Abstract

Introduction: Few studies have evaluated the effect of nuts processing on the glycemic response and satiety. Objective: To evaluate the effect of peanut processing on glycemic response, and energy and nutrients intake. Method: Thirteen healthy subjects (4 men and 9 women), with a mean age of 28.5 ± 10 years, BMI 22.7 ± 2.5 kg/m2, and body fat 23.7 ± 5.7% participated in this randomized crossover clinical trial. After 10-12 h of fasting, one of the following types of test meals were consumed: raw peanuts with skin (RPS), roasted peanuts without skin, ground-roasted peanuts without skin (GRPWS) or control meal. The test meals had the same nutrient composition, and were consumed with 200 ml of water in 15 minutes. Glycemic response was evaluated 2 hours after each meal. Energy and nutrients intake were assessed through diet records reflecting the habitual food intake and food consumption 24 hours after the ingestion of test meal. Result: The area under the glycemic response curve after GRPWS was lower (p = 0.02) the one obtained for RPS. There was no treatment effect on energy intake, macronutrients and fiber consumption after the test meal. Conclusion: The consumption of ground-roasted peanuts may favor the control and prevention of diabetes due to its reduction on postprandial glucose response. However, more prospective studies are needed to confirm this hypothesis.
Keywords
Peanuts, Arachis hypogaea, Blood glucose, Diabetes mellitus, Glycemic index, Food intake.