## **Supplementary**

Table S1 Associations between the CMI, all-cause mortality, and CVD mortality after excluding participants who died within 2 years of follow-up (n=890)

СМІ	Model 1		Model 2		Model 3	
	HR (95% CI)	Р	HR (95% CI)	Р	HR (95% CI)	Р
Outcome: a	II-cause deaths					
Q1	Reference	-	Reference	-	Reference	-
Q2	1.3 (1.06–1.6)	0.01	0.94 (0.77–1.15)	0.53	0.99 (0.78–1.25)	0.90
Q3	1.44 (1.2–1.72)	<0.001	0.96 (0.8–1.15)	0.65	1.04 (0.79–1.35)	0.80
Q4	1.42 (1.19–1.71)	<0.001	1.15 (0.96–1.4)	0.14	1.25 (0.94–1.67)	0.12
Outcome: c	ardiovascular mortality					
Q1	Reference	-	Reference	-	Reference	-
Q2	1.41 (0.99–2.01)	0.06	0.99 (0.69–1.43)	0.96	0.92 (0.63-1.36)	0.69
Q3	1.48 (1.11–1.98)	0.008	0.96 (0.72–1.27)	0.76	0.75 (0.48–1.15)	0.19
Q4	1.68 (1.17–2.42)	0.005	1.39 (0.96–2.02)	0.08	0.91 (0.51–1.64)	0.75

Model 1 was unadjusted; Model 2 was adjusted for sex, age, race, education level, and family income-to-poverty ratios; Model 3 was further adjusted for smoking status, alcohol consumption, BMI, hypertension, eGFR, HEI-2015, HbA1c, LDL-C, and TC. Q1: CMI  $\leq$ 0.56; Q2: 0.56< CMI  $\leq$ 0.62; Q3: 0.62< CMI  $\leq$ 0.68; and Q4: CMI >0.68. BMI, body mass index; CI, confidence interval; CMI, cardiometabolic index; CVD, cardiovascular disease; eGFR, estimated glomerular filtration rate; HbA1c, hemoglobin A1c; HEI, Healthy Eating Index; HR, hazard ratio; LDL-C, low-density lipoprotein cholesterol; TC, total cholesterol.

Table S2 Associations between the CMI, all-cause mortality, and CVD mortality after excluding participants who had a history of CVD at the baseline (n=2,804)

СМІ	Model 1		Model 2		Model 3	
	HR (95% CI)	Р	HR (95% CI)	Р	HR (95% CI)	Р
Outcome: a	Il-cause mortality					
Q1	Reference	-	Reference	_	Reference	-
Q2	1.16 (0.96–1.39)	0.12	0.86 (0.71–1.03)	0.11	1.02 (0.81–1.27)	0.88
Q3	1.35 (1.1–1.65)	0.004	0.94 (0.76–1.16)	0.57	1.22 (0.89–1.68)	0.22
Q4	1.38 (1.11–1.71)	0.004	1.17 (0.95–1.44)	0.15	1.55 (1.1–2.19)	0.01
Outcome: c	ardiovascular mortality					
Q1	Reference	-	Reference	_	Reference	-
Q2	1.18 (0.82–1.72)	0.37	0.86 (0.59–1.25)	0.42	0.97 (0.64–1.48)	0.89
Q3	1.78 (1.2–2.63)	0.004	1.21 (0.82–1.8)	0.34	1.4 (0.83–2.36)	0.21
Q4	1.94 (1.31–2.86)	0.001	1.68 (1.14–2.48)	0.008	1.9 (1.03–3.48)	0.04

Model 1 was unadjusted; Model 2 was adjusted for sex, age, race, education level, and family income-to-poverty ratios; Model 3 was further adjusted for smoking status, alcohol consumption, BMI, hypertension, eGFR, HEI-2015, HbA1c, LDL-C, and TC. Q1: CMI  $\leq$ 0.56; Q2: 0.56< CMI  $\leq$ 0.62; Q3: 0.62< CMI  $\leq$ 0.68; and Q4: CMI >0.68. BMI, body mass index; CI, confidence interval; CMI, cardiometabolic index; CVD, cardiovascular disease; eGFR, estimated glomerular filtration rate; HbA1c, hemoglobin A1c; HEI, Healthy Eating Index; HR, hazard ratio; LDL-C, low-density lipoprotein cholesterol; TC, total cholesterol.

**Table S3** Associations between the CMI, all-cause mortality, and CVD mortality after excluding participants who had a history of malignant neoplasm at the baseline (n=2,088)

CMI	Model 1		Model 2		Model 3	
	HR (95% CI)	Р	HR (95% CI)	Р	HR (95% CI)	Р
Outcome: a	Il-cause deaths					
Q1	Reference	-	Reference	-	Reference	-
Q2	1.27 (1.07–1.5)	0.006	0.94 (0.8–1.11)	0.49	1.11 (0.9–1.39)	0.33
Q3	1.48 (1.25–1.74)	<0.001	1.01 (0.85–1.19)	0.95	1.22 (0.93–1.6)	0.15
Q4	1.58 (1.31–1.9)	<0.001	1.28 (1.07–1.52)	0.006	1.51 (1.11–2.04)	0.008
Outcome: c	ardiovascular mortality					
Q1	Reference	-	Reference	-	Reference	-
Q2	1.36 (0.96–1.93)	0.08	1 (0.7–1.42)	0.99	1.06 (0.76–1.49)	0.73
Q3	1.6 (1.19–2.15)	0.002	1.06 (0.8–1.43)	0.67	1.01 (0.7–1.46)	0.96
Q4	1.81 (1.3–2.52)	<0.001	1.52 (1.09–2.11)	0.01	1.21 (0.76–1.94)	0.42

Model 1 was unadjusted; Model 2 was adjusted for sex, age, race, education level, and family income-to-poverty ratios; Model 3 was further adjusted for smoking status, alcohol consumption, BMI, hypertension, eGFR, HEI-2015, HbA1c, LDL-C, and TC. Q1: CMI  $\leq$ 0.56; Q2: 0.56< CMI  $\leq$ 0.62; Q3: 0.62< CMI  $\leq$ 0.68; and Q4: CMI >0.68. BMI, body mass index; CI, confidence interval; CMI, cardiometabolic index; CVD, cardiovascular disease; eGFR, estimated glomerular filtration rate; HbA1c, hemoglobin A1c; HEI, Healthy Eating Index; HR, hazard ratio; LDL-C, low-density lipoprotein cholesterol; TC, total cholesterol.