

Salt intake in North Karelia

We would like to thank the PDG member who supplied references relating to salt and cardiovascular disease for their contribution. These references have been reviewed as possible additions to the current review. One study is relevant and describes changes in urinary sodium excretion in Finland over time (1).

Although not designed to present controlled changes in North Karelia, this study does show concurrent trends in North Karelia and the area used as a control in previous work (Kuopio). Therefore, for this study, net change in sodium excretion can be calculated. The paper also converts sodium excretion into equivalent salt intake and, although this is not a direct measure, it may be used to compare with other publications on salt intake.

Although information cannot be provided on significance (since statistical testing was not done to compare changes in North Karelia with the reference area) the results will be added to the ERG review. For the interest of the PDG, net changes in calculated salt intake according to the new reference are presented below:

	Salt intake (calculated from urinary Na excretion)				
Men	North Karelia ^a		Reference area (Kuopio)		Net change
	NaCl (g) Mean (95% CI)	Change from 1979	NaCl (g) Mean (95% CI)	Change from 1979	(-ve favours NK)
1979	12.9 (12.4-13.5)		13.1 (12.6-13.7)		
1982	13.9 (13.2-14.5)	+1.0	12.9 (12.2-13.6)	-0.2	+1.2
1987	12.0 (11.2-12.7)	-0.9	12.0 (11.3-12.6)	-1.1	+0.2
Women					
1979	10.4 (9.9-10.9)		10.4 (10.0-10.9)		
1982	9.9 (9.4-10.4)	-0.5	10.3 (9.8-10.7)	-0.1	-0.4
1987	8.8 (8.3-9.2)	-1.6	9.5 (9.0-10.0)	-0.9	-0.7

^aPaper presents findings for North Karelia to 2002 but changes in the control area are only given to 1987

It appears that net changes in salt intake in North Karelia were unfavourable in men and favourable in women from 1979 to 1982 and 1987. These findings do not change the interpretation of results for North Karelia or the conclusions made in the ERG report.

1) Laatikainen et al. Sodium in the Finnish diet: 20-year trends in urinary sodium excretion among the adult population. European Journal of Clinical Nutrition 2006:965-970.