Abstract

Objective. To assess the effect of a physical activity intervention on cardiovascular risk factors in Mexican school-age children.

Material and Methods. Children from two public schools in Queretaro (n=360, 8-14 years old) performed a 20-minute physical activity routine every school day during 16 weeks (February-May 2006). Anthropometric, blood pressure and biochemical assessment was done before and after implementation. Results. Systolic blood pressure, triglyceride and total cholesterol levels decreased significantly. The decrease in lipid and lipoprotein levels was higher in children with high baseline levels. In high-risk girls, the cardiovascular risk cluster score decreased significantly. No change in BMI, waist circumference, or insulin was observed.

Conclusion. A simple physical activity program modified several cardiovascular risk markers in school-age children. These results may be taken as a reference to develop better intervention programs directed toward preventing the effects of children obesity.

Keywords

Physical activity, children, cardiovascular risk, obesity, Mexico.