Resumen

Objective: The aim of this study was to assess dietary intake, nutritional status, body composition, and physical activity level in a group of Chilean children and adolescents with Type 1 diabetes mellitus (T1DM), compare these parameters with the recommendations of the International Society for Pediatric and Adolescent Diabetes (ISPAD), and determine the relationships between dietary intake, body composition, and diabetes control.

Methods: A total of 30 patients with T1DM (aged 15.2 +/- 4.0 years) were included. Dietary intake was assessed using a 92-item quantitative food frequency questionnaire. Body composition was determined using dual-energy X-ray densitometry. Physical activity was assessed by means of a survey.

Results: The energy intake of these patients was derived from 21.4% protein, 48% carbohydrates, and 31.2% fat. The glycosylated hemoglobin (HbA1c) was significantly correlated with fat as grams per day (r: 0.363, p < 0.05) and calories per day (r: 0.364, p < 0.05). The mean body fat percentage in females was 31.2% and 20.2% in males (p < 0.01) and the mean amount of physical activity was 4.5 +/- 2.7 h per week.

Conclusions: The study patients had a higher protein intake than recommended by ISPAD. Dietary carbohydrate intake was rather low, and dietary fat intake was the same as the limits recommended by ISPAD. Diabetic control was significantly correlated with protein, carbohydrates, fat, and sodium intake. The girls in the study had a higher percentage of body fat than the standard recommendations for their age. The level of physical activity was adequate.
Palabras clave

Palabras clave de autor: Diabetes mellitus type 1; Dietary intake; Macronutrient distribution; Percent body fat

KeyWords Plus: GLYCEMIC CONTROL; NUTRITIONAL MANAGEMENT; GLUCOSE CONTROL; LIPID PROFILE; CHILDREN; ADOLESCENTS; FAT; VALIDITY; GIRLS; MASS