Abstract

Background: Temporal trends in dietary patterns reveal associations between food consumption and increased prevalence of non-communicable chronic diseases. Objectives: This study characterized dietary patterns in adolescents in urban area located in northeast of Brazil, relating it to the markers of a healthy diet. Methods: A cross-sectional study used two 24-hour recalls to assess dietary intake in 430 public school students from Natal-RN, Brazil. Principal component analysis was used to derive dietary patterns according to consumption of food based on weight (grams), energy (Kcal), or fiber (grams). These models resulted in a number of different main components, 7, 8 and 4, respectively (cumulative variance >70%; factor loadings >0.4). The association between independent variables and the factor scores of all components obtained was determined by the Prevalence Ratio (CI 95%). Results: The dietary patterns derived were: (1) Pure Traditional Food System, the highly representative pattern in young adolescents and the first component of the analytical models, (2) Combined and Risk Food System; extraction of total food weight and energy revealed markers of unhealthy diets based on high sugar, saturated fat, and salt consumption, and (3) Modified Traditional Food System represented by fiber; pattern 1 was observed within this model too. The associations observed, predominantly from the TFSm pattern, distinguished by sex, age and nutritional status. Conclusions: Patterns 1 and 3 are characterized by preserved regional food practices that prevent chronic disease, whereas pattern 2 is characterized by health risks. These inter-sectorial findings should be considered in the development of health care policies for children and adolescents.

Keywords

Adolescents, Principal component analysis, Eating.