

Supplementary Table 1. Overall cardiovascular health components scoring criteria in the InCHIANTI study

Overall CVH components	Ideal (2 points)	Intermediate (1 point)	Poor (0 point)
Smoking status	Never smoking	Previous smoking	Current smoking within 3 years
Physical activity	Light exercise for more than 4 hours/week, moderate exercise for at least 1-2 hours/week, or intense exercise many times/week	Light exercise 2-4 hours/week	Inactive, or with some walking
Body mass index (kg/m ²)	< 25	25-29.9	≥ 30
Mediterranean diet score	6-9	4-5	0-3
Blood Pressure (mm Hg)	Systolic blood pressure (SBP) <120 and Diastolic blood pressure (DBP) <80 and without taking medication	120 ≤ SBP ≤ 139, or 80 ≤ DBP ≤ 89, or SBP <120 and DBP <80 with medication	SBP ≥ 140 or DBP ≥ 90
Total Cholesterol (mg/dL)	< 200 and without taking medication	200-239 or <200 with medication	≥ 240
Fasting Plasma Glucose (mg/dL)	< 100 and without taking medication	100-125 or <100 with medication	≥ 126

Supplementary Table 2. Odds ratio (OR) and 95% Confidence Intervals (CI) of ADL and IADL disability over 9-year follow-up for baseline health behaviors and factor scores (per one score increase) analyzed on a continuous scale among INCHIANTI participants aged 65 y and older using GEE model ^a

	<u>ADL disability</u>		<u>IADL disability</u>	
	OR (95% CI)	p value	OR (95% CI)	p value
Health behaviors ^b	0.71 (0.63-0.82)	<0.001	0.72 (0.66-0.79)	<0.001
Health factors ^c	0.87 (0.72-1.06)	0.169	1.04 (0.92-1.17)	0.528

^a Model mutually adjusted for health behaviors and factors, additional adjusting for age (years), sex, years of education (for IADL only), impaired cognition, depressed mood, number of chronic diseases

^b Health behaviors include smoking status, physical activity, body mass index and diet quality, score ranges from 0 to 8

^c Health factors include blood pressure, total cholesterol and fasting plasma glucose, score ranges from 0 to 6

Supplementary Table 3. Odds ratio (OR) and 95% Confidence Intervals (CI) of worsening of ADL and IADL disability over 9-year follow-up for baseline health behaviors and factor scores (per one score increase) analyzed on a continuous scale among INCHIANTI participants aged 65 years and older using GEE model ^a

	<u>Worsening ADL disability</u>		<u>Worsening IADL disability</u>	
	OR (95% CI)	p value	OR (95% CI)	p value
Health behaviors ^b	0.77 (0.67-0.88)	<0.001	0.77 (0.70-0.85)	<0.001
Health factors ^c	0.89 (0.73-1.10)	0.281	0.96 (0.84-1.09)	0.531

^a Model mutually adjusted for health behaviors and factors, additional adjusting for age, sex, years of education (for IADL only), impaired cognition, depressed mood, number of chronic diseases

^b Health behaviors include smoking status, physical activity, body mass index and diet quality, score ranges from 0 to 8

^c Health factors include blood pressure, total cholesterol and fasting plasma glucose, score ranges from 0 to 6

Supplementary Table 4. Comparison of socio-demographic and health characteristics of InCHIANTI participants at baseline missing baseline cardiovascular health (CVH) scores with those with complete information.

Baseline characteristics	Not-missing baseline data (included in analysis)	Missing baseline CVH score	p value
N	925	141	
Female (%)	55.14	60.28	0.251
Age (years)	74.0±6.7	76.9±13.3	<0.001
SPPB<10 (%), n=932	24.17	69.23	<0.001
Energy intake (kcal/d)	1933±553	1770±557	0.001
Cognition impairment (%)	23.57	43.97	<0.001
Depressed mood (%), n=1049	19.85	31.82	0.002
Deceased during follow-up years (%)	32.22	65.96	<0.001

Supplementary Table 5. Comparison of socio-demographic and health characteristics of InCHIANTI participants at baseline missing ADL and IADL data at 9-y follow-up.

Baseline characteristics	Not-missing 9-year ADL and IADL (included in analysis)	Missing 9-year ADL and IADL	p value
N	597	328	
Female (%)	55.95	53.66	0.503
Age (years)	72.0±5.1	77.8±7.5	<0.001
SPPB<10 (%), n=906	14.09	42.9	<0.001
Energy intake (kcal/d)	1959±567	1885±524	0.052
Cognition impairment (%)	17.25	35.06	<0.001
Depressed mood, n=917 (%)	17.59	24.06	0.019
Deceased during follow-up years (%)	5.7	80.49	<0.001
Classified as poor health for CVH metric			
Smoking status (%)	13.4	15.55	0.37
Physical activity (%)	9.55	29.57	<0.001
BMI (%)	25.29	25.61	0.916
Diet quality (%)	25.96	33.23	0.019
Blood pressure (%)	75.54	82.62	0.013
Total cholesterol (%)	33.33	24.09	0.003
Plasma glucose (%)	7.54	11.89	0.028