

Impact of Cadmium Exposure on the Association between Lipopolysaccharide and Metabolic Syndrome

Table S1. Odds ratios (OR) and 95% confidence intervals (CI) for metabolic syndrome and associated risk factors according to the LPS/HDL ratio in men.

		LPS/HDL Quartiles													
		Quartile 1 (<0.6)		Quartile 2 (0.6–1.1)				Quartile 3 (1.1–2.1)				Quartile 4 (≥2.1)			
		OR	OR	(95% CI)			OR	(95% CI)			OR	(95% CI)			
Metabolic syndrome															
Model 1	1.00	1.32	(0.34	–	5.16)	1.56	(0.41	–	5.92)	3.70	(1.00	–	13.64)		
Model 2	1.00	1.28	(0.32	–	5.15)	1.56	(0.41	–	5.97)	3.85	(1.03	–	14.40)		
High waist circumference															
Model 1	1.00	1.04	(0.30	–	3.65)	2.45	(0.74	–	8.13)	2.34	(0.69	–	7.93)		
Model 2	1.00	0.95	(0.26	–	3.53)	3.05	(0.86	–	10.82)	2.37	(0.67	–	8.45)		
Low HDL cholesterol															
Model 1	1.00	7.55	(0.83	–	68.55)	9.56	(1.07	–	85.28)	18.42	(2.12	–	160.20)		
Model 2	1.00	5.10	(0.52	–	50.46)	15.82	(1.62	–	154.99)	25.17	(2.63	–	240.60)		
High TG															
Model 1	1.00	1.95	(0.60	–	6.33)	1.45	(0.44	–	4.75)	2.13	(0.65	–	6.99)		
Model 2	1.00	2.15	(0.63	–	7.34)	1.45	(0.43	–	4.89)	2.42	(0.70	–	8.34)		
High BP															
Model 1	1.00	1.56	(0.48	–	5.09)	0.67	(0.20	–	2.27)	4.07	(1.12	–	14.76)		
Model 2	1.00	2.10	(0.57	–	7.70)	0.52	(0.14	–	1.93)	5.86	(1.41	–	24.38)		
High blood glucose															
Model 1	1.00	3.09	(0.61	–	15.72)	4.13	(0.85	–	20.13)	2.53	(0.47	–	13.56)		
Model 2	1.00	3.35	(0.62	–	17.99)	3.16	(0.64	–	15.61)	2.41	(0.43	–	13.47)		

Model 1: adjusted for age; Model 2: Model 1 plus additional adjustments for smoking, alcohol consumption, and physical exercise.

Table S2. Odds ratios (OR) and 95% confidence intervals (CI) for metabolic syndrome and associated risk factors according to the LPS/HDL ratio in women.

		LPS/HDL quartiles											
		Quartile 1 (<0.7)		Quartile 2 (0.7–1.2)			Quartile 3 (1.2–2.1)			Quartile 4 (≥2.1)			
		OR	OR	(95% CI)		OR	(95% CI)		OR	(95% CI)			
Metabolic syndrome													
Model 1	1.00	1.32	(0.30	–	5.81)	1.04	(0.22	–	4.88)	0.80	(0.17	–	3.76)
Model 2	1.00	1.28	(0.28	–	5.81)	1.07	(0.22	–	5.06)	0.86	(0.18	–	4.13)
High waist circumference													
Model 1	1.00	1.31	(0.31	–	5.58)	1.01	(0.22	–	4.59)	0.68	(0.13	–	3.44)
Model 2	1.00	1.28	(0.29	–	5.56)	1.03	(0.23	–	4.65)	0.69	(0.13	–	3.56)
Low HDL cholesterol													
Model 1	1.00	1.00	(0.29	–	3.46)	2.10	(0.64	–	6.86)	4.60	(1.38	–	15.26)
Model 2	1.00	0.93	(0.26	–	3.30)	2.07	(0.63	–	6.78)	4.33	(1.29	–	14.56)
High TG													
Model 1	1.00	1.32	(0.30	–	5.85)	1.39	(0.31	–	6.18)	2.01	(0.50	–	8.09)
Model 2	1.00	1.27	(0.28	–	5.73)	1.36	(0.31	–	6.09)	1.86	(0.45	–	7.64)
High BP													
Model 1	1.00	2.12	(0.51	–	8.80)	1.39	(0.31	–	6.20)	3.41	(0.87	–	13.32)
Model 2	1.00	1.90	(0.43	–	8.36)	1.34	(0.29	–	6.12)	2.88	(0.71	–	11.70)
High blood glucose													
Model 1	1.00	4.66	(0.48	–	45.62)	2.18	(0.18	–	25.97)	2.79	(0.27	–	29.25)
Model 2	1.00	4.55	(0.44	–	47.26)	2.36	(0.19	–	29.13)	3.48	(0.31	–	38.58)

Model 1: adjusted for age; Model 2: Model 1 plus additional adjustments for alcohol consumption and physical exercise; BP, blood pressure; TG, triglyceride.

Table S3. The association between the LPS/HDL ratio and metabolic syndrome based on blood Cd concentrations.

	Men		Women	
	OR	(95% CI)	OR	(95% CI)
Metabolic syndrome				
Cd < 50th percentile	1.29	(0.58 – 2.86)	1.51	(0.61 – 3.73)
Cd ≥ 50th percentile	3.07	(1.41 – 6.68)	0.73	(0.35 – 1.51)
High waist circumference				
Cd < 50th percentile	1.67	(0.76 – 3.64)	1.81	(0.76 – 4.27)
Cd ≥ 50th percentile	1.56	(0.86 – 2.83)	0.53	(0.22 – 1.30)
Low HDL cholesterol				
Cd < 50th percentile	1.38	(0.57 – 3.29)	2.21	(1.12 – 4.39)
Cd ≥ 50th percentile	3.50	(1.33 – 9.22)	1.57	(0.84 – 2.91)
High TG				
Cd < 50th percentile	1.15	(0.58 – 2.25)	1.33	(0.59 – 3.00)
Cd ≥ 50th percentile	1.60	(0.89 – 2.89)	1.30	(0.69 – 2.45)
High BP				
Cd < 50th percentile	1.90	(0.88 – 4.08)	1.79	(0.84 – 3.80)
Cd ≥ 50th percentile	1.41	(0.74 – 2.70)	1.17	(0.62 – 2.19)
High blood glucose				
Cd < 50th percentile	1.14	(0.47 – 2.74)	1.99	(0.59 – 6.67)
Cd ≥ 50th percentile	1.52	(0.74 – 3.14)	1.16	(0.46 – 2.93)

Model adjusted for age, smoking, alcohol consumption and physical exercise in men, age, alcohol consumption and physical exercise in women. Cd, Cadmium; BP, blood pressure; TG, triglyceride. The cutoff values for 50th percentile of Cd are 0.96 µg/L for men, 1.28 µg/L for women.