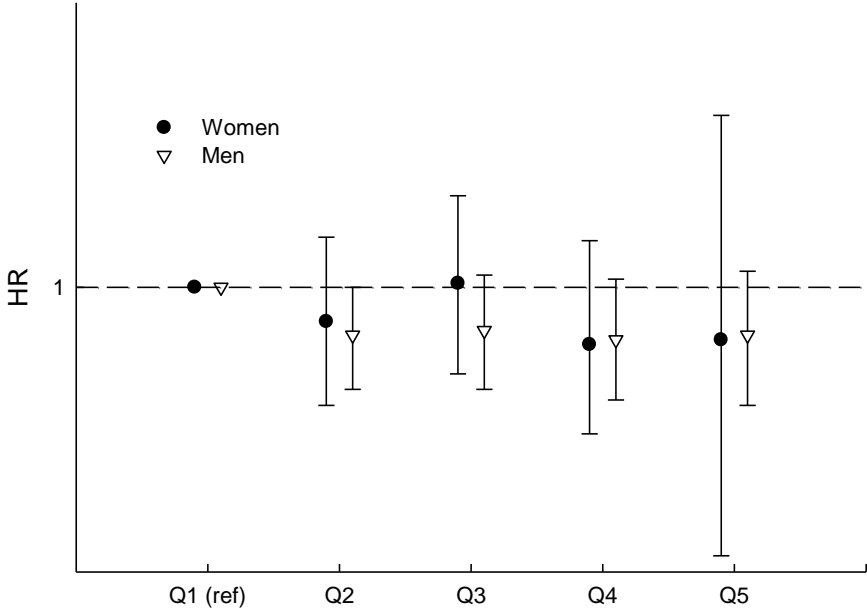## Supplementary material legends:

Supplementary material figure 1s. The association of coronary heart disease (CHD) by quintiles (Q1-Q5) of energy adjusted alpha-linolenic acid (ALA) intake has been calculated by using Cox proportional hazards regression. Data are given as hazard ratios (HR) of CHD event and CHD death with Q1 as reference category. Error bars indicate 95% confidence intervals, black circle women and white triangle men. The model was adjusted for age at baseline and the calendar year in which the baseline questionnaire was returned, smoking habits, body mass index, physical activity, educational level, history of hypertension, alcohol intake, total energy intake, fibre intake, monounsaturated fatty acid, trans fatty acid, saturated fatty acid, and linoleic acid intake.

Supplementary material, figure 1s

CHD event

CHD death
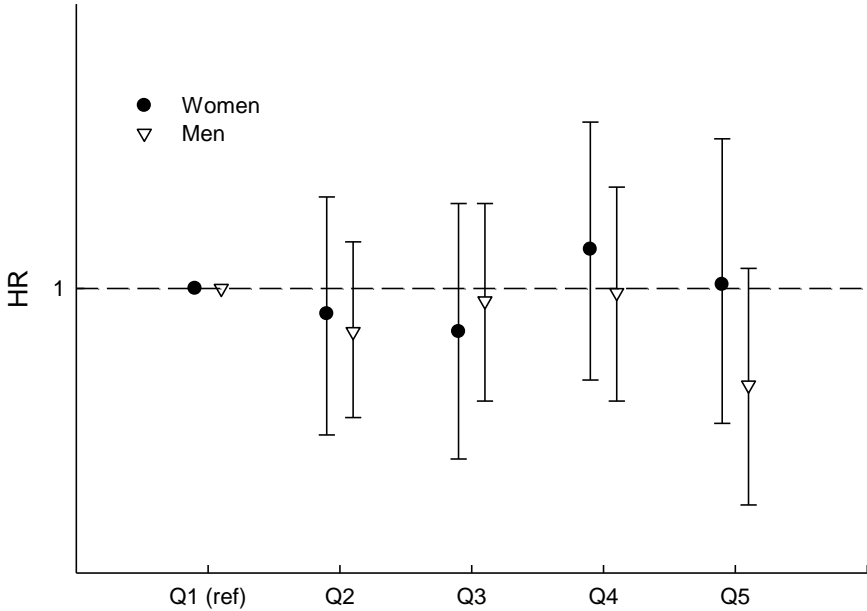
Supplementary material, table 1s. Risk of coronary heart disease (CHD) according to low and high intake of alpha-linolenic acid (ALA)

	All		Women		Men	
	Below median ALA intake	Above median ALA intake	Below median ALA intake	Above median ALA intake	Below median ALA intake	Above median ALA intake
	HR (95 % CI)	HR (95 % CI)	HR (95 % CI)	HR (95 % CI)	HR (95 % CI)	HR (95 % CI)
ALA, CHD events						
Model 1	1.0 (reference)	0.98 (0.90,1.06)	1.0 (reference)	1.01 (0.83,1,23)	1.0 (reference)	0.98 (0.90,1.06)
Model 2	1.0 (reference)	0.96 (0.89,1.03)	1.0 (reference)	0.98 (0.82,1.18)	1.0 (reference)	0.96 (0.89,1.03)
Model 3	1.0 (reference)	0.92 (0.85,1.00)	1.0 (reference)	0.97 (0.79,1.19)	1.0 (reference)	0.91 (0.83,1.00)
ALA, CHD deaths						
Model 1	1.0 (reference)	1.01 (0.92,1.11)	1.0 (reference)	0.96 (0.81,1.14)	1.0 (reference)	1.04 (0.92,1.17)
Model 2	1.0 (reference)	1.01 (0.91,1.11)	1.0 (reference)	0.95 (0.80,1.13)	1.0 (reference)	1.04 (0.92,1.18)
Model 3	1.0 (reference)	0.99 (0.85,1.17)	1.0 (reference)	1.03 (0.82,1.29)	1.0 (reference)	0.91 (0.78,1.32)

The subjects are grouped according to < or ≥ median intake of ALA and with those with an intake of ALA below median as the reference group. Data are given as hazard ratios (HR) and 95% confidence intervals (CI) by using Cox proportional hazards regression. Median energy-adjusted ALA intake was 1.01 g/d and 1.17 g/d among women and men, respectively. **Model 1** included intake of ALA expressed in energy adjusted g/d. Age at baseline and the calendar year in which the baseline questionnaire was returned were entered into the model through the strata statement. **Model 2** included the variables of model 1 and the following known risk factors for CHD: smoking habits, body mass index, physical activity, educational level, history of hypertension. **Model 3** included the variables of model 2 and the following dietary risk factors: alcohol intake, total energy intake (where alcohol is excluded), fibre intake, monounsaturated fatty acid, trans fatty acid, saturated fatty acid, long-chain n-3 fatty acids, and linoleic acid intake.

Supplementary material, table 2s HR and 95% CI of CHD according to ALA and n-3 LCPUFA intake*

	Women				Men			
	Low n-3 LCPUFA		High n-3 LCPUFA		Low n-3 LCPUFA		High n-3 LCPUFA	
	Low ALA	High ALA	Low ALA	High ALA	Low ALA	High ALA	Low ALA	High ALA
CHD event								
Model 1	1.0 (reference)	0.84 (0.71,0.99)	0.85 (0.72,1.01)	1.02 (0.74,1.40)	1.0 (reference)	1.01 (0.84,1.22)	1.01 (0.91,1.11)	0.95 (0.78,1.16)
Model 2	1.0 (reference)	0.85 (0.72,1.01)	0.83 (0.70,0.98)	0.94 (0.76,1.15)	1.0 (reference)	1.03 (0.88,1.21)	0.99 (0.90,1.10)	0.96 (0.81,1.14)
Model 3	1.0 (reference)	0.89 (0.74,1.06)	0.83 (0.68,1.02)	0.97 (0.77,1.22)	1.0 (reference)	0.99 (0.86,1.14)	1.01 (0.86,1.19)	0.95 (0.78,1.16)
CHD death								
Model 1	1.0 (reference)	0.98 (0.78,1.26)	0.96 (0.72,1.37)	0.87 (0.58,1.28)	1.0 (reference)	1.06 (0.80,1.40)	1.14 (0.96,1.34)	1.06 (0.87,1.29)
Model 2	1.0 (reference)	1.03 (0.81,1.31)	1.00 (0.77,1.30)	0.90 (0.66,1.22)	1.0 (reference)	1.11 (0.83,1.47)	1.12 (0.95,1.33)	1.08 (0.89,1.32)
Model 3	1.0 (reference)	1.12 (0.87,1.45)	0.95 (0.56,1.61)	1.07 (0.81,1.42)	1.0 (reference)	1.19 (0.94,1.34)	1.19 (0.76,1.87)	1.00 (0.81,1.24)

Grouped according to < or $\geq$ median intake of both ALA and n-3 LCPUFA and with the group of those with an intake of both ALA and n-3 LCPUFA below the median as reference group. Median energy-adjusted ALA intake was 1.01 g/d and 1.17 g/d among women and men, respectively. Median energy-adjusted n-3 LCPUFA intake was 0.15 g/d and 0.26 g/d among women and men, respectively. Data are given as hazard ratios (HR) and 95% confidence intervals (CI) by using Cox proportional hazards regression. **Model 1** included intake of ALA expressed in energy adjusted g/d. Age at baseline (y) and the calendar year of the baseline questionnaire were entered into the model through the strata statement. **Model 2** included the variables of model 1 and the following known risk factors for CHD: smoking habits, body mass index, physical activity, educational level, history of hypertension. **Model 3** included the variables of model 2 and the following dietary risk factors: alcohol intake, total energy intake (where alcohol is excluded), fibre intake, monounsaturated fatty acid, trans fatty acid, saturated fatty acid, and linoleic acid intake. * ALA, alpha-linolenic acid; CHD, coronary heart disease; HR, hazard ratio.