

Table 1: Demographic, biochemical and exercise test parameters of the 32 obese, 21 overweight, and 30 normal-weight children who participated in the study.

	normal-weight (n =30)	overweight (n =21)	obese (n =32)	p#
Age (years)	11.98 ± 1.95	10.91 ± 1.72	11.35 ± 2.21	0.158
Males (number, %)	16 (53 %)	9 (43 %)	18 (56 %)	
BMI (kg/m ²)	20.11 ± 3.09	25.78 ± 1.35	31.70 ± 5.37	<0.001***
BMI z score	-0.97 ± 0.48	-0.08 ± 0.21	0.85 ± 0.84	<0.001***
Weight z score	0.03 ± 1.01	-0.07 ± 1.03	0.02 ± 1.03	0.942
Height z score	0.09 ± 1.1	-0.33 ± 0.76	0.13 ± 0.92	0.209
Physical activity (hours/week)	6.35 ± 4.44	4.29 ± 2.22	3.58 ± 2.68	<0.001**
HOMA-IR	0.63 ± 0.48	1.36 ± 0.89	2.12 ± 1.44	0.002*
VO ₂ max (ml/kg/min)	1.24 ± 1.26	0.63 ± 0.17	0.44 ± 0.17	0.001**
Leptin (ng/ml)	14.14 ± 12.81	27.33 ± 10.59	36.77 ± 23.97	<0.001**
Adiponectin (µg/ml)	16.20 ± 6.61	12.96 ± 7.21	11.51 ± 4.38	0.011*
Homocysteine (µmol/L)	7.62 ± 1.92	7.59 ± 2.05	8.71 ± 3.73	0.229

Values are means ± standard deviation, BMI: Body mass index, HOMA-IR: Homeostatic model assessment of insulin resistance, VO₂max: maximum quantity of oxygen, #: ANOVA, ***: Statistically significant difference between Normal vs Overweight vs Obese, **: Statistically significant difference between Normal vs Overweight, Normal vs Obese, *: Statistically significant difference between Normal vs Obese.