

Table S2. Anthropometric, physical activity and blood biochemical parameters in the schoolchildren studied according to sex and HOMA-IR

	Total			Girls			Boys		
	HOMA- IR≤3.16 (n=809)	HOMA- IR>3.16 (n=45)	p	HOMA- IR≤3.16 (n=410)	HOMA- IR>3.16 (n=31)	p	HOMA- IR≤3.16 (n=399)	HOMA- IR>3.16 (n=14)	p
Age (years) – I	10.1±0.9	10.5±1.0	0.003	10.1±0.9	10.5±1.0	0.039	10.1±0.9	10.6±1.0	0.035
Madrid [% (n)]	56.1(454)	46.7(21)	0.190	61.0(250)	32.3(10)	0.002	51(204.0)	79(11.0)	0.272
Barcelona [% (n)]	7.5(61)	13.3(6)		6.3(26)	19.4(6)		9(35.0)	0(0.0)	
Sevilla [% (n)]	12.5(101)	11.1(5)		11.5(47)	12.9(4)		14(54.0)	7(1.0)	
A Coruña [% (n)]	12.9(104)	22.2(10)		10.2(42)	25.8(8)		16(62.0)	14(2.0)	
Valencia [% (n)]	11.0(89)	6.7(3)		11.0(45)	9.7(3)		11(44.0)	0(0.0)	
Body composition									
Weight (kg) – I	38.9±9.0	48.4±10.6	<0.001	39.0±9.0	47.0±8.8	<0.001	38.8±9.0	51.3±13.8	<0.001
Height (m) # – I	1.4±0.1	1.5±0.1	<0.001	1.4±0.1	1.5±0.1	<0.001	1.4±0.1	1.5±0.1	0.044
BMI (kg/m2) – SIR	18.8±3.0	21.8±3.9	<0.001	18.7±2.9	21.0±2.8	<0.001	18.9±3.1	23.8±5.1	<0.001
Z-BMI – SI	0.64±1.11	1.50±1.12#	<0.001	0.52±1.04	1.21±0.81	<0.001	0.76±1.17	2.13±1.46#	<0.001
Nutritional status by BMI									
Underweight [% (n)]	0.9(7)	0.0(0)	<0.001	0.7(3)	0.0(0)	0.002	1(4.0)	0(0.0)	<0.001
Normal weight [% (n)]	61.1(494)	28.9(13)		65.6(269)	32.3(10)		56(225.0)	21(3.0)	
Overweight [% (n)]	26.7(216)	40.0(18)		27.3(112)	51.6(16)		26(104.0)	14(2.0)	
Obesity [% (n)]	11.4(92)	31.1(14)		6.3(26)	16.1(5)		17(66.0)	64(9.0)	
Body fat (%) # – SI	27.4±5.7	31.6±3.9	<0.001	29.1±4.7	31.8±3.4	<0.001	25.6±6.0	31.1±4.8	<0.001
Nutritional status by body fat percentage									
Low fat [% (n)]	0.4(3)	0.0(0)	0.003	0.2(1)	0.0(0)	0.009	1(2.0)	0(0.0)	0.047
Normal fat [% (n)]	38.0(307)	11.1(5)		42.4(174)	12.9(4)		34(133.0)	7(1.0)	
Fat excessive [% (n)]	30.9(249)	44.4(20)		31.5(129)	54.8(17)		30(120.0)	21(3.0)	
Obesity [% (n)]	30.7(248)	44.4(20)		25.9(106)	32.3(10)		36(142.0)	71(10.0)	
Physical activity									
Activity coefficient– S	1.53±0.11	1.49±0.10	0.008	1.53±0.11	1.47±0.07#	<0.001	1.53±0.11	1.54±0.13#	0.449
Biochemical data									
Glucose (mg/dL)	84.2±9.6	89.0±10.4	0.002	83.0±10.0	88.5±8.5	<0.001	85.3±9.0	90.1±14.0	0.511
Insulin (mcU/mL) – SI	5.6±3.1	18.9±5.0	<0.001	6.1±3.2	19.3±5.6	<0.001	5.1±2.8	18.0±3.4	<0.001
QUICKI – I	0.39±0.04	0.31±0.01	<0.001	0.38±0.04	0.31±0.01	<0.001	0.39±0.04	0.31±0.01	<0.001
HOMA-IR – I	1.17±0.66	4.13±1.29	<0.001	1.27±0.69	4.23±1.48	<0.001	1.07±0.61	3.93±0.68	<0.001

BMI, body mass index; IR, insulin resistance .Two-way ANOVA analysis: S: differences according to sex; I: differences according to insulin resistance (IR) score; R: interaction between sex and IR. # Variable follow a normal distribution. For comparison of means, the Mann-Whitney U test was used if the distribution of the variables was not homogeneous, the Student's t-test for homogeneous distributions.