

**Supplementary material 7. Subgroup analysis of Cox proportional hazards models by age category**

Subgroups	All-cause mortality			Cancer mortality		Cardiovascular mortality	
	No. of participants	No. of deaths	HR (95% CI)	No. of deaths	HR (95% CI)	No. of deaths	HR (95% CI)
<b>40 – 64 years</b>							
Linear	102,959	924	0.71 (0.64 to 0.79)	438	0.71 (0.64 to 0.79)	170	0.85 (0.72 to 1.00)
Categories							
0-2	21,011	284	1.00 (ref)	131	1.00 (ref)	47	1.00 (ref)
3	30,776	283	0.65 (0.55 to 0.77)	131	0.62 (0.49 to 0.79)	55	0.82 (0.55 to 1.22)
4	40,285	292	0.51 (0.43 to 0.60)	145	0.49 (0.38 to 0.63)	52	0.65 (0.43 to 0.97)
5 (healthiest)	10,887	65	0.39 (0.30 to 0.51)	31	0.35 (0.23 to 0.52)	16	0.71 (0.40 to 1.26)
HR for trend			0.72 (0.67 to 0.78)		0.71 (0.64 to 0.79)		0.85 (0.72 to 1.00)
PAF (%)		38.3 (22.7 to 50.7)		42.2 (20.1 to 58.1)		10.0 (-4.3 to 43.5)	
<b>65 – 74 years</b>							
Linear	143,839	2,339	0.77 (0.74 to 0.81)	1,306	0.76 (0.71 to 0.80)	439	0.76 (0.71 to 0.80)
Categories							
0-2	13,924	386	1.00 (ref)	223	1.00 (ref)	80	1.00 (ref)
3	36,391	694	0.73 (0.64 to 0.82)	387	0.70 (0.60 to 0.83)	135	0.68 (0.52 to 0.90)
4	63,934	928	0.58 (0.52 to 0.66)	508	0.54 (0.46 to 0.63)	159	0.52 (0.40 to 0.68)
5 (healthiest)	29,590	331	0.45 (0.39 to 0.52)	188	0.43 (0.36 to 0.53)	65	0.48 (0.34 to 0.67)
HR for trend			0.77 (0.74 to 0.81)		0.76 (0.71 to 0.80)		0.77 (0.70 to 0.86)
PAF (%)		29.2 (22.3 to 35.5)		28.7 (19.2 to 37.0)		21.7 (2.8 to 36.8)	
<i>P</i> for interaction			0.13		0.51		0.62

All analyses were adjusted for age, sex, CKD, hypertension, diabetes mellitus, hypercholesterolemia, history of myocardial infarction, history of stroke, and study site.

HR for trend indicates the change in HR by one lifestyle category change towards healthiest.

*P* for interaction shows the results of fitting an interaction term between the healthy lifestyle score category and age category.

PAF, population attributable risk fraction.