

**Supplementary Table 1.** Baseline characteristics of study population stratified waist circumference in men

Characteristic	WC <90 cm			WC ≥90 cm			P value <sup>h</sup>
	Normouricemia Group A (n=4,169)	Hyperuricemia <sup>a</sup> Group B (n=735)	P value	Normouricemia Group C (n=1,751)	Hyperuricemia Group D (n=601)	P value	
Age, yr	45.95±0.29	40.91±0.61	<0.001	49.33±0.45 <sup>ij</sup>	42.17±0.58 <sup>i</sup>	<0.001	<0.001
BMI, kg/m <sup>2</sup>	22.91±0.04	23.59±0.1	<0.001	27.51±0.08 <sup>ij</sup>	28.64±0.15 <sup>ij</sup>	<0.001	<0.001
WC, cm	81.22±0.11	82.45±0.25	<0.001	95.7±0.16 <sup>ij</sup>	96.96±0.31 <sup>ij</sup>	<0.001	<0.001
SBP, mm Hg	117.79±0.28	119.59±0.55	0.002	123.39±0.42 <sup>ij</sup>	123.24±0.62 <sup>ij</sup>	0.626	<0.001
DBP, mm Hg	76.79±0.19	79.05±0.43	<0.001	81.04±0.29 <sup>ij</sup>	83.09±0.51 <sup>ij</sup>	<0.001	<0.001
FPG, mg/dL	99.79±0.42	97.53±0.61	<0.001	110.89±0.88 <sup>ij</sup>	102.47±0.84 <sup>ij</sup>	<0.001	<0.001
HbA1c, %	5.58±0.01	5.45±0.02	0.001	5.95±0.03 <sup>ij</sup>	5.66±0.03 <sup>ij</sup>	<0.001	<0.001
TG, mg/dL	140.01±2.33	190.14±10.7	<0.001	185.86±4.16 <sup>i</sup>	229.08±8.44 <sup>ij</sup>	<0.001	<0.001
HDL-C, mg/dL	49.45±0.22	46.99±0.47	<0.001	44.66±0.28 <sup>ij</sup>	42.31±0.42 <sup>ij</sup>	<0.001	<0.001
LDL-C, mg/dL	114.49±0.57	117.0±1.39	0.075	116.18±0.96	123.47±1.46 <sup>ij</sup>	<0.001	<0.001
TC, mg/dL	189.45±0.67	196.68±1.82	<0.001	193.35±1.08 <sup>i</sup>	203.6±1.68 <sup>ij</sup>	<0.001	<0.001
Uric acid, mg/dL	5.41±0.02	7.72±0.03	<0.001	5.53±0.03 <sup>ij</sup>	7.89±0.04 <sup>ij</sup>	<0.001	<0.001
eGFR, mL/min/1.73 m <sup>2</sup>	96.99±0.43	92.45±0.66	<0.001	95.4±0.48 <sup>ij</sup>	91.79±0.77 <sup>i</sup>	0.001	<0.001
Smoking			0.323			0.006	0.001
Never smoker	1,060 (27.0)	174 (26.1)		367 (21.8) <sup>ij</sup>	144 (28.4)		
Ex-smoker	1,645 (35.4)	268 (33.0)		786 (41.1) <sup>ij</sup>	233 (34.4)		
Current smoker	1,464 (37.5)	293 (40.9)		597 (37.1) <sup>ij</sup>	224 (37.2)		
Alcohol intake			<0.001			0.042	<0.001
Nondrinker	728 (14.8)	81 (10.5)		315 (16.0) <sup>ij</sup>	74 (11.2) <sup>i</sup>		
Light drinker	2,888 (71.5)	495 (68.9)		1,118 (64.7) <sup>ij</sup>	401 (69.8) <sup>i</sup>		
Moderate-to-heavy drinker	553 (13.7)	159 (20.6)		317 (19.3) <sup>ij</sup>	126 (19.0) <sup>i</sup>		
Physically active	938 (25.0)	214 (32.4)	0.001	358 (22.3) <sup>j</sup>	134 (24.4) <sup>j</sup>	0.379	<0.001
Household income			0.102			0.274	0.192
Low	492 (16.7)	113 (20.8)		179 (15.1) <sup>j</sup>	92 (18.6)		
Middle	2,090 (55.9)	370 (52.8)		895 (57.8) <sup>j</sup>	299 (54.5)		
High	1,058 (27.3)	182 (26.4)		440 (27.1) <sup>j</sup>	153 (26.8)		
Education level			0.023				<0.001
Elementary school or less	558 (9.1)	65 (5.8)		251 (10.3) <sup>j</sup>	40 (3.4) <sup>ij</sup>		
Middle school	403 (8.2)	59 (7.4)		176 (9.6) <sup>j</sup>	45 (5.7) <sup>ij</sup>		
High school	1,344 (37.0)	258 (40.7)		539 (33.7) <sup>j</sup>	174 (33.1) <sup>ij</sup>		
College or more	1,637 (45.7)	311 (46.2)		700 (46.3) <sup>j</sup>	306 (57.8) <sup>ij</sup>		
Diabetes	509 (9.6)	51 (5.6)	0.001	451 (23.1) <sup>ij</sup>	73 (9.5) <sup>j</sup>	<0.001	<0.001
Hypertension	1,155 (22.8)	220 (27.3)	0.019	848 (44.6) <sup>ij</sup>	276 (40.6) <sup>ij</sup>	0.138	<0.001
Abdominal obesity <sup>b</sup>	-	-	-	-	-	-	-
High BP <sup>c</sup>	1,661 (34.8)	324 (41.6)	0.001	1,092 (60.1) <sup>ij</sup>	377 (60.5) <sup>ij</sup>	0.880	<0.001
Hyperglycemia <sup>d</sup>	1,799 (36.7)	316 (37.6)	0.670	1,174 (62.1) <sup>ij</sup>	345 (51.6) <sup>ij</sup>	<0.001	<0.001
Hypertriglyceridemia <sup>e</sup>	1,532 (35.4)	363 (48.4)	<0.001	1,007 (57.9) <sup>ij</sup>	398 (66.5) <sup>ij</sup>	0.002	<0.001
Low HDL-C <sup>f</sup>	857 (19.0)	191 (24.0)	0.003	595 (32.7) <sup>ij</sup>	254 (44.4) <sup>ij</sup>	<0.001	<0.001
MetS <sup>g</sup>	812 (16.3)	197 (23.4)	<0.001	1,281 (70.2) <sup>ij</sup>	442 (71.9) <sup>ij</sup>	0.500	<0.001

Values are presented as mean ± standard error or number (%).

WC, waist circumference; BMI, body mass index; SBP, systolic blood pressure; DBP, diastolic blood pressure; FPG, fasting plasma glucose; HbA1c, glycosylated hemoglobin; TG, triglyceride; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; TC, total cholesterol; eGFR, estimated glomerular filtration rate; BP, blood pressure; MetS, metabolic syndrome.

<sup>a</sup>Serum uric acid level of ≥7.0 mg/dL in men and ≥6.0 mg/dL in women, <sup>b</sup>WC ≥90 cm in men or ≥85 cm in women, <sup>c</sup>Systolic BP ≥130 mm Hg and/or diastolic BP ≥85 mm Hg or use of antihypertensive medications, <sup>d</sup>FPG ≥100 mg/dL or use of antidiabetic medications, <sup>e</sup>TG ≥150 mg/dL or medication use, <sup>f</sup>HDL-C <40 mg/dL in men and <50 mg/dL in women or medication use, <sup>g</sup>Having three or more of the aforementioned components, <sup>h</sup>Comparison between four groups, <sup>i</sup>P<0.05 compared with Group A, <sup>j</sup>P<0.05 compared with Group B.