

Figure S1 Study flow diagram. TG, triglyceride; CVD, cardiovascular disease.

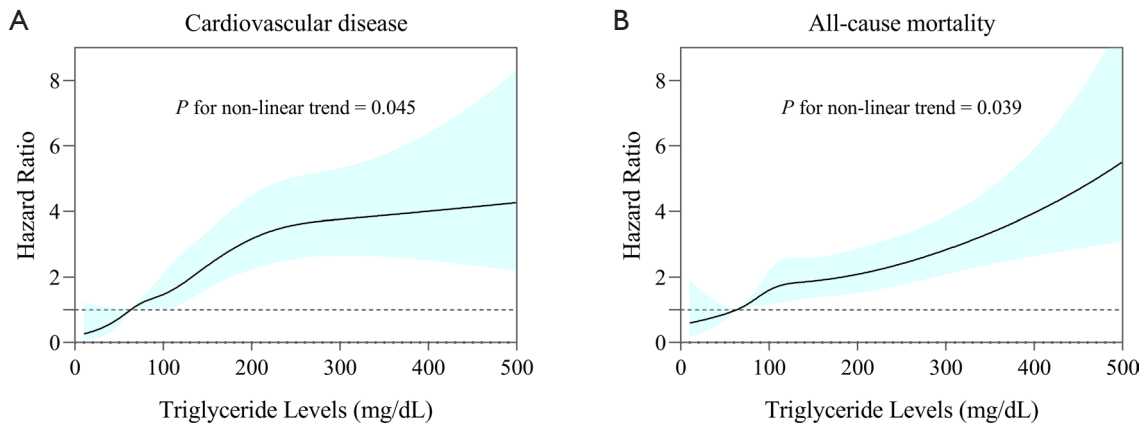


Figure S2 Full adjusted hazard ratios of incident cardiovascular disease (A) and all-cause mortality (B) by baseline triglyceride levels.

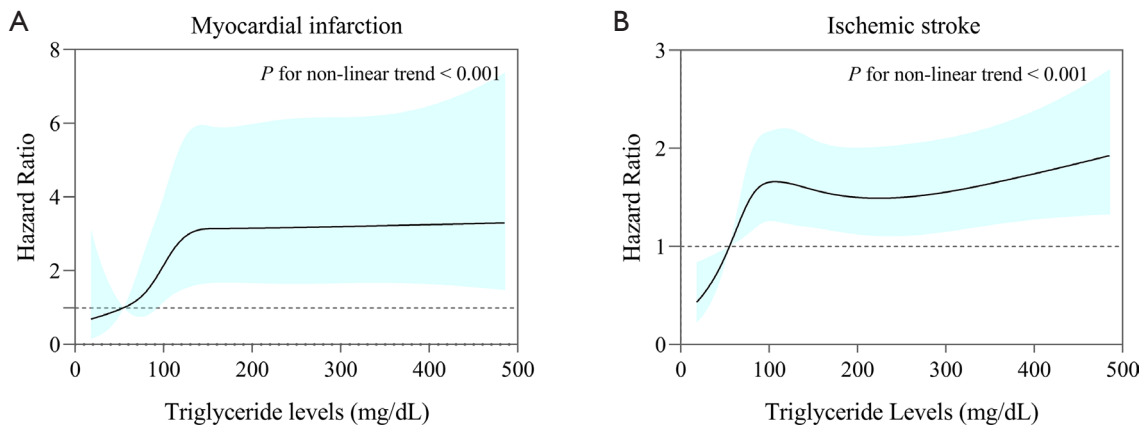


Figure S3 Full adjusted hazard ratios of incident myocardial infarction (A) and ischemic stroke (B) by baseline triglyceride levels.

Table S1 Counts and proportions of missing data^a

| Variable | Count of missing values (%) |
|---|-----------------------------|
| Triglyceride, mg/dL | 0 |
| Age, years | 0 |
| Sex | 0 |
| Obesity | 1095 (2.5) |
| High-density lipoprotein cholesterol, mg/dL | 23 (0.1) |
| Low-density lipoprotein cholesterol, mg/dL | 60 (0.1) |
| Smoking status | 4737 (10.8) |
| Alcohol consumption | 4157 (9.5) |
| Physical activity | 6229 (14.2) |
| Education level | 6064 (13.8) |
| Hypertension | 0 |
| Diabetes | 0 |
| Family history of cardiovascular disease | 2135 (4.9) |

^a, Little's chi-square test for covariate-dependent missingness (CDM) showed that the missing values were missing at random ($P>0.99$).

Table S2 Variance inflation factors of the covariables in Model 2

| Covariable | Variance inflation factor |
|---|---------------------------|
| Triglyceride, mg/dL | 1.06 |
| Age, years | 1.24 |
| Sex | 1.31 |
| Obesity | 1.14 |
| High-density lipoprotein cholesterol, mg/dL | 1.04 |
| Low-density lipoprotein cholesterol, mg/dL | 1.03 |
| Smoking status | 1.36 |
| Alcohol consumption | 1.38 |
| Physical activity | 1.02 |
| Education level | 1.22 |
| Hypertension | 1.10 |
| Diabetes | 1.03 |
| Family history of cardiovascular disease | 1.02 |
| Mean variance inflation factor | 1.15 |

Table S3 Sensitivity analyses (A)

| Triglyceride, mg/dL | HR (95% CI) ^a | | | | |
|----------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Analysis 1 ^b | Analysis 2 ^c | Analysis 3 ^d | Analysis 4 ^e | Analysis 5 ^f |
| CVD | | | | | |
| Events/total | 295/43691 | 276/43218 | 294/43584 | 285/43834 | 288/33809 |
| Q1 [<67] | Reference | Reference | Reference | Reference | Reference |
| Q2 [67–97] | 1.42 (0.91, 2.24) | 1.46 (0.89, 2.41) | 1.40 (0.87, 2.18) | 1.35 (0.84, 2.19) | 1.39 (0.88, 2.20) |
| Q3 [98–150] | 1.43 (0.89, 2.28) | 1.53 (0.95, 2.46) | 1.42 (0.90, 2.23) | 1.37 (0.86, 2.17) | 1.43 (0.89, 2.29) |
| Q4 [≥ 151] | 2.11 (1.37, 3.24) | 2.36 (1.50, 3.70) | 2.07 (1.35, 3.18) | 2.10 (1.36, 3.25) | 2.08 (1.34, 3.21) |
| P for trend | <0.001 | <0.001 | <0.001 | <0.001 | 0.01 |
| Per SD increase | 1.08 (1.02, 1.15) | 1.08 (1.02, 1.15) | 1.08 (1.01, 1.15) | 1.09 (1.03, 1.15) | 1.08 (1.02, 1.15) |
| All-cause mortality | | | | | |
| Events/total | 344/43691 | 322/43218 | 282/43584 | 310/43847 | 323/33809 |
| Q1 [<67] | Reference | Reference | Reference | Reference | Reference |
| Q2 [67–97] | 1.01 (0.69, 1.48) | 1.05 (0.72, 1.53) | 1.05 (0.68, 1.60) | 1.07 (0.71, 1.61) | 1.05 (0.71, 1.55) |
| Q3 [98–150] | 1.30 (0.92, 1.85) | 1.39 (0.97, 1.98) | 1.40 (0.94, 2.09) | 1.47 (1.00, 2.14) | 1.41 (0.98, 2.04) |
| Q4 [≥ 151] | 1.46 (1.04, 2.06) | 1.50 (1.05, 2.14) | 1.70 (1.15, 2.51) | 1.74 (1.20, 2.53) | 1.60 (1.12, 2.31) |
| P for trend | 0.008 | 0.005 | 0.001 | 0.001 | 0.002 |
| Per SD increase | 1.06 (1.01, 1.12) | 1.06 (1.00, 1.12) | 1.06 (1.01, 1.13) | 1.06 (1.00, 1.12) | 1.06 (1.00, 1.13) |

^a, adjusted for age, sex, obesity, high-density lipid cholesterol, low-density lipid cholesterol, smoking status, alcohol consumption, physical activity, education level, hypertension, diabetes, and family history of cardiovascular disease; ^b, excluded participants with LDL-C ≥ 190 mg/dL at baseline; ^c, excluded participants on antihypertensive or hypoglycemic agents at baseline; ^d, excluded participants with new-onset cancer during follow-up; ^e, excluded participants who experienced outcomes during the first 2-year follow-up period; ^f, excluded participants with missing covariable values and performed a complete-case analysis. HR, hazard ratio; CI, confidence interval; CVD, cardiovascular disease; Q, quartile; SD, standard deviation.

Table S4 Sensitivity analyses (B)

| Triglyceride, mg/dL | HR (95% CI) ^a | | | | |
|----------------------------|--------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| | Analysis 6 ^b | Analysis 7 ^c | Analysis 8 ^d | Analysis 9 ^e | Analysis 10 ^f |
| CVD | | | | | |
| Events/total | 141/24365 | 187/36757 | 191/40265 | 276/43350 | 249/41564 |
| Q1 [<67] | Reference | Reference | Reference | Reference | Reference |
| Q2 [67–97] | 2.20 (1.03, 4.72) | 1.32 (0.81, 2.16) | 1.27 (0.74, 2.17) | 1.33 (0.83, 2.11) | 1.35 (0.86, 2.11) |
| Q3 [98–150] | 2.40 (1.14, 5.07) | 1.39 (0.84, 2.28) | 1.45 (0.86, 2.42) | 1.47 (0.92, 2.36) | 1.38 (0.87, 2.20) |
| Q4 [≥151] | 3.86 (1.24, 8.00) | 1.76 (1.10, 2.81) | 2.24 (1.38, 3.64) | 2.07 (1.34, 3.21) | 1.87 (1.21, 2.90) |
| P for trend | <0.001 | 0.024 | <0.001 | <0.001 | 0.004 |
| Per SD increase | 1.08 (1.00, 1.16) | 1.07 (1.00, 1.15) | 1.08 (1.01, 1.15) | 1.07 (1.00, 1.15) | 1.07 (1.00, 1.15) |
| All-cause mortality | | | | | |
| Events/total | 169/24365 | 263/36757 | 242/40265 | 325/43350 | 309/41564 |
| Q1 [<67] | Reference | Reference | Reference | Reference | Reference |
| Q2 [67–97] | 1.25 (0.74, 2.12) | 1.00 (0.67, 1.50) | 0.92 (0.61, 1.40) | 1.06 (0.72, 1.55) | 1.07 (0.74, 1.58) |
| Q3 [98–150] | 1.74 (1.04, 2.92) | 1.31 (0.90, 1.92) | 1.42 (0.97, 2.09) | 1.42 (1.00, 2.03) | 1.41 (1.00, 2.02) |
| Q4 [≥151] | 1.87 (1.14, 3.07) | 1.66 (1.14, 2.40) | 1.48 (1.01, 2.19) | 1.54 (1.08, 2.20) | 1.64 (1.14, 2.35) |
| P for trend | 0.015 | 0.002 | 0.14 | 0.005 | 0.002 |
| Per SD increase | 1.02 (0.91, 1.15) | 1.05 (0.98, 1.13) | 1.02 (0.92, 1.14) | 1.05 (1.00, 1.12) | 1.06 (1.00, 1.13) |

^a, adjusted for age, sex, obesity, high-density lipid cholesterol, low-density lipid cholesterol, smoking status, alcohol consumption, physical activity, education level, hypertension, diabetes, and family history of cardiovascular disease; ^b, excluded current drinkers at baseline; ^c, excluded participants with obesity at baseline; ^d, excluded participants with hypertension at baseline; ^e, excluded participants with diabetes at baseline; ^f, excluded participants with metabolic syndrome at baseline. HR, hazard ratio; CI, confidence interval; CVD, cardiovascular disease; Q, quartile; SD, standard deviation.

Table S5 The ROC curves and diagnostic characteristics of the triglyceride level as a marker to predict CVD and all-cause mortality

| Primary outcomes | AUC (95% CI) | Cut-off value (mg/dL) | Sensitivity (%) | Specificity (%) |
|---------------------|----------------------|-----------------------|-----------------|-----------------|
| CVD | 0.664 (0.634, 0.695) | 110 | 66.4 | 57.3 |
| All-cause mortality | 0.616 (0.586, 0.645) | 102 | 66.7 | 52.0 |

ROC, receiver operating characteristic; CVD, cardiovascular diseases; AUC, area under the curve; CI, confidence interval.