

Table S1. Descriptive characteristics of metabolically healthy but obese (MHO) and metabolically unhealthy obese (MUO) children.

	ActiveBrains (n=62)		EFIGRO (n=61)	
<i>Number of cardiometabolic risk factors (0/1/2/3/4) (%)</i>	42.4/31.8/21.2/4.5		45.9/37.7/16.4/0.0	
	MHO <sup>a</sup> (n=26)	MUO <sup>a</sup> (n=36)	MHO <sup>a</sup> (n=28)	MUO <sup>a</sup> (n=33)
<i>Sex (n/%)</i>				
Boys	23/88.5	20/55.6	17/60.7	11/33.3
Girls	3/11.5	16/44.4	11/39.3	22/66.7
	Mean	SD	Mean	SD
Years from PHV	-2.5 ± 1.0	-2.2 ± 1.0	-2.1 ± 1.2	<b>-1.5 ± 0.9</b>
Age (years)	10.0 ± 1.3	10.1 ± 1.2	10.2 ± 1.1	10.7 ± 1.1
Weight (kg)	56.8 ± 11.2	59.4 ± 9.2	57.8 ± 11.7	60.3 ± 10.8
Stature (cm)	144.6 ± 8.9	145.4 ± 7.5	145.1 ± 9.1	147.0 ± 7.5
BMI (kg/m <sup>2</sup> )	26.9 ± 3.2	28.0 ± 3.1	27.2 ± 2.9	27.8 ± 3.2
Lean mass (kg)	30.4 ± 5.1	31.0 ± 4.5	31.8 ± 5.4	33.1 ± 5.1
Fat mass (%)	42.6 ± 4.5	44.3 ± 4.0	41.3 ± 4.2	41.8 ± 4.3
ST (min)	563.8 ± 48.8	567.9 ± 58.9	550.1 ± 81.6	547.8 ± 86.7
MVPA (min)	61.9 ± 19.9	<b>52.3 ± 18.0</b>	54.5 ± 19.9	50.3 ± 22.8
CRF (laps)	16.4 ± 7.0	13.9 ± 7.8	17.4 ± 10.6	16.1 ± 7.4
<i>Cardiometabolic risk factors</i>				
Systolic blood pressure (mmHg)	97.9 ± 12.4	102.9 ± 15.8	99.1 ± 10.5	96.9 ± 10.5
Diastolic blood pressure (mmHg)	53.8 ± 12.4	59.7 ± 15.8	61.4 ± 6.2	64.9 ± 9.5
Glucose (mmol/L)	4.8 ± 0.4	4.8 ± 0.4	4.7 ± 0.4	4.9 ± 0.3
Triglycerides (mmol/L)	0.9 ± 0.2	<b>1.5 ± 0.9</b>	0.8 ± 0.3	<b>1.1 ± 0.5</b>
HDL cholesterol (mmol/L)	1.5 ± 0.3	<b>1.1 ± 0.2</b>	1.5 ± 0.2	<b>1.1 ± 0.2</b>
Waist circumference (cm) <sup>b</sup>	92.5 ± 8.1	94.4 ± 7.9	81.7 ± 6.6	83.8 ± 6.6
<i>aBMD (g/cm<sup>2</sup>)</i>				
TBLH	0.775 ± 0.069	0.778 ± 0.049	0.819 ± 0.051	0.819 ± 0.051
Trunk	0.708 ± 0.065	0.705 ± 0.047	0.718 ± 0.043	0.710 ± 0.072

Lumbar Spine	0.768 ± 0.098	0.772 ± 0.083	0.772 ± 0.076	0.782 ± 0.121
Arms	0.608 ± 0.040	0.607 ± 0.037	0.641 ± 0.046	0.633 ± 0.062
Legs	0.914 ± 0.093	0.925 ± 0.065	0.993 ± 0.075	0.988 ± 0.079
Pelvis	0.938 ± 0.118	0.935 ± 0.081	0.959 ± 0.081	0.954 ± 0.107

---

Significant associations ( $p < 0.05$ ) of the comparison between MHO and MUO within each study are highlighted in bold.

SD = standard deviation; PHV = peak height velocity; BMI = body mass index; ST = sedentary time; MVPA = moderate-to-vigorous physical activity; CRF = cardiorespiratory fitness; HDL = high-density lipoprotein; aBMD = areal bone mineral density; TBLH = total body less head.

<sup>a</sup> MHO was classified as 0 risk factors and MUO as  $\geq 1$  risk factors, including only obese participants.

<sup>b</sup> Waist circumference was excluded as a criterion in the MHO and MUO categories.