China Child and Adolescent Cardiovascular Health collaboration group

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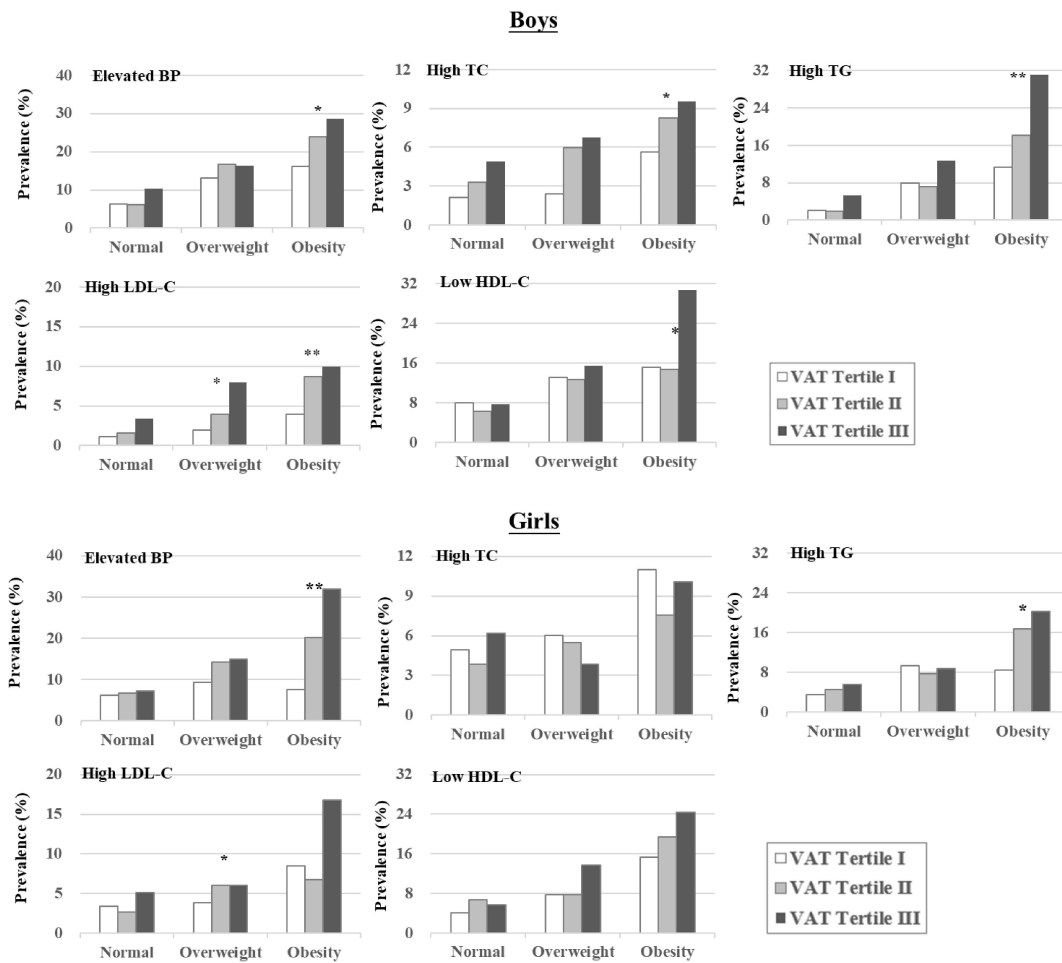
Figure S1. Prevalence of cardiometabolic risk factors across VAT tertiles among normal weight, overweight and obese individuals by sex

BP=blood pressure; TC=total cholesterol; TG=triglycerides; HDL-C=high-density lipid cholesterol; LDL-C=low-density lipid cholesterol; VAT=visceral adipose tissue.

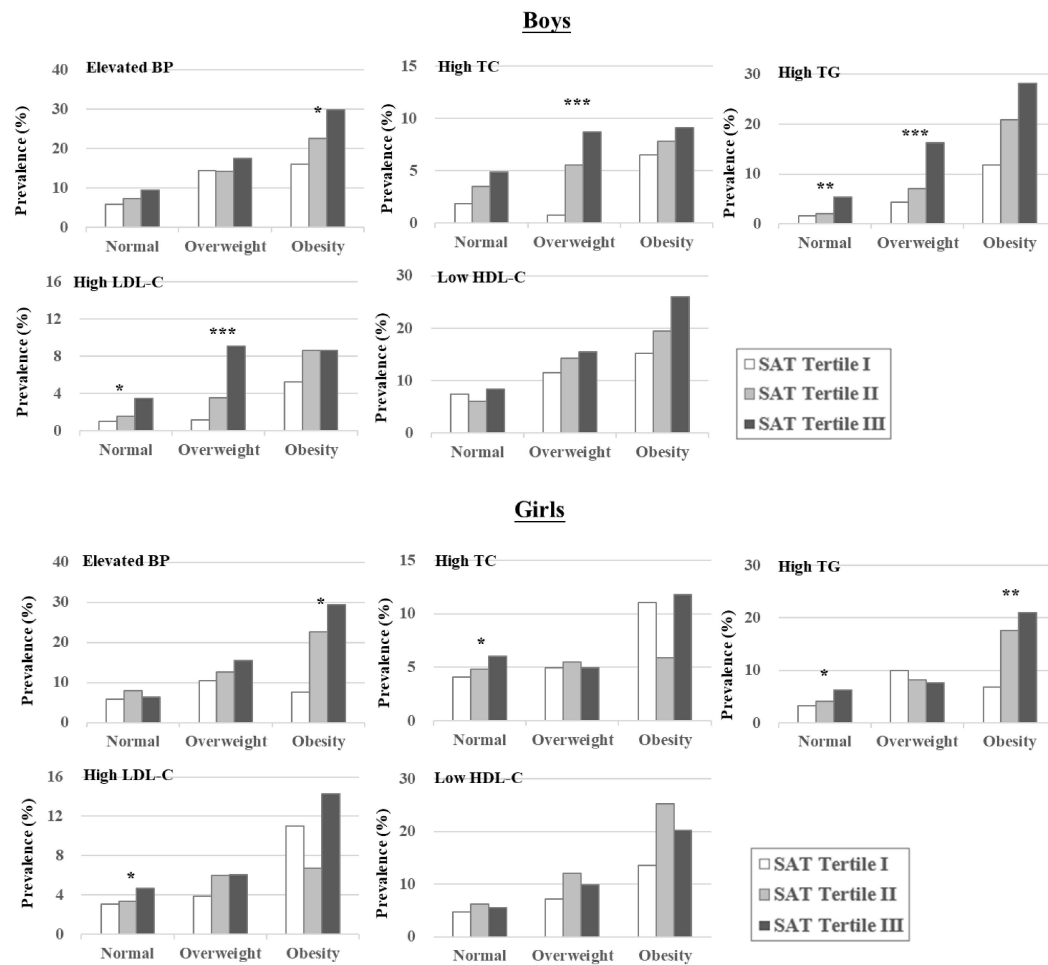p for trend: * p<0.05; ** p<0.01; *** p<0.001

Figure S2. Prevalence of cardiometabolic risk factors across SAT tertiles among normal weight, overweight and obese individuals by sex

BP=blood pressure; TC=total cholesterol; TG=triglycerides; HDL-C=high-density lipid cholesterol; LDL-C=low-density lipid cholesterol; SAT= subcutaneous adipose tissue.

p for trend: * p<0.05; ** p<0.01; *** p<0.001

Table S1. Linear Regression of Cardiometabolic Risk Factors Associated with 1-SD Increase in VAT and SAT by Sex

	Boys						Gils						p for sex interaction*
	Model 1		Model 2		Model 3		Model 1		Model 2		Model 3		
	β (se)	p	β (se)	p	β (se)	p	β (se)	p	β (se)	p	β (se)	p	
SBP													
VAT	3.20 (0.16)	<0.001	0.24 (0.28)	0.403	0.16 (0.22)	0.471	2.40 (0.15)	<0.001	0.15 (0.25)	0.532	0.34 (0.21)	0.105	0.735
SAT	3.28 (0.16)	<0.001	1.50 (0.37)	<0.001	0.62 (0.26)	0.018	2.40 (0.15)	<0.001	0.89 (0.29)	0.002	0.10 (0.24)	0.662	0.067
DBP													
VAT	1.46 (0.12)	<0.001	0.51 (0.22)	0.020	0.83 (0.18)	<0.001	1.21 (0.12)	<0.001	0.19 (0.20)	0.343	0.72 (0.17)	<0.001	0.128
SAT	1.44 (0.12)	<0.001	0.18 (0.29)	0.542	0.74 (0.21)	<0.001	1.01 (0.12)	<0.001	0.79 (0.24)	0.001	0.21 (0.20)	0.282	<0.001
TC													
VAT	6.84 (0.41)	<0.001	5.93 (0.76)	<0.001	8.09 (0.61)	<0.001	3.50 (0.44)	<0.001	5.13 (0.75)	<0.001	5.92 (0.64)	<0.001	0.289
SAT	7.01 (0.41)	<0.001	8.16 (1.00)	<0.001	10.42 (0.71)	<0.001	3.34 (0.44)	<0.001	5.81 (0.88)	<0.001	6.78 (0.72)	<0.001	0.013
TG													
VAT	14.11 (0.56)	<0.001	3.95 (1.03)	<0.001	8.35 (0.83)	<0.001	7.44 (0.53)	<0.001	3.52 (0.91)	<0.001	3.88 (0.77)	<0.001	0.658
SAT	15.53 (0.56)	<0.001	7.69 (1.34)	<0.001	11.74 (0.97)	<0.001	7.61 (0.53)	<0.001	4.45 (1.06)	<0.001	4.46 (0.87)	<0.001	0.007
LDL-C													
VAT	7.65 (0.34)	<0.001	5.18 (0.63)	<0.001	6.92 (0.50)	<0.001	4.80 (0.36)	<0.001	4.80 (0.62)	<0.001	5.44 (0.53)	<0.001	0.543
SAT	7.97 (0.34)	<0.001	7.26 (0.82)	<0.001	8.76 (0.59)	<0.001	4.64 (0.36)	<0.001	4.91 (0.72)	<0.001	5.79 (0.59)	<0.001	0.002
HDL-C													
VAT	-2.29 (0.16)	<0.001	-0.52 (0.29)	0.076	-0.49 (0.23)	0.033	-1.90 (0.16)	<0.001	-0.67 (0.28)	0.017	-0.41 (0.24)	0.083	0.599
SAT	-2.52 (0.16)	<0.001	-1.16 (0.38)	0.002	-0.63 (0.27)	0.020	-1.88 (0.16)	<0.001	-0.33 (0.33)	0.316	-0.03 (0.27)	0.920	0.020

SBP=systolic blood pressure; DBP=diastolic blood pressure; TC=total cholesterol; TG=triglycerides; HDL-C=high-density lipid cholesterol; LDL-C=low-density lipid cholesterol; VAT=visceral adipose tissue; SAT= subcutaneous adipose tissue

Model 1, adjusted for region, family income, age, puberty development, family history of chronic disease, physical activity, and smoking; Model 2, model 1+adjusted for fat mass index; Model 3, model 1+adjusted for body mass index

* p for sex-interaction for model 2.

Table S2. Odds and 95% Confidence Interval of Cardiometabolic Risk Factors Associated with 1-SD Increase in VAT and SAT by Age

	6-11 y			12-18 y			p for sex interaction*
	Model 1	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**	
Elevated BP							
VAT	1.69 (1.51-1.90)	1.25 (1.01-1.57)	1.26 (1.06-1.50)	1.52 (1.42-1.63)	1.14 (1.00-1.31)	1.22 (1.10-1.35)	0.716
SAT	1.72 (1.54-1.92)	1.40 (1.02-1.93)	1.24 (1.02-1.52)	1.57 (1.46-1.69)	1.29 (1.01-1.45)	1.18 (1.04-1.35)	0.422
High TC							
VAT	1.32 (1.14-1.54)	1.13 (0.84-1.53)	1.51 (1.17-1.94)	1.45 (1.32-1.58)	1.24 (1.02-1.51)	1.51 (1.33-1.73)	0.068
SAT	1.36 (1.18-1.57)	1.32 (0.87-1.99)	1.89 (1.43-2.50)	1.49 (1.34-1.65)	1.09 (0.80-1.50)	1.67 (1.40-2.00)	0.104
High TG							
VAT	2.25 (1.97-2.57)	1.39 (1.08-1.81)	1.47 (1.19-1.83)	1.63 (1.51-1.76)	1.23 (1.07-1.42)	1.35 (1.21-1.50)	0.083
SAT	2.26 (1.98-2.57)	1.44 (1.02-2.03)	1.53 (1.21-1.94)	1.79 (1.64-1.95)	1.31 (1.01-1.69)	1.54 (1.33-1.78)	0.054
High LDL-C							
VAT	1.72 (1.46-2.03)	1.43 (1.02-2.01)	1.76 (1.33-2.33)	1.56 (1.43-1.71)	1.33 (1.10-1.61)	1.52 (1.33-1.73)	0.815
SAT	1.71 (1.46-2.00)	1.55 (1.01-2.41)	1.97 (1.44-2.70)	1.59 (1.43-1.77)	1.08 (0.81-1.43)	1.52 (1.27-1.82)	0.956
Low HDL-C							
VAT	1.76 (1.55-2.00)	1.63 (1.23-2.16)	1.28 (1.04-1.58)	1.44 (1.34-1.54)	1.17 (1.02-1.35)	1.17 (1.06-1.29)	0.009
SAT	1.77 (1.57-2.00)	2.35 (1.64-3.37)	1.34 (1.07-1.68)	1.49 (1.38-1.60)	1.30 (1.05-1.61)	1.15 (1.01-1.31)	0.003

OR=odds ratio; CI=confidence interval; TC=total cholesterol; TG=triglycerides; HDL-C=high-density lipid cholesterol; LDL-C=low-density lipid cholesterol; VAT=visceral adipose tissue; SAT= subcutaneous adipose tissue

Model 1, adjusted for region, family income, sex, puberty development, family history of chronic disease, physical activity, and smoking; Model 2, model 1+ adjusted for fat mass index; Model 3, model 1+adjusted for body mass index

*, p for sex-interaction for model 2.