

Supplementary Table 1. Scores for coding education by number of years of school completed

Category	Total years	Scores	
		Males	Females
Doctor	22	69	73
Master	19	69	73
college	16	63	66
Junior school	15	61	63
high school	12	52	53
middle school	9	45	44
Elementary school	6	36	34
	3	33	32
	0	29	28

Supplementary Table 2. Average scores for categories of major occupational groups

Major occupational groups	Category	Scores
Managerial workers	I	59
professionals & technical	II	63
Office clerks	III	56
Service workers	IV	46
Agriculture and forestry	V	34
Laborer	VI	42
Soldier	VII	53
Others	VIII	49

Supplementary table 3. Correlation matrix of the study variables among primiparas in Wuhan, China (N=8737)

Variables	1	2	3	4	5	6	7	8	9	10	11
GWG by IOM recommendations	—										
Pre-pregnancy BMI	-0.065**	—									
Physical activity during the last trimester of pregnancy	-0.001	0.002									
Sleep quality in the month before the birth	-0.001	0.017	-0.002	—							
A multi-vitamin supplement during the first trimester of pregnancy	-0.008	0.019	0.110**	-0.031**	—						
Infant's gender	-0.002	-0.012	-0.003	0.005	-0.008	—					
Passive smoking during pregnancy	-0.008	-0.031**	-0.009	0.017	0.046**	0.004	—				
Maternal age	-0.024*	0.133**	-0.021*	-0.017	0.156**	-0.015	-0.020	—			
PIH	-0.021*	0.058**	-0.001*	-0.016	-0.016	0.002	-0.007	0.037**	—		
SES	-0.020	0.069**	0.047**	0.047**	0.147**	-0.010	-0.060**	0.252**	-0.023*	—	
SGA	0.137**	-0.077**	0.016	0.012	-0.036**	0.008	0.007	-0.040**	0.035**	-0.039**	—

SES, socio-economic status; BMI, body mass index; GWG, gestational weight gain; IOM, Institute of Medicine; SGA, small-for-gestational age; AGA, appropriate-for-gestational age; PIH, pregnancy-induced hypertension syndrome. * $P < 0.05$, ** $P < 0.001$