

Supplementary Table 1 Logistic regression analysis of the association between log serum cotinine (continuous/trivial) and Chronic kidney disease in different subgroups (NHANES 2005-2016, N=10,900)

Log serum cotinine (ng/mL)	Chronic kidney disease OR (95%CI) P value		
	<60	≥60	Total
Age			
Per 1 increment	1.05 (0.98, 1.13) 0.1666	0.99 (0.93, 1.05) 0.7374	1.00 (0.95, 1.04) 0.9218
Log serum cotinine tertile			
Low (-1.96 to < -1.72)	1.0	1.0	1.0
Middle (-1.72 to < -0.60)	0.99 (0.78, 1.26) 0.9457	1.02 (0.85, 1.23) 0.8121	1.01 (0.87, 1.17) 0.9014
High (-0.60 to 3.2)	1.09 (0.83, 1.44) 0.5311	0.96 (0.77, 1.21) 0.7396	0.97 (0.82, 1.16) 0.7575
BMI	<25	≥25	
Per 1 increment	1.01 (0.92, 1.10) 0.8416	1.04 (0.99, 1.10) 0.1204	1.03 (0.98, 1.07) 0.2263
Log serum cotinine tertile			
Low (-1.96 to < -1.72)	1.0	1.0	1.0
Middle (-1.72 to < -0.60)	1.09 (0.81, 1.47) 0.5583	1.04 (0.88, 1.23) 0.6236	1.05 (0.90, 1.21) 0.5495
High (-0.60 to 3.2)	1.12 (0.78, 1.62) 0.5410	1.11 (0.91, 1.35) 0.3005	1.09 (0.92, 1.30) 0.3068
Hypertension	No	Yes	Total
Per 1 increment	1.00 (0.93, 1.08) 0.9574	1.07 (1.01, 1.14) 0.0155	1.03 (0.99, 1.08) 0.1791
Log serum cotinine tertile			
Low (-1.96 to < -1.72)	1.0	1.0	1.0
Middle (-1.72 to < -0.60)	1.22 (0.96, 1.56) 0.1076	1.00 (0.83, 1.20) 0.9781	1.04 (0.90, 1.21) 0.5593
High (-0.60 to 3.2)	0.99 (0.74, 1.32) 0.9290	1.28 (1.02, 1.60) 0.0298	1.11 (0.93, 1.31) 0.2574
Diabetes	No	Yes	
Per 1 increment	1.02 (0.97, 1.07) 0.4417	1.07 (0.98, 1.17) 0.1451	1.03 (0.99, 1.08) 0.1791
Log serum cotinine tertile			
Low (-1.96 to < -1.72)	1.0	1.0	1.0
Middle (-1.72 to < -0.60)	1.06 (0.89, 1.25) 0.5165	1.04 (0.78, 1.41) 0.7741	1.04 (0.90, 1.21) 0.5593
High (-0.60 to 3.2)	1.08 (0.88, 1.32) 0.4820	1.21 (0.86, 1.70) 0.2753	1.11 (0.93, 1.31) 0.2574

Adjustment factors included age; sex; race; poverty income ratio; education; fasting blood glucose; glycosylated hemoglobin A1c; serum uric acid; triglycerides; low-density lipoprotein cholesterol; body

mass index; waist circumference; diabetes; hypertension; smoking; drinking; glucose-lowering drugs; hypolipidemic drugs; antihypertensive drugs.

Age, BMI, and hypertension subgroups were adjusted for the above variables in addition to their own variables.

Diabetes subgroup adjusted for above variables except fasting glucose, glycosylated hemoglobin A1c and diabetic.

Supplementary Figure 1

