**ADDITIONAL FILE TABLES**

**Additional File Table S1.** Age group-stratified ratios (95% CI) for the prevalence of DM with regard to BMI, WC, WHR, and ABSI according to the cutoff point of each index

|  |  |  |  |
| --- | --- | --- | --- |
| Index | Age group (years) | Crude Model | Model 1\* |
| BMI | 40–49 | 2.00 (2.39–2.82) | 2.00 (1.84–2.19) |
|  | 50–59 | 1.88 (1.77–1.99) | 1.66 (1.56–1.76) |
|  | 60–79 | 1.37 (1.30–1.45) | 1.38 (1.31–1.47) |
| WC | 40–49 | 2.60 (2.39–2.82) | 2.30 (2.10–2.52) |
|  | 50–59 | 1.88 (1.77–1.99) | 1.86 (1.75–1.97) |
|  | 60–79 | 1.37 (1.30–1.45) | 1.67 (1.57–1.76) |
| WHR | 40–49 | 2.60 (2.39–2.82) | 2.36 (2.16 –2.58) |
|  | 50–59 | 1.88 (1.77–1.99) | 2.27 (2.13 –2.41) |
|  | 60–79 | 1.37 (1.30–1.45) | 1.91 (1.80–2.03) |
| ABSI | 40–49 | 2.60 (2.39–2.82) | 1.47 (1.33–1.62) |
|  | 50–59 | 1.88 (1.77–1.99) | 1.45 (1.35–1.55) |
|  | 60–79 | 1.37 (1.30–1.45) | 1.46 (1.36–1.57) |

\*Model 1: crude model + age, sex, year, site, education, income, smoking, drinking, total cholesterol and systolic blood pressure; BMI cutoff point: 25 kg/m2, WC cutoff point: 90 and 85 cm for male and female participants, respectively, WHR cutoff point: 0.9 and 0.85 for male and female participants, respectively, and ABSI cutoff point: 0.08 and 0.073 m11/6/kg2/3 for male and female participants, respectively.

**Additional File Table S2.** Sex-specific and age group-specific odd ratios (95% CI) of the prevalence of DM for BMI, WC, WHR, and ABSI according to the cutoff point of each index

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sex** | **Index** | **Age group (years)** | **Crude Model** | **Model 1\*** |
| Male | BMI | 40–49 | 2.00 (2.39–2.82) | 1.67 (1.48–1.89) |
|  |  | 50–59 | 1.88 (1.77–1.99) | 1.50 (1.37–1.63) |
|  |  | 60–79 | 1.37 (1.30–1.45) | 1.40 (1.29–1.52) |
|  | WC | 40–49 | 2.60 (2.39–2.82) | 2.01 (1.77–2.28) |
|  |  | 50–59 | 1.88 (1.77–1.99) | 1.67 (1.52–1.82) |
|  |  | 60–79 | 1.37 (1.30–1.45) | 1.65 (1.52–1.79) |
|  | WHR | 40–49 | 2.60 (2.39–2.82) | 2.03 (1.79–2.29) |
|  |  | 50–59 | 1.88 (1.77–1.99) | 1.93 (1.77–2.29) |
|  |  | 60–79 | 1.37 (1.30–1.45) | 1.93 (1.77–2.11) |
|  | ABSI | 40–49 | 2.60 (2.39–2.82) | 1.21 (1.05–1.40) |
|  |  | 50–59 | 1.88 (1.77–1.99) | 1.32 (1.21–1.44) |
|  |  | 60–79 | 1.37 (1.30–1.45) | 1.39 (1.28–1.51) |
| Female | BMI | 40–49 | 2.00 (2.39–2.82) | 2.35 (2.07–2.67) |
|  |  | 50–59 | 1.88 (1.77–1.99) | 1.76 (1.62–1.91) |
|  |  | 60–79 | 1.37 (1.30–1.45) | 1.33 (1.23–1.44) |
|  | WC | 40–49 | 2.60 (2.39–2.82) | 2.62 (2.29–2.99) |
|  |  | 50–59 | 1.88 (1.77–1.99) | 2.00 (1.83–2.18) |
|  |  | 60–79 | 1.37 (1.30–1.45) | 1.64 (1.52–1.78) |
|  | WHR | 40–49 | 2.60 (2.39–2.82) | 2.75 (2.42–3.12) |
|  |  | 50–59 | 1.88 (1.77–1.99) | 2.62 (2.40–2.86) |
|  |  | 60–79 | 1.37 (1.30–1.45) | 2.09 (1.90–2.29) |
|  | ABSI | 40–49 | 2.60 (2.39–2.82) | 1.77 (1.53–2.06) |
|  |  | 50–59 | 1.88 (1.77–1.99) | 1.75 (1.55–1.98) |
|  |  | 60–79 | 1.37 (1.30–1.45) | 1.86 (1.58–2.19) |

\*Model 1: crude model + age, sex, year, site, education, income, smoking, drinking, total cholesterol and systolic blood pressure; BMI cutoff point: 25 kg/m2, WC cutoff point: 90 and 85 cm for male and female participants, respectively, WHR cutoff point: 0.9 and 0.85 for male and female participants, respectively, and ABSI cutoff point: 0.08 and 0.073 m11/6/kg2/3 for male and female participants, respectively.

**Additional File Table S3.** Difference in AUC among indices for DM in sex-specific and age-specific analyses

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sex** | **Index** | **Age group (years)** | **Model 1\*** | **Model 2\*\*** | **Difference\*\*\*** | ***p*-value** |
| Male | BMI | 40–49 | 0.641 | 0.658 | 0.017 | <.0001 |
|  |  | 50–59 | 0.619 | 0.634 | 0.015 | <.0001 |
|  |  | 60–79 | 0.626 | 0.632 | 0.006 | 0.007 |
|  | WC | 40–49 | 0.641 | 0.667 | 0.026 | <.0001 |
|  |  | 50–59 | 0.619 | 0.646 | 0.027 | <.0001 |
|  |  | 60–79 | 0.626 | 0.639 | 0.013 | <.0001 |
|  | WHR | 40–49 | 0.641 | 0.668 | 0.027 | <.0001 |
|  |  | 50–59 | 0.619 | 0.622 | 0.003 | <.0001 |
|  |  | 60–79 | 0.626 | 0.644 | 0.018 | <.0001 |
|  | ABSI | 40–49 | 0.641 | 0.642 | 0.001 | 0.212 |
|  |  | 50–59 | 0.619 | 0.622 | 0.003 | 0.069 |
|  |  | 60–79 | 0.626 | 0.633 | 0.007 | 0.0007 |
| Female | BMI | 40–49 | 0.692 | 0.719 | 0.027 | <.0001 |
|  |  | 50–59 | 0.661 | 0.677 | 0.016 | <.0001 |
|  |  | 60–79 | 0.650 | 0.654 | 0.004 | 0.0076 |
|  | WC | 40–49 | 0.692 | 0.718 | 0.026 | <.0001 |
|  |  | 50–59 | 0.661 | 0.681 | 0.020 | <.0001 |
|  |  | 60–79 | 0.650 | 0662 | 0.012 | <.0001 |
|  | WHR | 40–49 | 0.692 | 0.727 | 0.035 | <.0001 |
|  |  | 50–59 | 0.661 | 0.700 | 0.039 | <.0001 |
|  |  | 60–79 | 0.650 | 0.673 | 0.023 | <.0001 |
|  | ABSI | 40–49 | 0.692 | 0.703 | 0.011 | <.0001 |
|  |  | 50–59 | 0.661 | 0.668 | 0.007 | 0.0001 |
|  |  | 60–79 | 0.650 | 0.656 | 0.006 | 0.0003 |

\*Model 1 was adjusted for age, sex, year, site, education, income, smoking, drinking, total cholesterol, and systolic blood pressure; \*\*Model 2 was adjusted for all variables in Model 1 + BMI, WC, WHR, or ABSI; \*\*\*Difference between Model 1 and Model 2.

**Additional File Table S4.** Reclassification of indices based on sex-specific and age-specific stratification

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sex** | **Index** | **Age group (years)** | **IDI\*** | ***p*-value** | **cfNRI\*\*** | ***p*-value** |
| Male | BMI | 40–49 | 0.0038 | <.0001 | 0.273 | <.0001 |
|  |  | 50–59 | 0.0047 | <.0001 | 0.214 | <.0001 |
|  |  | 60–79 | 0.0040 | <.0001 | 0.167 | <.0001 |
|  | WC | 40–49 | 0.0070 | <.0001 | 0.315 | <.0001 |
|  |  | 50–59 | 0.0073 | <.0001 | 0.241 | <.0001 |
|  |  | 60–79 | 0.0084 | <.0001 | 0.228 | <.0001 |
|  | WHR | 40–49 | 0.0078 | <.0001 | 0.358 | <.0001 |
|  |  | 50–59 | 0.0119 | <.0001 | 0.318 | <.0001 |
|  |  | 60–79 | 0.0108 | <.0001 | 0.243 | <.0001 |
|  | ABSI | 40–49 | 0.0004 | 0.0197 | 0.090 | 0.0026 |
|  |  | 50–59 | 0.0022 | <.0001 | 0.138 | <.0001 |
|  |  | 60–79 | 0.0032 | <.0001 | 0.139 | <.0001 |
| Female | BMI | 40–49 | 0.0064 | <.0001 | 0.496 | <.0001 |
|  |  | 50–59 | 0.0051 | <.0001 | 0.330 | <.0001 |
|  |  | 60–79 | 0.0025 | <.0001 | 0.156 | <.0001 |
|  | WC | 40–49 | 0.0081 | <.0001 | 0.423 | <.0001 |
|  |  | 50–59 | 0.0077 | <.0001 | 0.347 | <.0001 |
|  |  | 60–79 | 0.0069 | <.0001 | 0.236 | <.0001 |
|  | WHR | 40–49 | 0.0095 | <.0001 | 0.558 | <.0001 |
|  |  | 50–59 | 0.0135 | <.0001 | 0.493 | <.0001 |
|  |  | 60–79 | 0.0110 | <.0001 | 0.295 | <.0001 |
|  | ABSI | 40–49 | 0.0021 | <.0001 | 0.256 | <.0001 |
|  |  | 50–59 | 0.0023 | <.0001 | 0.152 | <.0001 |
|  |  | 60–79 | 0.0025 | <.0001 | 0.077 | <.0001 |

\* Integrated discrimination index; \*\*Category-free net reclassification improvement