

**Supplemental Table S1.** Baseline Characteristics of Participants According to the Quartile of Average Successive Variability of Body-weight

Variable	Quartile 1 (n=3,774)	Quartile 2 (n=3,867)	Quartile 3 (n=3,854)	Quartile 4 (n=3,845)	P value <sup>a</sup>
Age, yr	39.4±6.2	38.5±5.9	37.9±5.6	36.7±5.0	<0.001
Male sex	1,279 (33.9)	1,578 (40.8)	1,828 (47.4)	1,829 (47.6)	<0.001
BMI, kg/m <sup>2</sup>	21.0±2.4	21.5±2.4	22.0±2.5	23.0±2.8	<0.001
Waist circumference, cm	75.3±7.5	76.6±7.2	78.3±7.3	80.9±8.0	<0.001
FBG, mg/dL	91.5±7.7	92.1±8.0	92.5±7.6	92.4±7.9	<0.001
HbA1c, %	5.6±0.3	5.6±0.2	5.6±0.2	5.6±0.2	0.763
HOMA-IR	1.0±0.6	1.1±0.6	1.1±0.6	1.2±0.7	<0.001
SBP, mm Hg	104.0±12.0	105.0±12.0	106.2±12.0	107.2±12.1	<0.001
AST, IU/L	19.0±5.7	19.2±7.5	20.0±14.4	19.4±9.5	<0.001
ALT, IU/L	16.2±8.3	17.0±10.6	18.1±11.5	18.2±12.0	<0.001
Total cholesterol, mg/dL	186.6±30.6	187.6±31.9	188.5±31.1	189.3±32.0	0.001
Triglyceride, mg/dL	84.6±44.3	87.7±48.4	90.2±50.0	93.6±55.9	<0.001
HDL-C, mg/dL	63.6±14.5	62.2±14.2	60.8±14.1	60.2±14.4	<0.001
LDL-C, mg/dL	110.6±28.3	112.5±29.2	114.2±28.5	114.9±29.1	<0.001
Alcohol intake, g/day	5.7±6.4	6.1±6.6	6.6±6.8	6.7±6.8	<0.001
Current smoker	372 (9.9)	527 (13.6)	616 (16.0)	719 (18.7)	<0.001
Regular exercise <sup>b</sup>	411 (10.9)	449 (11.6)	469 (12.2)	495 (12.9)	0.004
Obesity <sup>c</sup>	246 (6.5)	284 (7.3)	441 (11.4)	813 (21.1)	<0.001

Values are expressed as mean±standard deviation or number (%). Cut off value for ASVW: 1st quartile (<1.13 kg), 2nd quartile (1.13–1.625 kg), 3rd quartile (1.625–2.33 kg), 4th quartile (≥2.33 kg).

BMI, body mass index; FBG, fasting blood glucose; HbA1c, glycosylated hemoglobin; HOMA-IR, homeostasis model assessment of insulin resistance; SBP, systolic blood pressure; AST, aspartate transaminase; ALT, alanine aminotransferase; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol.

<sup>a</sup>Student's *t* tests for continuous variables and chi-square tests for categorical variables were used to compare characteristics of the study subjects at baseline. Right-skewed variables (HOMA-IR, AST, ALT, and alcohol intake) were log-transformed for Student's *t* tests; <sup>b</sup>Regular exercise was defined as performing >20 minutes of vigorous physical activity at least three times per week; <sup>c</sup>BMI cut off of 25 kg/m<sup>2</sup> was used to define obesity for Korean population in this study.