Abstract

Introduction: A pilot intervention was conducted to promote physical activity and nutrition in public preschool education (near half a million children in Chile), in order to prevent obesity. Objective: To assess the primary (body fat) and secondary outcomes (physical activity and energy intake) of a nutrition and physical activity pilot intervention for preschool children, attending day care centres. Methods: A pilot intervention in six day care centres selected at random (n = 530), in 4-5 years old preschool children, Santiago, Chile intending to: provide nutritional and physical activity education to educators and health promotion activities for the family, which in turn, will affect the primary (body fat), and secondary outcomes (physical activity pattern and energy food intake) were measured in a representative subsample of 120 intervened and 145 controls children. Results: In relation to secondary outcomes monitoring, moderate-vigorous activity was duplicated in the intervention group (+5.4% and +4.7%, respectively), in both obese and eutrophic children. Energy intake decreased in 11.7% in obese and 7.5% in eutrophic children. Dietary fat intake was reduced (-11 g in obese and -8.4 g in eutrophic children). Intervened obese children reduced body fat in 1.5%, meanwhile in control obese children, body fat increased 1.3% (p < 0.01). Conclusions: The pilot intervention demonstrated the feasibility to influence dietary risk factors and physical activity at the day care centres and families. Therefore, the implementation of the validated intervention program will be tested in different weather conditions, to prevent unhealthy habits in preschool children and their families.

Keywords

Intervention, Outcomes, Preschool children, Physical activity, Nutrition.