96)	62	0.28(0.96)		100.00	-0.33 [-0.60, -0.06]
Subtotal (95% CI)	222		62			100.00	-0.33 [-0.60, -0.06]

Test for heterogeneity: not applicable
Test for overall effect: Z = 2.39 (P = 0.02)



Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 20 Change in HbA 1c% at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	0.00(0.71)	62	0.16(0.71)		100.00	-0.16 [-0.36, 0.04]
Subtotal (95% CI)	222		62			100.00	-0.16 [-0.36, 0.04]

Test for heterogeneity: not applicable
Test for overall effect: Z = 1.57 (P = 0.12)

Review: Sibutramine UPDATE adults only
Comparison: 02 Sibutramine and diet vs placebo and diet (otherwise healthy)
Outcome: 21 Change in fasting plasma glucose (mmol/l) at 18 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight maintenance							
STORM 2000	222	0.14(1.35)	62	0.26(1.35)		100.00	-0.12 [-0.50, 0.26]
Subtotal (95% CI)	222		62			100.00	-0.12 [-0.50, 0.26]

Test for heterogeneity: not applicable
Test for overall effect: Z = 0.62 (P = 0.54)

Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 01 Weight change in kg at 12 months

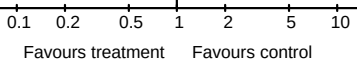
Study or sub-category	N	Sibutramine Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Kaukua 2004	102	-7.10(7.92)	108	-2.60(6.65)		33.64	-4.50 [-6.48, -2.52]
NEW McNulty 2003a	68	-5.50(4.95)	32	-0.20(4.00)		40.06	-5.30 [-7.12, -3.48]
NEW McNulty 2003b	62	-8.00(7.09)	32	-0.20(4.00)		26.29	-7.80 [-10.04, -5.56]
Subtotal (95% CI)	232		172			100.00	-5.69 [-6.84, -4.54]

Test for heterogeneity: Chi² = 4.96, df = 2 (P = 0.08), I² = 59.6%
Test for overall effect: Z = 9.69 (P < 0.00001)

Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 02 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
NEW McNulty 2003a	54/100	88/100		50.00	0.61 [0.51, 0.75]
NEW McNulty 2003b	35/100	88/100		50.00	0.40 [0.30, 0.52]
Subtotal (95% CI)	200	200		100.00	0.51 [0.43, 0.60]

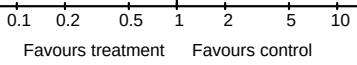
Total events: 89 (Treatment), 176 (Control)
Test for heterogeneity: Chi² = 6.68, df = 1 (P = 0.010), I² = 85.0%
Test for overall effect: Z = 8.20 (P < 0.00001)



Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 03 Failure to achieve at least 10% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
NEW McNulty 2003a	86/100	100/100		50.00	0.86 [0.79, 0.93]
NEW McNulty 2003b	73/100	100/100		50.00	0.73 [0.65, 0.82]
Subtotal (95% CI)	200	200		100.00	0.80 [0.74, 0.85]

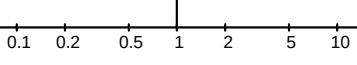
Total events: 159 (Treatment), 200 (Control)
Test for heterogeneity: Chi² = 5.76, df = 1 (P = 0.02), I² = 82.6%
Test for overall effect: Z = 6.39 (P < 0.00001)



Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 04 Failure to complete at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
NEW Kaukua 2004	8/100	11/100		16.42	0.73 [0.31, 1.73]
NEW McNulty 2003a	28/100	28/100		41.79	1.00 [0.64, 1.56]
NEW McNulty 2003b	21/100	28/100		41.79	0.75 [0.46, 1.23]
Subtotal (95% CI)	300	300		100.00	0.85 [0.62, 1.16]

Total events: 57 (Treatment), 67 (Control)
Test for heterogeneity: Chi² = 0.88, df = 2 (P = 0.64), I² = 0%
Test for overall effect: Z = 1.03 (P = 0.30)



Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 05 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW McNulty 2003a	68	-0.10(1.08)	32	-0.20(1.08)		50.76	0.10 [-0.35, 0.55]
NEW McNulty 2003b	62	0.00(1.08)	32	-0.20(1.08)		49.24	0.20 [-0.26, 0.66]
Subtotal (95% CI)	130		64			100.00	0.15 [-0.17, 0.47]

Test for heterogeneity: Chi² = 0.09, df = 1 (P = 0.76), I² = 0%
Test for overall effect: Z = 0.90 (P = 0.37)

Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 06 Change in LDL cholesterol in mmol/l at 12 months

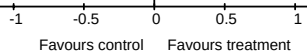
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW McNulty 2003a	68	-0.20(0.74)	32	-0.20(0.74)		50.76	0.00 [-0.31, 0.31]
NEW McNulty 2003b	62	-0.10(0.74)	32	-0.20(0.74)		49.24	0.10 [-0.22, 0.42]
Subtotal (95% CI)	130		64			100.00	0.05 [-0.17, 0.27]

Test for heterogeneity: Chi² = 0.20, df = 1 (P = 0.66), I² = 0%
Test for overall effect: Z = 0.44 (P = 0.66)

Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 07 Change in HDL cholesterol (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW McNulty 2003a	68	0.10(0.29)	32	0.00(0.29)		50.76	0.10 [-0.02, 0.22]
NEW McNulty 2003b	62	0.10(0.29)	32	0.00(0.29)		49.24	0.10 [-0.02, 0.22]
Subtotal (95% CI)	130		64			100.00	0.10 [0.01, 0.19]

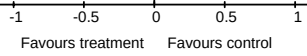
Test for heterogeneity: Chi² = 9.81E-32, df = 1 (P = 1.00), I² = 0%
Test for overall effect: Z = 2.26 (P = 0.02)



Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 08 Change in triglycerides mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW McNulty 2003a	68	-0.20(0.96)	32	0.10(0.96)		50.76	-0.30 [-0.70, 0.10]
NEW McNulty 2003b	62	-0.20(0.96)	32	0.10(0.96)		49.24	-0.30 [-0.71, 0.11]
Subtotal (95% CI)	130		64			100.00	-0.30 [-0.59, -0.01]

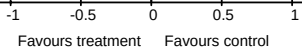
Test for heterogeneity: Chi² = 1.43E-31, df = 1 (P = 1.00), I² = 0%
Test for overall effect: Z = 2.05 (P = 0.04)



Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 09 Change in HbA 1c % at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW McNulty 2003a	68	-0.56(2.20)	32	-0.22(1.92)		47.33	-0.34 [-1.19, 0.51]
NEW McNulty 2003b	62	-0.32(1.80)	32	-0.22(1.92)		52.67	-0.10 [-0.90, 0.70]
Subtotal (95% CI)	130		64			100.00	-0.21 [-0.80, 0.37]

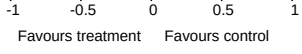
Test for heterogeneity: Chi² = 0.16, df = 1 (P = 0.69), I² = 0%
Test for overall effect: Z = 0.72 (P = 0.47)



Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 10 Change in fasting plasma glucose (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW McNulty 2003a	68	-0.30(1.35)	32	0.20(1.35)		50.76	-0.50 [-1.07, 0.07]
NEW McNulty 2003b	62	-0.10(1.35)	32	0.20(1.35)		49.24	-0.30 [-0.88, 0.28]
Subtotal (95% CI)	130		64			100.00	-0.40 [-0.81, 0.00]

Test for heterogeneity: Chi² = 0.24, df = 1 (P = 0.63), I² = 0%
Test for overall effect: Z = 1.95 (P = 0.05)



Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 11 Change in SBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Kaukua 2004	102	4.10(12.70)	108	3.60(12.70)		65.75	0.50 [-2.94, 3.94]
NEW McNulty 2003a	68	4.40(15.67)	32	-0.20(16.00)		17.41	4.60 [-2.08, 11.28]
NEW McNulty 2003b	62	-1.50(15.75)	32	-0.20(16.00)		16.84	-1.30 [-8.09, 5.49]
Subtotal (95% CI)	232		172			100.00	0.91 [-1.88, 3.70]

Test for heterogeneity: Chi² = 1.63, df = 2 (P = 0.44), I² = 0%
Test for overall effect: Z = 0.64 (P = 0.52)

Review: Sibutramine UPDATE adults only
Comparison: 03 Sibutramine and diet vs placebo and diet (type 2 diabetes)
Outcome: 12 Change in DBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Kaukua 2004	102	1.70(8.30)	108	-0.20(8.30)		57.28	1.90 [-0.35, 4.15]
NEW McNulty 2003a	68	3.30(9.07)	32	0.50(8.80)		20.72	2.80 [-0.93, 6.53]
NEW McNulty 2003b	62	0.40(7.87)	32	0.50(8.80)		22.00	-0.10 [-3.72, 3.52]
Subtotal (95% CI)	232		172			100.00	1.65 [-0.05, 3.35]

Test for heterogeneity: Chi² = 1.31, df = 2 (P = 0.52), I² = 0%
Test for overall effect: Z = 1.90 (P = 0.06)

Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	Sibutramine Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	142	-4.40(7.16)	69	-0.50(6.06)		49.10	-3.90 [-5.75, -2.05]
NEW McMahon 2002	145	-4.50(7.19)	72	-0.40(6.03)		50.90	-4.10 [-5.92, -2.28]
Subtotal (95% CI)	287		141			100.00	-4.00 [-5.30, -2.70]

Test for heterogeneity: Chi² = 0.02, df = 1 (P = 0.88), I² = 0%
Test for overall effect: Z = 6.04 (P < 0.00001)

Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 02 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
McMahon 2000	60/100	91/100		49.73	0.66 [0.56, 0.78]
NEW McMahon 2002	57/100	92/100		50.27	0.62 [0.52, 0.74]
Subtotal (95% CI)	200	200		100.00	0.64 [0.56, 0.72]

Total events: 117 (Treatment), 183 (Control)
Test for heterogeneity: Chi² = 0.24, df = 1 (P = 0.62), I² = 0%
Test for overall effect: Z = 7.06 (P < 0.00001)

Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 03 Failure to achieve at least 10% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
McMahon 2000	87/100	96/100		49.74	0.91 [0.83, 0.99]
NEW McMahon 2002	87/100	97/100		50.26	0.90 [0.83, 0.97]
Subtotal (95% CI)	200	200		100.00	0.90 [0.85, 0.96]

Total events: 174 (Treatment), 193 (Control)
Test for heterogeneity: Chi² = 0.03, df = 1 (P = 0.86), I² = 0%
Test for overall effect: Z = 3.40 (P = 0.0007)

Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 04 Failure to complete at 12 months

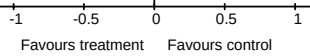
Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
McMahon 2000	47/100	45/100		46.88	1.04 [0.77, 1.41]
NEW McMahon 2002	43/100	51/100		53.13	0.84 [0.63, 1.13]
Subtotal (95% CI)	200	200		100.00	0.94 [0.76, 1.16]

Total events: 90 (Treatment), 96 (Control)
Test for heterogeneity: Chi² = 0.99, df = 1 (P = 0.32), I² = 0%
Test for overall effect: Z = 0.60 (P = 0.55)

Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 05 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	133	-0.03(1.08)	59	-0.07(1.08)		49.12	0.04 [-0.29, 0.37]
NEW McMahon 2002	129	-0.09(1.08)	63	-0.06(1.08)		50.88	-0.03 [-0.36, 0.30]
Subtotal (95% CI)	262		122			100.00	0.00 [-0.23, 0.24]

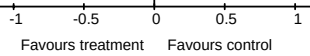
Test for heterogeneity: Chi² = 0.09, df = 1 (P = 0.77), I² = 0%
Test for overall effect: Z = 0.04 (P = 0.97)



Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 06 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	131	-0.09(0.74)	58	-0.11(0.74)		49.99	0.02 [-0.21, 0.25]
NEW McMahon 2002	122	-0.11(0.74)	60	-0.10(0.74)		50.01	-0.01 [-0.24, 0.22]
Subtotal (95% CI)	253		118			100.00	0.01 [-0.16, 0.17]

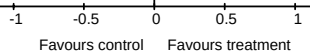
Test for heterogeneity: Chi² = 0.03, df = 1 (P = 0.86), I² = 0%
Test for overall effect: Z = 0.06 (P = 0.95)



Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 07 Change in HDL cholesterol (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	133	0.14(0.29)	59	0.06(0.29)		49.12	0.08 [-0.01, 0.17]
NEW McMahon 2002	129	0.12(0.29)	63	0.03(0.29)		50.88	0.09 [0.00, 0.18]
Subtotal (95% CI)	262		122			100.00	0.09 [0.02, 0.15]

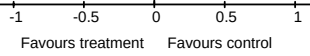
Test for heterogeneity: Chi² = 0.02, df = 1 (P = 0.88), I² = 0%
Test for overall effect: Z = 2.68 (P = 0.007)



Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 08 Change in triglycerides mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	133	-0.19(0.96)	59	-0.01(0.96)		49.12	-0.18 [-0.47, 0.11]
NEW McMahon 2002	129	-0.31(0.96)	63	-0.08(0.96)		50.88	-0.23 [-0.52, 0.06]
Subtotal (95% CI)	262		122			100.00	-0.21 [-0.41, 0.00]

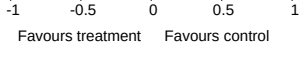
Test for heterogeneity: Chi² = 0.06, df = 1 (P = 0.81), I² = 0%
Test for overall effect: Z = 1.95 (P = 0.05)



Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 09 Change in fasting plasma glucose (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	133	0.23(1.35)	59	0.31(1.35)		100.00	-0.08 [-0.49, 0.33]
Subtotal (95% CI)	133		59			100.00	-0.08 [-0.49, 0.33]

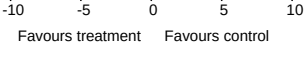
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.38 (P = 0.70)



Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 10 Change in SBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	142	2.70(12.70)	69	1.50(12.70)		49.11	1.20 [-2.45, 4.85]
NEW McMahon 2002	145	3.80(12.70)	72	1.10(12.70)		50.89	2.70 [-0.89, 6.29]
Subtotal (95% CI)	287		141			100.00	1.96 [-0.60, 4.52]

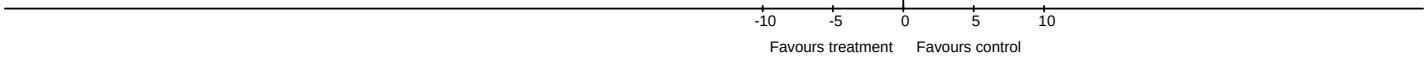
Test for heterogeneity: Chi² = 0.33, df = 1 (P = 0.57), I² = 0%
Test for overall effect: Z = 1.50 (P = 0.13)



Review: Sibutramine UPDATE adults only
Comparison: 04 Sibutramine and diet vs placebo and diet (hypertension)
Outcome: 11 Change in DBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
McMahon 2000	142	2.00(8.30)	69	-1.30(8.30)		49.11	3.30 [0.91, 5.69]
NEW McMahon 2002	145	3.00(8.30)	72	-0.10(8.30)		50.89	3.10 [0.75, 5.45]
Subtotal (95% CI)	287		141			100.00	3.20 [1.53, 4.87]

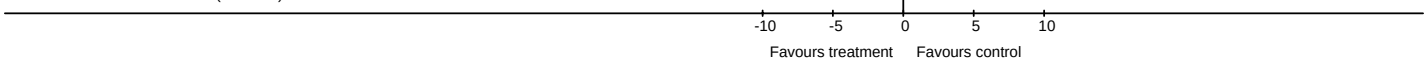
Test for heterogeneity: Chi² = 0.01, df = 1 (P = 0.91), I² = 0%
Test for overall effect: Z = 3.75 (P = 0.0002)



Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
NEW Sanchez-Reyes 20	44	-4.10(7.08)	42	-1.40(6.31)		100.00	-2.70 [-5.53, 0.13]
Total (95% CI)	44		42			100.00	-2.70 [-5.53, 0.13]

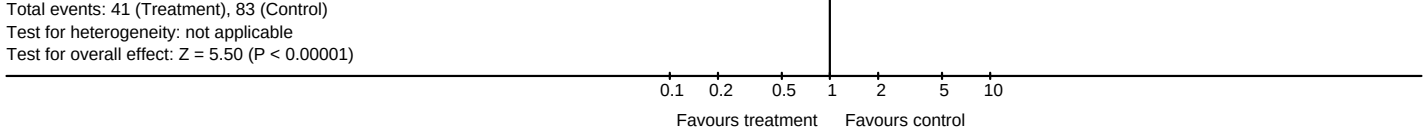
Test for heterogeneity: not applicable
Test for overall effect: Z = 1.87 (P = 0.06)



Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 02 Failure to achieve at least 5% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
NEW Sanchez-Reyes 20	41/100	83/100		100.00	0.49 [0.38, 0.64]
Subtotal (95% CI)	100	100		100.00	0.49 [0.38, 0.64]

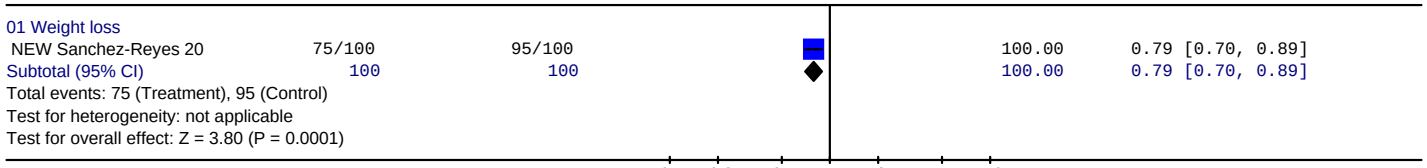
Total events: 41 (Treatment), 83 (Control)
Test for heterogeneity: not applicable
Test for overall effect: Z = 5.50 (P < 0.00001)



Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 03 Failure to achieve at least 10% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
NEW Sanchez-Reyes 20	75/100	95/100		100.00	0.79 [0.70, 0.89]
Subtotal (95% CI)	100	100		100.00	0.79 [0.70, 0.89]

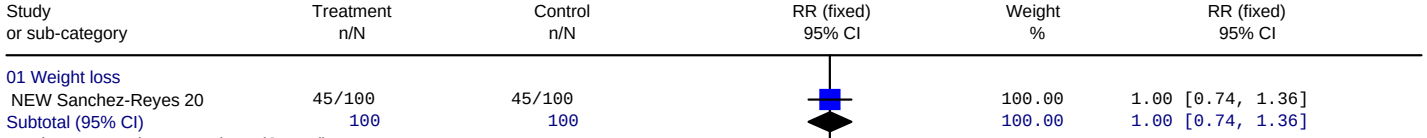
Total events: 75 (Treatment), 95 (Control)
Test for heterogeneity: not applicable
Test for overall effect: Z = 3.80 (P = 0.0001)



Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 04 Failure to complete at 12 months

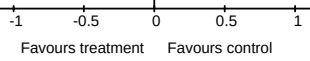
Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
NEW Sanchez-Reyes 20	45/100	45/100		100.00	1.00 [0.74, 1.36]
Subtotal (95% CI)	100	100		100.00	1.00 [0.74, 1.36]

Total events: 45 (Treatment), 45 (Control)
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



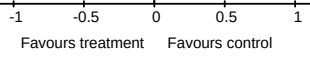
Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 05 Change in HbA 1c % at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Sanchez-Reyes 20	44	-0.60(0.76)	42	0.00(0.76)		100.00	-0.60 [-0.92, -0.28]
Subtotal (95% CI)	44		42			100.00	-0.60 [-0.92, -0.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.66 (P = 0.0003)							
Total (95% CI)	44		42			100.00	-0.60 [-0.92, -0.28]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 3.66 (P = 0.0003)							



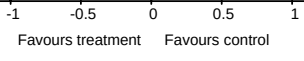
Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 06 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Sanchez-Reyes 20	44	-0.10(1.08)	42	0.30(1.08)		100.00	-0.40 [-0.86, 0.06]
Subtotal (95% CI)	44		42			100.00	-0.40 [-0.86, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.72 (P = 0.09)							
Total (95% CI)	44		42			100.00	-0.40 [-0.86, 0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.72 (P = 0.09)							



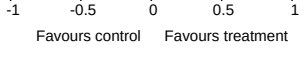
Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 07 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Sanchez-Reyes 20	44	-0.07(0.74)	42	0.30(0.74)		100.00	-0.37 [-0.68, -0.06]
Subtotal (95% CI)	44		42			100.00	-0.37 [-0.68, -0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.32 (P = 0.02)							
Total (95% CI)	44		42			100.00	-0.37 [-0.68, -0.06]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 2.32 (P = 0.02)							



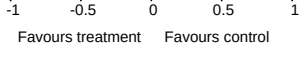
Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 08 Change in HDL cholesterol (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Sanchez-Reyes 20	44	0.02(0.29)	42	-0.03(0.29)		100.00	0.05 [-0.07, 0.17]
Subtotal (95% CI)	44		42			100.00	0.05 [-0.07, 0.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.80 (P = 0.42)							
Total (95% CI)	44		42			100.00	0.05 [-0.07, 0.17]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.80 (P = 0.42)							



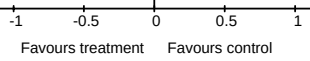
Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 09 Change in triglycerides mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Sanchez-Reyes 20	44	-0.19(0.96)	42	-0.20(0.96)		100.00	0.01 [-0.40, 0.42]
Subtotal (95% CI)	44		42			100.00	0.01 [-0.40, 0.42]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.05 (P = 0.96)							
Total (95% CI)	44		42			100.00	0.01 [-0.40, 0.42]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.05 (P = 0.96)							



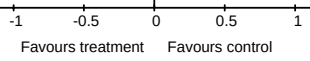
Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 10 Change in fasting plasma glucose (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Sanchez-Reyes 20	44	-1.46(1.98)	42	-0.93(1.98)		100.00	-0.53 [-1.37, 0.31]
Subtotal (95% CI)	44		42			100.00	-0.53 [-1.37, 0.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.24 (P = 0.21)							
Total (95% CI)	44		42			100.00	-0.53 [-1.37, 0.31]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.24 (P = 0.21)							



Review: Sibutramine UPDATE adults only
Comparison: 05 Sibutramine+D and PA, vs placebo+D and PA
Outcome: 11 Change in HbA 1c % at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Sanchez-Reyes 20	44	-0.60(0.76)	42	0.10(0.76)		100.00	-0.70 [-1.02, -0.38]
Subtotal (95% CI)	44		42			100.00	-0.70 [-1.02, -0.38]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.27 (P < 0.0001)							
Total (95% CI)	44		42			100.00	-0.70 [-1.02, -0.38]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.27 (P < 0.0001)							



Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 01 Weight change in kg at 6 months

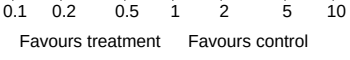
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Porter 2004	281	-6.80(5.50)	220	-3.10(5.40)		100.00	-3.70 [-4.66, -2.74]
Subtotal (95% CI)	281		220			100.00	-3.70 [-4.66, -2.74]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 7.55 (P < 0.00001)							

Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 02 Weight change in kg at 12 months

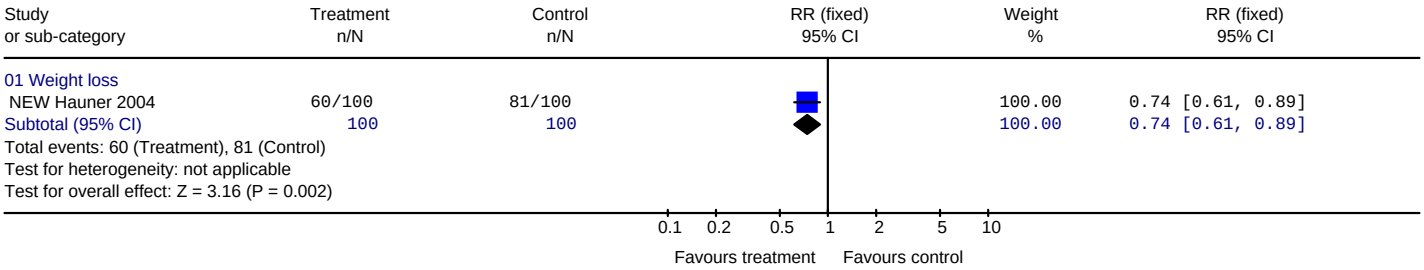
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Hauner 2004	174	-8.10(7.74)	174	-5.10(6.73)		40.42	-3.00 [-4.52, -1.48]
NEW Porter 2004	281	-6.30(7.70)	220	-2.50(6.62)		59.58	-3.80 [-5.06, -2.54]
Subtotal (95% CI)	455		394			100.00	-3.48 [-4.45, -2.51]
Test for heterogeneity: Chi² = 0.63, df = 1 (P = 0.43), I² = 0%							
Test for overall effect: Z = 7.03 (P < 0.00001)							
Total (95% CI)	455		394			100.00	-3.48 [-4.45, -2.51]
Test for heterogeneity: Chi² = 0.63, df = 1 (P = 0.43), I² = 0%							
Test for overall effect: Z = 7.03 (P < 0.00001)							

Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 03 Failure to achieve at least 5% loss of initial body weight at 12 months

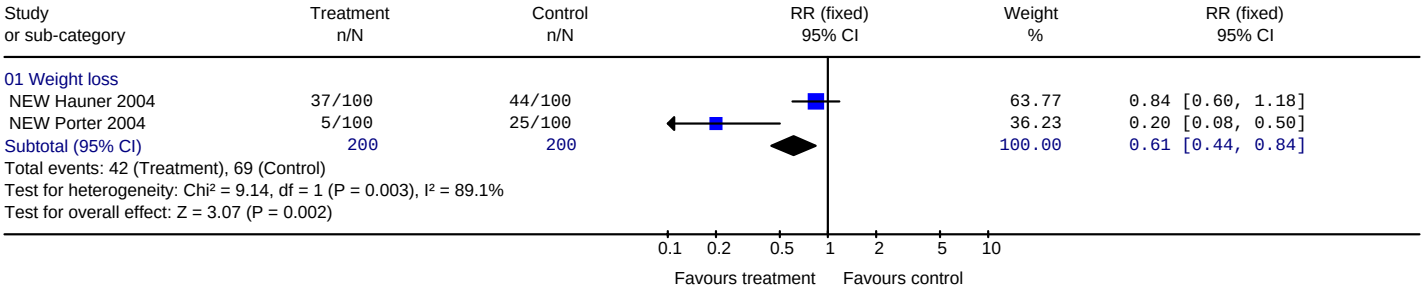
Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
NEW Hauner 2004	37/100	59/100		42.14	0.63 [0.46, 0.85]
NEW Porter 2004	53/100	81/100		57.86	0.65 [0.53, 0.81]
Subtotal (95% CI)	200	200		100.00	0.64 [0.54, 0.77]
Total events: 90 (Treatment), 140 (Control)					
Test for heterogeneity: Chi² = 0.05, df = 1 (P = 0.82), I² = 0%					
Test for overall effect: Z = 4.95 (P < 0.00001)					



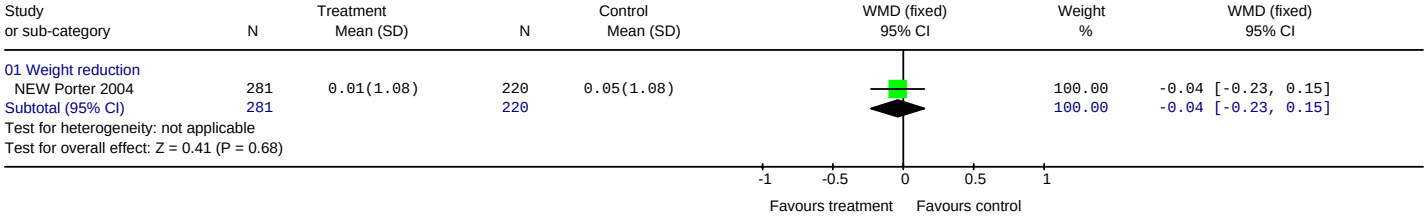
Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 04 Failure to achieve at least 10% loss of initial body weight at 12 months



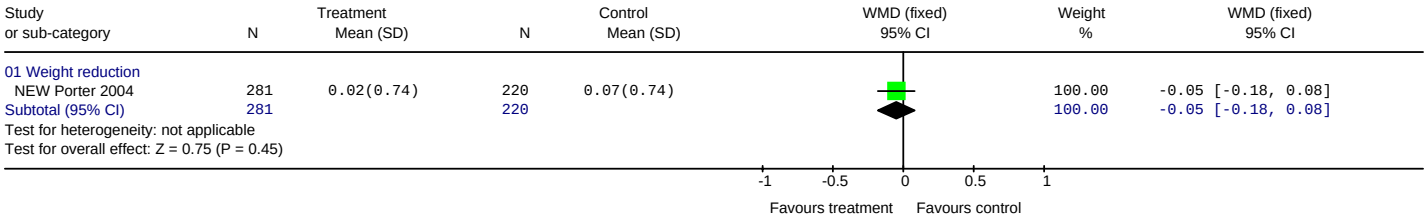
Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 05 Failure to complete at 12 months



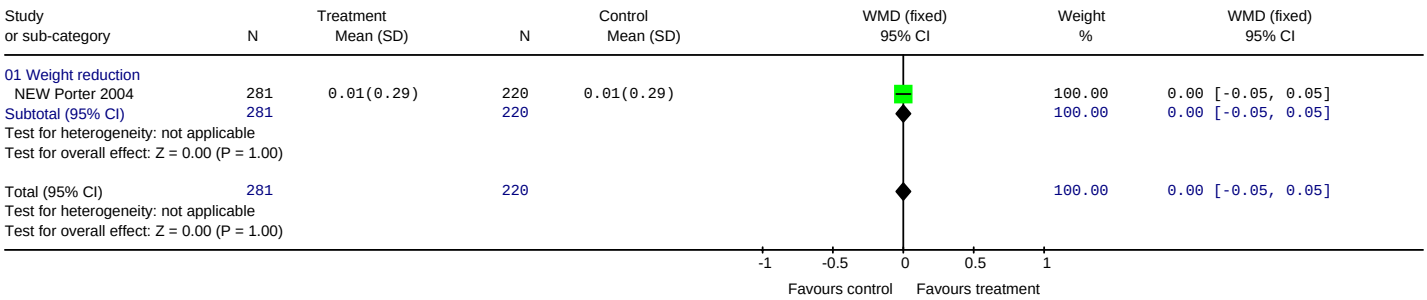
Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 06 Change in total cholesterol in mmol/l at 6 months



Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 07 Change in LDL cholesterol in mmol/l at 6 months

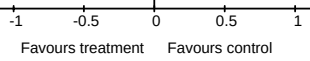


Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 08 Change in HDL cholesterol (mmol/l) at 6 months



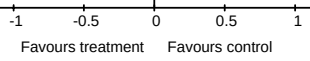
Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 09 Change in triglycerides mmol/l at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Porter 2004	281	-0.15(0.96)	220	-0.09(0.96)		100.00	-0.06 [-0.23, 0.11]
Subtotal (95% CI)	281		220			100.00	-0.06 [-0.23, 0.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.69 (P = 0.49)							
Total (95% CI)	281		220			100.00	-0.06 [-0.23, 0.11]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.69 (P = 0.49)							



Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 10 Change in fasting plasma glucose (mmol/l) at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Porter 2004	281	-0.04(1.98)	220	-0.10(1.98)		100.00	0.06 [-0.29, 0.41]
Subtotal (95% CI)	281		220			100.00	0.06 [-0.29, 0.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.34 (P = 0.74)							
Total (95% CI)	281		220			100.00	0.06 [-0.29, 0.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.34 (P = 0.74)							



Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 11 Change in SBP (mmHg) at 6 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Porter 2004	281	-1.40(12.70)	220	-2.10(12.70)		100.00	0.70 [-1.54, 2.94]
Subtotal (95% CI)	281		220			100.00	0.70 [-1.54, 2.94]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.61 (P = 0.54)							

Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 12 Change in DBP (mmHg) at 6 months

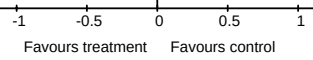
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Porter 2004	281	-0.90(8.30)	220	-1.70(8.30)		100.00	0.80 [-0.66, 2.26]
Subtotal (95% CI)	281		220			100.00	0.80 [-0.66, 2.26]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.07 (P = 0.28)							

Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 13 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Hauner 2004	174	-0.06(0.88)	174	-0.04(0.98)		100.00	-0.02 [-0.22, 0.18]
Subtotal (95% CI)	174		174			100.00	-0.02 [-0.22, 0.18]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.20 (P = 0.84)							

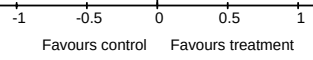
Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 14 Change in LDL cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Hauner 2004	174	-0.16(0.79)	174	-0.22(1.10)		100.00	0.06 [-0.14, 0.26]
Subtotal (95% CI)	174		174			100.00	0.06 [-0.14, 0.26]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.58 (P = 0.56)							



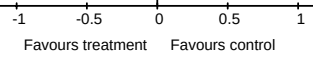
Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 15 Change in HDL cholesterol (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Hauner 2004	174	0.14(0.26)	174	0.10(0.29)		100.00	0.04 [-0.02, 0.10]
Subtotal (95% CI)	174		174			100.00	0.04 [-0.02, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.35 (P = 0.18)							
Total (95% CI)	174		174			100.00	0.04 [-0.02, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.35 (P = 0.18)							



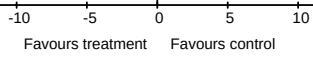
Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 16 Change in triglycerides mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Hauner 2004	174	-0.11(0.79)	174	0.19(2.51)		100.00	-0.30 [-0.69, 0.09]
Subtotal (95% CI)	174		174			100.00	-0.30 [-0.69, 0.09]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.50 (P = 0.13)							
Total (95% CI)	174		174			100.00	-0.30 [-0.69, 0.09]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.50 (P = 0.13)							



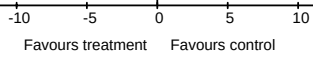
Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 17 Change in SBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Hauner 2004	174	-2.90(14.70)	174	-1.50(16.40)		100.00	-1.40 [-4.67, 1.87]
Subtotal (95% CI)	174		174			100.00	-1.40 [-4.67, 1.87]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.84 (P = 0.40)							
Total (95% CI)	174		174			100.00	-1.40 [-4.67, 1.87]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.84 (P = 0.40)							



Review: Sibutramine UPDATE adults only
Comparison: 06 Sibutramine+D, PA, and BT vs placebo+D, PA, and BT
Outcome: 18 Change in DBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Hauner 2004	174	-0.30(10.50)	174	-1.30(9.90)		100.00	1.00 [-1.14, 3.14]
Subtotal (95% CI)	174		174			100.00	1.00 [-1.14, 3.14]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.91 (P = 0.36)							
Total (95% CI)	174		174			100.00	1.00 [-1.14, 3.14]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.91 (P = 0.36)							



Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 01 Weight change in kg at 12 months

Study or sub-category	N	Sibutramine Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	27	-7.30(6.75)	27	-0.80(4.68)		100.00	-6.50 [-9.60, -3.40]
Subtotal (95% CI)	27		27			100.00	-6.50 [-9.60, -3.40]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 4.11 (P < 0.0001)							

Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 02 Weight change in kg at 24 months

Study or sub-category	N	Sibutramine Mean (SD)	N	Placebo Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	23	-4.60(5.75)	25	-8.10(8.00)		100.00	3.50 [-0.42, 7.42]
Subtotal (95% CI)	23		25			100.00	3.50 [-0.42, 7.42]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.75 (P = 0.08)							

Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 03 Failure to complete at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
NEW Redmon 2003	10/100	13/100		100.00	0.77 [0.35, 1.67]
Subtotal (95% CI)	100	100		100.00	0.77 [0.35, 1.67]
Total events: 10 (Treatment), 13 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: Z = 0.66 (P = 0.51)					

Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 04 Change in total cholesterol in mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	27	-0.41(1.08)	27	-0.44(1.08)		100.00	0.03 [-0.55, 0.61]
Subtotal (95% CI)	27		27			100.00	0.03 [-0.55, 0.61]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.10 (P = 0.92)							

Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 05 Change in LDL cholesterol in mmol/l at 12 months

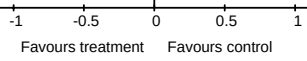
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	27	-0.31(0.67)	27	-0.33(0.78)		100.00	0.02 [-0.37, 0.41]
Subtotal (95% CI)	27		27			100.00	0.02 [-0.37, 0.41]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.10 (P = 0.92)							

Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 06 Change in HDL cholesterol (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	27	0.05(0.16)	27	0.02(0.16)		100.00	0.03 [-0.06, 0.12]
Subtotal (95% CI)	27		27			100.00	0.03 [-0.06, 0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.69 (P = 0.49)							
Total (95% CI)	27		27			100.00	0.03 [-0.06, 0.12]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.69 (P = 0.49)							

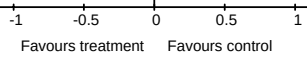
Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 07 Change in triglycerides mmol/l at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	27	-0.52(1.40)	27	0.09(1.04)		100.00	-0.61 [-1.27, 0.05]
Subtotal (95% CI)	27		27			100.00	-0.61 [-1.27, 0.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.82 (P = 0.07)							
Total (95% CI)	27		27			100.00	-0.61 [-1.27, 0.05]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.82 (P = 0.07)							



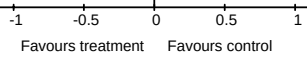
Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 08 Change in HbA 1c % at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	27	-0.60(1.55)	27	0.00(1.00)		100.00	-0.60 [-1.30, 0.10]
Subtotal (95% CI)	27		27			100.00	-0.60 [-1.30, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.69 (P = 0.09)							
Total (95% CI)	27		27			100.00	-0.60 [-1.30, 0.10]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.69 (P = 0.09)							



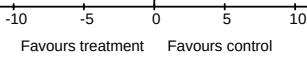
Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 09 Change in fasting plasma glucose (mmol/l) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	27	-0.66(2.59)	27	-0.61(2.59)		100.00	-0.05 [-1.43, 1.33]
Subtotal (95% CI)	27		27			100.00	-0.05 [-1.43, 1.33]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.07 (P = 0.94)							
Total (95% CI)	27		27			100.00	-0.05 [-1.43, 1.33]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.07 (P = 0.94)							



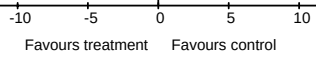
Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 10 Change in SBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	27	-6.00(15.59)	27	-6.00(10.39)		100.00	0.00 [-7.07, 7.07]
Subtotal (95% CI)	27		27			100.00	0.00 [-7.07, 7.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							
Total (95% CI)	27		27			100.00	0.00 [-7.07, 7.07]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.00 (P = 1.00)							



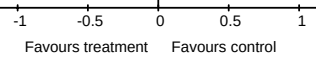
Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 11 Change in DBP (mmHg) at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	27	-3.00(5.20)	27	-6.00(10.39)		100.00	3.00 [-1.38, 7.38]
Subtotal (95% CI)	27		27			100.00	3.00 [-1.38, 7.38]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.34 (P = 0.18)							
Total (95% CI)	27		27			100.00	3.00 [-1.38, 7.38]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 1.34 (P = 0.18)							



Review: Sibutramine UPDATE adults only
Comparison: 07 Sibutramine and lifestyle vs lifestyle alone THEN sibutramine and lifestyle for all participants
Outcome: 12 Change in HbA 1c % at 24 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
01 Weight reduction							
NEW Redmon 2003	23	-0.50(1.44)	25	-0.30(1.00)		100.00	-0.20 [-0.91, 0.51]
Subtotal (95% CI)	23		25			100.00	-0.20 [-0.91, 0.51]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.55 (P = 0.58)							
Total (95% CI)	23		25			100.00	-0.20 [-0.91, 0.51]
Test for heterogeneity: not applicable							
Test for overall effect: Z = 0.55 (P = 0.58)							



Review: Sibutramine UPDATE adults only
Comparison: 08 Sibutramine + LCD + exercise + behaviour therapy vs sibutramine + LCD + exercise
Outcome: 01 Weight change in kg at 6 months

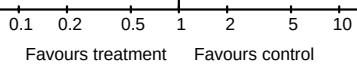
Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wadden 2001a	17	-11.40(7.10)	9	-5.60(5.00)		43.82	-5.80 [-10.50, -1.10]
Wadden 2001b	17	-17.90(5.80)	10	-5.60(5.00)		56.18	-12.30 [-16.45, -8.15]
Total (95% CI)	34		19			100.00	-9.45 [-12.56, -6.34]
Test for heterogeneity: Chi² = 4.13, df = 1 (P = 0.04), I² = 75.8%							
Test for overall effect: Z = 5.96 (P < 0.00001)							

Review: Sibutramine UPDATE adults only
Comparison: 08 Sibutramine + LCD + exercise + behaviour therapy vs sibutramine + LCD + exercise
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
Wadden 2001a	17	-11.10(10.50)	9	-3.80(6.10)		39.83	-7.30 [-13.69, -0.91]
Wadden 2001b	17	-16.60(7.50)	10	-3.80(6.10)		60.17	-12.80 [-18.00, -7.60]
Total (95% CI)	34		19			100.00	-10.61 [-14.64, -6.58]
Test for heterogeneity: Chi² = 1.71, df = 1 (P = 0.19), I² = 41.7%							
Test for overall effect: Z = 5.16 (P < 0.00001)							

Review: Sibutramine UPDATE adults only
Comparison: 08 Sibutramine + LCD + exercise + behaviour therapy vs sibutramine + LCD + exercise
Outcome: 03 Failure to achieve at least 5% loss of initial body weight at 12 months

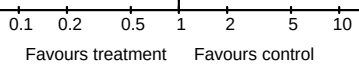
Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Wadden 2001a	47/100	68/100		50.00	0.69 [0.54, 0.89]
Wadden 2001b	12/100	68/100		50.00	0.18 [0.10, 0.31]
Subtotal (95% CI)	200	200		100.00	0.43 [0.34, 0.55]
Total events: 59 (Treatment), 136 (Control)					
Test for heterogeneity: Chi² = 23.94, df = 1 (P < 0.00001), I² = 95.8%					
Test for overall effect: Z = 6.98 (P < 0.00001)					



Review: Sibutramine UPDATE adults only
Comparison: 08 Sibutramine + LCD + exercise + behaviour therapy vs sibutramine + LCD + exercise
Outcome: 04 Failure to achieve at least 10% loss of initial body weight at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Wadden 2001a	65/100	89/100		50.00	0.73 [0.62, 0.86]
Wadden 2001b	24/100	89/100		50.00	0.27 [0.19, 0.38]
Subtotal (95% CI)	200	200		100.00	0.50 [0.43, 0.59]

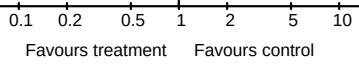
Total events: 89 (Treatment), 178 (Control)
Test for heterogeneity: Chi² = 33.27, df = 1 (P < 0.00001), I² = 97.0%
Test for overall effect: Z = 8.37 (P < 0.00001)



Review: Sibutramine UPDATE adults only
Comparison: 08 Sibutramine + LCD + exercise + behaviour therapy vs sibutramine + LCD + exercise
Outcome: 05 Failure to complete at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
Wadden 2001a	24/100	32/100		49.61	0.75 [0.48, 1.18]
Wadden 2001b	0/100	32/100		50.39	0.02 [0.00, 0.25]
Subtotal (95% CI)	200	200		100.00	0.38 [0.25, 0.58]

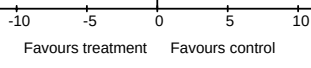
Total events: 24 (Treatment), 64 (Control)
Test for heterogeneity: Chi² = 13.86, df = 1 (P = 0.0002), I² = 92.8%
Test for overall effect: Z = 4.49 (P < 0.00001)



Review: Sibutramine UPDATE adults only
Comparison: 09 Sibutramine and diet vs placebo and diet (4 months) then open label sibutramine for all participants
Outcome: 01 Weight change in kg at 4 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
NEW Hainer 2005	38	-9.00(8.46)	42	-4.90(7.30)		100.00	-4.10 [-7.58, -0.62]
Total (95% CI)	38		42			100.00	-4.10 [-7.58, -0.62]

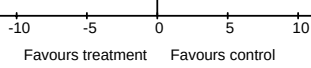
Test for heterogeneity: not applicable
Test for overall effect: Z = 2.31 (P = 0.02)



Review: Sibutramine UPDATE adults only
Comparison: 09 Sibutramine and diet vs placebo and diet (4 months) then open label sibutramine for all participants
Outcome: 02 Weight change in kg at 12 months

Study or sub-category	N	Treatment Mean (SD)	N	Control Mean (SD)	WMD (fixed) 95% CI	Weight %	WMD (fixed) 95% CI
NEW Hainer 2005	38	-12.90(9.57)	42	-11.90(9.28)		100.00	-1.00 [-5.14, 3.14]
Total (95% CI)	38		42			100.00	-1.00 [-5.14, 3.14]

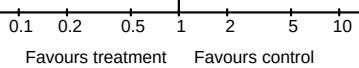
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.47 (P = 0.64)



Review: Sibutramine UPDATE adults only
Comparison: 09 Sibutramine and diet vs placebo and diet (4 months) then open label sibutramine for all participants
Outcome: 03 Failure to complete at 12 months

Study or sub-category	Treatment n/N	Control n/N	RR (fixed) 95% CI	Weight %	RR (fixed) 95% CI
01 Weight loss					
NEW Hainer 2005	23/100	23/100		100.00	1.00 [0.60, 1.66]
Subtotal (95% CI)	100	100		100.00	1.00 [0.60, 1.66]

Total events: 23 (Treatment), 23 (Control)
Test for heterogeneity: not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



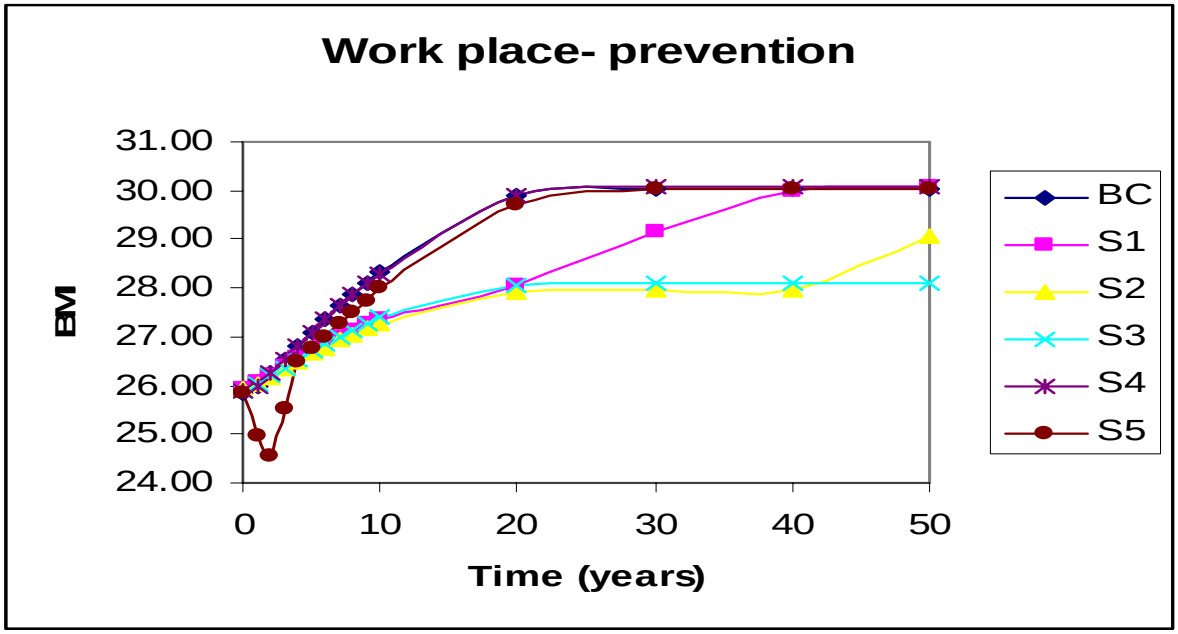
Appendix 18

HEALTH ECONOMICS: PUBLIC HEALTH

Table 1. Mortality by age and sex

Age (years)	Male	Female	Age (years)	Male	Female
0	0.005725	0.004715	**51**	0.004243	0.002774
1	0.000414	0.000364	**52**	0.004652	0.002925
2	0.000243	0.000204	**53**	0.004981	0.003281
3	0.000182	0.000139	**54**	0.005400	0.003502
4	0.000145	0.000143	**55**	0.005933	0.003839
5	0.000114	0.000114	**56**	0.006375	0.004209
6	0.000122	0.000113	**57**	0.007333	0.004551
7	0.000101	0.000090	**58**	0.007923	0.005022
8	0.000106	0.000080	**59**	0.008772	0.005568
9	0.000117	0.000075	**60**	0.010084	0.006298
10	0.000106	0.000100	**61**	0.011025	0.006754
11	0.000122	0.000080	**62**	0.012525	0.007445
12	0.000142	0.000122	**63**	0.013254	0.008134
13	0.000173	0.000107	**64**	0.014909	0.009035
14	0.000192	0.000132	**65**	0.016209	0.009820
15	0.000254	0.000137	**66**	0.017756	0.010953
16	0.000321	0.000210	**67**	0.019749	0.012030
17	0.000486	0.000229	**68**	0.022014	0.013572
18	0.000644	0.000250	**69**	0.024525	0.014919
19	0.000613	0.000303	**70**	0.026694	0.016276
20	0.000738	0.000253	**71**	0.030018	0.018466
21	0.000666	0.000270	**72**	0.033499	0.021096
22	0.000778	0.000274	**73**	0.037136	0.023658
23	0.000760	0.000297	**74**	0.041829	0.026625
24	0.000716	0.000279	**75**	0.046822	0.030265
25	0.000820	0.000318	**76**	0.052029	0.033726
26	0.000786	0.000348	**77**	0.057773	0.037443
27	0.000766	0.000331	**78**	0.063690	0.042188
28	0.000815	0.000352	**79**	0.071991	0.046527
29	0.000851	0.000397	**80**	0.078723	0.052626
30	0.000923	0.000438	**81**	0.087252	0.058660
31	0.000938	0.000461	**82**	0.095888	0.066367
32	0.001038	0.000476	**83**	0.102962	0.072231
33	0.001027	0.000510	**84**	0.112893	0.081454
34	0.001052	0.000596	**85**	0.125632	0.092885
35	0.001124	0.000590	**86**	0.145341	0.107513
36	0.001218	0.000658	**87**	0.160356	0.120096
37	0.001303	0.000695	**88**	0.176224	0.134309
38	0.001280	0.000843	**89**	0.192971	0.149487
39	0.001458	0.000882	**90**	0.204588	0.166094
40	0.001596	0.000939	**91**	0.222805	0.183601
41	0.001649	0.000997	**92**	0.247299	0.206840
42	0.001824	0.001144	**93**	0.272060	0.229441
43	0.002134	0.001301	**94**	0.287803	0.252408
44	0.002147	0.001458	**95**	0.326015	0.272554
45	0.002348	0.001549	**96**	0.342374	0.299233
46	0.002626	0.001794	**97**	0.368259	0.323896
47	0.002960	0.001992	**98**	0.396878	0.349627
48	0.003206	0.002159	**99**	0.417557	0.376015
49	0.003560	0.002275	**100**	0.443119	0.407128
50	0.003909	0.002578			

Figure 1. Body mass index (BMI; kg/m^2) vs. time for work place counselling



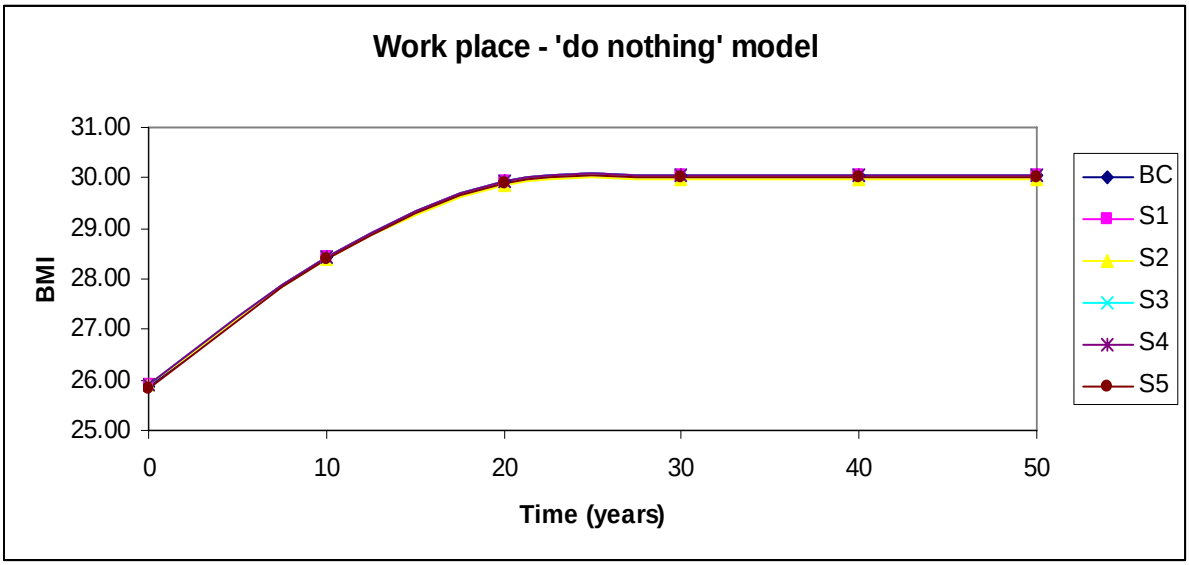
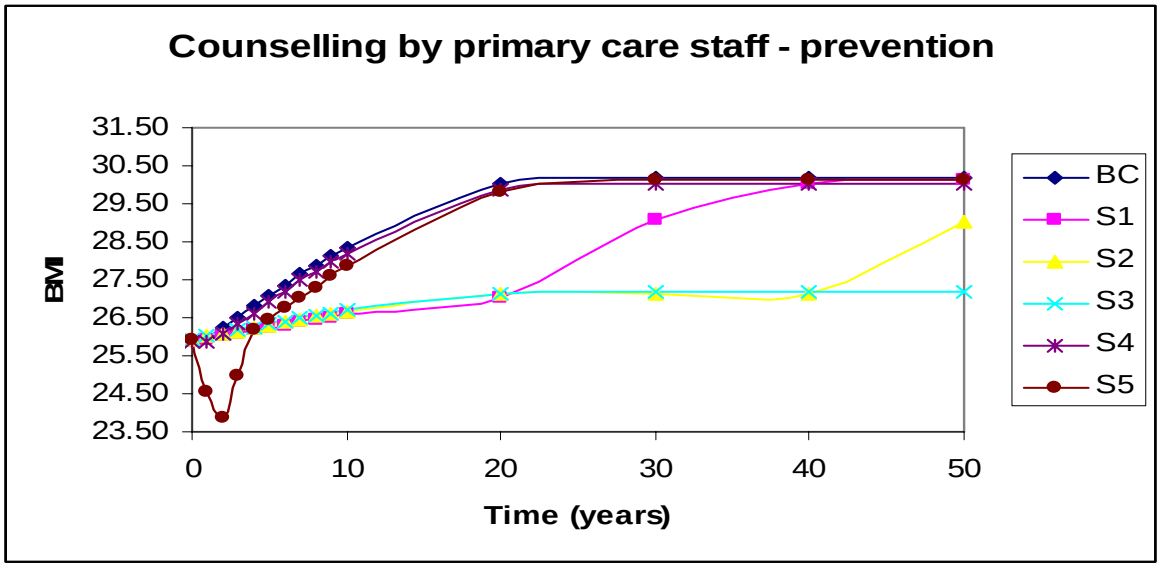


Figure 2. Body mass index (BMI; kg/m^2) vs. time for counselling by primary care staff



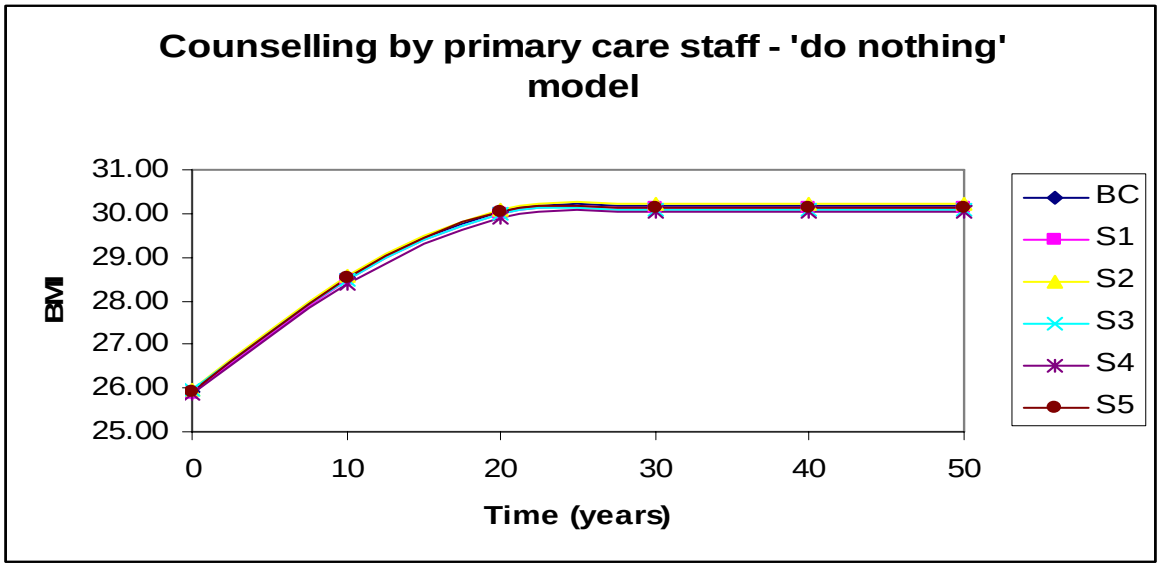
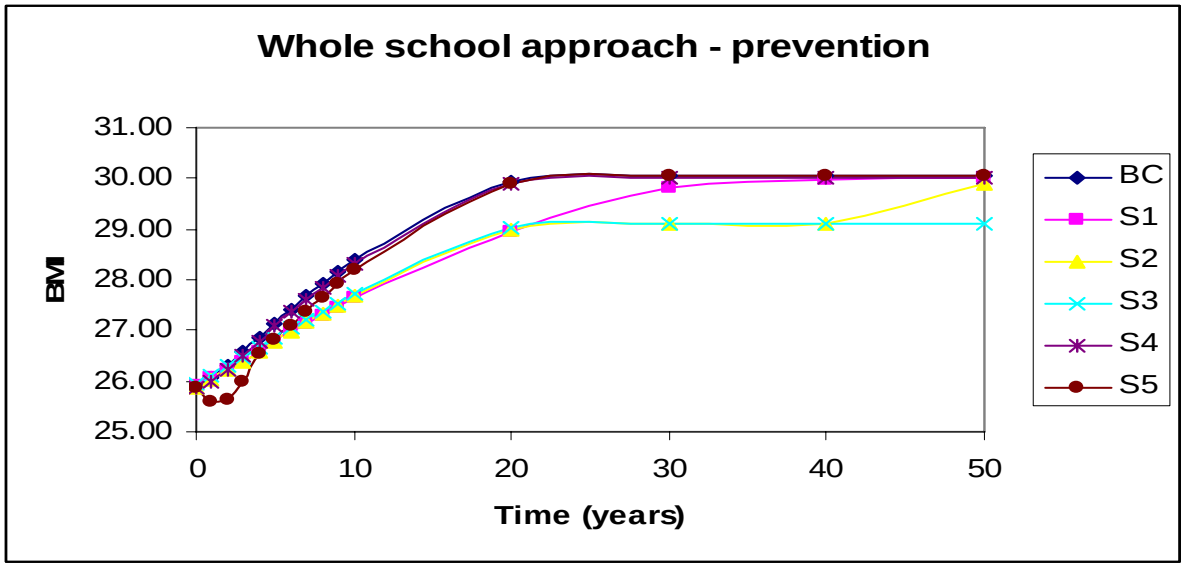
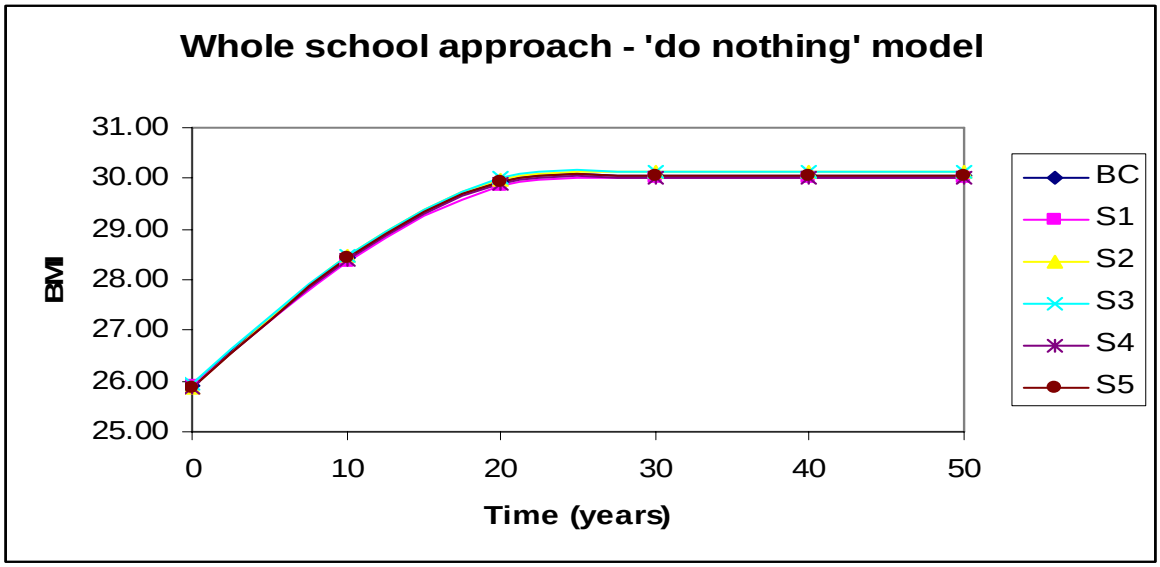


Figure 3. Body mass index (BMI; kg/m^2) vs. time for the whole school approach





THE COST-EFFECTIVENESS OF INTERVENTIONS TO PREVENT OBESITY: EVIDENCE SUMMARY TABLES

First author	**Study design**	**Research type**	**Research quality**	**Study population**	**Research question and design** (include power calculation if available)	**Length of follow-up**	**Main results** (include effect size(s)/confidence intervals for each outcome if available)	**Confounders** (potential sources of bias)/ **Comments**
Evidence of efficacy (internal validity) for weight maintenance/reduction								
Dzator 2004 [1]	Randomised controlled trial (RCT)	1	+	The study population included Perth couples who were cohabiting for the first time, had not been living together for more than 2 years, intended to stay in Perth for the 2 years and were not planning a pregnancy. Average age 29.4 (SD 8.2) years. Individuals were excluded if they suffered from heart disease, diabetes or severe asthma. 137 couples entered the study, 111 completed the testing at the end of the programme and 81 attended follow-up after 1 year.	**Aim:** To investigate the effect that diet and PA programmes have on couples. Couples were randomised to one of two interventions or a control. The low-level intervention group received an initial introductory group workshop, followed by mail outs. The high-level intervention group received mail outs alternated with interactive sessions, with a dietitian and the exercise physiologist. Control patients were invited for measurement (they were offered the programme at the end of the study).	16-week intervention 8-month follow-up (1 year after baseline)	Intervention is more effective than doing nothing. The high intervention group showed substantial marginal improvement compared to the low intervention group. This was particularly the case for blood cholesterol, blood pressure, fat intake and fitness. There was no significant difference in body mass index (BMI) at either 4 or 12 months.	**Limitations:** No allocation concealment. Potential for bias caused by the over representation of higher socio-economic status (SES). Participants were chosen who responded to an advertisement, these were potentially more motivated to begin with. Intention to treat (ITT) analysis was used.

					Programme delivered by health promotion professionals. **Power calculation:** $p = 0.05$ with a power of 80% as a minimum.			
Israel 1985 (included in McLean 2003 systematic review) [9]	Randomised controlled trial (RCT)			Thirty-three families, children aged between 8–12 years and at least 20% over IBW; mean age 11 years and 4 months. Behavioural weight reduction only group, *n* = 12 (nine girls, three boys, range 9–12 years). Behavioural weight reduction plus parent training group, *n* = 12 (eight girls, four boys, range 8–13 years). Wait list control group, *n* = 9 (six girls, three boys, range 9–12 years).	To evaluate the effect of explicit and additional training in general child management skills in the context of a behavioural treatment programme for overweight children.	Behavioural weight reduction only group and behavioural weight reduction plus parent training group received identical treatment consisting of stimulus control cues, exercise, food intake and rewards; responsibility for monitoring was divided between parent and child, also included homework. Behavioural weight reduction plus parent training group also received 2-hour-long sessions of	Changes in weight at 1-year behavioural weight reduction plus parent training vs. behavioural weight reduction only: 5.2 (*n* = 11) vs. 4.8 kg (*n* = 9). Change in % overweight at 1 year behavioural weight reduction plus parent training vs. behavioural weight reduction only: –10.2 (*n* = 11) % vs. –1.3% (*n* = 9). No significant difference between two active treatment groups.	Thirty-three families, children aged between 8–12 years and at least 20% over IBW; mean age 11 years and 4 months. Behavioural weight reduction only group, *n* = 12 (nine girls, three boys, range 9–12 years). Behavioural weight reduction plus parent training group, *n* = 12 (eight girls, four boys, range 8–13 years). Wait list control group, *n* = 9 (six girls, three boys, range 9–12 years).

						instruction in behavioural child management skills prior to start of programme, understanding was tested in three quizzes and concepts were referred to in treatment programme. Nine × 90 min sessions then brief problem-solving discussions at 1, 2, 4, 6, 9 and 12 months including telephone calls.		
Overall strength of evidence of efficacy for weight outcomes = 1+								

Evidence of efficacy (internal validity) for diet outcomes								
Aldana et al. 2005 [2]	Before and after study	2	–	The study population was employees and retirees of the Washoe County School District (WCSD) in 1997 to 2002. Participants were eligible if they had	**Aim:** To assess the effect the WCSD Wellness Programme on employee healthcare costs and the rates of absenteeism. There were 11 different programmes offered to all participants. The	2 years	Of the eligible employees 1407 participated in either 2001 or 2002, and 1264 in both. The majority were >50 years, female, had a certified job classification, worked at least 6 years and had not participated in any of the wellness programmes. The results for each of the	There was no control group to compare the results with.

				been employed full time by the district for ≥3 years, including 2001 and 2002. 6246 were eligible; of this 1441 were retired. Participants enrolled on line or at any of the different district schools or facilities.	programmes were promoted over the internet and email. The programmes were: 1) Brighten your smile – participants were encouraged to brush and floss their teeth twice per day; 2) Holiday weight challenge – this encouraged responsible energy intake and expenditure during the holiday season; 3) Water challenge – promoted dehydration awareness; 4) Tame the TV – encouraged the substituted of healthier activities for TV; 5) March nutrition mystery – by eating five portions of fruit and vegetables per day clues to a mystery became available; 6) Mount Everest fitness challenge – teams moved up a web-based map of Mount Everest by exercising; 7) Test your rest – 7–9 hours sleep per night was encouraged; 8) Iron man triathlon fitness challenge – the teams moved up a course by exercising, drinking		programmes are as follows: 1) 166 participants, there was a significant increase in brushing and flossing; 2) 1761 participants, 91% reported no weight gain. For those who lost weight, they lost 2.5 lb (1.13 kg) on average; 3), 4), 5), 7), 9) and 11) had 2736 participants; 6) and 8) had 3288 participants, and reported a 90% compliance to dietary and exercise recommendations. Programme completion rates ranged from 62 to 82% The number of days missed of work increased with age and years worked and was higher among males and classified employees. The days of work significantly decreased with the level of wellness participation.	

					water and eating fruits and vegetables; 9) Train your brain – encouraged participants to read for a few minutes each day; 10) Exercise for life – participants committed to 8 weeks of exercise; 11) Buckle up America – the wearing of seatbelts was encouraged.			
Proper 2004 [3]	RCT individual	1	+	The study population was recruited from three municipal services of a Dutch town. To be included participants had to be a civil servant; perform office work; work at least 24 hours per week at the local municipal service of Enschde; and have a contract until at least the end of the post-test. The mean age of the intervention group was 43.8 years and for the control group was 43.7 years.	**Aim:** To investigate the efficacy of physical activity (PA) counselling at a worksite. Cost benefit and cost-effectiveness were looked at. Costs of the intervention were compared to the monetary benefits from a reduction in sick leave. Patients were randomised to either the intervention group or a control group. Participants in the intervention group were offered seven consultations, which took place at the worksite. The counselling promoted PA and healthy dietary habits. Standardised protocols and the individual's stage of behaviour change were used as guides. Stage of development was determined using baseline	The intervention lasted 9 months. Outcomes were investigated during the same 9 months 1 year after the intervention.	The results of the study show that 'a significant positive intervention effect was observed for energy expenditure'. Participants in the intervention group expended more energy per day. The controls decreased their energy expenditure. The mean energy expenditure was 64 kcal (268 kJ)/day, for the intervention group, and –129 kcal (–540 kJ)/day for the control group. The fitness level of the intervention group improved, compared with the controls. The effect on the proportion of subjects meeting public health recommendation for moderate-intensity PA was not significant. The prevalence of upper extremity symptoms decreases more in the intervention group; no significant effect was found.	The authors' note that several potential benefits were not included in the study. These included employee turnover, productivity, commitment to the company and improved corporate image. Healthcare costs, due to medical consumption or therapy, were not taken on to account.

					measurements. Advice offered was tailored to the individual. The counsellor and the employee devised a plan to improve PA and nutrition. Both the intervention group and the control group received written information about lifestyle factors (PA, nutrition, alcohol, smoking, [work] stress, and musculoskeletal symptoms).			
Rajgopal 2002 [4]	Before and after study	2	–	The study population consisted of 3100 homemakers, who had graduated from Virginia Expanded Food and Nutrition Education Programme (EFNEP), i.e. were included in the 1996 sample study. EFNEP teaches homemakers recommended food-related behaviours and food nutrient intakes.	**Aim:** To evaluate the economic efficacy of the Virginia EFNEP. The monetised health benefits were compared with the programme implementation costs. The study was split into three phases. The first investigated behaviours taught in EFNEP that might 'contribute to delay or avoidance of diet-related chronic diseases and conditions that are believed to be most prevalent among the low-income population'. In the second phase SPSS was used to select participants from the 3100 graduated homemakers who had met the selected criteria for	1 year	The perspective adopted was that of the programme sponsors, including the federal leaders and legislators who determine the funding and direction of the programme. The initial benefit/cost ratio was US$10.64/US$1.00, indicating that for every one dollar spent more than ten dollars may be saved in future healthcare costs. Sensitivity analysis on the initial assumptions and the lack of incidence data for some disease areas gives a benefit/cost ratio ranging from US$2.66/US$1.00 to US$17.04/US$1.00. Reducing in the number of graduates to achieve the optimal behaviours by 75%, the ratio is US$2.66/US$1.00, and when it is reduced by 50% the ratio is US$5.32/US$1.00. Assuming 50% is the portion of osteoporosis due to dietary factors, the ratio is	This was a general dietary initiative and was not targeted at obesity. The authors note that data on disease incidence rates for low-income populations and treatment costs for diet-related diseases were not available for several diseases. Some available treatment costs did not reflect total economic costs of the diseases. There was a lack of data on the portion of some diseases and conditions that could be attributed to diet.

					optimal nutritional behaviour (ONB). The final phase gleaned the data from the previous phases in to a controlled before and after (CBA) formula.		US$5.91/US$1.00. Using only estimated disease incidence rates for low-income populations the ratio is US$17.01/US$1.00.	
Roux 2004 [5]	Markov model	1	+	The study population included adults; further details of the study population were not provided.	**Aim:** To assess the cost-effectiveness of population wide strategies to promote PA in adults. A Markov model was developed to estimate the costs, health gains and cost-effectiveness. Four public health strategies that had been strongly recommended by the US Task Force for Preventative Services were investigated. Further details of the interventions were not provided. The efficacy estimates were obtained from RCTs. A systematic review of disease burden by exercise status was used to obtain the relative risk of five diseases (coronary heart disease, ischaemic stroke, colorectal cancer, breast cancer and type 2 diabetes), for inactive, regularly active, and sufficiency active PA levels.	10, 20, 30 and 40 years time horizons were used.	A societal perspective was used. PA access intervention was the most effective. Social support was the most cost-effective intervention at US$9,000 per quality-adjusted life-year (QALY), assuming a 40-year time horizon. All physical activities were cost effective (ranging from $9,000/QALY to $30,000/QALY) The results were sensitive to intervention costs and efficacy and analytic time horizon.	The information provided is taken from an abstract presentation at NAASO's 2004 annual meeting.

					The Quality of Well Being Scale was used for data on quality of life.			
Wang 2003 [6]	RCT Individual	1	+	310 female middle school children in Boston, MA, USA, metropolitan area. The children appear to be 14 years old.	**Aim:** To investigate the effect of Planet Health, a school-based intervention was designed to reduce obesity in the youth of middle school children. Children were randomly assigned to the intervention group or a control group.	2 years (fall 1995 to spring 1997)	Planet Health would prevent an estimated 1.9% of the female students from becoming overweight adults. Obesity prevalence declined from 23.6 to 20.4% during the intervention. This compares with an increase from 21.5 to 23.7% in the control group. When baseline covariates were controlled the prevalence of obesity in girls from the intervention group was reduced significantly compared to the control girls (odds ratio [OR] 0.47, 95% CI 0.24 to 0.93, $p = 0.03$). There were no significant differences found among boys.	No allocation concealment.
Wang *et al.* 2004 [7]	CCT	2	+	The study population included third graders in Augusta, GA, USA, were included in the study.	The aim was to investigate the cost-effectiveness of an after school obesity prevention programme called MCG FitKid Project. Nine elementary schools were included in the study.	3 years. Only the first year results are presented here.	A societal perspective was adopted. The cost of the programme was US$546 per student (US$174,070 per programme). There was a 0.5% ($p = 0.07$) body fat reduction in the intervention students. When comparing the intervention with the control, there was a saving of US$451 per student in costs of usual after-school care. The cost-effectiveness ratio was US$190 per 1% body fat reduction.	The information provided is taken from an abstract presentation at NAASO's (The Obesity Society's) 2004 annual meeting.

							For students who attended at least 40 and 80% of the sessions, the programme resulted in an average 0.8% ($p < 0.01$) and 1.2% ($p < 0.01$) body fat reduction respectively. This was achieved at a cost of US$634 and US$839 per student in after-school care costs. Resulting in a per capita net savings of US$88 and US$293 respectively.	

Evidence of efficacy (internal validity) for physical activity outcomes

Overall strength of evidence of efficacy for physical activity outcomes = 1+

Overall strength of evidence of efficacy for diet outcomes = 1+

Evidence of corroboration (external validity)

Evidence of salience – Is it appropriate for the UK?

First author	Study design	Research type	Research quality	Study population	Research question and design	Length of follow-up	Main results	Confounders/comments

Evidence for implementation – Will it work in the UK?

First author	Study design	Research type	Research quality	Study population	Research question and design	Length of follow-up	Main results	Confounders/ comments
Aldana et al. 2005 [2]	Before and after study	2	–	The study population was employees and retirees of the Washoe County School District (WCSD) for the 1997 to 2002. Participants were eligible if they had been employed full	Aim: To see the effect the WCSD Wellness Programme had on employee healthcare costs and the rates of absenteeism. There were 11 different programmes offered to all participants.	2 years	Of the eligible employees 1407 participated in either 2001 or 2002, and 1264 in both. The majority were ≥50 years, female, had a certified job classification, worked at least 6 years and had not participated in any of the wellness programmes. The results for each of the programmes are as follows:	There was no control group to compare the results with. This was carried out in the USA, there is not evidence to suggest that similar programmes would not work in the UK.

				time by the district for three or more years, including 2001 and 2002. 6246 were eligible, of this 1441 were retired. Participants enrolled on line or at any of the different district schools or facilities.	The programmes were promoted over the Internet and email. The programmes were: 1) Brighten your smile – where participants were encouraged to brush and floss their teeth twice a day; 2) Holiday weight challenge – this encouraged responsible energy intake and expenditure during the holiday season; 3) Water challenge – promoted dehydration awareness; 4) Tame the television – encouraged the substituted of healthier activities for television; 5) March nutrition mystery – by eating five portions of fruit and vegetables per day clues to a mystery became available; 6) Mount Everest fitness challenge – teams moved up a web-based map of		1) 166 participants, there was a significant increase in brushing and flossing; 2) 1761 participants, 91% reported no weight gain. For those who lost weight, they lost 2.5 lb on average; 3), 4), 5), 7), 9) and 11) had 2736 participants; 6) and 8) had 3288 participants, reporting a 90% compliance to dietary and exercise recommendations. Programme completion rates ranged from 62 to 82% The number of days missed of work increased with age and years worked and was higher among males and classified employees. The days of work significantly decreased with the level of wellness participation.	

					Mount Everest by exercising; 7) Test your rest – 7 to 9 hours sleep per night was encouraged; 8) Iron man triathlon fitness challenge – the teams moved up a course by exercising, drinking water and eating fruits and vegetables; 9) Train your brain – encouraged participants to read for a few minutes each day; 10) Exercise for life – participants committed to 8 weeks of exercise; 11) Buckle up America – the wearing of seatbelts was encouraged.			
Dzator 2004 [1]	RCT	1	+	The study population included Perth couples who were cohabiting for the first time, had not been living together for more than 3 years, intended to stay in Perth for the 3 years and were not planning a pregnancy.	**Aim:** To investigate the effect that diet and PA programmes have on couples. Couples were randomised to one of two interventions or a control. The low-level intervention group received an initial introductory group	16-week intervention 8-month follow-up (1 year after baseline)	Intervention is more effective than doing nothing. The high-intervention group showed substantial marginal improvement compared with the low-intervention group. This was particularly the case for blood cholesterol, blood pressure, fat intake and fitness. There was no significant difference in BMI at either 4 or 12 months.	The study was carried out in Perth. All topics presented in participants are generalisable to all countries (i.e. the benefits of good nutrition, how to start an exercise programme, injury prevention, recognising signs of overexertion, back care and cultivating exercise partners).

				Average age 29.4 (SD 8.2) years. Individuals were excluded if they suffered from heart disease, diabetes or severe asthma. 137 couples entered the study, 111 completed the testing at the end of the programme and 81 attended follow-up after one year.	workshop, followed by mail outs. The high-level intervention group received mail outs alternated with interactive sessions, with a dietitian and the exercise physiologist. Control patients were invited for measurement (they were offered the programme at the end of the study). Programme delivered by health promotion professionals. **Power calculation:** $p = 0.05$ with a power of 80% as a minimum.			**Limitations:** There is a potential for bias caused by the over representation of higher socioeconomic status (SES). Participants were chosen who responded to an advertisement, these were potentially more motivated to begin with.
Proper 2004 [3]	RCT individual	1	+	The study population was recruited from three municipal services, of a Dutch town. To be included participants had to be a civil servant; perform office work; work at least 24 hours per week at the local	Aim: To investigate the efficacy of PA counselling at a worksite. Cost–benefit and cost-effectiveness were looked at. Costs of the intervention were compared with the monetary benefits from a reduction in sick leave.	The intervention lasted 9 months. Outcomes were investigated during the same 9 months 1 year after the intervention.	The results of the study show that 'a significant positive intervention effect was observed for energy expenditure'. Participants in the intervention group expended more energy per day. The controls decreased their energy expenditure. The fitness level of the intervention group improved, compared with the controls.	This study was carried out in a Dutch town therefore may not be generalisable to the UK. The public health recommendations may not be the same as those given in the UK. The authors' note that several potential benefits were not included in the study. These included employee turnover,

				municipal service of Enschde; and have a contract until at least the end of the post-test. The mean age of the intervention group was 43.8 years and for the control group was 43.7 years.	Patients were randomised to either the intervention group or a control group. Participants in the intervention group were offered seven consultations, which took place at the worksite. The counselling promoted PA and healthy dietary habits. Standardised protocols and the individual's stage of behaviour change were used as guides. Stage of development was determined using baseline measurements. Advice offered was tailored to the individual. The counsellor and the employee devised a plan to improve PA and nutrition. Both the intervention group and the control group received written information about life style factors (PA, nutrition, alcohol,		The effect on the proportion of subjects meeting public health recommendation for moderate-intensity PA was not significant. The prevalence of upper extremity symptoms decreased more in the intervention group; no significant effect was found.	productivity, commitment to the company and improved corporate image. Healthcare costs, due to medical consumption or therapy, were not taken into account.

					smoking, [work] stress, and musculoskeletal symptoms).			
Rajgopal 2002 [4]	Before and after study	2	–	The study population consisted of 3100 homemakers, who had graduated from the Virginia Expanded Food and Nutrition Education Programme (EFNEP), i.e. were included in the 1996 sample study. EFNEP teaches limited resource homemakers recommended food-related behaviours and food nutrient intakes.	The aim of the study was to evaluate the economic efficacy of the Virginia EFNEP. The monetised health benefits were compared with the programme implementation costs. The study was split into three phases. The first investigated behaviours taught in EFNEP that might 'contribute to delay or avoidance of diet-related chronic diseases and conditions that are believed to be most prevalent among the low-income population'. In the second phase SPSS was used to select participants from the 3100 graduate homemakers who had met the selected criteria for ONB. The final phase gleaned the data from the previous phases in to a CBA formula.	1 year	The perspective adopted was that of the programme sponsors, including the federal leaders and legislators who determine the funding and direction of the programme.	This was a general dietary initiative and was not targeted at obesity. This study investigates the cost benefit of the EFNEP programme in the USA, as such it might not be generalisable to the UK. Limited resource homemakers in the USA may not have the same characteristics as limited resource homemakers in the UK.

Roux 2004 [8]	Discrete choice experiment (non-randomised experimental design)	3	+	Members of a community weight loss programme in the spring of 2001, Calgary, Alberta, Canada. Participants were ≥25 years, overweight or obese (BMI ≥25 kg/m^2), had recently enrolled on the scheme, were not pregnant or nursing and were absence of clinical co-morbidities.	**Aim:** To investigate factors that impact on individual's decision to adhere to a community weight loss programme.	N/A	Attributes with a positive coefficient (participants were willing to give up something else to move up a level) were amount of doctor time, programme components emphasised, and the programme focus. Attributes with a negative coefficient (i.e. become less preferable as the absolute magnitude of the coefficients rises) were the programme cost for 3 months and one-way travel time. Service attributes do play a marked role in the decisions that users of a weight loss programme make.	This study investigated what influences Canadians' decisions to adhere to a community weight loss programme. These may not be generalisable to different settings. **Limitations:** The sample was self-selecting and therefore may not be representative of the general weight loss population; the sample size was small.
Wang 2003 [6]	RCT	1	+	310 female middle school children in Boston, MA, USA, metropolitan area.	**Aim:** To investigate the effect of Planet Health, a school-based intervention was designed to reduce obesity in the youth of middle school children. Children were randomly assigned to the intervention group or a control group	2 years (fall 1995 to spring 1997)	Planet Health would prevent an estimated 1.9% of the female students from becoming overweight adults. Obesity prevalence declined from 23.6 to 20.4% during the intervention. This compares with an increase of 21.5 to 23.7% in the control group. When baseline covariates were controlled the prevalence of obesity in girls from the intervention group was reduced significantly compared with the control girls (OR 0.47, 95% CI 0.24 to 0.93, $p = 0.03$). There were no significant differences	The curricula and amount of physical education classes the control group received is likely to be different than the amount typically received by a UK middle-school child.

							found among boys.	
Wang et al. 2004 [7]	CCT	2	+	The study population included third graders in Augusta, GA, USA, were included in the study.	**Aim:** To investigate the cost-effectiveness of an after school obesity prevention programme called MCG FitKid Project. Nine elementary schools were included in the study.	3 years. Only the first year results are presented here.	A societal perspective was adopted. The cost of the programme was US$546 per student (US$174,070 per programme). There was a 0.5% ($p = 0.07$) body-fat reduction in the intervention students. When comparing the intervention to the control, there was a saving of US$451 per student in costs of usual after-school care. The cost-effectiveness ratio was US$190 per 1% body-fat reduction. For students who attended at least 40% and 80% of the sessions, the programme resulted in an average 0.8% ($p < 0.01$) and 1.2% ($p < 0.01$) body-fat reduction respectively. This was achieved at a cost of US$634 and US$839 per student in after-school care costs. Resulting in a per capita net savings of US$88 and US$293 respectively.	The information provided is taken from an abstract presentation at NAASO's 2004 annual meeting. This is a US study and as such details about the school day and after care facility may not be generalisable to the UK.
Overall strength of evidence of corroboration = none of the studies were UK studies. All the studies investigated different interventions.								
Evidence of cost-effectiveness								
First author	**Study design**	**Research type**	**Research quality**	**Study population**	**Research question and design**	**Length of follow-up**	**Main results**	**Confounders/comments**

Aldana et al. 2005 [2]	Before and after study	2	–	The study population was employees and retirees of the Washoe County School District (WCSD) for 1997 to 2002. Participants were eligible if they had been employed full time by the district for ≥3 years, including 2001 and 2002. 6246 were eligible, of this 1441 were retired. Participants enrolled online or at any of the different district schools or facilities.	Aim: To see the effect the WCSD Wellness Programme had on employee healthcare costs and the rates of absenteeism. There were 11 different programmes offered to all participants. The programmes were promoted over the Internet and email. The programmes were: 1) Brighten your smile – participants were encouraged to brush and floss their teeth twice per day; 2) Holiday weight challenge – this encouraged responsible energy intake and expenditure during the holiday season; 3) Water challenge – promoted dehydration awareness; 4) Tame the television – encouraged the substituted of healthier activities for television; 5) March nutrition mystery – by eating five portions of fruits and vegetables per day clues to a mystery became available; 6) Mount Everest fitness challenge – teams moved up a web-based map of Mount Everest by exercising; 7) Test your rest – 7 to 9 hours sleep per night was	2 years	Of the eligible employees 1407 participated in either 2001 or 2002, and 1264 in both. The majority were 50 years plus, female, had a certified job classification, worked at least 6 years and had not participated in any of the wellness programmes. The results for each of the programmes were as follows: For every certified and classified employee who was absent from work, on average, the WCSD paid US$231/day and US$103/day respectively. The cost per day of a substitute was US$75. Programme participation was associated with a US$3,041,290 difference in absenteeism cost during 2001 and 2002, compared with non-participants. This is '… 15.6 times greater than the total cost for all wellness programmes during the same time period'. The programme costs included the costs of wellness staff,	There was no control group to compare the results with.

					encouraged; 8) Iron man triathlon fitness challenge – the teams moved up a course by exercising, drinking water and eating fruits and vegetables; 9) Train your brain – encouraged participants to read for a few minutes each day; 10) Exercise for life – participants committed to 8 weeks of exercise; 11) Buckle up America – the wearing of seatbelts was encouraged.		benefits, programme costs, and any other associated costs. 'These savings translate into a cost saving of US$15.6 for every dollar spent on programming.'	
Dzator 2004 [1]	RCT	1	+	The study population included Perth couples who were cohabiting for the first time, had not been living together for more than 2 years, intended to stay in Perth for the 2 years and were not planning a pregnancy. Average age 29.4 (SD 8.2) years. Individuals were excluded if they suffered from heart disease, diabetes or severe asthma. 137 couples	**Aim:** To investigate the effect that diet and PA programmes have on couples. Couples were randomised to one of two interventions or a control. The low-level intervention group received 'initial introductory group workshop, after which modules were mailed at intervals of 2 to 3 weeks'. The high-level intervention group received 'mail outs alternated with interactive sessions of about eight couples per group, at which the dietitian and the exercise physiologist explained nutritional and exercise techniques, answered questions and reviewed progress'. Control patients were invited for	16-week intervention 8-month follow-up (1 year after baseline)	Direct intervention costs were included. Intervention is more effective than doing nothing. The high-intervention group showed substantial marginal improvement compared with the low-intervention group. This was particularly the case for blood cholesterol, blood pressure, fat intake and fitness. The total cost for the high-intervention group was US$41,854.34 (US$445.30 per participant, US$111.33 per month). The total cost for the	**Limitations:** There is a potential for bias caused by the over representation of higher SES. Participants were chosen who responded to an advertisement, these were potentially more motivated to begin with.

				entered the study, 111 completed the testing at the end of the programme and 81 attended follow-up after 1 year.	measurement (they were offered the programme at the end of the study). Programme delivered by health promotion professionals. **Power calculation:** $p = 0.05$ with a power of 80% as a minimum.		low-intervention group was US$41,847.26 (US$445.18 per participant, US$111.30 per month). At 12-month follow-up the total and average incremental costs were US$43,282.10 ($460.44 per participant, $38.37 per month) for the high-intervention group and $431,09.43 ($458.61 per participant, $38.22 per month) for the low-intervention group. 'The results show that the high intervention group achieved greater marginal effectiveness and cost-effectiveness than the low level intervention.' The average cost of having interactive workshops every two to three weeks post-intervention was US$445.50 per unit change in the outcome variable; for the high-intervention group; this is US$445.18 for the low-intervention group. This shows that the high-intervention group costs US$0.12 per participant at the end of the	

							programme and US$1.84 at the 12-months follow-up, to 'achieve an additional average unit of improvement (increase or decrease) in the outcomes additional to that achieved in the low intervention group.'	
Proper 2004 [3]	RCT individual	1	+	The study population were recruited from three municipal services, of a Dutch town. To be included participants had to be a civil servant; perform office work; work at least 24 hours per week at the local municipal service of Enschde; and have a contract until at least the end of the post-test. The mean age of the intervention group was 43.8 years and for the control group was 43.7 years.	The aim was to investigate the efficacy of PA counselling at a worksite. Cost–benefit and cost-effectiveness were looked at. Costs of the intervention were compared with the monetary benefits from a reduction in sick leave. Patients were randomised to either the intervention group or a control group. Participants in the intervention group were offered seven consultations, which took place at the worksite. The counselling promoted PA and healthy dietary habits. Standardised protocols and the individual's stage of behaviour change were used as guides. Stage of development was determined using baseline measurements. Advice offered was tailored to the individual. The counsellor and the employee devised a plan to improve PA and	The intervention lasted 9 months. Outcomes were investigated during the same 9 months 1 year after the intervention.	The company perspective was used for the economic evaluation. The intervention costs were €430 per participant. There were no statistically significant differences between the total costs or the sick leave costs between the two groups. During the intervention the costs due to sick leave were lower in the intervention group by €125 (95% CI –1386 to –1062) (€1915 compared with €2040). During the intervention the mean total cost were higher in the intervention group by €305 (95% CI –1029 to –1419) (€2345 compared with €2040). The year after the intervention the costs due to sick leave were lower in the intervention group	The authors' note that several potential benefits were not included in the study. These included employee turnover, productivity, commitment to the company and improved corporate image. Healthcare costs, due to medical consumption or therapy, were not taken on to account.

					nutrition. Both the intervention group and the control group received written information about life style factors (PA, nutrition, alcohol, smoking, [work] stress, and musculoskeletal symptoms).		by € –635 (95% CI – 1885 to –814) (€1830 compared with €2465). For public health recommendations met the cost-effectiveness ratio was €–1030 (95% CI – 36,535 to –591) per kcal per day per employee. Cost for the intervention group was €2508, compared with a cost of €1947 for the control. The effect for the intervention group was –6.62, compared with an effect of –6.0 for the control. For energy expenditure the cost-effectiveness ratio was €5.2 (95% CI –4.9 to 27.4)/kcal per day per employee. Cost for the intervention group was €2583, compared with a cost of €1578 for the control. The effect for the intervention group was 64.2, compared with an effect of –129 for the control. For cardio-respiratory fitness the cost-effectiveness ratio was €235 (95% CI –10.0 to –830) per beats/min decrease in sub-maximal heart rate. Cost for the	

							intervention group was €2223, compared with a cost of €1118 for the control. The effect for the intervention group was –2.2, compared with an effect of 2.5 for the control. For upper-extremity symptoms the cost-effectiveness ratio was €53.6 (95% CI –101 to –810). Cost for the intervention group was €2461, compared with a cost of €1829 for the control. The effect for the intervention group was –17.9, compared with an effect of –6.2 for the control.	
Rajgopal 2002 [4]	Before and after study	2	–	The study population consisted of 3100 homemakers, who had graduated from the Virginia Expanded Food and Nutrition Education Programme (EFNEP), i.e. were included in the 1996 sample study. EFNEP teaches homemakers recommended food-related behaviours and	The aim of the study was to evaluate the economic efficacy of the Virginia EFNEP. The monetised health benefits were compared to the programme implementation costs. The study was split into three phases. The first investigated behaviours taught in EFNEP that might 'contribute to delay or avoidance of diet-related chronic diseases and conditions that are believed to be most prevalent among the low-income population'. In the second phase SPSS	1 year.	The perspective adopted was that of the programme sponsors, including the federal leaders and legislators who determine the funding and direction of the programme. The initial benefit/cost ratio was US$10.64/US$1.00, indicating that for every one dollar spent more than ten dollars may be saved in future healthcare costs.	This is a general dietary initiative and is not targeted at obesity. The authors note that data on disease incidence rates for low-income populations and treatment costs for diet related diseases was not available for several diseases. Some available treatment costs did not reflect total economic costs of the diseases. There was a lack of data on the portion of some diseases and conditions

				food nutrient intakes.	was used to select participants from the 3100 graduated homemakers who had met the selected criteria for ONB. The final phase gleaned the data from the previous phases in to a CBA formula.		Sensitivity analysis on the initial assumptions and the lack of incidence data for some disease areas gave a benefit/cost ratio ranging from US$2.66/$1.00 to US$17.04/$1.00. Reducing in the number of graduates to achieve the optimal behaviours by 75%, the ratio was US$2.66/$1.00, and when it was reduced by 50% the ratio was $5.32/$1.00. Assuming 50% is the portion of osteoporosis due to dietary factors, the ratio is US$5.91/US$1.00. Using only estimated disease incidence rates for low-income populations the ratio is US$17.01/US$1.00.	that could be attributed to diet.
Roux 2004 [8]	Discrete choice experiment (non-randomised experimental design)	3	+	Members of a community weight loss programme in the spring of 2001, Calgary Alberta, Canada. Participants were ≥25 years, overweight or obese (BMI ≥25 kg/m^2), had recently enrolled on the scheme, were not pregnant or nursing and	**Aim:** To investigate factors that impact on an individual's decision to adhere to a community weight loss programme.	N/A	Participants were willing to pay an extra US$600 out-of-pocket for a 3-month weight loss programme that was more accessible, comprehensive and tailored when compared to the current available programme. Service attributes do play a marked role in the decisions, users of a weight loss programme make.	**Limitations:** The sample was self-selecting and therefore may not be representative of the general weight loss population; the sample size was small.

				were absent of clinical co-morbidities.				
Roux 2004 [5]	Markov model	1	+	The study population included adults, further details of the study population were not provided.	**Aim:** To assess the cost-effectiveness of population wide strategies to promote PA in adults. A Markov model was developed to estimate the costs, health gains and cost-effectiveness. Four public health strategies that had been strongly recommended by the US Task Force for Preventative Services were investigated. Further details of the interventions were not provided. The efficacy estimates were obtained from RCTs. A systematic review of disease burden by exercise status was used to obtain the relative risk of five diseases (coronary heart disease, ischaemic stroke, colorectal cancer, breast cancer and type 2 diabetes), for inactive, regularly active and sufficiency active PA levels. The Quality of Well Being Scale was used for data on quality of life.	10-, 20-, 30- and 40-year time horizons were used.	A societal perspective was used. PA access intervention was the most effective. Social support was the most cost-effective intervention at US$9,000 per QALY, assuming a 40-year time horizon. All PAs were cost-effective (ranging from US$9,000 to US$30,000 per QALY). The results were sensitive to intervention costs and efficacy and analytic time horizon.	The information provided is taken from an abstract presentation at NAASO's 2004 annual meeting.
Wang 2003 [6]	RCT	1	+	310 female middle school children in	**Aim:** To investigate the effect of	2 years (fall 1995 to	A societal perspective was used in the study.	The authors note that there is concern about

				Boston, MA, USA, metropolitan area.	Planet Health, a school-based intervention was designed to reduce obesity in middle-school children. Children were randomly assigned to the intervention group or a control group.	spring 1997)	Planet health would prevent an estimated 1.9% of the female students from becoming overweight adults. For the five schools in the study the total intervention cost over the 2 years, was US$33,677. This is US$14 per student. 4.1 QALYs would be saved; society would save an estimated US$15,887 in medical costs and US$25,104 in productivity costs. The gives US$4,305 per QALY saved and a net saving of US$7,313 to society. Sensitivity analysis showed that the cost-effectiveness of the programme was relatively unaffected by changes to most parameters but was more sensitive to changes in the discount rate.	possible bias in estimates of the probability of an overweight young woman 21 to 29 years of age being overweight by 40 years old and the probability of a non-overweight young woman aged 21 to 29 years being overweight by 40 years old. This is due to the 'elimination of women with missing data'. **Limitation of the model:** Intervention costs were estimated and not prospectively measured; modelling was used for the number of adulthood overweight cases prevented; only a single data source was available for most of the parameters; overweight relapses were not considered; intervention effectiveness was based on 310 female students who were included in the baseline and follow-up analysis but costs were estimated on all 1203 students; not all direct and indirect costs were included, i.e. medical costs associated with obesity during adolescence were not

								included.
Wang et al. 2004 [7]	CCT	2	+	The study population included 3rd graders in Augusta, GA, USA, were included in the study.	**Aim:** To investigate the cost-effectiveness of an after school obesity prevention programme called MCG FitKid Project. Nine elementary schools were included in the study.	3 years. Only the first year results are presented here.	A societal perspective was adopted. The cost of the programme was US$546 per student (US$174,070 per programme). There was a 0.5% ($p = 0.07$) body fat reduction in the intervention students. When comparing the intervention to the control, there was a saving of US$451 per student in costs of usual after-school care. The cost effectiveness ratio was US$190 per 1% body-fat reduction. For students who attended at least 40% and 80% of the sessions, the programme resulted in an average 0.8% ($p < 0.01$) and 1.2% ($p < 0.01$) body-fat reduction respectively. This was achieved at a cost of US$634 and US$839 per student in after-school care costs, resulting in per capita net savings of US$88 and US$293 respectively.	The information provided is taken from an abstract presentation at NAASO's 2004 annual meeting.
Cost-effectiveness summary = 1+								

Reference list

1. Dzator JA, Hendrie D, Burke V et al. (2004) Randomized trial of interactive group sessions achieved greater improvements in nutrition and physical activity at a tiny increase in cost. *Journal of Clinical Epidemiology* 57(6): 610–9.

2. Aldana S, Merrill R, Price K, Hardy A, Hager R (2005) Financial impact of a Comprehensive Multisite Workplace Health Promotion Program. *Preventive Medicine* 40:131–7.

3. Proper KI, de Bruyne MC, Hildebrandt VH, van der Beek AJ, Meerding WJ, van Mechelen W (2004) Costs, benefits and effectiveness of worksite physical activity counseling from the employer's perspective. *Scandavian Journal of Work and Environmental Health* 30(1): 36–46.

4. Rajgopal R, Cox RH, Lambur M, Lewis EC (2002) Cost–benefit analysis indicates the positive economic benefits of the expanded food and nutrition education program related to chronic disease prevention. *Journal of Nutrition Education and Behaviour* 34(1): 26–37.

5. Roux L, Pratt M, Yanagawa T, Yore M, Tengs T (2004) Measurement of the value of exercise in obesity prevention: A cost-effectiveness analysis of promoting physical activity among US adults. *Obesity Research* 12:A18–A18.

6. Wang LY, Yang Q, Lowry R, Wechsler H (2003) Economic analysis of a school-based obesity prevention program. *Obesity Research* 11(11): 1313–24.

7. Wang L, Yin Z, Gutin B, Hanes J et al. (2004) A cost-effectiveness analysis of a school-based obesity prevention program. *Obesity Research* 12:A18–A18.

8. Roux L, Ubach C, Donaldson C, Ryan M (2004) Valuing the benefits of weight loss programs: an application of the discrete choice experiment. *Obesity Research* 12(8):1342–51.

9. McLean N, Griffin S, Toney K, Hardeman W (2003) Family involvement in weight control, weight maintenance and weight loss interventions: a systematic review of randomised trials. *International Journal of Obesity* 27 (9): 987-1005.