

Supplementary Table S1. Association of SSBP with 10-year CVDs risk by linear regression.

| SSBP | Univariate linear regression | | * Multivariate linear regression | |
|------------------------------|------------------------------|---------|----------------------------------|---------|
| | β (95%CI) | P value | β (95%CI) | P value |
| Continuous | | | | |
| MAP change 1, per SD | 0.22(0.01, 0.43) | 0.039 | 0.29(0.09, 0.49) | 0.005 |
| MAP change 2, per SD | 0.13(-0.22, 0.48) | 0.463 | 0.11(-0.19, 0.41) | 0.467 |
| Categories | | | | |
| MAP change 1, mmHg | | | | |
| quartiles 1 (≤ -4.29) | Reference | - | Reference | |
| quartiles 2 (-4.30 to 0.49) | 0.44(-0.60, 1.48) | 0.405 | 0.31(-0.73, 1.35) | 0.557 |
| quartiles 3 (0.50 to 4.99) | 0.35(-0.18, 0.88) | 0.190 | 0.20(-0.32, 0.72) | 0.444 |
| quartiles 4 (≥ 5.00) | 0.73(0.35, 1.12) | <0.001 | 0.70(0.33, 1.08) | <0.001 |
| P for trend | | <0.001 | | |
| MAP change 2, mmHg | | | | |
| quartiles 1 (≤ -3.83) | Reference | - | Reference | |
| quartiles 2 (-3.84 to 0.33) | -1.69(-2.62, -0.72) | 0.001 | -1.49(-2.40, -0.57) | 0.001 |
| quartiles 3 (0.33 to 4.83) | -0.54(-1.04, -0.04) | 0.033 | -0.47(-0.93, -0.01) | 0.048 |
| quartiles 4 (≥ 4.84) | -0.24(-0.59, 0.10) | 0.165 | -0.32(-0.65, 0.00) | 0.053 |
| P for trend | | 0.318 | | 0.128 |

*Adjusted for 24hUNa/K.

Supplementary Table S2. Association between sodium, potassium, sodium: potassium ratio, and the 10-year CVDs risk by linear regression.

| | Univariate linear regression | | * Multivariate linear regression | |
|------------------------|------------------------------|---------|----------------------------------|---------|
| | β (95%CI) | P value | β (95%CI) | P value |
| Continuous | | | | |
| 24hUNa, per SD (g/day) | 0.48(0.22, 0.75) | <0.001 | 0.44(0.17, 0.71) | 0.001 |
| 24hUK, per SD (g/day) | 0.35(-0.06, 0.77) | 0.094 | 0.31(-0.11, 0.72) | 0.146 |
| 24hUNa/K, per SD | 0.79(0.34, 1.23) | <0.001 | 0.82(0.38, 1.26) | <0.001 |
| Categories | | | | |
| 24hUNa (g/day) | | | | |
| quartile 1 | Reference | | Reference | |
| quartile 2 | 2.40(1.28, 3.52) | <0.001 | 2.31(1.20, 3.43) | <0.001 |
| quartile 3 | 1.24(0.68, 1.80) | <0.001 | 1.22(0.66, 1.79) | <0.001 |
| quartile 4 | 1.13(0.75, 1.51) | <0.001 | 1.09(0.71, 1.47) | <0.001 |
| P for trend | | <0.001 | | <0.001 |
| 24hUK (g/day) | | | | |
| quartile 1 | Reference | | Reference | |
| quartile 2 | 1.37(0.18, 2.55) | 0.024 | 1.29(0.11, 2.47) | 0.033 |
| quartile 3 | 0.28(-0.28, 0.84) | 0.33 | 0.16(-0.40, 0.72) | 0.573 |
| quartile 4 | 0.45(0.06, 0.84) | 0.024 | 0.42(0.03, 0.81) | 0.034 |
| P for trend | | 0.086 | | 0.127 |
| 24hUNa/K | | | | |
| quartile 1 | Reference | | Reference | |
| quartile 2 | 1.83(0.65, 3.01) | 0.003 | 1.85(0.66, 3.03) | 0.002 |
| quartile 3 | 1.07(0.46, 1.68) | 0.001 | 1.07(0.47, 1.68) | 0.001 |
| quartile 4 | 0.78(0.35, 1.20) | <0.001 | 0.80(0.38, 1.23) | <0.001 |
| P for trend | | <0.001 | | <0.001 |

*Adjusted for MAP change 1.

Supplementary Table S3. Association between sodium, potassium, sodium: potassium ratio, and SSBP stratified by hypertension

| | MAP change 1 (mm Hg) | | | | MAP change 2 (mm Hg) | | | |
|------------------------|--------------------------------|----------------|-----------------------------------|----------------|--------------------------------|----------------|-----------------------------------|----------------|
| | ^a With hypertension | | ^a Without hypertension | | ^a With hypertension | | ^a Without hypertension | |
| | β (95%CI) | <i>P</i> value | β (95%CI) | <i>P</i> value | β (95%CI) | <i>P</i> value | β (95%CI) | <i>P</i> value |
| Continuous | | | | | | | | |
| 24hUNa (g/day), per SD | -0.240 (-0.512, 0.033) | 0.085 | 0.082 (-0.205, 0.369) | 0.576 | 0.010 (-0.237, 0.257) | 0.937 | 0.325 (-0.341, 0.991) | 0.338 |
| 24hUK (g/day), per SD | -0.080 (-0.598, 0.439) | 0.763 | -0.408 (-0.818, 0.001) | 0.051 | 0.152 (-0.726, 1.030) | 0.734 | 0.511 (-0.070, 1.091) | 0.084 |
| 24hUNa/K, per SD | 0.148 (-0.236, 0.531) | 0.450 | 0.576 (0.006, 1.146) | 0.048 | -0.018 (-0.980, 0.819) | 0.860 | -0.296 (-1.183, 0.590) | 0.512 |
| Categories | | | | | | | | |
| 24hUNa (g/day) | | | | | | | | |
| quartile 1 | Ref. | | Ref. | | Ref. | | Ref. | |
| quartile 2 | -0.421 (-1.158, 0.316) | 0.262 | 0.202 (-0.412, 0.316) | 0.519 | -2.262 (-4.836, 0.313) | 0.085 | -0.931 (-2.043, 0.181) | 0.101 |
| quartile 3 | -0.207 (-0.852, 0.438) | 0.528 | 0.399 (-1.635, -0.141) | 0.153 | -0.675 (-1.901, 0.551) | 0.280 | 0.482 (-0.529, 1.492) | 0.350 |
| quartile 4 | -0.312 (-0.969, 0.344) | 0.350 | 0.440 (-0.081, 0.961) | 0.098 | -0.552 (-1.671, 0.568) | 0.333 | 0.000 (-0.406, 0.405) | 0.999 |
| P for trend | | 0.350 | | 0.098 | | 0.569 | | 0.819 |
| 24hUK (g/day) | | | | | | | | |
| quartile 1 | Ref. | | Ref. | | Ref. | | Ref. | |
| quartile 2 | -0.140 (-1.638, 1.358) | 0.854 | -0.858 (-2.022, 0.306) | 0.148 | -1.323 (-3.725, 1.080) | 0.280 | 0.583 (-0.543, 1.709) | 0.310 |
| quartile 3 | -0.517 (-1.151, 0.117) | 0.110 | -0.645 (-1.171, -0.118) | 0.017 | -0.586 (-1.736, 0.564) | 0.317 | 0.408 (-0.171, 0.987) | 0.167 |
| quartile 4 | 0.070 (-0.416, 0.557) | 0.777 | -0.276 (-0.696, 0.145) | 0.198 | -0.094 (-1.136, 0.949) | 0.860 | 0.537 (-0.164, 1.238) | 0.133 |
| P for trend | | 0.974 | | 0.097 | | 0.855 | | 0.066 |
| 24hUNa/K | | | | | | | | |
| quartile 1 | Ref. | | Ref. | | Ref. | | Ref. | |
| quartile 2 | -0.277 (-1.802, 1.249) | 0.721 | 0.613 (-0.653, 1.880) | 0.342 | 1.846 (0.238, 3.454) | 0.025 | 0.887 (-1.233, 3.008) | 0.412 |
| quartile 3 | -0.665 (-1.376, 0.047) | 0.067 | 0.390 (-0.190, 0.970) | 0.187 | 1.226 (-0.609, 3.061) | 0.190 | -0.315 (-0.950, 0.320) | 0.330 |
| quartile 4 | -0.186 (-0.726, 0.354) | 0.449 | 0.524 (0.111, 0.937) | 0.013 | 0.598 (-0.511, 1.707) | 0.289 | -0.225 (-0.658, 0.208) | 0.308 |
| P for trend | | 0.251 | | 0.005 | | 0.332 | | 0.383 |

*Adjusted for age, gender, BMI, FBG, and baseline MAP.