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Research Article

Agro-Geology and CHD in Finland

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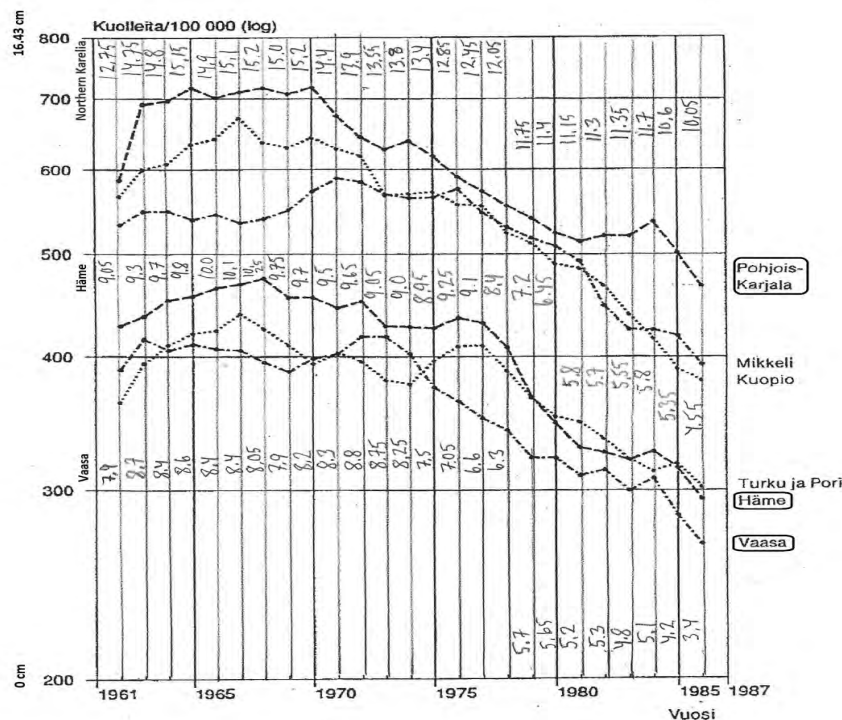
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An example of measurements (cm) and calculations of periodical age adjusted (3 years sliding means) of CHD mortality of 35-64 y. men (1/100,000) in three Finnish provinces (Northern Karelia (Pohjois-Karjala), Häme and Vaasa) from Figure. 6a (Valkonen T, Martikainen P. Journal of Social Medicine. 1990). Because the scale is on logarithmic scale, "extracting" of numbers needed calculations (down).

Figure 6a from Journal of Social Medicine 1990, with the permission of Valkonen T, shows shows the age adjusted CHD mortality of 35-64 y. men (three years sliding means) in Northern Karelia (Pohjois-Karjala), Mikkeli, Kuopio, Turku_ and Pori, Häme and Vaasa provinces from 1961-87 [Ref 17 in article]. The range 0-16.43 cm, resp. CHD mortality 400-800 (1/100,000).

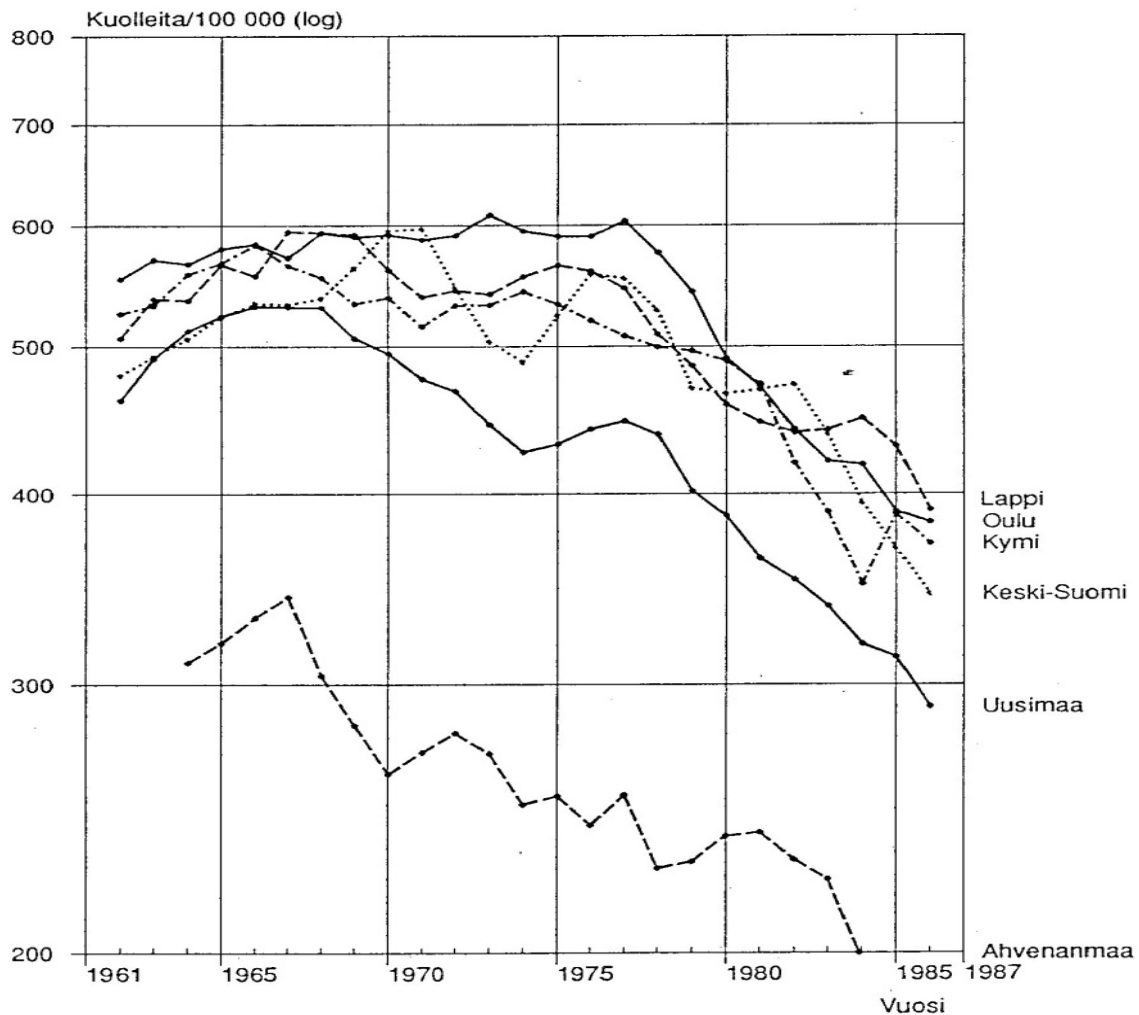


Kuvio 6a. Ikävakiointu sepelvaltimotautikuolleisuus lääneittäin 1961-87, 35-64-vuotiaat miehet, kolmen vuoden liukuvat keskiarvot.

Age adjusted CHD mortality of 35-64 y. old men in three Finnish provinces, three years sliding means (measured by Töysä T from Figure 6a, Valkonen 1990) [Ref 17 in article]						
	Häme	Northern Karelia	Vaasa	Häme	Northern Karelia	Vaasa
	cm			1/100,000		
1962	9,05	12,75	7,90	429	586	390
1963	9,30	14,75	8,70	438	694	417
1964	9,70	14,80	8,40	453	697	406
1965	9,80	15,15	8,60	457	718	413
1966	10,00	14,90	8,40	465	703	406
1967	10,10	15,10	8,40	469	715	406
1968	10,25	15,20	8,05	475	721	394
1969	9,75	15,00	7,90	455	709	390
1970	9,70	15,20	8,20	453	721	399
1971	9,50	14,40	8,30	446	674	403
1972	9,65	13,90	8,80	451	646	420
1973	9,05	13,55	8,75	429	627	418
1974	9,00	13,80	8,25	427	641	401
1975	8,95	13,40	7,50	426	620	377
1976	9,25	12,85	7,05	437	591	363
1977	9,10	12,45	6,60	431	572	349
1978	8,40	12,05	6,30	406	553	340
1979	7,20	11,75	5,70	367	539	324
1980	6,45	11,40	5,68	345	523	323
1981	5,80	11,15	5,20	326	512	310
1982	5,70	11,30	5,30	324	519	313
1983	5,55	11,35	4,80	319	521	300
1984	5,80	11,70	5,10	326	537	308
1985	5,35	10,60	4,20	314	489	285
1986	4,55	10,05	3,40	294	467	266
1964-84	8,5	13,4	7,2	414	622	370
1964-67	9,9	15,0	8,5	461	708	408
1968-71	9,8	15,0	8,1	457	706	397
1972-75	9,2	13,7	8,3	433	633	404
1976-79	8,5	12,3	6,4	410	564	344
1980-83	5,9	11,3	5,2	328	519	311

		log (cm)	log10
y.0	200	0,0	2,3
y.∞	800	16,43	2,9

$$\text{CHD} = \text{POTENCE}\{10; \text{LOG}10(200)+y/y.800*[\text{LOG}10(800)-\text{LOG}10(200)]\} = \text{POTENCE}[10; 2.3+y/y.800*(2.9-2.3)] = 10^{[2.3+y/16.43*(2.9-2.3)]}$$



Kuvio 6b. Ikävakioitu sepelvaltimotautikuolleisuus lääneittäin 1961–87, 35–64-vuotiaat miehet, kolmen vuoden liukuvat keskiarvot.

Figure 6b from Journal of Social Medicine 1990, with the permission of Valkonen T, shows the age adjusted CHD mortality of 35–64 y. men (three years sliding means) from 1961–87 in six Finnish provinces (Lapland (Lappi), Oulu, Kymi, Central Finland (Keski-Suomi), Uusimaa and Åland (Ahvenanmaa)).