EFFECT OF BARU ALMOND, PEANUT AND BRAZIL NUT ON SERUM LIPID PROFILE OF RATS TREATED WITH HIGH-FAT DIETS

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The aim of this study was to evaluate the effect of the intake of baru almond (*Dipteryx alata* Vog., a native fruit from Brazilian Savanna), peanut and brazil nut on serum lipid profile of rats treated with high-fat diets. A bioassay with adults Wistar rats was conducted over 9 weeks and the animals were treated with the following diets formulated according to American Institute of Nutrition (AIN-93G): 5 high-fat diets (0.1% cholic acid + 1% cholesterol + 5% lard + 15% of one of the following lipid sources – lard and olive oil [controls], baru almond, peanut or brazil nut) and a standard diet (7% soybean oil). Blood samples were collected in order to determine serum lipid profile. Peanut modulated lipid profile by decreasing the levels of total cholesterol (TC= 84 mg.dL⁻¹) and triglycerides (TG= 46 mg.dL⁻¹), and by increasing the levels of HDL-cholesterol (HDL-c= 44 mg.dL⁻¹), when compared to lard-control (TC= 217 mg.dL⁻¹, TG= 223 mg.dL⁻¹ and HDL-c= 24 mg.dL⁻¹) and olive oil-control (TC= 111 mg.dL⁻¹ and HDL-c= 36 mg.dL⁻¹). The baru almond reduced total cholesterol (126 mg.dL⁻¹) and triglycerides (61 mg.dL⁻¹) and increased the level of HDL-C (36 mg.dL⁻¹), when compared to lard-control. Brazil nut decreased the levels of total cholesterol (119 mg.dL⁻¹) and triglycerides (57 mg.dL⁻¹) compared to the lard-control, but did not increased the level of HDL-c (23 mg.dL⁻¹). Considering these results, the consumption of baru almond, peanut and brazil nut must be encouraged, especially to replacing foods rich in saturated-fat.