

Table S1. Anthropometric, physical activity and blood biochemical parameters in the schoolchildren studied according to sex and age.

| | Total | | | Girls | | | Boys | | |
|---|------------------------|------------------------|--------|------------------------|------------------------|--------|------------------------|------------------------|--------|
| | 08-10 years (n=541) | 11-13 years (n=313) | P | 08-10 years (n=272) | 11-13 years (n=169) | P | 08-10 years (n=269) | 11-13 years (n=144) | P |
| Madrid [% (n)] | 53.2(288) | 59.7(187) | 0.004 | 56.3(153) | 63.3(107) | 0.268 | 50.2(135) | 55.6(80) | 0.025 |
| Barcelona [% (n)] | 6.8(37) | 9.6(30) | | 6.6(18) | 8.3(14) | | 7.1(19) | 11.1(16) | |
| Sevilla [% (n)] | 12.6(68) | 12.1(38) | | 12.1(33) | 10.7(18) | | 13.0(35) | 13.9(20) | |
| A Coruña [% (n)] | 13.7(74) | 12.8(40) | | 11.8(32) | 10.7(18) | | 15.6(42) | 15.3(22) | |
| Valencia [% (n)] | 13.7(74) | 5.8(18) | | 13.2(36) | 7.1(12) | | 14.1(38) | 4.2(6) | |
| Body composition | | | | | | | | | |
| Weight (kg) -A | 36.7±8.2 | 44.1±9.4 | <0.001 | 36.4±7.4 | 44.8±9.4 | <0.001 | 37.1±8.8 | 43.2±9.4 | <0.001 |
| Height (m) # -SA | 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 | <0.001 |
| BMI (kg/m2) -A | 18.6±3.1 | 19.7±3.0 | <0.001 | 18.4±2.9 | 19.7±2.9 | <0.001 | 18.8±3.4 | 19.6±3.1 | 0.003 |
| Z-BMI # -S | 0.68±1.19 | 0.69±1.02 | 0.498 | 0.54±1.07 | 0.62±0.99 | 0.216 | 0.83±1.28 | 0.76±1.05 | 0.276 |
| Nutritional status by BMI | | | | | | | | | |
| Underweight [% (n)] | 0.7(4) | 1.0(3) | 0.386 | 0.7(2) | 0.6(1) | 0.482 | 0.7(2) | 1.4(2) | 0.540 |
| Normal weight [% (n)] | 58.8(318) | 60.4(189) | | 64.3(175) | 61.5(104) | | 53.2(143) | 59.0(85) | |
| Overweight [% (n)] | 26.6(144) | 28.8(90) | | 26.8(73) | 32.5(55) | | 26.4(71) | 24.3(35) | |
| Obesity [% (n)] | 13.9(75) | 9.9(31) | | 8.1(22) | 5.3(9) | | 19.7(53) | 15.3(22) | |
| Body fat (%) # -SA | 27.0±6.1 | 28.7±4.7 | <0.001 | 28.7±5.0 | 30.3±3.8 | <0.001 | 25.2±6.5 | 26.9±5.0 | 0.002 |
| Nutritional status by body fat percentage | | | | | | | | | |
| Low fat [% (n)] | 0.6(3) | 0.0(0) | <0.001 | 0.4(1) | 0.0(0) | 0.046 | 0.7(2) | 0.0(0) | 0.002 |
| Normal fat [% (n)] | 40.4(218) | 30.0(94) | | 43.8(119) | 34.9(59) | | 37.1(99) | 24.3(35) | |
| Fat excessive [% (n)] | 26.2(141) | 40.9(128) | | 28.3(77) | 40.8(69) | | 24.0(64) | 41.0(59) | |
| Obesity [% (n)] | 32.8(177) | 29.1(91) | | 27.6(75) | 24.3(41) | | 38.2(102) | 34.7(50) | |
| Physical activity | | | | | | | | | |
| Activity coefficient -A | 1.54±0.11 | 1.51±0.11 | 0.007 | 1.53±0.11 | 1.51±0.10 | 0.089 | 1.54±0.10 | 1.52±0.12 | 0.045 |
| Biochemical data | | | | | | | | | |
| Glucose (mg/dL) -S | 84.0±10.0 | 85.1±9.0 | 0.112 | 82.7±10.2 | 84.5±9.6 | 0.134 | 85.3±9.7 | 85.9±8.2 | 0.393 |
| Insulin (mcU/mL) -SA | 5.8±4.0 | 7.3±4.8 | <0.001 | 6.3±4.3 | 8.3±5.3 | <0.001 | 5.2±3.5 | 6.1±3.9 | 0.005 |
| QUICKI -SA | 0.39±0.05 | 0.37±0.04 | <0.001 | 0.39±0.05 | 0.37±0.04 | <0.001 | 0.40±0.04 | 0.38±0.04 | 0.004 |
| HOMA-IR -SA | 1.21±0.87 | 1.54±1.09 | <0.001 | 1.31±0.94 | 1.74±1.23 | <0.001 | 1.10±0.77 | 1.30±0.86 | 0.004 |
| IR [% (n)] -SA | 3.51(19) | 8.31(26) | 0.003 | 4.78(13) | 10.65(18) | 0.023 | 2.23(6) | 5.56(8) | 0.044 |

BMI, body mass index; IR, insulin resistance. Two-way ANOVA analysis: S: differences according to sex; A: differences according to age; R: interaction between sex and age. # 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.