



**Supplementary Figure S1.** Flowchart of participant selection.

**Supplementary Table S1.** Distribution of participants by baseline survey wave and age group (N = 2,440)

Baseline Year	6–11 years (N)	12–14 years (N)	15–17 years (N)	Total (N)
1993	192	231	173	596
1997	271	139	131	541
2000	144	63	23	230
2004	84	43	18	145
2006	52	25	9	86
2009	84	34	6	124
2011	189	65	29	283
2015	259	91	61	411
2018	0	15	9	24
Total	1,275	706	459	2,440

**Note.** Baseline was defined as the initial survey wave in which a participant (aged 6–17 years) entered the study with valid WC measurements. Follow-up data were collected through the 2022 survey wave.

**Supplementary Table S2.** Baseline characteristics of the study population and assessment of attrition bias

Characteristics	Analytical Sample (N = 2,440)	Excluded Sample (N = 653)	P-value
Baseline Age (years), mean ± SD	11.60 (2.91)	14.23 (3.01)	< 0.001
Gender (Boys), %	53.7	45.6	< 0.001
WC (cm), mean ± SD			
6–11 years	58.1 (9.1)	60.0 (10.6)	0.037
12–14 years	65.7 (8.6)	64.7 (8.9)	0.171
15–17 years	69.0 (8.5)	68.9 (8.0)	0.869
Urbanization (Urban), %	33.0	34.6	0.099
Household Income (RMB), median (IQR: P <sub>25</sub> , P <sub>75</sub> )	12,495 (6,000, 30,600)	7,895 (4,414, 17,492)	< 0.001

**Note.** WC, Waist Circumference. Household income was calculated as annual per capita income. P-values were calculated using Student's t-test for continuous variables (Baseline Age, WC), Chi-square test for categorical variables (Gender, Urbanization), and Mann-Whitney U test for non-normally distributed data (Household Income).