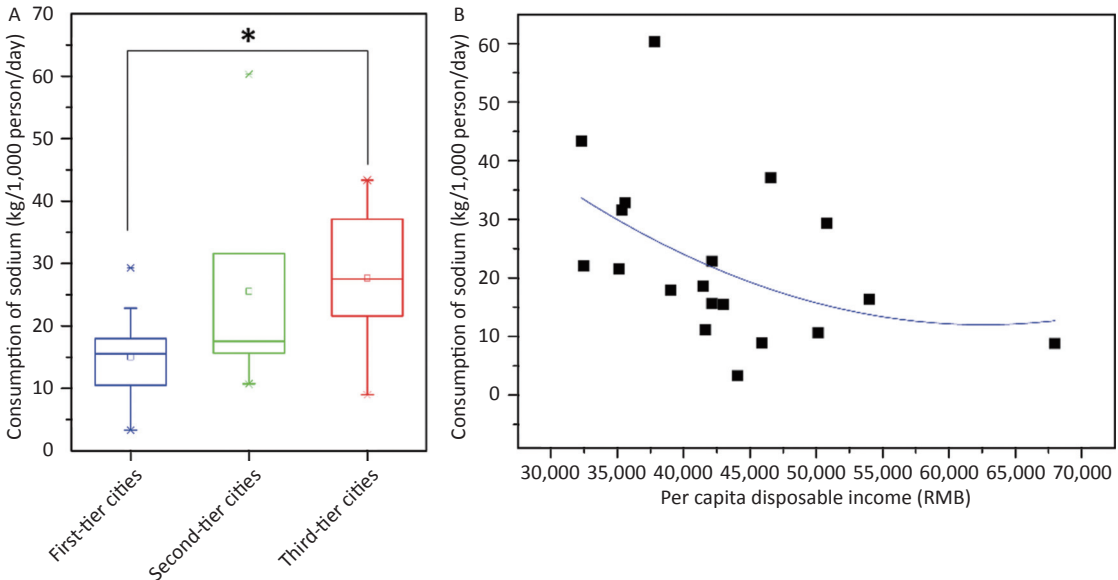


Supplementary Table S1. Concentration of sodium and potassium in wastewater and tap water, concentration of NH₄-N and parameters of each WWTP

WWTPs	C _{NH₄-N} , mean ± SD ^a (mg L ⁻¹)	Population ^b (× 10 ⁴)	Flow rate (× 10 ⁴ m ³ day ⁻¹)	Concentration in wastewater mean ± SD ^c (mg L ⁻¹)		Concentration in tap water mean ± SD (mg L ⁻¹)	
				Sodium	Potassium	Sodium	Potassium
QD	21.7 ± 0.3	50.6	14.0	126.2 ± 10.1	31.6 ± 1.9	20.2 ± 1.1	6.2 ± 0.2
JN	51.2 ± 1.0	21.3	2.5	102.4 ± 8.5	35.6 ± 1.1	11.0 ± 0.3	5.3 ± 0.4
WH	63.6 ± 1.1	42.4	4.0	128.3 ± 9.3	49.0 ± 3.2	33.1 ± 1.7	16.3 ± 0.9
HF	26.1 ± 0.6	130.0	30.0	89.4 ± 7.6	24.1 ± 1.1	8.6 ± 0.6	7.7 ± 0.2
CD	21.4 ± 0.2	17.8	5.0	81.4 ± 3.4	22.1 ± 2.0	< LOD	4.3 ± 0.1
HAR	9.5 ± 0.2	4.8	3.0	97.6 ± 2.9	62.9 ± 5.8	1.7 ± 0.1	5.9 ± 0.3
XA	40.2 ± 1.3	133.0	20.0	84.6 ± 3.6	30.8 ± 2.0	10.2 ± 0.6	3.9 ± 0.2
BJ	50.6 ± 0.3	337.0	40.0	86.5 ± 4.5	28.8 ± 3.2	12.1 ± 0.4	6.2 ± 0.3
ZZ	26.7 ± 0.1	88.9	20.0	104.3 ± 9.9	31.6 ± 1.5	24.3 ± 1.0	6.5 ± 0.2
HUH	22.3 ± 0.2	14.8	4.0	146.0 ± 10.2	14.7 ± 1.3	8.8 ± 0.6	9.5 ± 0.6
CZ	29.9 ± 0.8	80.3	16.1	82.0 ± 4.6	21.6 ± 0.2	< LOD	3.9 ± 0.1
GY-1	8.9 ± 0.01	9.0	6.1	44.0 ± 1.3	19.3 ± 0.3	0.2 ± 0.02	7.0 ± 0.4
GY-2	12.3 ± 0.2	16.4	8.0	28.0 ± 3.5	13.3 ± 0.6	0.2 ± 0.02	7.0 ± 0.4
GZ	26.1 ± 0.8	217.0	50.0	69.6 ± 7.1	17.5 ± 0.2	2.1 ± 0.1	6.5 ± 0.5
YC	23.9 ± 0.1	39.9	10.0	151.6 ± 9.0	25.2 ± 0.9	20.4 ± 0.7	3.7 ± 0.1
BD	8.3 ± 0.02	4.1	3.0	136.3 ± 8.5	14.8 ± 0.4	76.6 ± 1.2	10.5 ± 0.7
CC-1	19.6 ± 2.0	127.3	39.0	65.9 ± 3.6	21.9 ± 0.7	2.4 ± 0.9	6.4 ± 0.1
CC-2	9.5 ± 0.9	14.3	9.0	71.9 ± 4.0	21.3 ± 0.7	2.4 ± 0.9	6.4 ± 0.1
SY	34.4 ± 1.4	229.1	40.0	37.3 ± 1.3	8.1 ± 0.5	18.3 ± 1.6	6.7 ± 0.2
DL-1	32.8 ± 7.6	64.8	12.0	98.2 ± 5.2	23.8 ± 1.1	13.4 ± 1.0	10.8 ± 0.3
DL-2	28.3 ± 9.1	38.5	8.2	95.1 ± 6.7	19.9 ± 0.9	13.4 ± 1.0	10.8 ± 0.3
DL-3	35.5 ± 11.7	17.7	3.0	95.1 ± 3.4	25.9 ± 1.0	13.4 ± 1.0	10.8 ± 0.3
JZ	32.1 ± 1.3	158.0	26.0	149.5 ± 9.8	27.9 ± 1.2	15.0 ± 0.8	10.9 ± 0.4
KM	15.3 ± 0.02	77.8	30.5	39.6 ± 1.1	16.0 ± 0.8	< LOD	7.9 ± 0.2

Note. ^a: C_{NH₄-N}: concentration of NH₄-N in wastewater, mg L⁻¹; SD: standard deviation. ^b: Population was calculated from equation (3) based on the concentration of NH₄-N. ^c: Concentration of sodium and potassium in wastewater from all sources. WWTPs, wastewater treatment plants; Beijing (BJ), Yinchuan (YC), Shenyang (SY), Xi'an (XA), Changzhou (CZ), Chengdu (CD), Kunming (KM), Baoding (BD), Hefei (HF), Guiyang (GY), Harbin (HRB), Huhhot (HUH), Zhengzhou (ZZ), Guangzhou (GZ), Qingdao (QD), Weihai (WH), Jinan (JN), Dalian (DL), Changchun (CC), and Jinzhou (JZ).



Supplementary Figure S1. The association of daily consumption of sodium with city grades (A) and per capita disposable income (B). *Indicates a significant difference ($P < 0.05$).