Supplemental Materials

Table S1 Association of per 10-point increase in LE8 score with baseline hs-CRP

LE8 score	Model 1		Model 2	
	β (95% *CI*)	*P*-value	*β* (95% *CI*)	*P*-value
LE8 score	-0.127 (-0.146, -0.108)	<0.001	-0.159 (-0.178, -0.139)	<0.001
LE8 Behaviors score	0.025 (0.009, 0.041)	0.0014	0.002 (-0.013, 0.019)	0.780
Mean diet score	-0.011 (-0.023, 0.00002)	0.050	-0.010 (-0.023, 0.001)	0.0802
Mean physical activity score	-0.019 (-0.027, -0.012)	<0.001	-0.021 (-0.029, -0.014)	<0.001
Mean sleep health score	0.035 (0.027, 0.043)	<0.001	0.031 (0.026, 0.039)	<0.001
Mean tobacco/nicotine exposure score	0.013 (0.008，0.017)	<0.001	0.005 (0.0005，0.010)	0.029
LE8 Factors score	-0.129 (-0.140, -0.118)	<0.001	-0.133 (-0.144, -0.121)	<0.001

LE8, Life's Essential 8.

Model 1 adjusted for age and sex.

Model 2 further adjusted for education, income and drinking status on the basis of Model 1.

Table S2. Definition of LE8 CVH by AHA and the criteria used in this study

Domain	Metric	Method of measurement	Quantification of CVH metric
Health behaviors	Diet health	Measurement: Self-reported intake of salt, fatty foods, and tea Examples of salt intake measurement: "What flavor do you prefer." Examples of fatty food intake measurement: "How often do you eat fatty foods?" Example of tea intake measurement: "How often do you drink tea?"	Metric: The unweighted average of salt, fatty food, and tea scoring. Salt scoring: Points Level 100 <6 g/day 50 6-12 g/day 0 >12 g/day Fatty food scoring: Points Level 100 <1 time/week 50 1-3 times/week 0 >3 times/week Tea scoring:

			Points Level 100 ≥4 times/week 75 1-3 times/week 50 1-3 times/month 25 < 1 time/month 0 Never
	Physical activity	Measurement: Self-reported times of physical activity per week. Example tools for measurement: "How many times did you usually spend on physical activity (note: It took at least 20 minutes each time)? "	Metric: Minutes of physical activity per week. Scoring: Points Level 100 ≥ 80 50 20-60 0 <20
	Nicotine exposure	Measurement: Self-reported use of cigarettes Example tools for measurement: Do you now smoke cigarettes? (Never smoker, former smoker, some days, every day)	Metric: Smoking status Scoring: Points Status 100 Never smoker 50 Former smokers quit ≥ 1 y 25 Current smokers, < 1cigarette/d 0 Current smoker, ≥1cigarette/d
	Sleep health	Measurement: Self-reported average hours of sleep per night Example tools for	Metric: Average hours of sleep per night Scoring: Points Level

		measurement: “On average, how many hours of sleep do you get per night?”	100 7 - <9 h 90 9 - < 10 h 70 6 - < 7 h 40 5 - <6 or ≥10 h 20 4 - <5 h 0 <4h
Health factors	Body mass index	Measurement: Body weight (kg) divided by height squared(m^2) Example tools for measurement: Objective measurement of height and weight	Metric: Body mass index (kg/m2) Scoring: Points Level 100 <23 75 23.0-24.9 50 25.0-29.9 25 30.0-34.9 0 ≥35.0
	Blood lipids	Measurement: Plasma total and HDL cholesterol with the calculation of non-HDL cholesterol. Example tools for measurement: Fasting blood sample. non-HDL-cholesterol unit conversion: 1mmol/L= 38.67mg/L 1mg/L=0.02586mmol/L	Metric: Non-HDL cholesterol (mmol/L) Scoring: Points Level 100 < 3.36 60 3.36-4.13 40 4.14-4.90 20 4.91-5.68 0 ≥ 5.69 If drug treated, subtract 20 points
	Blood glucose	Measurement: Fasting blood glucose (FBG) Example tools for	Metric: FBG (mmol/L) Scoring: Points Level

		measurement: Fasting blood glucose sample. HBA1C to FBG (mg/L) to conversion: 28.7 * A1C - 46.7 = FBG FBG unit conversion: 1mg = 0.056mmol/L 1mmol/L= 18.02 mg/dL	100 No history of diabetes with FBG <5.6 60 No diabetes with FBG 5.6-6.9 40 Diabetes with FBG < 8.6 30 Diabetes with FBG 8.6-10.1 20 Diabetes with FBG 10.2-11.6 10 Diabetes with FBG 11.7-13.2 0 Diabetes with FBG ≥13.3
	Blood pressure	Measurement: Appropriately measured systolic and diastolic blood pressure Example tools for measurement: Corrected Mercury sphygmomanometer	Metric: Systolic and diastolic blood pressure (mm Hg) Scoring: Points Level 100 <120 / < 80 75 120-129 / < 80 50 130-139 or 80-89 25 140-159 or 90-99 0 ≥160 or ≥100 If drug treated, subtract 20 points.