
Title

Effect of physical exercise on cardiometabolic risk factors in preadolescents and adolescents with severe obesity: a systematic review; [Efecto del ejercicio físico sobre factores de riesgo cardiometabólicos en preadolescentes y adolescentes con obesidad severa: una revisión sistemática]

Abstract

Objective: The aim of this systematic review was to assess the effect of physical exercise on cardiometabolic risk factors in pre-adolescents and adolescents with severe obesity. Methodology: A systematic search of the literature was carried out using the databases Web of Science, PubMed, Scopus, Scielo, Cochrane, EBSCO, of articles published up to 17 August 2022. We included studies involving pre-adolescents or adolescents, aged 10-18 years with severe obesity, in either a structured or unstructured physical training intervention of at least 4 weeks. Results: Significant post-intervention improvements were observed in body weight, BMI, waist circumference, body fat percentage, blood pressure, fasting glucose, insulin, HOMA-IR, total cholesterol, cholesterol HDL, cholesterol LDL, with no significant changes in triglycerides, compared to baseline. When comparing the results with the control group, only significant differences in body weight, BMI and body fat percentage were reported. Conclusion: Physical exercise was associated with a decrease in some cardiometabolic risk factors, however, the results were inconsistent when compared to a control group. © 2024 Federacion Espanola de Docentes de Educacion Fisica. All rights reserved.

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