Consumption of ready-to-eat cereal is inversely associated with body mass index in 6-13 years old Chilean schoolchildren


Abstract

Background and aims: childhood obesity in Chile is a serious problem with the prevalence continuing to increase over the last decade, despite all governmental efforts to diminish it. Studies indicate that the consumption of certain foods may help to control body weight. The objective of this study was to evaluate the relationship between ready-to-eat cereals (RTEC), body mass index and nutritional intake of macronutrients and micronutrients in school children from Santiago, Chile.

Methods and results: the study included 1,477 children aged 6-13 years who were evaluated by trained nutritionists. Weight, height and waist circumference were measured and a 24-hour recall questionnaire was administered in which the hours spent watching TV were also recorded. Overall, 32% of boys and 28% of girls were overweight but the difference between them was not significant. All children, regardless of sex, showed a significant inverse relationship between amounts of RTEC consumed and body mass index (BMI). Those girls that consumed higher amount of RTEC had a reduced waist circumference than those that had a lower intake. A high consumption of RTEC in all children was related to a higher intake of calories, proteins, carbohydrates, calcium and zinc and to a lower intake of calories from fat. RTEC consumption was also associated with lower risk of being overweight/obese.

Conclusion: this study identifies RTEC intake as a potential indicator of a healthy diet. Controlled interventions are necessary to isolate the effect of RTEC consumption from other participating factors.

Keywords: Ready-to-eat cereals, Body mass index, Food intake, School children, Breakfast cereals, Nutrient intake, Aged 4, Children, Obesity, Adolescents, Overweight, Diet, BMI, Nutrition & Dietetics