**Table S1.** Criteria of metabolic syndrome (MetS) and its abnormal components (AC) defined by IDF and JIS-Adult.

| MetS components. | Central obesity | High blood pressure | Low HDL-C | Increased triglyceride | Elevated fasting glucose | Diagnostic criteria of MetS |
|---|---|---|---|---|---|---|
| **IDF-Adolescent** [32] | | | | | | |
| **10-15 years** | WC ≥90 percentile (or adult cutoff if lower)[1,2] | SBP ≥130 / DBP ≥85 mmHg (or antihypertensive drug treatment) | <40 mg/dL | ≥150 mg/dL | ≥100 mg/dL (or previously diagnosed type 2 diabetes) | **Central obesity + 2 other ACs** |
| **16-18 years** | WC ≥90 percentile (or adult cutoff if lower)[1,2] | SBP ≥130 / DBP ≥85 mmHg (or antihypertensive drug treatment) | <40 mg/dL in males, <50 mg/dL in females | ≥150 mg/dL | ≥100 mg/dL (or previously diagnosed type 2 diabetes) | **Central obesity + 2 other ACs** |
| **JIS-Adult (for Asians ≥18 years)** [20] | WC ≥90 cm in males, WC ≥80 cm in females[3] | SBP ≥130 / DBP ≥85 mmHg (or antihypertensive drug treatment) | <40 mg/dL in males, <50 mg/dL in females | ≥150 mg/dL | ≥100 mg/dL (or previously diagnosed type 2 diabetes) | **Any 3 or more ACs** |
| **Difference in definition[4]** | **No** | **No** | **Yes** | **No** | **No** | **Yes** |

**Abbreviations**: IDF-Adolescent, International Diabetes Federation definition of MetS for adolescents; JIS-Adult, Joint Interim Statement of MetS for adults; WC, waist circumference; HDL-C, high-density lipoprotein cholesterol; SBP, systolic blood pressure; DBP, diastolic blood pressure. [1] The 90 percentiles of WC in this nationwide data were both higher than that of Asian adult cutoff points, therefore, the adult cutoff points (i.e., WC ≥90 cm in males and ≥80 cm in females) were applied. [2]Central obesity can be assumed if BMI is >30 kg/m², and WC does not need to be considered. [3]The recommended WC thresholds of abdominal obesity for Asian adults (i.e., WC ≥90 cm in males and ≥80 cm in females) were applied. [4]This denotes whether there were differences in the diagnosis of MetS and its components across 3 criteria.