Trypsin Inhibitor From Peanut Is Associated With Reduced Fasting Glucose

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INTRODUCTION: Nowadays, obesity and type 2 diabetes mellitus prevalence remains growing around the world, being public health problems, reaching epidemic levels. Whereas advances in treatment of obesity and diabetes are being developed, bioactive products are noteworthy. OBJECTIVES: The aim of the research was to evaluate the consume of isolated trypsin inhibitor (AHTI) of peanut paçoca that could promote satiety, reduced fasting glucose and weight control. MATERIAL AND METHODS: Wistar rats (n = 05) were distributed individually and randomly into three groups in cages, receiving AIN-93G for 11 days, consuming 100 g of the following diets: (1) AIN-93G diet; (2) AIN-93G diet supplemented by oral gavage with AHTI (25 mg/kg); (3) AIN-93G diet supplemented by oral gavage with AHTI (50mg/kg). At the end of the procedure, the rats were fasted for 12-15h, blood was collected, serum was separated by centrifugation and used for glucose determination and others biochemistry parameters. RESULTS AND DISCUSSION: Both groups supplemented by AHTI decreased fasting glucose, whereas other biochemical parameters showed no significant variation, remaining within the normal ranges. CONCLUSIONS: The experimental administration of AHTI resulted in low fasting glucose levels, emphasizing the potential of bioactive products, like peanut derivatives, for prevention and treatment of metabolic diseases.

Palavra chave: glucose, peanut, trypsin.
Patrocínio: CNPq and NUPLAN/UFRN.