Gender difference of metabolic syndrome and its association with dietary diversity at different ages

SUPPLEMENTARY MATERIALS

Supplementary Figure 1: Association between predicted probability of having metabolic syndrome and age with additional adjustment of BMI

Supplementary Table 1: Multivariable adjusted\(^1\) Odds Ratio and 95% confidence interval of metabolic syndrome at three DDS tertiles

| ORs          | Total population (n=4308) | Female (n=2348) | Male (n=1960) |
|--------------|---------------------------|-----------------|---------------|
| DDS1         | 1                         | 1               | 1             |
| DDS2         | 1.051(0.836, 1.320)\(^2\) | 0.971(0.721, 1.310) | 1.248(0.856, 1.819) |
| DDS3         | 1.034(0.782, 1.366)       | 0.862(0.597, 1.247) | 1.395(0.894, 2.176) |
| Female       | 1.664(1.250, 2.215)       |                 |               |
| age          | 1.084(1.035, 1.136)       | 1.098(1.025, 1.176) | 1.101(1.027, 1.180) |
| age square   | 0.999(0.999, 1.000)       | 1.000(0.999, 1.000) | 0.999(0.998, 1.000) |
| BMI          | 1.354(1.312, 1.397)       | 1.387(1.330, 1.446) | 1.295(1.233, 1.360) |

\(^1\) Adjusted for age, square of age, educational level (primary, middle and high), ln (income), smoking (current smoking or no), drinking (current drink or no), physical activity (light, moderate and heavy), localization (urban or rural; north or south), BMI, total energy intake and fat share. For total population regression, sex was added in addition.

\(^2\) Values are Ors (95%CI) unless otherwise indicated.
Supplementary Table 2: Multivariable adjusted<sup>1</sup> Odds Ratio and 95% confidence interval of MetS<sup>2</sup> and its risk factors at three DDS tertiles for each age group

| Component of metabolic syndrome | Indices | Female | Male |
|--------------------------------|---------|--------|------|
|                                | DDS1    | DDS2   | DDS3  | p<sub>trend</sub> | DDS1 | DDS2 | DDS3 | p<sub>trend</sub> |
| MetS                           | Young<sup>3</sup> | 0.54 (0.36, 0.81) | 0.41 (0.23, 0.72) | 0.000 | 1.10 (0.68, 1.78) | 0.93 (0.51, 1.70) | 0.927 |
|                                | Middle aged<sup>4</sup> | 1.10 (0.78, 1.56) | 0.92 (0.59, 1.44) | 0.873 | 1.33 (0.85, 2.08) | 2.10 (1.22, 3.62) | 0.009 |
|                                | Old<sup>5</sup> | 1.38 (0.87, 2.18) | 1.69 (0.98, 2.92) | 0.040 | 1.34 (0.76, 2.36) | 1.08 (0.53, 2.23) | 0.562 |

- 1 Adjusted for educational level (primary, middle and high), logarithm of income, smoking (yes/no), drinking (current drink or not), physical activity (light, moderate and heavy), localization (urban or rural; north or south), BMI, total energy intake and fat share.
- 2 MetS was defined as the presence of three or more of the following components: (1) abdominal adiposity (WC ≥102 cm in men and ≥88 cm in women); (2) low serum HDL cholesterol (<40 mg/dl for men and <50 mg/dl for women); (3) high serum triglyceride levels (>150 mg/dl); (4) elevated blood pressure (SBP ≥130 mmHg or DBP ≥85 mmHg); and (5) abnormal glucose homeostasis (fasting plasma glucose level ≥100 mg/dl).
- 3 Young is defined as <45 y.
- 4 Adult is defined as ≥45 y and ≤60 y.
- 5 Old is defined as >60 y.
- 6 Values are ORs (95% CI) unless otherwise indicated.