Abstract

Background: Diabetes mellitus is a metabolic disorder characterized by chronic hyperglycemia and body composition is important in the disease control. The nutritional intervention has relevance in the improvement of glycemia and lipemia in diabetic patients.

Aim: Evaluate the influence of fat intake on body composition, lipemia and glycemia on patients with type 1 diabetes mellitus.

Methods: 19 patients were evaluated by anthropometric (body mass index and waist circumference), body composition (fat mass, lean body mass and total body water by bioelectrical impedance) and biochemical variables, after 8 hours of fasting. Dietary assessment was performed using the dietary records for 3 days, analyzed for nutritional software DietPró 5i. The groups were formed according to the usual intake of saturated fatty acids (SFA) (G1 < 10% of total energy expenditure (TEE) of SFA and G2 10% of TEE of SFA). Statistical analysis was performed in SPSS 16.0, considering p < 0.05. Results: There was no difference in anthropometric and biochemical variables between groups, but G1 presented higher fat mass (FM) and G2 high SFA and adequate monounsaturated fatty acids (MUFA) intake. The lipemia and glycemia were not affected by high SFA intake, but adequate MUFA intake may have influenced the results of these variables. No found relation between type of fat ingested and biochemistry variables. Conclusion: Body composition can be influenced by type of fat ingested. Lipemia and glycemia were not influenced by high SFA intake, perhaps due to MUFA intake adequate.

Keywords

Diabetes mellitus, Lipemia, Glycemia, Body composition, Fat intake.