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**Supplementary Material 6.** Adjusted hazard ratio (95% CI) of incident (fasting glucose defined) diabetes/prediabetes 5, 10, and 15 years later by tertile of pericardial adipose tissue at exam year 15, the CARDIA Study (2000-2016)

|  |  |
| --- | --- |
|  | Diabetes 5 - 15 years later3 |
|    | T1 | T2 | T3 | Ptrend | Per 10 cm3 increment |
| Person-years | 12,990 | 12,990 | 12,990 |  |  |
| No. of diabetes | 20 | 23 | 76 |  |  |
| Incidence rate\* | 1.5 | 1.8 | 5.9 |  |  |
| Unadjusted | 1 (ref.) | 1.17 (0.64, 2.12) | **3.95 (2.42, 6.47)** | <0.001 | **10.19 (10.14, 10.24)** |
| Model 1 | 1 (ref.) | 1.20 (0.66, 2.19) | **4.44 (2.65, 7.44)** | <0.001 | **10.23 (10.18, 10.29)** |
| Model 2 | 1 (ref.) | 0.86 (0.46, 1.63) | **2.60 (1.48, 4.55)** | <0.001 | **10.18 (10.12, 10.25)** |
| Model 3 | 1 (ref.) | 0.69 (0.36, 1.32) | 1.61 (0.87, 2.99) | 0.006 | 10.12 (10.05, 10.20) |
|  | Prediabetes 5 - 15 years later3 |
|   | T1 | T2 | T3 | Ptrend | Per 10 cm3 increment |
| Person-years | 12,990 | 12,990 | 12,990 |  |  |
| No. of prediabetes | 132 | 182 | 256 |  |  |
| Incidence rate\* | 10.2 | 14.0 | 19.7 |  |  |
| Unadjusted | 1 (ref.) | **1.44 (1.15, 1.80)** | **2.30 (1.86, 2.84)** | <0.001 | **10.11 (10.09, 10.14)** |
| Model 1 | 1 (ref.) | **1.34 (1.07, 1.69)** | **1.98 (1.58, 2.48)** | <0.001 | **10.09 (10.06, 10.12)** |
| Model 2 | 1 (ref.) | 1.12 (0.89, 1.42) | **1.36 (1.06, 1.75)** | 0.035 | **10.04 (10.01, 10.08)** |
| Model 3 | 1 (ref.) | 0.97 (0.76, 1.24) | 0.98 (0.74, 1.30) | 0.965 | 9.98 (9.94, 10.03) |

Note: Pericardial adipose tissue (cm3) tertile: 7.0 ≤T1≤ 29.3, 29.3<T2 ≤47.4, and 47.4<T3. Bolded values are statistically significant (P < 0.05). Model 1 adjusts for sex, race, center, age at exam year 15, education and occupation status at exam year 30. Model 2 adjusts for Model 1, plus smoking status at exam year 30, averages (exam years 15, 20, 25, and 30) of moderate-to-vigorous intensity physical activity, alcohol, systolic blood pressure, diastolic blood pressure, total cholesterol, high-density lipoprotein-cholesterol, diet quality score (derived from exam years 0, 7, and/or 20), antihypertensive and lipids lowering medication use at exam year 15, and family history of diabetes at exam year 25. Model 3 adjusts for Model 2, plus body mass index (averages of exam years 15, 20, 25, and 30). \*Incidence rate indicates per 1,000 person-years.

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