

Supplementary Contents

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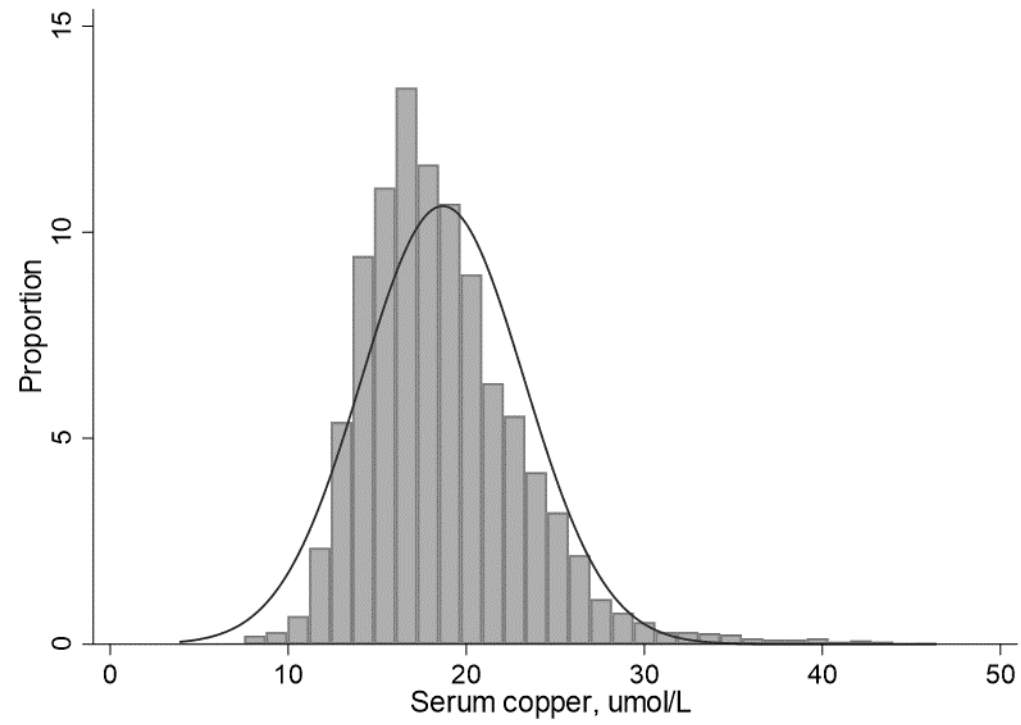


Figure S1. Serum copper distributions

Table S1. Sensitivity analysis for the associations of serum copper concentrations with hypertension.

Outcomes	Categorical models					Continuous models	
	Q1	Q2	Q3	Q4	<i>P</i> for trend	1SD increase	<i>P</i> -value
Excluding participants with eGFR<60 mL/min/1.73m ²							
Untreated Hypertension	1.00 (ref)	1.05 (0.75–1.47)	1.17 (0.83–1.66)	1.10 (0.75–1.63)	0.515	1.04 (0.91–1.20)	0.557
Treated Hypertension	1.00 (ref)	1.31 (0.92–1.89)	1.42 (0.99–2.05)	1.76 (1.19–2.60)	0.006	1.20 (1.05–1.38)	0.008
Treated Hypertension ^a	1.00 (ref)	1.42 (0.86–2.32)	1.33 (0.81–2.17)	1.69 (0.99–2.88)	0.092	1.16 (0.95–1.42)	0.154
SBP	1.00 (ref)	–0.67 (–1.84–0.50)	0.26 (–1.01–1.53)	–0.19 (–1.57–1.20)	0.879	0.18 (–0.30–0.65)	0.466
DBP	1.00 (ref)	–1.81 (–3.03–(–0.59))	–1.23 (–2.55–0.09)	–1.48 (–2.92–(–0.03))	0.088	–0.15 (–0.65–0.34)	0.542
Excluding outliers (beyond the range of 1%–99%) of the serum copper							
Untreated Hypertension	1.00 (ref)	1.01 (0.72–1.41)	1.21 (0.87–1.70)	1.07 (0.73–1.56)	0.515	1.03 (0.88–1.20)	0.695
Treated Hypertension	1.00 (ref)	1.35 (0.97–1.88)	1.48 (1.06–2.06)	1.82 (1.28–2.60)	0.001	1.25 (1.07–1.46)	0.004
Treated Hypertension ^a	1.00 (ref)	1.41 (0.91–2.19)	1.41 (0.90–2.19)	1.59 (1.00–2.53)	0.083	1.16 (0.93–1.43)	0.186
SBP	1.00 (ref)	–0.97 (–2.13–0.19)	–0.13 (–1.39–1.13)	–0.77 (–2.15–0.61)	0.506	–0.15 (–0.70–0.41)	0.604
DBP	1.00 (ref)	–1.51 (–2.73–(0.30))	–1.05 (–2.37–0.27)	–1.52 (–2.96–(–0.07))	0.077	–0.44 (–1.03–0.14)	0.134

Notes: SBP=systolic blood pressure; DBP=diastolic blood pressure. ^a Model was further adjusted for antihypertensive drugs. Participants treated with other types of antihypertensive drugs were not included. Ref=reference group.

Table S2. Hypertensive patients' serum copper concentrations in different subgroups.

Outcome	serum copper concentration, $\mu\text{mol/L}$	<i>P</i>-value
Non-hypertension (N=2380)	18.45 \pm 4.61	Ref
Untreated Hypertension (N=385)	18.67 \pm 3.93	0.376
Treated Hypertension (N=611)	19.53 \pm 4.34	<0.001
Antihypertensive use		
ACE-I (N=85)	19.17 \pm 3.58	0.154
ARB (N=38)	18.24 \pm 3.97	0.780
BB (N=43)	19.73 \pm 4.51	0.071
CCB (N=34)	18.60 \pm 3.44	0.850
Thiazides (N=37)	21.72 \pm 4.83	<0.001

Notes: ACE-I=angiotensin-converting enzyme inhibitor; ARB=angiotensin receptor blocker; BB=Beta-blocker; CCB=calcium channel blocker; Thiazides=thiazide and thiazide-like diuretics. *P*-values were calculated by Student's *t*-test, all group was set Non-hypertension as reference group. Ref=reference group.