Objective: To compare the glycemic control and lipid profile of children and adolescents undergoing two different dietetic treatments for type 1 diabetes mellitus assisted at the Children and Adolescent’s Diabetes Mellitus Health Center-UFRJ. Methods: A retrospective longitudinal study conducted between 2002 and 2006. We evaluated the same subjects in two different periods: after 1 year in TD and subsequently after 1 year in CCHO. The evolution of the nutritional status during the dietary treatments was evaluated using Body Mass Index (BMI) for age. The lipid panel was evaluated according to the 1st Guideline for Prevention of Atherosclerosis in Childhood and Adolescence, used in Brazil, and the glycemic control was evaluated by measuring glycosylated hemoglobin (HbA1c). Results: We evaluated 93 individuals, 38.7% children and 61.3% adolescents. The mean age at study entry was 11.1 (± 2.66) years and the mean disease duration was 6.1 (± 3.2) years. A significant difference in the percentage of adequacy of HbA1c (p = 0.000) and in the values of total plasma cholesterol (p = 0.043) was found after 1 year of CCHO diet, which did not happen during the observation time of TD. The evolution of anthropometric nutritional status showed no significant difference between the beginning and the end of both dietary treatments. Conclusion: The results of this study suggest that a more flexible food orientation program can contribute to the improvement of blood glucose levels without causing deterioration of the lipid profile when compared to TD. (Nutr Hosp. 2014;29:547-552) DOI:10.3305/NH.2014.29.3.7116

Keywords
Type 1 diabetes. Diet. Carbohydrate counting.