Supplemental Table 1 Mean and coefficients of variation of fatty acids measurement, the Health Professionals Follow-up Study. [a]

Variable	Plasma fatty acids		Erythrocyte fatty acids	
	Mean	CV	Mean	CV
14:0	0.54	21%	0.30	45%
15:0	0.14	16%	0.11	36%
16:0	19.13	6%	19.16	9%
17:0	0.31	19%	0.37	17%
18:0	8.12	7%	14.48	15%
19:0	0.10	31%	0.12	23%
20:0	0.19	21%	0.38	9%
22:0	0.49	28%	1.58	13%
23:0	0.20	31%	0.28	16%
24:0	0.41	27%	3.90	17%
16:1n-7	1.57	7%	0.47	25%
18:1n-7	1.65	10%	1.08	6%
18:1n-9	19.53	2%	13.15	6%
20:1n-9	0.15	18%	0.19	8%
24:1n-9	0.53	31%	3.76	17%
18:2n-6	30.40	2%	13.23	9%
18:3n-6	0.42	8%	0.11	35%
20:4n-6	7.19	5%	12.99	10%
18:3n-3	0.61	4%	0.21	12%
20:5n-3	0.63	7%	0.51	12%
22:6n-3	1.72	10%	3.68	14%
trans 16:1n-7	0.15	10%	0.14	23%
trans 18:1	1.78	12%	1.50	11%
9t, 12t 18:2n-6	0.04	40%	0.01	66%
9c, 12t 18:2n-6	0.25	12%	0.12	15%
9t, 12c 18:2n-6	0.16	17%	0.08	18%

CV, Coefficients of variation.

Supplemental Table 2 Spearman correlations between lipophilic index and coronary heart disease risk factors among control participants, the Health Professionals Follow-up Study.

Variables	Plasma lipophilic index (n=838)		Erythrocyte lipophilic index (n=876)	
	r	P value	r	P value
Total cholesterol, mg/dl	-0.04	0.27	-0.07	0.03
LDL cholesterol, mg/dl	-0.18	<0.001	-0.11	0.002
HDL cholesterol, mg/dl	-0.37	<0.001	-0.07	0.06
Total cholesterol-to-HDL cholesterol ratio	0.33	<0.001	0.02	0.66
LDL cholesterol-to-HDL cholesterol ratio	0.14	<0.001	-0.03	0.36
Triglycerides, mg/dl	0.58	<0.001	0.07	0.05
C-reactive protein, mg/dl	0.10	0.003	-0.02	0.54
Interlukin-6, mg/dl [b]	0.18	<0.001	-0.02	0.63
TNFα-R1, ng/mL [b]	0.18	<0.001	0.09	0.05
TNFα-R2, ng/mL [b]	0.13	0.005	-0.01	0.85
ICAM-1, µg/mL [b]	0.10	0.02	-0.05	0.30
VCAM-1, µg/mL [b]	0.12	0.008	-0.01	0.91
Adiponectin, pg/mL [b]	-0.21	<0.001	-0.06	0.17

Abbreviations: CHD, coronary heart disease; LDL, low-density lipoporotein; HDL, high-density lipoprotein; TNFα-R1, Tumor necrosis factor α receptor 1; TNFα-R2, Tumor necrosis factor α receptor 2; ICAM-1, intercellular adhesion molecule-I; VCAM-1, vascular cell adhesion molecule-1.

[a] Correlation coefficients were adjusted for matching factors included age (years), smoking status (never/current smoker/ past smoker) and month of blood draw.

[b] Sample size: n=512

Supplemental Table 3 Characteristics of study participants at baseline in 1994 by CHD status, the Health Professionals Follow-up Study [a]

Characteristics	Cases (n=459)		Control (n=879)	
Plasma lipophilic index	18.6	2.9	18.2	2.9
Erythrocyte lipophilic index	25.7	2.6	25.6	2.8
Demographic characteristics				
Age, years [b]	63.9	8.7	63.7	8.6
BMI, kg/m^2	26.1	3.2	25.5	3.0
Physical activity, MET-hours/week	17.9	22.2	20.5	27.9
Current smoker, % [b]	9.5		9.3	
History of hypertension, %	39.0		28.8	
History of high cholesterol , %	49.2		40.4	
Family history of MI, %	42.5		33.3	
Antihypertensive medication user, %	26.2		20.6	
Cholesterol-lowering medication user, %	7.6		6.6	
Aspirin user, %	24.2		22.6	
Diet				
Total energy intake, kcal/d	2048.9	634.9	2045.0	640.1
Total carbohydrate intake, g/d	245.5	37.2	243.9	39.2
Total fat intake, g/d	69.9	11.8	69.0	12.6
Saturated fat intake, %E	10.6	2.4	10.4	2.5
Monounsaturated fat intake, %E	12.2	2.3	12.1	2.5
Polyunsaturated fat intake, %E	5.7	1.2	5.7	1.2
trans Fat intake, %E	1.4	0.5	1.3	0.5
P:S	0.5	0.2	0.5	0.2
Alcohol, g/d	10.3	13.9	12.9	14.6
Glycemic load	130.0	22.4	128.9	23.0
AHEI diet score	41.0	9.0	41.9	9.3
Biomarkers				
Total cholesterol, mg/dl	209.8	39.4	203.0	36.2

LDL cholesterol, mg/dl	133.4	34.7	126.2	31.1
HDL cholesterol, mg/dl	42.3	11.1	46.0	12.7
Triglycerides, mg/dl	141.0 (96.0-204.0)		117.0 (85.0-169.0)	
C-reactive protein, mg/dl	0.32 (0.12-0.96)		0.27 (0.09-0.86)	
Interlukin-6, mg/dl [c]	1.89 (1.12-3.07)		1.51 (0.96-2.87)	
TNFα-R1, ng/mL [c]	1.42 (1.18-1.76)		1.38 (1.16-1.67)	
TNFα-R2, ng/mL [c]	2.90 (2.42-3.51)		2.79 (2.34-3.33)	
ICAM-1, μg/mL [c]	0.33 (0.28-0.40)		0.32 (0.28-0.37)	
VCAM-1, μg/mL [c]	1.33 (1.13-1.57)		1.28 (1.10-1.48)	
Adiponectin, pg/mL [c]	15.0 (9.7-20.5)		16.4 (11.5-22.7)	

Abbreviations: CHD, coronary heart disease; MI, myocardial infarction; %E, % of total energy; AHEI, alternative healthy eating index; P:S, the ratio of polyunsaturated to saturated fatty acids; LDL, low-density lipoporotein; HDL, high-density lipoprotein; TNFα-R1, Tumor necrosis factor α receptor 1; TNFα-R2, Tumor necrosis factor α receptor 2; ICAM-1, intercellular adhesion molecule-I; VCAM-1, vascular cell adhesion molecule-1.

[a] Data are mean and SD or median (interquartile range) for continuous variables or % for categorical variables.

[b] Matching factors that control matched to case.

[c] Sample size: n=283 for cases and 512 for control participants.