

## Supplementary Note

- Body mass index (BMI) was categorized using the World Health Organization (WHO) international classification of adult underweight, overweight and obesity.

BMI ( $\text{kg}/\text{m}^2$ ): <18.5 (underweight); 18.5–24.9 (normal); 25–29.9 (overweight);  $\geq 30$  (obesity)

- Waist circumference and waist-hip ratio were categorized using WHO recommended gender specific cut-off points, related to increased risk of metabolic complications. The International Diabetes Federation (IDF) recommended ethnic group specific cut-offs for waist circumference.

Waist circumference (cm): men >94, women >80; European men >94, women >80; South Asian,

Chinese and Japanese men >90, women >80

Waist-hip ratio: men  $\geq 0.90$  women  $\geq 0.85$

- Systolic and diastolic blood pressure (SBP and DBP) was categorized according to 2013 European Society of Hypertension (ESH) and European Society of Cardiology (ESC) guidelines (with a modification).

Blood pressure (mmHg): SBP <120 and DBP <80 (optimal); SBP 120–129 or DBP 80–84 (normal); SBP 130–139 or DBP 85–89 (high normal); SBP  $\geq 140$  or DBP  $\geq 90$  (hypertension)

- Random blood glucose was first categorized with the level  $\geq 200$  mg/dL (11.1 mmol/L) which defines diabetes according to the WHO and other criteria. The level 140–199 mg/dL (7.8–11.0 mmol/L) was then created in reference to the WHO definition of prediabetes after ingestion of 75 g of oral glucose load on a 2-hour oral glucose tolerance test in spite of our use of random glucose. And the remaining category was referred to as normal in the Supplementary Note.

Random blood glucose (mg/dL): <140 (normal); 140–199 (prediabetes);  $\geq 200$  (diabetes).

- Glycated haemoglobin (HbA1c) was categorized with cut-off values according to the American Diabetes Association and WHO (for the diabetes level).

HbA1c (%): <5.7 (normal); 5.7–6.4 (prediabetes);  $\geq 6.5$  (diabetes)

- Total cholesterol was first categorized according to the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III: ATP III) using cut-off values of 200 mg/dL (5.2 mmol/L) and 240 mg/dL (6.2 mmol/L) to define desirable, borderline high and high cholesterol (The latter is also used by the WHO). The desirable cholesterol levels were further categorized using WHO cut-off values of 190 mg/dL (5.0 mmol/L) to define raised cholesterol.

Total cholesterol (mg/dL): <190 (desirable by NCEP and normal by WHO); 190–199 (desirable by NCEP but raised according to WHO); 200–239 (borderline high);  $\geq 240$  (high)

- High-density lipoprotein (HDL) cholesterol was categorized according to NCEP ATP III using cut-off value of <40 mg/dL for both men and women, and cut-off values to define

metabolic syndrome, <40 for men and <50 for women. We created 40-49 category so that gender comparisons could easily be made.

HDL cholesterol (mg/dL): <40 (low for men and women); 40-49 (marginal risk for women)

- Low-density lipoprotein (LDL) cholesterol was classified according to NCEP ATP III criteria.

LDL cholesterol (mg/dL): <100 (optimal); 100–129 (near optimal / above optimal); 130–159 (borderline-high); ≥160 (high / very high combined)

- Triglyceride level was categorized according to NCEP ATP III criteria.

Triglyceride (mg/dL): <150 (normal); 150–199 (borderline-high); ≥200 (high)

- Haemoglobin level was categorized according to WHO criteria.

Haemoglobin (g/dL): <11 (moderate / severe anaemia combined); 11.0–11.9 (mild anaemia);

12.0–12.9 (mild anaemia for men and non-anaemia for women; ≥13.0 (non-anaemia)

## Reference

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