Comparison Between Ingestion of Yellow and Red Peachpalm Flour (Bactris gasipaes Kunth. Var. GasipaesHenderson) over Glycemic Behavior in Diabetic and Non-diabetic Wistar Rats

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The demand for more healthful food has stimulated the study of fiber rich vegetable species. Amongst these, peachpalm presents two kinds of flour - red and yellow, both with presumable low glycemic behavior. This study aimed to compare glycemic behavior of these two types of flour in diabetic and nondiabetic rats fed with semipurified diets. Forty two male Wistar rats were divided in 6 groups: 1)Nondiabetic casein, 2)Diabetic casein, 3)Non-diabetic yellow palm 4)Diabetic yellow palm, 5)Non diabetic red palm and 6)Diabetic red palm. Diabetic rats were induced with streptozotocin and presented blood glucose greater than 120mg/dL. All of them was monitored weekly at 0,5,15,30,60,90 and 120 minutes after 12h fasting and increments under glicemic curve was taken. Results: The red flour showed faster rise in blood glucose between 5 and 15 minutes and maintenance of glucose plateau between 15 and 30 minutes and then start falling between 30 and 45 minutes. Already the yellow flour behaves lifting smooth and steady, showing continuous and gradual increases between time 0 and 30 minutes, and rapid falling after that. When evaluating diabetic rats there was no difference between flours showed gradual elevation of blood glucose with plateau at 15 minutes and stabilization of that at lower levels, with significant difference to standard diet (p<0,05). We concluded that yellow flour has great capacity to control glucose load in diabetic and non-diabetic rats than red one and don't promote abrupt changes in glucose levels, being more interesting to the use in products with low glycemic profile.

Palavras-chave: Glycemic Load; Peachpalm Flour; Diabetic Rats

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