Abstract

Background: To evaluate the nutritional status in young adults with Down syndrome (DS). Methods: 38 persons, 15 (39.5%) women and 23 (60.5%) men (age range 16-38 years) with DS. Body composition was analyzed from anthropometric parameters according to standard protocols, levels of physical activity and nutrient intake was determined using validated questionnaires: a 72 h recall and consumption food frequency questionnaire (recorded by the tutors of the participants). The following biochemical parameters were estimated: blood lipids profile (total cholesterol, HDL-cholesterol, LDL-cholesterol and triglycerides), glucose, uric acid, proteins (ferritin and transferrin), minerals (Fe, Zn, Cu, Mg and Se) and vitamins (B12, B9, E, C and -carotene). The data were statistically analysed with Student t tests. Results: From the 38 participants, 36.8% were overweight (BMI: 25-29.9 kg/m²) and 36.8% were obese (BMI ³ 30 kg/m²). The BMI differed from women to men (P < 0.001) (29.1 ± 4.3 and 27.9 ± 4.6 kg/m², respectively). The average values of the biochemical parameters, except for uric acid, both in women and men were within normal ranges. The average energy intake was 1,909 ± 337 and 2,260 ± 284 kcal/day for women and men, respectively. The contribution of proteins to total caloric intake was 18.8 and 16.3% for women and men, respectively, while carbohydrates contributed 43.3 and 45.6%, and lipids 37.9 and 38.1%. All participants were sedentary. Conclusion: In this group presented a high prevalence of overweight and obesity. Further research is required in the development and evaluation of appropriate intervention programs to improve their nutritional status and quality of life.

Keywords