

SUPPLEMENTARY MATERIAL

Baseline
1984-1989

4-year examinations
1991-1993

11-year examinations
1999-2001

Cohort 1 (years 1984-1986)
1166 men (83.3%)
Age: 54 y

Cohort 2 (years 1986-1989)
1516 men (82.6%)
Age: 42, 48, 54 or 60 y

Cohort 2
1038 men (88.3%)
Age: 46-65 y

Cohort 2
854 men (95.0%)
Age: 53-73 y

Supplemental Figure S1. Timeline of the Kuopio Ischemic Heart Disease Risk Factor Study.

The percentages in parentheses indicate the proportion of eligible participants that participated in the study visits.

SUPPLEMENTARY MATERIAL

Supplemental Table S1. Baseline characteristics of 1981 participants in the Kuopio Ischaemic Heart Disease Risk Factor (KIHD) Study in 1984-1989 according to low-fat and high-fat fermented dairy intake

Intake quartile (intake range, g/d)	Low-fat fermented dairy intake quartiles								High-fat fermented dairy intake quartiles							
	1 (0)		2 (1-113)		3 (114-294)		4 (295-1638)		1 (0)		2 (1-15)		3 (16-36)		4 (37-329)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Subjects (n)	722		422		419		418		466		516		500		499	
Age (years)	52.0	5.7	52.2	5.2	52.8	5.2	53.1*	4.7	53.6	4.6	52.9	4.9	52.3	5.4	51.0*	5.8
Body mass index (kg/m ²)	26.8	3.8	26.3	3.2	26.7	3.1	27.0	3.7	26.9	4.1	27.0	3.4	26.6	3.3	26.3*	3.2
Leisure-time physical activity (kcal/d)	126	156	159	204	147	161	128	151	122	163	125	140	144	162	162*	199
Income (euro)	13990	9471	15924	10087	15004	10197	11916*	6798	10633	6604	14077	9942	15353	9826	16421*	9558
Education (years)	9.0	3.6	9.9	4.1	9.2	3.8	7.9*	2.7	7.5	2.5	8.8	3.6	9.3	3.7	10.2*	4.0
Married (%)	85		88		89		86		79		88		89		90*	
Living in rural area (%)	29		17		24		38*		35		26		24		24*	
Diabetes (%)	5		5		3		6		6		4		4		5	
Family history of CHD (%)	44		47		45		49		45		51		45		43	
Current smoker (%)	35		26		23		25*		38		30		24		23*	
Hypertension (%)	54		55		58		57		59		57		58		51*	
Systolic blood pressure (mmHg)	134	17	133	16	134	17	136*	16	136	18	134	16	134	17	133*	16
Diastolic blood pressure (mmHg)	89	11	88	11	89	10	90	10	90	11	89	10	89	11	88*	10
Fasting blood glucose (mmol/L)	4.7	0.8	4.7	1.3	4.7	0.8	4.8	1.0	4.8	1.1	4.7	1.1	4.7	0.8	4.7*	0.9
Serum LDL cholesterol (mmol/L)	4.02	1.00	3.88	0.92	4.04	1.02	4.07	1.00	4.06	1.06	4.04	0.96	3.98	0.96	3.94*	0.98
Serum HDL cholesterol (mmol/L)	1.31	0.30	1.30	0.29	1.31	0.29	1.31	0.30	1.31	0.29	1.29	0.28	1.31	0.29	1.32	0.31
Serum triglycerides (mmol/L)	1.24	0.73	1.23	0.64	1.27	0.85	1.27	0.75	1.26	0.82	1.25	0.64	1.27	0.82	1.23	0.68
C-reactive protein (mg/L)	2.4	4.2	2.1	2.9	1.9	4.9	2.4	4.5	2.6	4.5	2.1	3.2	2.1	3.4	2.2	5.4

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Serum long-chain n-3 polyunsaturated fatty acids (%)

Alcohol intake (g/wk)	4.6	1.6	4.7	1.6	4.8	1.6	4.7	1.6	4.5	1.6	4.8	1.8	4.7	1.6	4.7	1.4
	82	133	76	120	63	88	64*	98	83	137	68	97	63	109	78	115

Dietary intakes

Energy (kcal/d)	2464	626	2414	621	2382	565	2623*	637	2437	631	2399	633	2437	601	2605*	597
Protein (E%)	15.3	2.4	15.6	2.4	15.9	2.6	16.4*	2.4	14.9	2.4	15.7	2.6	15.8	2.4	16.5*	2.4
Carbohydrates (E%)	41.9	6.8	42.9	6.3	43.7	6.0	43.7*	5.7	43.0	6.7	43.4	6.3	43.3	6.3	41.8*	6.1
Fiber (g/d)	24.7	8.8	24.5	8.9	25.3	8.3	27.7*	8.6	25.2	9.1	24.8	8.7	25.1	8.4	26.6*	8.7
Total fat (E%)	39.7	6.3	38.5	5.6	37.9	5.5	37.5*	5.2	39.1	6.2	38.1	5.7	38.4	5.7	38.9	5.6
Polyunsaturated fatty acids (E%)	4.6	1.5	4.7	1.4	4.6	1.3	4.1*	1.3	4.4	1.5	4.6	1.5	4.6	1.4	4.5	1.3
Monounsaturated fatty acids (E%)	12.0	2.3	11.8	2.1	11.5	2.0	11.1*	2.0	11.7	2.4	11.7	2.1	11.7	2.1	11.7	2.1
Saturated fatty acids (E%)	18.6	4.3	17.8	3.6	17.6	3.7	18.0*	3.7	18.6	4.2	17.7	3.9	17.9	3.9	18.4	3.7
Unprocessed red meat (g/d)	79	53	74	45	69	47	78	56	71	52	76	49	75	50	81*	53
Processed red meat (g/d)	72	64	69	62	67	54	70	58	71	65	69	58	68	54	73	64
Fruits, berries and vegetables (g/d)	236	151	268	151	280	175	265*	152	212	159	252	146	272	147	294*	167
Calcium intake (mg/d)	1191	373	1222	353	1322	323	1512*	342	1191	363	1225	326	1295	350	1456*	394

* $P_{\text{for trend}}$ across quartiles <0.05 ; $P_{\text{for trend}}$ was assessed with linear regression (continuous variables) or with χ^2 test (categorical variables).

SUPPLEMENTARY MATERIAL

Supplemental Table S2. Baseline characteristics of 1981 participants in the Kuopio Ischaemic Heart Disease Risk Factor (KIHD) Study in 1984-1989 according to low-fat and high-fat nonfermented dairy intake

Intake quartile (intake range, g/d)	Low-fat nonfermented dairy intake quartiles								High-fat nonfermented dairy intake quartiles							
	1 (0-82)		2 (82-222)		3 (222-475)		4 (475-2114)		1 (0-13)		2 (13-57)		3 (57-282)		4 (282-1830)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Subjects (n)	495		495		496		495		495		495		496		495	
Age (years)	53.0	5.1	52.5	5.1	52.2	5.4	52.1*	5.6	51.7	5.9	51.9	5.5	52.7	5.2	53.5*	4.5
Body mass index (kg/m ²)	26.3	3.5	26.8	3.5	26.9	3.5	26.8	3.5	27.0	3.7	26.6	3.1	26.8	3.6	26.5	3.5
Leisure-time physical activity (kcal/d)	118	149	130	152	144	156	161*	206	153	164	155	161	149	204	95*	126
Income (euro)	12337	10076	15241	10233	15009	8395	14106	8374	16060	10051	17008	9738	13451	9182	10125*	6529
Education (years)	8.1	3.2	9.0	3.6	9.5	3.8	9.3*	3.7	9.6	3.8	10.2	3.9	8.9	3.7	7.1*	2.1
Married (%)	80		88		91		88*		88		93		90		77*	
Living in rural area (%)	46		28		19		17*		16		13		28		53*	
Diabetes (%)	4		5		5		4		6		5		4		4	
Family history of CHD (%)	43		47		48		46		47		49		46		43	
Current smoker (%)	37		22		26		30*		27		23		25		39*	
Hypertension (%)	56		55		55		57		57		56		54		56	
Systolic blood pressure (mmHg)	136	17	134	16	134	16	134	17	135	17	134	16	133	16	136*	17
Diastolic blood pressure (mmHg)	89	11	89	10	89	10	89	11	89	11	89	10	89	10	90	11
Fasting blood glucose (mmol/L)	4.8	0.9	4.7	0.8	4.8	1.1	4.7	1.1	4.7	1.0	4.7	1.1	4.7	1.0	4.7	0.8
Serum LDL cholesterol (mmol/L)	4.20	1.03	3.97	1.01	3.96	0.94	3.89*	0.95	3.83	0.97	3.95	1.01	4.02	0.91	4.21*	1.03
Serum HDL cholesterol (mmol/L)	1.34	0.33	1.29	0.28	1.31	0.30	1.28*	0.26	1.32	0.30	1.27	0.29	1.30	0.29	1.34*	0.30
Serum triglycerides (mmol/L)	1.18	0.63	1.25	0.85	1.27	0.75	1.30*	0.71	1.31	0.79	1.30	0.73	1.26	0.68	1.14*	0.75
C-reactive protein (mg/L)	2.6	4.6	2.0	3.8	2.2	4.9	2.2	3.1	2.4	5.2	1.9	2.8	1.9	2.8	2.7*	5.3

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Serum long-chain n-3
polyunsaturated fatty
acids (%)

Alcohol intake (g/wk)	4.8	1.5	4.7	1.6	4.8	1.8	4.4*	1.4	4.8	1.8	4.8	1.6	4.7	1.5	4.5*	1.4
	82	119	70	119	70	113	69	109	90	140	70	97	66	104	66*	113

Dietary intakes

Energy (kcal/d)	2430	677	2454	647	2399	569	2595*	565	2235	561	2367	537	2458	563	2819*	658
Protein (E%)	15.3	2.6	15.3	2.5	16.0	2.6	16.3*	2.2	16.6	2.8	16.0	2.4	15.4	2.4	14.8*	2.0
Carbohydrates (E%)	40.9	6.8	43.2	6.2	43.5	6.1	43.9*	5.9	43.6	6.7	43.4	6.5	43.5	6.2	41.0*	5.6
Fiber (g/d)	24.8	8.8	25.4	8.7	24.8	8.3	26.6*	9.1	24.4	8.2	25.3	8.8	25.3	8.8	26.7*	9.0
Total fat (E%)	40.7	6.3	38.6	5.5	37.8	5.5	37.3*	5.3	36.3	5.7	37.6	5.5	38.5	5.3	41.9*	5.2
Polyunsaturated fatty acids (E%)	4.2	1.6	4.6	1.5	4.8	1.3	4.5	1.2	5.0	1.4	5.0	1.4	4.5	1.3	3.7*	1.2
Monounsaturated fatty acids (E%)	11.7	2.4	11.7	2.2	11.8	2.2	11.5	1.9	11.8	2.3	11.8	2.2	11.6	2.1	11.5*	2.0
Saturated fatty acids (E%)	19.9	4.4	17.9	3.8	17.2	3.4	17.5*	3.5	15.9	3.4	16.9	3.2	18.2	3.2	21.5*	3.4
Unprocessed red meat (g/d)	77	53	78	51	73	51	74	49	77	52	76	50	73	52	76	51
Processed red meat (g/d)	70	66	70	59	71	62	69	55	73	63	68	59	67	62	72	59
Fruits, berries and vegetables (g/d)	226	156	263	154	272	154	272*	161	268	170	297	162	267	155	201*	124
Calcium intake (mg/d)	1238	388	1160	354	1273	314	1501*	342	1271	373	1258	352	1263	384	1380*	368

* $P_{\text{for trend}}$ across quartiles <0.05 ; $P_{\text{for trend}}$ was assessed with linear regression (continuous variables) or with χ^2 test (categorical variables).