Resumen

Background: It is necessary to know the levels of physical activity (PA) for a better understanding of the development of chronic diseases in youth. The aim of this study was to assess levels of total PA and time spent in different PA intensities in Spanish adolescents by accelerometer. Methods: A sub-sample of 214 healthy Spanish adolescents (107 females), aged 13-16 years, enrolled in the AFINOS Study was selected for this study. Participants wore the ActiGraph GT1M accelerometer for 7 consecutive days. Total PA and time spent in sedentary, light, moderate, vigorous, and moderate to vigorous physical activity (MVPA) was estimated using the accelerometer. Adiposity was measured in the sample using sum of 6 skinfold thickness, waist circumference and BMI. Results: Adolescent boys were engaged in higher levels of total PA, moderate PA, vigorous PA and MVPA than adolescent girls, whereas girls were engaged in higher levels of light PA. Differences between age groups showed that the 15-16 years group did more total PA (P = 0.008) than the 13-14 years group. Adolescents with highest levels of body fat were less active and spent less time in vigorous PA and MVPA than adolescents with less body fat. Among the current sample, 71.1% of the adolescents (82.2% adolescent boys and 60.7% adolescent girls) reached the recommendation of 60 min in MVPA. Conclusions: Although these findings suggest that Spanish adolescents have similar PA levels than other European adolescents, further cross-sectional and longitudinal studies must assess PA levels in free-living conditions in Spanish children and adolescents using objective methods such as accelerometers, heart rate monitors and pedometers.

Palabras clave
Physical activity, Accelerometer, Assessment. Adolescents.