Association between plasma trace elements concentrations in early pregnancy and gestational diabetes mellitus in Shanghai, China

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TableS1.Profiling of trace elements in maternal plasma(n=1166)

TableS2.Level of glucose and lipid metabolism indices

TableS1. Profiling of trace elements in maternal plasma (n= 1166)

Elements (μg/L)	LOD	Percent of detection	Mean	Minimum	Percentile			Maximum
					25th	50th	75th	
Vanadium	0.0119	1157 (99.23%)	7.44	0.169	3.71	6.25	9.06	112.81
Chromium	0.3059	1166 (100%)	407.27	34.301	250.75	372.40	531.44	1217.98
Manganese	0.0076	1131 (97.00%)	6.90	0.587	3.51	5.79	8.90	127.69
Cobalt	0.0125	1166 (100%)	64.84	0.177	40.24	56.82	81.94	301.02
Nickle	0.0092	1021 (87.56%)	38.80	2.641	17.34	30.67	48.58	1019.21
Selenium	0.3063	1161 (99.57%)	96.96	4.333	60.33	87.80	120.72	324.82

LOD: Limit of detection

TableS2. Level of glucose and lipid metabolism indices

	Total (n= 1166)	Non-GDM (n= 763)	GDM (n= 403)	*p*
FPG (mmol/L)	4.67 (4.38-5.04)	4.49 (4.27-4.71)	5.19 (4.89-5.45)	<0.001***
OGTT-1h	8.11 (7.12-9.51)	7.70 (6.64-8.45)	10.04 (8.52-10.84)	<0.001***
OGTT-2h	6.79 (5.99-7.80)	6.45 (5.71-7.09)	8.10 (6.93-8.97)	<0.001***
FPI (μU/mL)	6.70 (4.80-8.90)	6.40 (4.50-8.30)	7.30 (5.60-9.90)	<0.001***
HOMA-IR	1.42 (0.98-1.92)	1.26 (0.88-1.69)	1.69 (1.30-2.31)	<0.001***
HbA1c, %	5.30 (5.10-5.43)	5.30 (5.10-5.40)	5.30 (5.20-5.50)	<0.001***
CHOL (mmol/L)	4.46 (3.98-4.96)	4.40 (3.93-4.93)	4.53 (4.10-4.99)	<0.001***
TG (mmol/L)	1.31 (1.06-1.64)	1.26 (1.02-1.60)	1.41 (1.14-1.78)	0.003**
LDL cholesterol (mmol/L)	2.47 (2.09-2.86)	2.43 (2.04-2.82)	2.54 (2.16-2.95)	<0.001***
HDL cholesterol (mmol/L)	1.89 (1.65-2.16)	1.90 (1.67-2.20)	1.87 (1.62-2.11)	0.008**
APO-A (mmol/L)	1.77 (1.68-1.87)	1.77 (1.67-1.87)	1.79 (1.69-1.87)	0.116
APO-B (mmol/L)	0.80 (0.71-0.90)	0.79 (0.70-0.89)	0.82 (0.73-0.90)	0.001**

FPG: fasting plasma glucose; OGTT, oral glucose tolerance test; FPI: fasting plasma insulin; HOMA-IR, homeostasis model of assessment-insulin resistance; HbA1c: glycosylated Hemoglobin; *P < 0.05, ** P < 0.01, ***P < 0.001.