

**Association between parental socioeconomic status and offspring overweight/obesity from The China Family Panel Studies:
a longitudinal survey**

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Table S1 P₉₅ of Predicted BMI from 0-15 years by category of average household income (Kg/m²)

Age (years)	Boys					Girls				
	The poorest	Lower 20%	Medium 20%	Higher 20%	The richest	The poorest	Lower 20%	Medium 20%	Higher 20%	The richest
0	18.06	17.90	17.83	18.07	17.83	17.87	17.79	17.70	17.69	17.68
1	17.74	17.58	17.52	17.75	17.51	17.62	17.55	17.46	17.45	17.44
2	17.43	17.28	17.21	17.44	17.20	17.37	17.31	17.22	17.21	17.20
3	17.16	17.00	16.93	17.17	16.93	17.15	17.08	17.00	16.99	16.98
4	16.96	16.81	16.74	16.97	16.73	16.97	16.90	16.81	16.80	16.79
5	16.88	16.72	16.65	16.89	16.65	16.85	16.77	16.69	16.68	16.66
6	16.95	16.76	16.72	16.96	16.72	16.79	16.72	16.63	16.62	16.61
7	17.18	17.03	16.96	17.19	16.95	16.83	16.76	16.67	16.66	16.65
8	17.54	17.38	17.31	17.55	17.30	16.95	16.88	16.79	16.78	16.77
9	17.94	17.78	17.71	17.95	17.70	17.15	17.08	16.99	16.98	16.97
10	18.31	18.15	18.08	18.32	18.08	17.42	17.35	17.26	17.25	17.24
11	18.61	18.45	18.37	18.62	18.37	17.75	17.68	17.59	17.58	17.57
12	18.77	18.67	18.60	18.84	18.60	18.13	18.05	17.97	17.96	17.95
13	19.00	18.85	18.78	19.01	18.77	18.54	18.46	18.38	18.37	18.36
14	19.10	18.94	18.87	19.11	18.86	18.96	18.89	18.80	18.79	18.78
15	19.24	19.09	19.02	19.25	19.01	19.41	19.33	19.25	19.24	19.23

Table S2 P₉₅ of Predicted BMI from 0-15 years by category of paternal education level (Kg/m²)

Age (years)	Boys					Girls				
	Primary school or less	Junior high school	Senior high school	Junior college or higher	Difference	Primary school or less	Junior high school	Senior high school	Junior college or higher	Difference
0	17.91	17.89	17.88	17.86	0.05	17.71	17.69	17.67	17.64	0.07
1	17.67	17.58	17.49	17.35	0.32	17.55	17.45	17.34	17.24	0.31
2	17.44	17.28	17.11	16.87	0.57	17.39	17.21	17.02	16.84	0.55
3	17.24	17.01	16.77	16.49	0.75	17.25	16.99	16.73	16.47	0.78
4	17.10	16.81	16.52	16.16	0.94	17.12	16.80	16.48	16.16	0.96
5	17.05	16.72	16.40	16.05	1	17.04	16.67	16.30	15.94	1.1
6	17.12	16.78	16.44	16.01	1.11	17.01	16.61	16.22	15.83	1.18
7	17.34	17.01	16.69	16.25	1.09	17.03	16.64	16.25	15.87	1.16
8	17.64	17.35	17.07	16.77	0.87	17.11	16.75	16.40	16.04	1.07
9	17.97	17.75	17.53	17.26	0.71	17.25	16.95	16.64	16.33	0.92
10	18.26	18.12	17.98	17.80	0.46	17.44	17.21	16.97	16.74	0.7
11	18.49	18.42	18.35	18.32	0.17	17.69	17.54	17.39	17.25	0.44
12	18.60	18.65	18.70	18.70	-0.1	17.97	17.92	17.88	17.83	0.14
13	18.69	18.84	19.00	19.13	-0.44	18.28	18.35	18.41	18.48	-0.2
14	18.70	18.96	19.23	19.49	-0.79	18.62	18.80	18.98	19.16	-0.54
15	18.76	19.13	19.50	19.87	-1.11	18.96	19.26	19.57	19.87	-0.91

Difference indicates the P₉₅ BMI difference between the lowest education level and highest education level.

Table S3 P₉₅ of Predicted BMI from 0-15 years by category of maternal education level (Kg/m²)

Age (years)	Boys					Girls				
	Primary school or less	Junior high school	Senior high school	Junior college or higher	Difference	Primary school or less	Junior high school	Senior high school	Junior college or higher	Difference
0	17.77	17.88	17.99	18.09	-0.32	17.69	17.70	17.70	17.69	0
1	17.56	17.56	17.55	17.50	0.06	17.58	17.43	17.29	17.14	0.44
2	17.36	17.24	17.13	16.96	0.4	17.49	17.19	16.89	16.58	0.91
3	17.19	16.97	16.70	16.48	0.71	17.38	16.95	16.52	16.08	1.3
4	17.07	16.76	16.42	16.06	1.01	17.29	16.75	16.21	15.67	1.62
5	17.04	16.67	16.31	15.86	1.18	17.21	16.61	16.00	15.40	1.81
6	17.11	16.73	16.35	15.85	1.26	17.15	16.54	15.94	15.31	1.84
7	17.32	16.96	16.54	16.11	1.21	17.12	16.58	16.03	15.49	1.63
8	17.61	17.30	16.95	16.66	0.95	17.13	16.70	16.25	15.81	1.32
9	17.92	17.70	17.44	17.24	0.68	17.20	16.90	16.61	16.17	1.03
10	18.20	18.09	17.98	17.83	0.37	17.34	17.19	17.03	16.85	0.49
11	18.41	18.42	18.37	18.35	0.06	17.57	17.53	17.48	17.26	0.31
12	18.55	18.69	18.79	18.90	-0.35	17.88	17.94	18.00	18.01	-0.13
13	18.65	18.92	19.20	19.36	-0.71	18.23	18.38	18.52	18.67	-0.44
14	18.68	19.09	19.51	19.87	-1.19	18.63	18.85	19.07	19.28	-0.65
15	18.75	19.30	19.85	20.32	-1.57	19.04	19.33	19.62	19.90	-0.86

Difference indicates the P₉₅ BMI difference between the lowest education level and highest education level.

Table S4 Association between paternal education level and offspring overweight/obesity (OR, 95%CI)

	Model 1 (N=4520, observation=10588)	Model 2 (N=1826, observation=2954)	Model 3 (N=2400, observation=4087)	Model 4 (N=1826, observation=2954)
Paternal education level				
Primary school or less	Ref	Ref	Ref	Ref
Junior high school	0.79(0.67-0.94)	1.09(0.55-2.16)	0.82(0.45-1.47)	1.14(0.56-2.29)
Senior high school	0.65(0.51-0.82)	1.43(0.57-3.62)	0.70(0.31-1.62)	1.52(0.59-3.93)
Junior college or higher	0.55(0.41-0.74)	1.75(0.54-5.66)	0.95(0.34-2.66)	1.97(0.59-6.58)
Residence	1.28(1.09-1.51)	1.19(0.61-2.34)	0.84(0.47-1.51)	1.18(0.59-2.35)
Sex	0.56(0.48-0.65)	0.08(0.03-0.19)	0.11(0.05-0.22)	0.07(0.03-0.18)
Child age	0.82(0.80-0.83)	0.56(0.46-0.69)	0.56(0.47-0.66)	0.57(0.46-0.70)
Average household income	0.97(0.92-1.02)	0.90(0.73-1.11)	0.97(0.81-1.16)	0.91(0.74-1.12)
Birth weight	1.27(1.06-1.53)	2.13(1.05-4.30)	2.01(1.08-3.74)	2.20(1.07-4.51)
Paternal obesity	1.66(1.34-2.06)	2.88(1.21-6.84)	3.06(1.49-6.31)	3.16(1.30-7.69)
Maternal obesity	1.63(1.23-2.16)	2.12(0.72-6.25)	1.73(0.73-4.10)	2.31(0.76-6.97)
Consumption of meat		0.97(0.41-2.27)		0.92(0.39-2.20)
Consumption of vegetable and		0.16(0.05-0.53)		0.19(0.06-0.63)
Consumption of fried food		0.59(0.35-1.00)		0.61(0.36-1.03)
Exercise			0.57(0.36-0.91)	0.46(0.25-0.82)
Constant	0.61(0.35-1.08)	135.67(4.97-3701.48)	39.41(3.27-474.43)	158.72(5.36-4699.56)

Table S5 Association between maternal education level and offspring overweight/obesity (OR, 95%CI)

	Model 1 (N=4520, observation=10588)	Model 2 (N=1826, observation=2954)	Model 3 (N=2400, observation=4087)	Model 4 (N=1826, observation=2954)
Maternal education level				
Primary school or less	Ref	Ref	Ref	Ref
Junior high school	0.74(0.63-0.87)	1.20(0.61-2.36)	1.09(0.61-1.92)	1.31(0.65-2.63)
Senior high school	0.55(0.42-0.71)	2.53(0.91-7.00)	0.97(0.39-2.39)	2.69(0.94-7.73)
Junior college or higher	0.42(0.31-0.58)	2.17(0.61-7.71)	0.90(0.30-2.73)	2.52(0.67-9.44)
Residence	1.17(0.99-1.39)	1.38(0.69-2.76)	0.88(0.49-1.59)	1.38(0.67-2.82)
Sex	0.56(0.49-0.65)	0.08(0.03-0.18)	0.11(0.05-0.22)	0.07(0.03-0.17)
Child age	0.81(0.80-0.83)	0.57(0.46-0.69)	0.56(0.48-0.66)	0.57(0.46-0.70)
Average household income	0.98(0.93-1.03)	0.89(0.72-1.09)	0.97(0.82-1.16)	0.90(0.72-1.11)
Birth weight	1.26(1.05-1.52)	2.17(1.08-4.38)	2.01(1.08-3.74)	2.27(1.10-4.71)
Paternal obesity	1.69(1.36-2.10)	2.74(1.16-6.48)	2.99(1.46-6.16)	2.99(1.22-7.29)
Maternal obesity	1.62(1.22-2.15)	2.11(0.72-6.20)	1.70(0.72-4.03)	2.32(0.76-7.05)
Consumption of meat		0.96(0.41-2.25)		0.91(0.38-2.19)
Consumption of vegetable and fruit		0.16(0.05-0.50)		0.18(0.05-0.60)
Consumption of fried food		0.57(0.34-0.96)		0.58(0.34-1.00)
Exercise			0.57(0.36-0.91)	0.45(0.25-0.81)
Constant	0.72(0.41-1.26)	110.16(4.23-2870.20)	30.27(2.62-350.12)	131.86(4.56-3811.72)