Table S1. Information on scoring each metric of Life's Essential 8.

Metric	Method of measurement	Scoring rubric	
Diet	Mediterranean Eating Pattern for Americans (MEPA)	Points 100 80 50 25 0	MEPA score (points) 6 5 4 3 0-2
Physical activity	Minutes of moderate (or greater) intensity activity per week (Each minute of moderate activity should count as 1 minute and each minute of vigorous activity should count as 2 minutes toward the total for the week.)	Scoring 100 90 80 60 40 20 0	Points Minutes ≥150 120 – 149 90 – 119 60 – 89 30 – 59 1 – 29 0
Nicotine exposure	Combustible tobacco used and/or inhaled NDS use; or secondhand smoke exposure	Scoring 100 75 50 25 0	Points Status Never smoker Former smoker, quit ≥5 years Former smoker, quit 1 -<5 years Former smoker, quit <1 year, or currently using inhaled NDS current smoker subtract 20 points (unless score is 0) for living with active indoor smoker in home.
Sleep health	Average hours of sleep per night	Scoring 100 90 70 40 20 0	Points Level 7 – <9 9 -<10 6 -<7 5 -<6 or ≥10 4 -<5 <4
Body mass index (BMI)	Body weight (kg) divided by height squared (m^2)	Scoring 100 70 30 15 0	Points Level <25 25.0-29.9 30.0-34.9 35.0-39.9 ≥40.0

Supplemental material

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Stroke Vasc Neurol

Blood lipids	Non-HDL-cholesterol (mg/dL) = Plasma total cholesterol (mg/dL) - HDL-cholesterol (mg/dL)	Scoring	Points Level
		100	<130
		60	130-159
		40	160-189
		20	190-219
		0	≥220
		If drug-treated level, subtract 20 points.	

Blood glucose	Fasting blood glucose (mg/dL) or Hemoglobin A1c (%)	Scoring	Points Level
		100	No history of diabetes and FBG < 100 (or HbA1c< 5.7)
		60	No diabetes and FBG 100 – 125 (or HbA1c 5.7-6.4) (Pre-diabetes)
		40	Diabetes with HbA1c <7.0
		30	Diabetes with HbA1c 7.0-7.9
		20	Diabetes with HbA1c 8.0-8.9
		10	Diabetes with HbA1c 9.0-9.9
		0	Diabetes with HbA1c ≥10.0

Blood pressure	Systolic and diastolic blood pressure (mm Hg)	Scoring	Points Level
		100	<120/80 (optimal)
		75	120-129/<80 (elevated)
		50	130-139 or 80-89 (stage 1 hypertension)
		25	140-159 or 90-99
		0	≥160 or ≥100
		Subtract 20 points if treated level.	

*Cannot meet these metrics until solid foods are being consumed

Table S2. Scanner parameters of MRI sequences

Contrast	Orientation	Voxel /mm³	Parameters	Scan time
T1w MPRAGE	3D sagittal	1.00×1.00×1.00	TE=3.0ms, TR=6.7ms, TI=880ms, shot interval=2000ms, Flip angle=8°	4:30
SWI	3D axial	0.63×0.63×0.80	first TE=7.2ms, echo spacing = 6.2ms, 5 echoes, Flip angle=17°, TR =37ms	2:20
FLAIR imaging	2D axial	0.53×0.53×6.50	TE=110ms, TR=7000ms, TI=2300ms, SPIR fat suppression	2:27
T2w imaging	2D axial	0.51×0.51×6.50	TE=105ms, TR=2500ms, SPIR fat suppression	1:05

T1w MPRAGE indicates T1-weighted magnetization prepared rapid acquisition gradient-echo; SWI, susceptibility-weighted imaging; FLAIR, fluid-attenuated inversion recovery; T2w, T2-weighted.