

Methods for measuring physical activity in children and their relationship with nutritional status: A narrative review

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Abstract

In recent decades, overweight and obesity have become a global epidemic that affects not only the adult population but also children and adolescents. In Spain the prevalence reaches 46%, with a greater presence in men. On the other hand, in some countries of Latin America the rates are close to 50% of overweight and obesity in children between 5 and 9 years old. Excess weight negatively affects the motor function of a child, causing a low ability to develop basic motor skills such as balance, gait and jumping. Also, overweight and obesity in children have been associated with a low motor repertoire, which translates into a delay in psychomotor development. These alterations influence the low motivation and interest in physical activity (PA) and less integration in games and sports practices. PA can be measured in different methods in children, the most commonly used instruments being pedometers, accelerometers and self-report questionnaires. The relationship between the level of PA and the nutritional status behaves in an inverse manner, that is, those with a higher BMI have low levels of PA. This occurs mainly in children older than 7 years old, since in children of lower ages this relationship is inconsistent. On the other hand, it has been possible to demonstrate the negative effects of low PA on motor skills and physical fitness in children, which is exacerbated by overweight and obesity in children. The regular performance of PA favours the development of motor skills in children with excess weight, favouring a more active participation in sports activities. Consequently, the development of effective intervention programs specifically targeting motor skills and physical fitness could help break the vicious circle of obesity and reduce the prevalence of comorbidities.

Author keywords

Children
Obesity
Overweight
Physical activity