

Supplementary Information

Short Stature is Associated with Increased Risk of Dyslipidemia in Korean Adolescents and Adults

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Supplementary Table S1. General characteristics of the subjects

	Adolescents (N=5207)			Adults (N=32682)		
	Boys (N=2776)	Girls (N=2431)	P-value	Men (N=13644)	Women (N=19038)	P-value
Age	15.1±0.1	15.1±0.1	0.931	38.9±0.1	39.3±0.1	0.002
Height (cm)	169.3±0.2	159.8±0.1	<0.001	172.0±0.1	158.9±0.1	<0.001
WC (cm)	73.4±0.2	68.8±0.2	<0.001	84.0±0.1	76.4±0.1	<0.001
BMI (kg/m²)	21.5±0.1	20.9±0.1	<0.001	24.2±0.1	22.9±0.1	<0.001
Alcohol consumption			<0.001			<0.001
No	2396 (83.4%)	2198 (88.7%)		2888 (21.7%)	9891 (51.1%)	
Occasionally	318 (14.9%)	189 (10.0%)		7246 (55.2%)	7755 (43.0%)	
Excessively	37 (1.7%)	23 (1.3%)		3100 (23.1%)	1026 (6.0%)	
Physical activity			<0.001			<0.001
No	1617 (58.2%)	1637 (66.8%)		8917 (67.0%)	13556 (72.6%)	
Yes	1126 (41.8%)	766 (33.2%)		4180 (33.0%)	4961 (27.4%)	
Household income			0.263			0.006
Quartile 1	319 (13.0%)	298 (14.2%)		1105 (8.7%)	1650 (9.0%)	
Quartile 2	646 (26.5%)	613 (26.9%)		3162 (24.4%)	4730 (26.0%)	
Quartile 3	872 (29.9%)	765 (31.1%)		4387 (32.8%)	6023 (32.1%)	
Quartile 4	903 (30.6%)	723 (27.9%)		4813 (34.2%)	6406 (33.0%)	

The data were present as mean±SE or number (%).

BMI, body mass index; WC, waist circumference

Supplementary Table S2. Prevalence of adverse lipid profile according to the height percentile

	Height percentile					P-for-trend
	<10th	10-29th	30-69th	70-89th	≥90th	
Adolescents (N=5,207)						
No.	503	1044	2078	1055	527	
TC ≥200 mg/dL	43 (8.8%)	78 (7.2%)	123 (6.1%)	61 (5.1%)	27 (5.3%)	0.006
LDL-C ≥130 mg/dL	33 (6.8%)	64 (6.1%)	110 (5.3%)	52 (4.6%)	21 (3.5%)	0.028
HDL-C <40 mg/dL	49 (9.6%)	144 (13.2%)	286 (13.1%)	184 (18.8%)	96 (18.7%)	<0.001
TG ≥130 mg/dL	60 (12.7%)	130 (12.4%)	251 (12.0%)	137 (13.9%)	65 (12.9%)	0.708
Dyslipidemia	130 (27.0%)	289 (27.2%)	537 (25.3%)	310 (30.0%)	161 (31.7%)	0.057
Adults (N=32,682)						
No.	3307	6432	13079	6580	3284	
TC ≥240 mg/dL	369 (9.8%)	569 (8.4%)	911 (6.5%)	352 (5.3%)	136 (3.8%)	<0.001
LDL-C ≥160 mg/dL	349 (9.3%)	583 (8.4%)	649 (7.0%)	346 (5.2%)	168 (4.7%)	<0.001
HDL-C <40 mg/dL	650 (20.1%)	1216 (19.5%)	2257 (17.6%)	1060 (16.0%)	663 (20.0%)	0.002
TG ≥200 mg/dL	534 (16.7%)	938 (15.6%)	1599 (12.8%)	711 (11.3%)	438 (13.5%)	<0.001
Dyslipidemia	1346 (39.8%)	2318 (35.9%)	4062 (31.0%)	1757 (26.7%)	983 (29.6%)	<0.001

The Data were presented in number (%).

HDL-C, high density lipoprotein-cholesterol; LDL-C, low density lipoprotein-cholesterol; TC, total cholesterol; TG, triglycerides

Supplementary Table S3. Sex and age-specific mean and specified percentile values (cm) of height in participants

	Mean	Height percentile			
		10 percentile	30 percentile	70 percentile	90 percentile
Adolescents					
Boys					
12 yr	157.1	145.8	152.1	161.5	167.4
13 yr	163.5	153.7	161.0	167.8	172.8
14 yr	168.9	161.2	166.1	172.1	176.6
15 yr	172.2	165.4	169.3	174.9	179.0
16 yr	173.1	166.3	169.9	176.2	181.4
17 yr	174.0	166.9	170.8	177.4	182.2
18 yr	174.2	167.8	171.1	177.0	181.7
Girls					
12 yr	155.7	147.5	153.2	158.9	163.5
13 yr	158.2	151.9	155.6	161.1	165.5
14 yr	159.8	153.5	157.1	162.3	167.0
15 yr	160.9	154.2	158.3	163.8	167.4
16 yr	160.8	154.8	157.9	163.4	167.5
17 yr	161.6	154.6	158.4	164.5	168.3
18 yr	160.9	153.2	158.7	164.5	168.2
Adults					
Male					
<30s	174.5	167.2	171.6	177.6	181.8
30s	173.4	166.0	170.4	176.3	180.9
40s	171.0	163.9	168.0	173.7	178.4
50s	168.5	161.2	165.6	171.6	175.7
Female					
<30s	161.5	154.4	158.7	164.3	168.5
30s	160.1	153.4	157.4	162.9	167.0
40s	158.2	151.5	155.4	160.8	164.9
50s	155.9	149.2	153.2	158.6	162.7