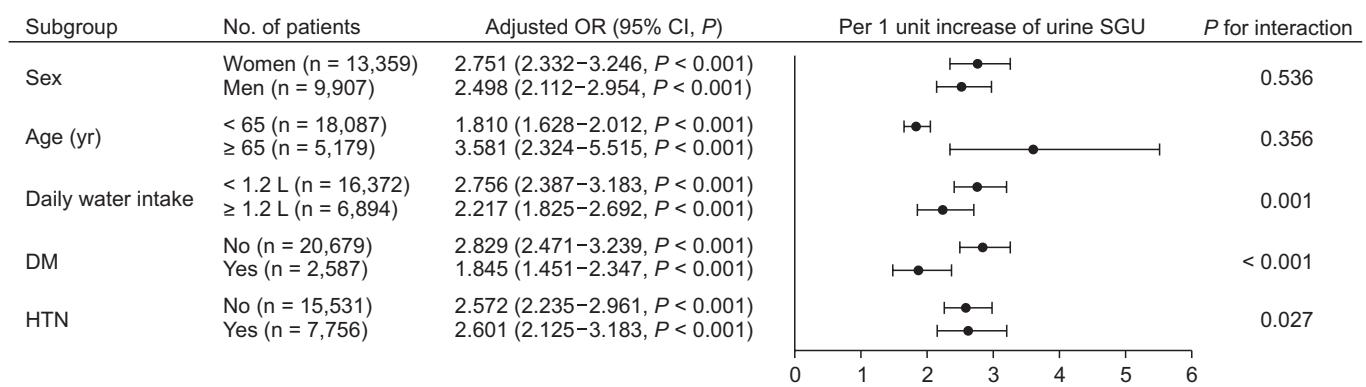


Supplementary Figure 1. Flow chart of participant selection.

BUN, blood urea nitrogen; KNHANES, Korea National Health and Nutrition Examination Survey; Neodin, Neodin Medical Institute Central Laboratory; SCL, Seoul Clinical Laboratories; USG, urine specific gravity.



Supplementary Figure 2. Subgroup analysis.

CI, confidence interval; DM, diabetes mellitus; HTN, hypertension; OR, odds ratio; SGU, specific gravity unit.

Supplementary Table 1. Factors associated with high urine specific gravity unit (SGU)

	Adjusted OR (95% CI)	P value
Age (per 1 yr increase)	1.021 (1.017–1.026)	< 0.001
Male sex (yes vs. no)	0.576 (0.516–0.642)	< 0.001
Current smoker (yes vs. no)	0.789 (0.702–0.888)	< 0.001
Frequent drinker (yes vs. no)	1.052 (0.944–1.174)	0.360
Regular walking (yes vs. no)	1.107 (1.006–1.217)	0.036
Cardiovascular disease (yes vs. no)	0.734 (0.581–0.929)	0.010
Waist circumference (per 1 cm increase)	1.009 (1.005–1.014)	< 0.001
Systolic BP (per 1 mmHg increase)	0.995 (0.991–1.000)	0.029
Diastolic BP (per 1 mmHg increase)	1.003 (0.997–1.009)	0.319
Pulse rate (per 1 count/min increase)	0.995 (0.991–1.000)	0.050
Diabetes (yes vs. no)	2.388 (2.063–2.764)	< 0.001
Dyslipidemia (yes vs. no)	1.050 (0.936–1.177)	0.407
eGFR (per 1 mL/min/1.73 m ² increase)	1.032 (1.028–1.037)	< 0.001
Proteinuria (yes vs. no)	1.342 (0.893–2.017)	0.156
High water intake (yes vs. no)	0.839 (0.762–0.924)	< 0.001
Urine sodium (per 1 mmol/L increase)	1.015 (1.014–1.016)	< 0.001
Urine creatinine (per 1 mmol/L increase)	1.512 (1.494–1.530)	< 0.001

High urine SGU was defined as the highest quartile of urine SGU (≥ 2.2).

BP, blood pressure; CI, confidence interval; eGFR, estimated glomerular filtration rate; OR, odds ratio.

Adjusted OR and 95% CI were analyzed using multivariate logistic regression analysis with all of the above covariates.