

SUPPLEMENTARY DATA

**Supplementary Table 1.** Baseline Characteristics of Subjects Based on Availability of CAC Progression Data

Characteristic	No CAC Progression Data (n=321)	CAC Progression Data (n=856)	<i>p</i> value*
Age at baseline, mean (SD)	35.1 (9.2)	39.2 (8.9)	<0.001
Males, N (%)	147 (45.8)	401 (46.9)	0.747
White, N (%)	284 (88.5)	770 (90.4)	0.336
Hispanic, N (%)	17 (5.3)	51 (6.0)	0.637
Diabetes, N (%)	148 (46.1)	398 (46.5)	0.905
HbA <sub>1c</sub> %, mean (SD)	6.7 (1.7)	6.6 (1.5)	0.356
BMI (kg/m <sup>2</sup> ), mean (SD)	26.1 (5.4)	26.2 (4.5)	0.858
SBP (mmHg), mean (SD)	116 (15)	116 (13)	0.625
DBP (mmHg), mean (SD)	79 (9)	78 (9)	0.355
Total cholesterol (mg/dl), mean (SD)	185 (40)	184 (37)	0.694
Triglycerides (mg/dl), geometric mean (25 <sup>th</sup> -75 <sup>th</sup> percentile)	99 (68-136)	97 (68-131)	0.593
Presence of CAC at baseline, N (%)	104 (32.4)	264 (30.8)	0.608

CAC: coronary artery calcification

\*p-value obtained from t-test for continuous data; chi-square for categorical data

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**Supplementary Table 2.** Comparison of Logistic Regression Model Fit for Continuous and Dichotomized ICH Variables

Variable	Continuous		ICH Metric	
	Wald p-value	Model AIC	Wald p-value	Model AIC
CAC Prevalence				
BMI (kg/m <sup>2</sup> )	<0.001	1376.21	<0.001	1389.28
Physical Activity*	0.049	1461.52	0.218	1464.77
Diet Score†	0.633	1466.11	0.252	1465.06
Total Cholesterol (mg/dl)	<0.001	1447.11	<0.001	1418.85
Blood Pressure (BP)		1391.95	<0.001	1396.93
Systolic BP (mmHg)	<0.001			
Diastolic BP (mmHg)	0.505			
HbA <sub>1c</sub> (%)	<0.001	1419.55	<0.001	1412.76
CAC Progression				
BMI (kg/m <sup>2</sup> )	<0.001	1079.26	<0.001	1091.34
Physical Activity*	0.321	1119.96	0.777	1121.23
Diet Score†	0.088	1118.39	0.507	1120.88
Total Cholesterol (mg/dl)	0.556	1120.96	<0.001	1108.53
Blood Pressure (BP)		1041.31	<0.001	1046.34
Systolic BP (mmHg)	<0.001			
Diastolic BP (mmHg)	0.985			
HbA <sub>1c</sub> (%)	<0.001	1079.57	<0.001	1076.97

\*Minutes per week of moderate or vigorous-intensity exercise

†Number of components of healthy diet met, scaled to 2000 kcal/day

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**Supplementary Table 3.** Multiple\* Logistic Regression of Ideal Cardiovascular Health on Prevalence and Progression of Coronary Artery Calcification (CAC) by Diabetes Status

Variable	Type 1 Diabetes (N=546)		No Diabetes (N=631)	
	Prevalence of CACOR (95% CI)	Progression of CACOR (95% CI)	Prevalence of CACOR (95% CI)	Progression of CACOR (95% CI)
Model 1: Ideal Health Metrics <sup>†</sup>				
Smoking	0.73 (0.46, 1.16)	0.50 (0.27, 0.90)	0.87 (0.56, 1.37)	0.48 (0.29, 0.82)
BMI	0.37 (0.23, 0.59)	0.68 (0.39, 1.19)	0.42 (0.26, 0.68)	0.68 (0.41, 1.13)
Physical activity	0.81 (0.38, 1.74)	1.46 (0.62, 3.43)	0.95 (0.46, 1.98)	1.34 (0.60, 2.70)
Diet	3.08 (0.34, 30.20)	0.08 (0.01, 1.14)	1.06 (0.11, 9.85)	0.10 (0.004, 2.39)
Total cholesterol	0.80 (0.50, 1.28)	1.27 (0.69, 2.33)	0.71 (0.46, 1.10)	1.20 (0.69, 2.09)
Blood pressure	0.97 (0.58, 1.64)	0.47 (0.26, 0.87)	0.67 (0.41, 1.09)	0.44 (0.26, 0.77)
HbA <sub>1c</sub> <sup>‡</sup>	0.57 (0.25, 1.28)	1.80 (0.73, 4.46)	0.96 (0.60, 1.56)	1.21 (0.11, 13.15)
Model 2:				
Number of Ideal Health Factors	0.75 (0.55, 1.02)	0.78 (0.55, 1.11)	0.74 (0.58, 0.95)	0.74 (0.55, 0.99)
Number of Ideal Health Behaviors	0.63 (0.48, 0.83)	0.67 (0.48, 0.93)	0.68 (0.51, 0.91)	0.96 (0.69, 1.33)
Model 3:				
Number of Ideal Health Metrics	0.68 (0.56, 0.83)	0.72 (0.57, 0.90)	0.71 (0.60, 0.86)	0.83 (0.67, 1.02)

\*Adjusted for age, log triglycerides, and sex; additionally adjusted for baseline CAC in all progression models and for duration of diabetes and log albumin excretion rate in the diabetes-specific models

<sup>†</sup>Factors were included in a single model to test the independent effect of each

<sup>‡</sup>Due to small numbers of ideal HbA<sub>1c</sub> in those with diabetes, the ideal and intermediate categories were combined

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**Supplementary Table 4.** Multiple\* Logistic Regression of Intermediate and Poor Cardiovascular Health on Prevalence and Progression of Coronary Artery Calcification

Variable	Prevalence of CAC	Progression of CAC
	OR (95% CI)	OR (95% CI)
Model 1: Cardiovascular Health Metrics <sup>†</sup>		
Smoking		
Intermediate vs. Ideal	1.09 (0.75, 1.57)	0.88 (0.57, 1.37)
Poor vs. Ideal	1.42 (0.88, 2.29)	1.62 (0.91, 2.88)
BMI		
Intermediate vs. Ideal	1.77 (1.24, 2.51)	1.36 (0.90, 2.04)
Poor vs. Ideal	5.74 (3.71, 8.90)	2.97 (1.78, 4.95)
Physical activity		
Intermediate vs. Ideal	1.18 (0.67, 2.07)	0.92 (0.49, 1.74)
Poor vs. Ideal	1.05 (0.62, 1.79)	1.00 (0.55, 1.82)
Diet		
Intermediate vs. Ideal	0.61 (0.15, 2.52)	1.46 (0.23, 9.27)
Poor vs. Ideal	0.52 (0.13, 2.15)	0.90 (0.14, 5.70)
Total cholesterol		
Intermediate vs. Ideal	1.43 (1.03, 1.99)	1.08 (0.73, 1.60)
Poor vs. Ideal	1.20 (0.67, 2.14)	0.48 (0.23, 1.00)
Blood pressure		
Intermediate vs. Ideal	1.25 (0.88, 1.78)	1.65 (1.10, 2.48)
Poor vs. Ideal	1.12 (0.67, 1.89)	4.39 (2.38, 8.09)
HbA <sub>1c</sub>		
Intermediate vs. Ideal	0.93 (0.58, 1.50)	0.97 (0.57, 1.66)
Poor vs. Ideal	1.90 (0.85, 4.26)	0.75 (0.31, 1.80)
Model 2:		
Health Factors Score <sup>‡</sup>	0.82 (0.71, 0.95)	0.80 (0.67, 0.95)
Health Behaviors Score <sup>‡</sup>	0.79 (0.71, 0.88)	0.88 (0.78, 1.00)
Model 3:		
Cardiovascular Health Score <sup>‡</sup>	0.80 (0.74, 0.87)	0.85 (0.78, 0.93)

\*Adjusted for age, log triglycerides, sex, and diabetes status; additionally adjusted for baseline CAC in progression models

<sup>†</sup>Factors were included in a single model to test the independent effect of each

<sup>‡</sup>Values were assigned for each metric (0 for poor, 1 for intermediate, 2 for ideal) and summed across health factors (cholesterol, blood pressure, HbA<sub>1c</sub>), health behaviors (smoking, BMI, physical activity, diet), and across all metrics to arrive at a summary score for ideal, intermediate, and poor cardiovascular health.