nutrients

Supplementary materials

Supplementary Table S1. The association between maternal characteristics and GDM, by univariate analyses (n=16,107).

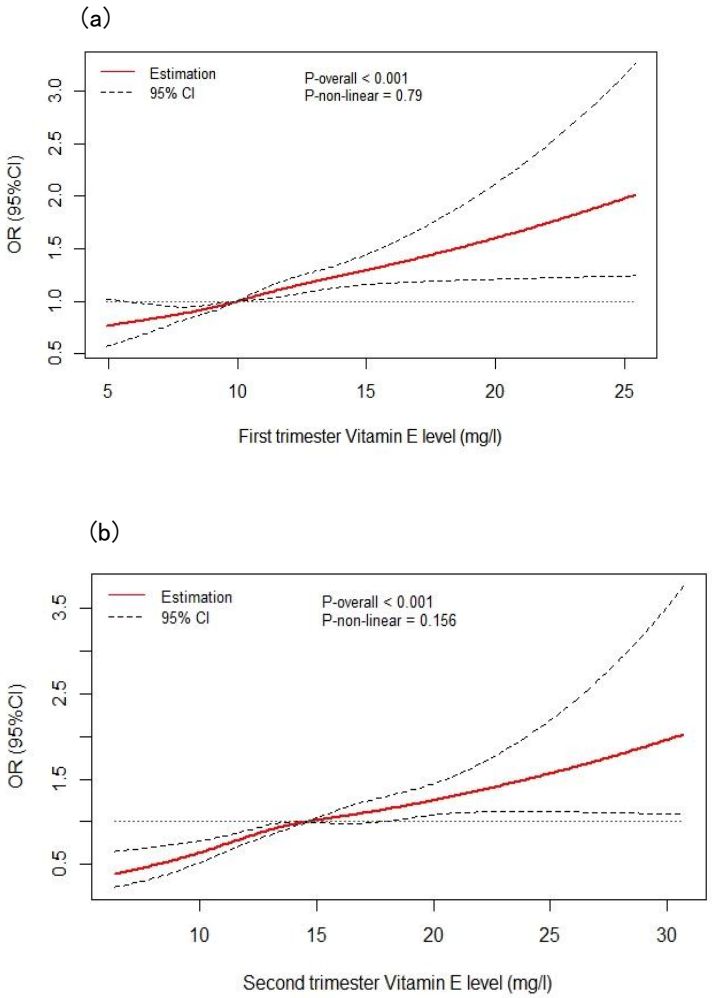
Variables	All participants	GDM	Not GDM	P [a]
	N	n (%)		
Maternal age				
≤20	110	17(15.5)	93(84.5)	**<0.001**
21-30	10548	2640(25.0)	7908(75.0)	
>30	5449	1845(33.9)	3604(66.1)	
Parity				
Primiparous	9863	2623(26.6)	7240(73.4)	**<0.001**
Multiparous	6244	1879(30.1)	4365(69.9)	
Maternal ethnicity				
Han	15149	4241(28.0)	10908(72.0)	0.629
Ethnic minorities	957	261(27.3)	696(72.7)	
Maternal education				
Below high school	3389	993(29.3)	2396(70.7)	0.479
High school or college	6249	1758(28.1)	4491(71.9)	
University or higher	6079	1735(28.5)	4344(71.5)	
Maternal pre-pregnancy BMI				
<18.50	1630	256(15.7)	1374(84.3)	**<0.001**
18.5-23.99	9766	2480(25.4)	7286(74.6)	
24.00-27.99	3237	1244(38.4)	1993(61.6)	
≥28.00	1093	507(46.4)	586(53.6)	
Folic acid usage				
Yes	14722	4144(28.1)	10578(71.9)	**0.068**
No	1385	358(25.8)	1027(74.2)	

a: The p value is reported from Chi-square test.

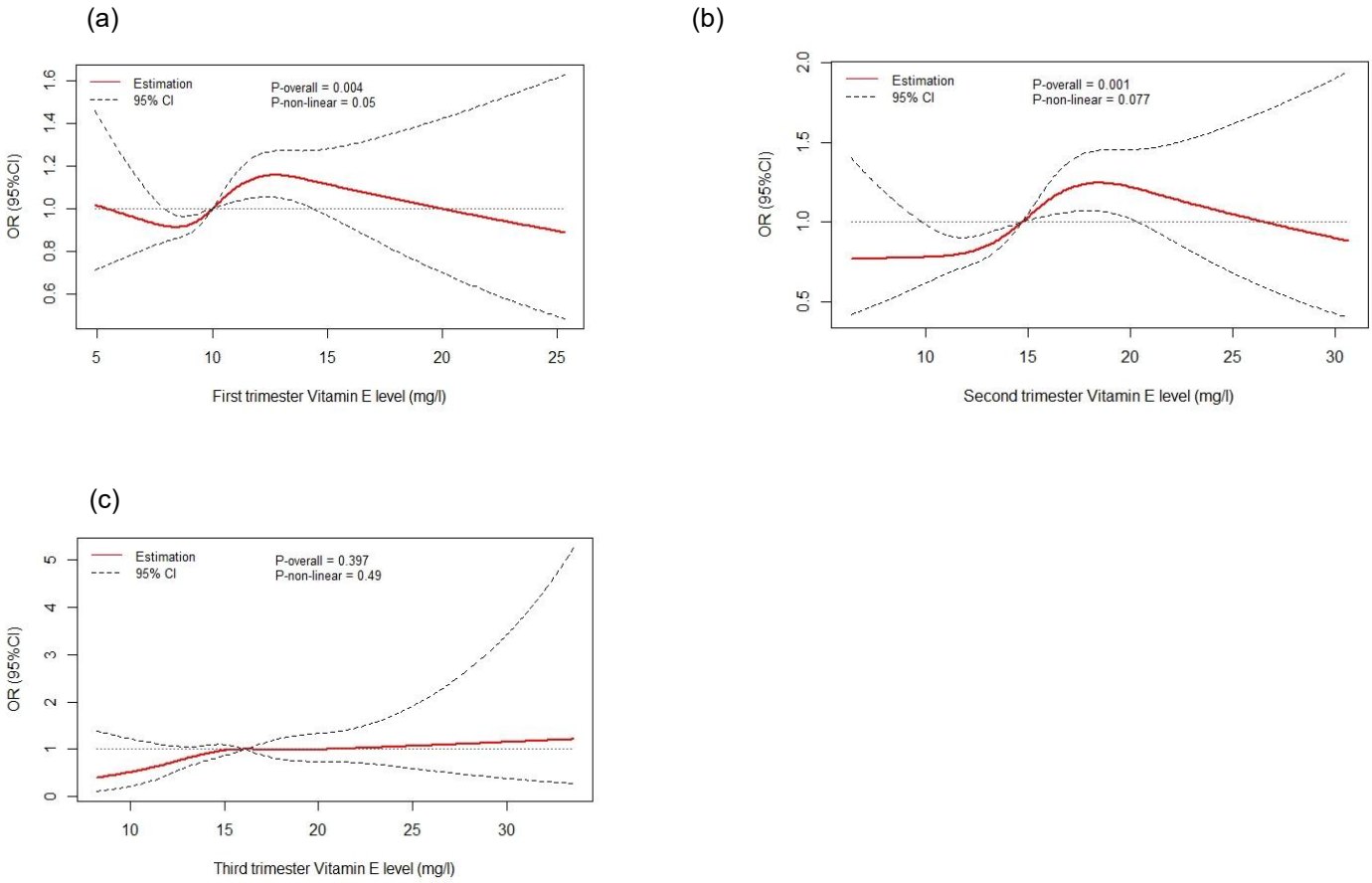
Supplementary Table S2. The association between maternal characteristics and large for gestational age (LGA), by univariate analyses (n=18,699)

Variables	All participants	LGA	Non-LGA	P [a]
	N	n (%)		
Maternal age				
⩽20	127	21(16.5)	106(83.5)	**<0.001**
21-30	12059	1869(15.5)	10190(84.5)	
>30	6513	1429(21.9)	5084(78.1)	
Parity				
Primiparous	11139	1681(15.1)	9458(84.9)	**<0.001**
Multiparous	7560	1638(21.7)	5922(78.3)	
Maternal ethnicity				
Han	17578	3117(17.7)	14461(82.3)	0.797
Ethnic minorities	1120	202(18.0)	918(82.0)	
Maternal education				
Below high school	3915	776(19.8)	3139(80.2)	**<0.001**
High school or college	7257	1247(17.2)	6010(82.8)	
University or higher	7142	1212(17.0)	5930(83.0)	
Maternal pre-pregnancy BMI				
<18.50	1985	156(7.9)	1829(92.1)	**<0.001**
18.5-23.99	11565	1917(16.6)	9648(83.4)	
24.00-27.99	3592	838(23.3)	2754(76.7)	
⩾28.00	1189	329(27.7)	860(72.3)	
Gestational weight gain				
<10 kg	2186	265(12.1)	1921(87.9)	**<0.001**
10-17 kg	7990	1205(15.1)	6785(84.9)	
> 17 kg	4806	1081(22.5)	3725(77.5)	
Preterm birth				
Yes	656	104(15.9)	552(84.1)	0.196
No	18043	3215(17.8)	14828(82.2)	
Newborn gender				
Boy	9626	1743(18.1)	7883(81.9)	0.187
Girl	9073	1576(17.4)	7497(82.6)	
Folic acid usage				
Yes	17052	3020(17.7)	14032(82.3)	0.653
No	1647	299(18.2)	1348(81.8)	

a: The p value is reported from Chi-square test.



Supplementary Figure S1. The relationship of (a) first trimester and (b) second trimester vitamin E levels and GDM (reference is 20.0 ml/l). Maternal age, parity, maternal pre-pregnancy BMI, folic acid usage were adjusted.



Supplementary Figure S2. The relationship of (a) first trimester, (b) second trimester and (c) third trimester vitamin E levels and LGA (reference is 20.0 ml/l). Maternal age, parity, maternal education, maternal pre-pregnancy BMI and gestational weight gain were adjusted.