

**Figure S1-**Curvilinear associations between sleep duration and children's BMI in cross-sectional and longitudinal analyses. (A) association in cross-sectional analyses; (B) association in longitudinal analyses. Y-axis represents the difference in BMI between children with any value of sleep duration with children with 11.5 hours of sleep. All analyses were adjusted for child's age, gender, birth weight, breastfeeding status, appetite and physical activity, maternal age at delivery, maternal body mass index, education and occupation. CI, confidence interval.

**Table S1**-Effect modification of gender on association between sleep duration and overweight/obesity in cross-sectional analyses.

	Risk of overweight				Risk of obesity			
	≤10 hours	11-12 hours	≥13 hours	P for interaction	≤10 hours	11-12 hours	≥13 hours	P for interaction
Gender				0.57				0.44
Boy	1.09	1.00	1.16		1.25	1.00	1.20	
	(1.01-1.19)		(1.06-1.26)		(1.08-1.44)		(1.03-1.40)	
Girl	1.17	1.00	1.16		1.26	1.00	1.36	
	(1.06-1.29)		(1.05-1.29)		(1.03-1.53)		(1.11-1.67)	
Appetite				0.02				0.004
More than peers	1.12	1.00	1.12		1.10	1.00	1.99	
	(1.04-1.20)		(1.04-1.20)		(0.80-1.50)		(1.45-2.74)	
The same as or less than peers	1.17	1.00	1.50		1.26	1.00	1.16	
	(1.01-1.35)		(1.26-1.78)		(1.11-1.43)		(1.02-1.33)	

Prevalence ratios and 95% confidence intervals were adjusted for child's age, gender, birth weight, breastfeeding status, appetite and physical activity, maternal age at delivery, maternal body mass index, education and occupation.

Table S2-Effect modification of gender on association between sleep duration and overweight/obesity in longitudinal analyses.

	Risk of overweight				Risk of obesity			
	≤10 hours	11-12 hours	≥13 hours	P for interaction	≤10 hours	11-12 hours	≥13 hours	P for interaction
Gender				0.35				0.39
Boy	1.32 (1.05-1.66)	1.00	1.11 (0.88-1.41)		1.47 (0.97-2.23)	1.00	1.22 (0.80-1.88)	
Girl	1.66 (1.32-2.09)	1.00	1.16 (0.91-1.48)		2.26 (1.44-3.54)	1.00	1.21 (0.70-2.08)	
Appetite				0.61				0.61
More than peers	1.43 (1.19-1.71)	1.00	1.11 (0.93-1.33)		1.71 (1.22-2.39)	1.00	1.16 (0.81-1.66)	
The same as or less than peers	1.79 (1.22-2.62)	1.00	1.14 (0.70-1.84)		2.27 (1.07-4.83)	1.00	1.48 (0.57-3.86)	

Risk ratios and 95% confidence intervals were adjusted for child's age, gender, birth weight, breastfeeding status, appetite and physical activity, maternal age at delivery, maternal body mass index, education and occupation.

**Table S3**-Child and maternal characteristic of those included in the longitudinal analyses (attendees) and those lost to follow up (non-attendees).

		Preschool-ag	D Wels-	
	n —	Attendees	Non-attendees	— P Value
Gender				0.58
Boy	19,350	7,712 (48.1)	11,638 (48.4)	
Girl	20,725	8,316 (51.9)	12,409 (51.6)	
Birth weight (g)				0.51
2,500-2,999	7,080	2,845 (17.8)	4,235 (17.6)	
3,000-3,499	21,186	8,512 (53.1)	12,674 (52.7)	
3,500-3,999	11,809	4,671 (29.1)	7,138 (29.7)	
Breastfeeding status				0.59
Never	2,045	806 (5.0)	1,239 (5.2)	
Ever	38,030	15,222 (95.0)	22.808 (94.8)	
Appetite		, ,	, ,	0.14
More than peers	31,954	12,855 (80.2)	19,099 (79.6)	
The same as or less than peers	8,051	3,166 (19.8)	4,885 (20.4)	
Physical activity			, , ,	0.09
≤ 2 hours/day	3,399	1,315 (8.2)	2,084 (8.7)	
> 2 hours/day	36,621	14,711 (91.8)	21,910 (91.3)	
Mother's age at delivery (year)		• • • •		< 0.001
< 25	23,916	9,263 (57.8)	14,653 (60.9)	
25-29	11,513	4,681 (29.2)	6,832 (28.4)	
$\geq 30$	4,646	2,084 (13.0)	2,562 (10.7)	
BMI at first screening (kg/m <sup>2</sup> )	,		, , ,	< 0.001
< 18.5	8,307	3,142 (19.6)	5,165 (21.5)	
18.5-24.9	29,714	12,011 (74.9)	17,703 (73.6)	
≥ 25	2,054	875 (5.5)	1,179 (4.9)	
Maternal education	,	` '	, , ,	0.06
< High school	28,729	11,552 (72.1)	17,177 (71.5)	
High school	7,664	2,977 (18.6)	4,687 (19.5)	
> High school	3,652	1,487 (9.3)	2,165 (9.0)	
Maternal occupation	,	, ( )	, ( /	0.79
Farmer	25,966	10,397 (65.0)	15,569 (64.8)	
Other	14,047	5,605 (35.0)	8,442 (35.2)	

Data are presented as number (column percentage) of children unless otherwise indicated. BMI, body mass index.