

Supplementary Material

Table S1. Collinearity statistics

| Variables | Tolerance | Variance inflation factor |
|--------------------------------------|------------------|----------------------------------|
| Triglyceride | 0.695 | 1.438 |
| Age | 0.781 | 1.280 |
| Sex | 0.784 | 1.276 |
| Body mass index | 0.687 | 1.456 |
| Systolic blood pressure | 0.726 | 1.378 |
| Low-density lipoprotein cholesterol | 0.825 | 1.212 |
| High-density lipoprotein cholesterol | 0.713 | 1.402 |
| Use of anti-diabetic drugs | 0.726 | 1.377 |
| Use of lipid-lowering drugs | 0.733 | 1.365 |

Table S2. Sensitivity analysis of the association between fasting plasma glucose^a (dependent) and triglycerides^a (independent) in 16,292 participants with normal triglycerides who were not taking lipid-lowering or anti-diabetes drugs

| | β (95% confidence interval) | <i>P</i> value |
|---------|-----------------------------------|----------------|
| Model 1 | 0.21 (0.19–0.22) | < 0.001 |
| Model 2 | 0.10 (0.08–0.11) | < 0.001 |
| Model 3 | 0.03 (0.01–0.05) | < 0.001 |

^a Natural log-transformed

Model 1: Not adjusted.

Model 2: Adjusted for age and sex.

Model 3: Adjusted for factors in Model 2 plus body mass index, systolic blood pressure, LDL cholesterol, and HDL cholesterol.

Table S3. Sensitivity analysis of natural log-transformed triglyceride-associated odds for type 2 diabetes in 16,292 participants with normal triglycerides who were not taking lipid-lowering or anti-diabetes drugs

| | Odds ratio | 95% CI | <i>P</i> value |
|---------|------------|-----------|----------------|
| Model 1 | 4.83 | 3.76–6.21 | < 0.001 |
| Model 2 | 2.77 | 2.12–3.62 | < 0.001 |
| Model 3 | 1.62 | 1.20–2.18 | 0.002 |

Abbreviations: CI, confidence interval

Model 1: Not adjusted.

Model 2: Adjusted for age and sex.

Model 3: Adjusted for factors in Model 2 plus body mass index, systolic blood pressure, LDL cholesterol, and HDL cholesterol.

Table S4. Prevalence of type 2 diabetes, stratified by the triglyceride cut-off of 1.09 mmol/L

| | Triglycerides, <1.09 mmol/L | Triglycerides, ≥1.09 mmol/L | Overall |
|--------------------|--------------------------------|--------------------------------|---------|
| Sample size | 10,189 | 6,517 | 16,706 |
| Type 2 diabetes, N | 458 | 609 | 1067 |
| Type 2 diabetes, % | 4.5% | 9.3% | 6.4% |