Abstract

Amazonian Camu-camu fruit (Myrciaria dubia HBK McVaugh) has attracted interest from food and cosmetics industries because of its rich content of vitamin C, flavonoids and anthocyanins. The goal of this study was to investigate the antiobesity action of the ingestion of the Camu-camu pulp in a rat model of diet-induced obesity. Wistar rats with obesity induced by subcutaneous injection of monosodium glutamate receiving diet ad libitum. The rats were divided into two groups: an experimental group that ingested 25 mL/day of Camu-camu pulp (CCG) and a non-treated group (CG). After 12 weeks, the animals were sacrificed. Blood, liver, heart, white adipose tissues were collected and weighted, biochemical and inflammatory profiles were determined as well. Animals that received the pulp of Camu-camu reduced their weights of the fat in white adipose tissues, glucose, total cholesterol, triglycerides, LDL-c and insulin blood levels. There was an increase in HDL-c levels. No change was observed in inflammatory markers and liver enzymes. Camu-camu pulp was able to improve the biochemical profile of obesity in rats suggesting that this Amazonian fruit can be further used as such a functional food ingredient in control of chronic diseases linked to obesity.

Keywords

Amazonian fruit, flavonoids, lipid profile, Myrciaria dubia, obesity.