

Table S1 Associations of individual of PAHs and obesity indices WWI.

Variables	Model 1		Model 2		Model 3	
	Adjusted OR (95%CI)	P-value	Adjusted OR (95%CI)	P-value	Adjusted OR (95%CI)	P-value
Urinary PAHs metabolites						
1-hydroxynaphthalene	1.02 (0.99-1.05)	0.204	1.01 (0.98-1.05)	0.510	1.06 (1.01-1.10)	0.011
2-hydroxynaphthalene	1.07 (1.02-1.12)	0.003	1.034 (0.98-1.09)	0.188	1.17 (1.10-1.25)	<0.001
3-hydroxyfluorene	0.87 (0.84-0.90)	<0.001	0.86 (0.83-0.90)	<0.001	0.92 (0.86-0.98)	0.007
2-hydroxyfluorene	0.94 (0.90-0.98)	0.005	0.92 (0.88-0.97)	<0.001	1.08 (1.01-1.16)	0.035
1-hydroxyphenanthrene	1.15 (1.08-1.23)	<0.001	1.13 (1.06-1.21)	<0.001	1.20 (1.12-1.29)	<0.001
1-hydroxypyrene	0.93 (0.88-0.97)	0.003	0.91 (0.87-0.96)	<0.001	1.04 (0.97-1.10)	0.280
PAH mixture	0.99 (0.94-1.04)	0.681	0.96 (0.91-1.02)	0.195	1.15 (1.07-1.24)	<0.001

PAHs: polycyclic aromatic hydrocarbons; WWI: waist-to-weight index; Model 3 was adjusted for survey cycle, race/ethnicity, education level, marital status, family poverty index, smoking status, drinking status, energy intake and hypertension.

Table S2 Mediation analysis for the associations between PAH mixture and liver fibrosis risk

Independent variable	Mediator	Total effect		Indirect effect		Direct effect		Proportion mediated, % (95% CI)
		Coefficient (95% CI)	P-value	Coefficient (95% CI)	P-value	Coefficient (95% CI)	P-value	
PAH mixture	WC	0.01258 (0.00208, 0.03303)	0.006	-0.00155 (-0.00312, -0.00058)	<0.001	0.01414 (0.00280, 0.03572)	0.002	-12.3(-41.3, -5.2)
PAH mixture	BMI	0.01312 (0.00226, 0.03346)	0.007	-0.00053 (-0.00133, -0.00004)	0.074	0.01365 (0.00251, 0.03447)	0.005	-4.0(-15.2, 0.4)

The mediation analyses were adjusted for release cycle, ethnicity, education level, marital status, family poverty index, smoking status, drinking status, energy intake and hypertension.