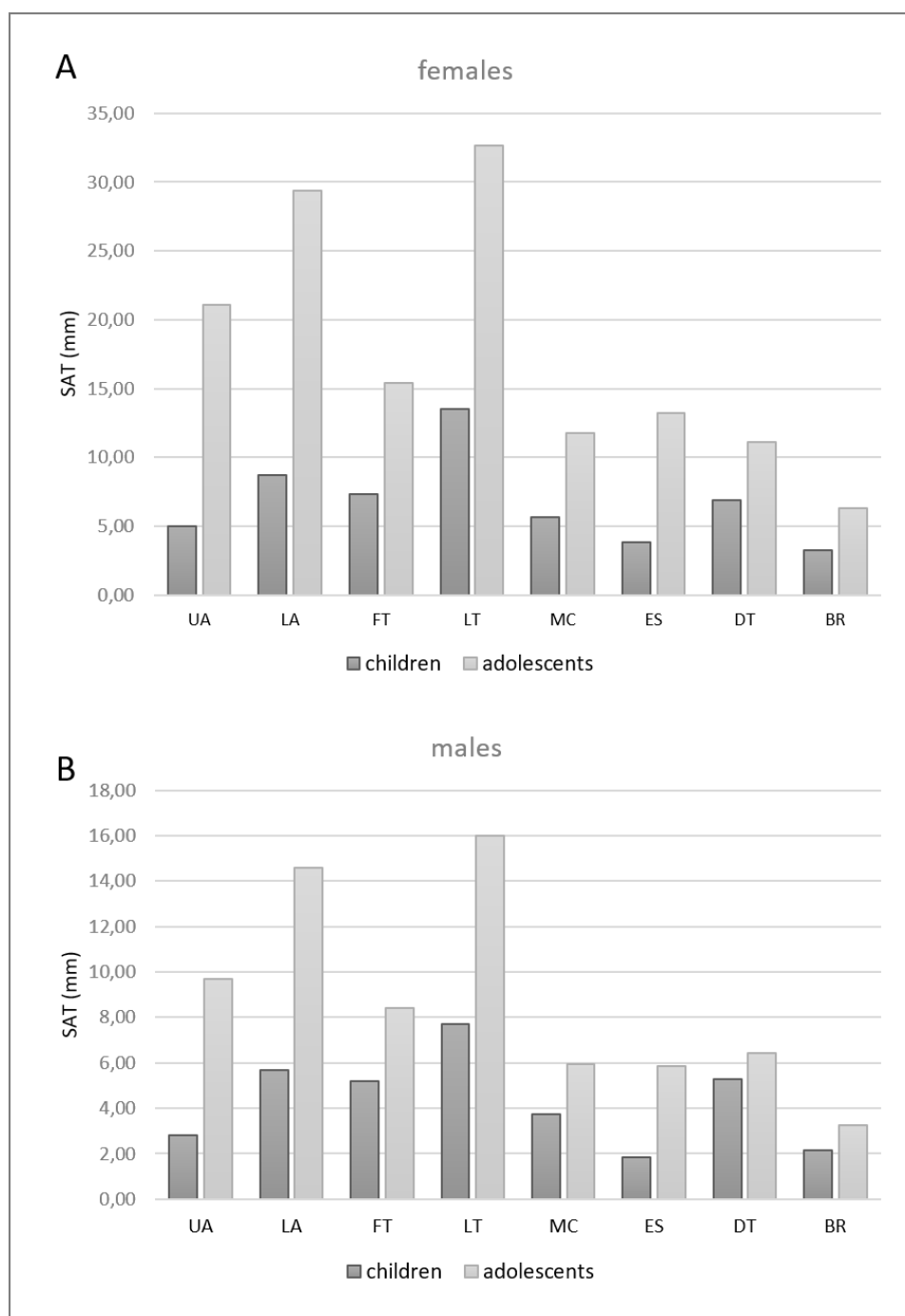


Table S1. Anthropometry, body indices and SAT in four cases excluded from descriptive statistics.

	Girl	Boy	Girl	Boy
age	10	11	11	15
<i>Anthropometric measures</i>				
body height (m)	1.31	1.43	1.48	1.66
body weight (kg)	60.69	65.48	86.83	126.20
sitting height (m)	0.65	0.73	0.78	0.88
leg length (m)	0.74	0.81	0.81	0.99
neck circumference (cm)	29	34	32	41
chest circumference (cm)	65	83	95	119
mid upper arm circ. (cm)	34	32	36	40
waist circumference (cm)	91	96	96	123
hip circumference (cm)	106	101	124	132
thigh circumference (cm)	54	56	67	80
calf circumference (cm)	36	36	50	48
ankle circumference (cm)	23	27	32	29
<i>Body indices</i>				
BMI (kg/m ²)	35.64	31.89	39.43	45.80
MI ₁ (0.53 m/(hs))	38.49	33.18	40.31	45.79
Cormic index	0.50	0.51	0.53	0.53
WHt ratio (m)	0.69	0.57	0.61	0.73
<i>SAT measures (in mm)</i>				
upper abdomen (UA)	42.49	35.89	49.86	51.46
lower abdomen (LA)	46.51	43.81	61.16	73.34
front thigh (FT)	32.20	26.56	42.53	34.25
lateral thigh (LT)	66.48	52.21	50.25	55.55
medial calf (MC)	15.40	19.20	32.44	24.69
erector spinae (ES)	28.15	44.76	29.41	39.57
distal triceps (DT)	25.37	14.05	12.79	22.22
brachioradialis (BR)	13.10	10.64	10.89	14.17
D _I	269.69	247.11	289.33	315.25
D _E	262.73	238.91	280.97	297.56
Fibres	6.96	8.20	8.35	17.69
SAT (kg)	18.51	19.42	24.66	33.28
SAT (%)	30.50	29.66	28.40	26.37
<i>Hemodynamic measures</i>				
SBP	126	149	185	156
DBP	70	91	106	77
HR	85.7	84.7	87.7	84.3

Abbreviations: BMI: body mass index; MI: mass index; WHt: waist to height ratio; SAT: subcutaneous adipose tissue; D_I: sum SAT including fibres; D_E: sum SAT excluding fibres, SAT in kg and in %, SBP: systolic blood pressure, DBP: diastolic blood pressure, HR: heart rate.

Figure S1. SAT thicknesses (mm) at the eight standardized sites in female (A) and male (B) children and adolescents.

Abbreviations: UA: upper abdomen, LA: lower abdomen, FT: frontal thigh, LT: lateral thigh, MC: medial calf, ES: erector spinae, DT: distal triceps, BR: brachioradialis.

Table S2. Correlation of subcutaneous adipose tissue (SAT) and anthropometric measures at eight sites in children (7–10 years) and adolescents (13–17 years).

Children	Neck	Chest	MUA	Waist	Hip	Thigh	Calf	Ankle	BMI
UA	.345**	.473**	.539**	.595**	.531**	.648**	.481**	.192	.687**
LA	.385**	.544**	.608**	.659**	.643**	.702**	.565**	.270*	.757**
FT	.271*	.286*	.477**	.426**	.443**	.620**	.379**	.112	.502**
LT	.243*	.322**	.562**	.441**	.465**	.694**	.473**	.187	.539**
MC	.235*	.308**	.478**	.465**	.497**	.662**	.488**	.154	.505**
ES	.340**	.411**	.535**	.518**	.487**	.618**	.387**	.291*	.539**
DT	.230	.383**	.534**	.457**	.443**	.688**	.482**	.183	.491**
BR	.286*	.352**	.554**	.454**	.478**	.660**	.469**	.118	.651**
D _I	.336**	.449**	.611**	.579**	.572**	.747**	.533**	.225	.670**
D _E	.337**	.448**	.611**	.580**	.580**	.743**	.521**	.217	.666**
Fibres	.169	.254*	.332**	.300**	.192	.470**	.459**	.230	.417**
SAT (kg)	.465**	.583**	.637**	.658**	.680**	.815**	.651**	.373**	.745**
SAT (%)	0.222	.279*	.543**	.371**	.426**	.671**	.445**	0.151	.461**
BMI	.499**	.613**	.498**	.711**	.696**	.680**	.673**	.333**	1
Adolescents	Neck	Chest	MUA	Waist	Hip	Thigh	Calf	Ankle	BMI
UA	.440**	.869**	.782**	.851**	.819**	.782**	.718**	.596**	.859**
LA	.494**	.881**	.791**	.887**	.856**	.809**	.741**	.616**	.863**
FT	.389**	.796**	.731**	.739**	.867**	.833**	.794**	.696**	.860**
LT	.326**	.728**	.680**	.706**	.796**	.690**	.609**	.528**	.765**
MC	.335**	.764**	.722**	.702**	.834**	.772**	.791**	.698**	.831**
ES	.316**	.795**	.694**	.737**	.817**	.714**	.634**	.566**	.864**
DT	.373**	.780**	.756**	.726**	.827**	.762**	.710**	.640**	.800**
BR	.300**	.762**	.745**	.729**	.759**	.707**	.684**	.568**	.788**
D _I	.429**	.884**	.808**	.852**	.896**	.828**	.763**	.652**	.906**
D _E	.420**	.881**	.803**	.847**	.895**	.825**	.762**	.650**	.905**
Fibres	.422**	.507**	.518**	.565**	.453**	.481**	.403**	.379**	.486**
SAT (kg)	.486**	.905**	.826**	.874**	.922**	.872**	.825**	.726**	.938**
SAT (%)	.308**	.788**	.717**	.730**	.841**	.714**	.674**	.539**	.779**
BMI	.494**	.886**	.814**	.840**	.906**	.882**	.820**	.746**	1

Abbreviations: MUA: mid upper arm circumference, UA: upper abdomen, LA: lower abdomen, FT: frontal thigh, LT: lateral thigh, MC: medial calf, ES: erector spinae, DT: distal triceps, BR: brachioradialis; D_I: sum SAT including fibres; D_E: sum SAT excluding fibres, SAT (subcutaneous adipose tissue) in kg and in %; BMI: body mass index. *,** correlation is significant at $p < .05/p < .01$, respectively.

Table S3. Correlation between SAT at the eight standardized sites and hemodynamic parameters.

Children	SBP	DBP	HR
upper abdomen (UA)	.548**	.405**	-.014
lower abdomen (LA)	.590**	.423**	-.029
front thigh (FT)	.554**	.404**	.002
lateral thigh (LT)	.459**	.338**	-.017
medial calf (MC)	.576**	.432**	.005
erector spinae (ES)	.528**	.410**	-.021
distal triceps (DT)	.356**	.200	.039
upper abdomen (UA)	.519**	.380**	-.027
Di	.550**	.402**	-.013
DE	.548**	.400**	-.009
Fibres	.380**	.298**	-.129
SAT (kg)	.620**	.472**	-.021
SAT (%)	.425**	.302*	.033
adolescents	SBP	DBP	HR
upper abdomen (UA)	.537**	.258*	-.005
lower abdomen (LA)	.547**	.260*	.037
front thigh (FT)	.408**	.252*	.054
lateral thigh (LT)	.433**	.222*	-.001
medial calf (MC)	.404**	.183	.091
erector spinae (ES)	.514**	.226*	.117
distal triceps (DT)	.490**	.225*	.042
upper abdomen (UA)	.506**	.254*	.047
Di	.534**	.262*	.040
DE	.525**	.252*	.042
Fibres	.528**	.371**	-.020
SAT (kg)	.555**	.264*	.049
SAT (%)	.436**	.205	.064

Abbreviations: SBP: systolic blood pressure (mmHg), DBP: diastolic blood pressure (mmHg), HR: heart rate, SAT: subcutaneous adipose tissue (mm); Di: sum SAT including fibres DE: sum SAT excluding fibres, SAT in kg and in %. Note: *, ** flag significant correlations ($p < .05$, $< .01$, respectively).

Table S4. Descriptive statistics and correlation between SAT measures based on 8-site, 5-site and 4-site measurements in the total cohort (n= 162).

	mean	SD	min.	max.	
D _I 8-sites	95.19	71.04	14.98	315.25	
D _E 8-sites	89.49	69.29	11.09	303.11	
Fibres 8-sites	5.70	2.64	2.21	17.69	
SAT (kg) 8-sites	8.73	6.72	1.84	35.24	
SAT (%) 8-sites	16.97	6.41	4.76	31.83	
D _I 5-sites	72.80	55.88	11.73	247.26	
D _E 5-sites	68.45	54.64	8.11	238.87	
Fibres 5-sites	4.35	2.00	1.58	15.20	
SAT (kg) 5-sites	8.04	6.18	1.67	31.19	
SAT (%) 5-sites	15.73	6.12	4.93	30.28	
D _I 4-sites	65.23	51.81	9.25	226.72	
D _E 4-sites	61.20	50.46	7.02	218.53	
Fibres 4-sites	4.03	2.11	1.37	15.19	
SAT (kg) 4-sites	8.15	6.44	1.66	31.25	
SAT (%) 4-sites	15.69	6.30	4.67	31.09	
	D _I 8-sites	D _E 8-sites	Fibres 8-sites	SAT (kg) 8-sites	SAT (%) 8-sites
D _I 5-sites	.998**	.997**	.668**	.978**	.939**
D _E 5-sites	.997**	.998**	.648**	.977**	.938**
Fibres 5-sites	.633**	.614**	.964**	.654**	.588**
SAT (kg) 5-sites	.983**	.982**	.689**	.995**	.895**
SAT (%) 5-sites	.944**	.944**	.633**	.894**	.987**
D _I 4-sites	.996**	.995**	.685**	.976**	.932**
D _E 4-sites	.996**	.996**	.663**	.974**	.933**
Fibres 4-sites	.632**	.611**	.958**	.666**	.570**
SAT (kg) 4-sites	.979**	.977**	.716**	.993**	.885**
SAT (%) 4-sites	.945**	.944**	.638**	.892**	.981**

Abbreviations: SAT: subcutaneous adipose tissue; D_I: sum SAT including fibres; D_E: sum SAT excluding fibres, SAT in kg and in %. Note: *, ** flag significant correlations ($p < .05$, $< .01$, respectively).