Online Supplemental Materials

**Urinary Metals and Adipokines in Midlife Women: The Study of Women’s Health Across the Nation (SWAN)**

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**Table S1.** Detection rates and concentrations of urinary metals.

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| --- | --- | --- | --- |
| **Metals** | **LOD** | **Percent >LOD** | **Median concentration (IQR), μg/L** |
| Arsenic | 0.3 | 100 | 15.0 (7.0, 38.8) |
| Barium | 0.1 | 99.5 | 1.8 (1.0, 3.1) |
| Cadmium | 0.06 | 94.7 | 0.44 (0.22, 0.79) |
| Cobalt | 0.05 | 99.3 | 0.62 (0.37, 0.94) |
| Cesium | 0.01 | 100 | 4.71 (3.03, 7.25) |
| Copper | 2.5 | 96.7 | 9.4 (6.1, 14.4) |
| Mercury | 0.05 | 99.8 | 1.23 (0.67, 2.34) |
| Manganese | 0.08 | 99.5 | 0.89 (0.59, 1.44) |
| Molybdenum | 0.3 | 100 | 44.1 (25.0, 70.9) |
| Nickel | 0.8 | 95.9 | 3.8 (2.4, 5.8) |
| Lead | 0.1 | 98.0 | 0.8 (0.5, 1.3) |
| Antimony | 0.04 | 78.2 | 0.08 (0.04, 0.13) |
| Tin | 0.1 | 97.2 | 0.9 (0.5, 1.8) |
| Thallium | 0.02 | 92.4 | 0.14 (0.08, 0.22) |
| Zinc | 2 | 100 | 306 (166, 513) |

LOD: limit of detection; IQR: interquartile range.

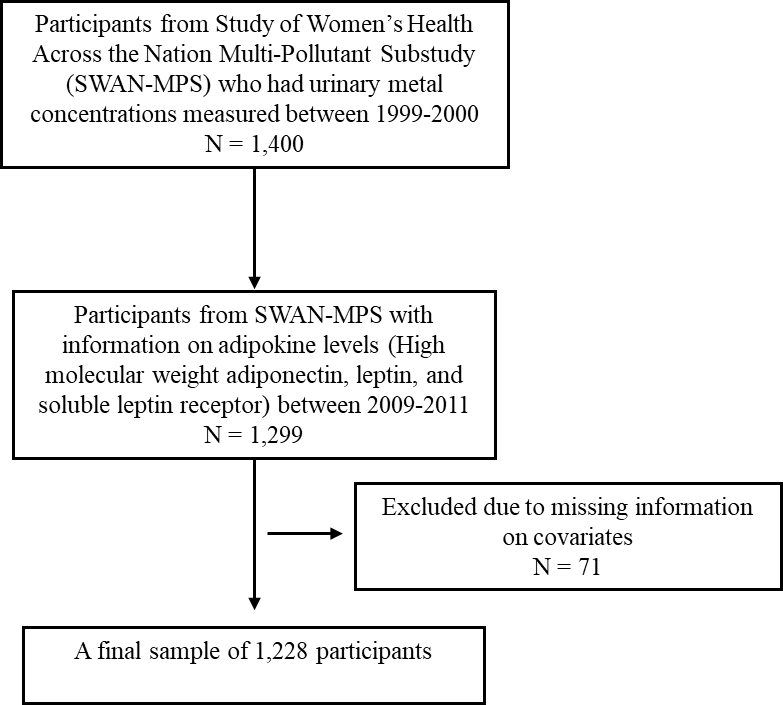
**Table S2.** Association between urinary molybdenum concentration and serum adipokine levels by racial/ethnic groups.

|  |  |  |  |
| --- | --- | --- | --- |
| **Racial/ethnic groups** | **Percentage change (95% CI) in adipokine levels for 1-SD increase in log-transformed urinary molybdenum concentrations)** | | |
|  | HMW-adiponectina | Leptina | sOB-Ra |
| White (n=631) | 6.13 (1.51, 10.96) | -2.07(-7.96, 4.19) | 3.65 (0.86, 6.52) |
| Black (n=257) | -3.64 (-11.11, 4.45) | -6.03(-13.88, 2.52) | -3.54 (-8.56, 1.75) |
| Asianb (n=340) | 2.34 (-4.41, 9.55) | -12.46 (-20.46, -3.66) | 2.83 (-1.75, 7.63) |

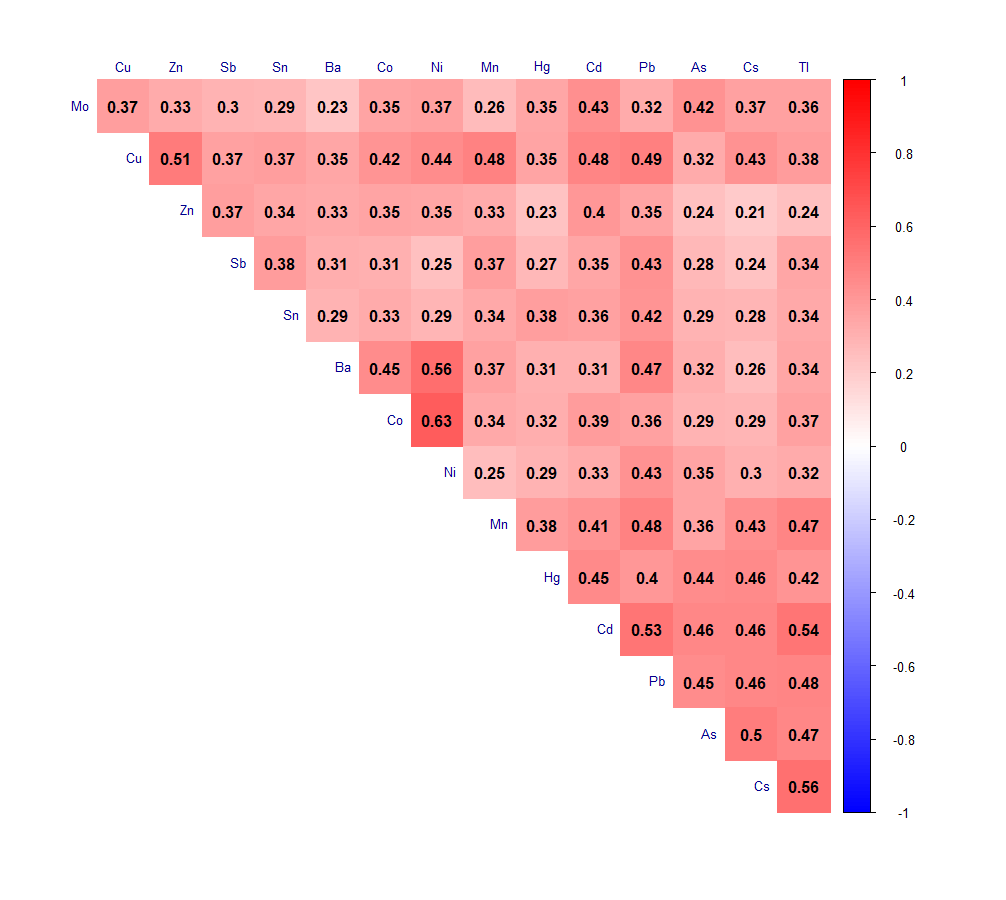
SD: standard deviation; HMW: high molecular weight; sOB-R: soluble leptin receptor.

a All linear regression models were adjusted for age, study site, education, waist circumference, smoking, physical activity, menopausal status, and urinary specific gravity.

b Asian include both Chinese and Japanese.



**Figure S1.** Schematic diagram of analytic sample.



**Figure S2.** Spearman correlation matrix of metal concentrations after adjusting for specific gravity. As: arsenic, Ba: barium, Cd: cadmium, Co: cobalt, Cs: cesium, Cu: copper, Hg: mercury, Mn: manganese, Mo: molybdenum, Ni: nickel, Pb: lead, Sb: antimony, Sn: tin, Tl: thallium, Zn: zinc.