

The effect of Purple Sweet Potato Flour against Changes in Body Weight of Male Rats Strain Wistar Induced High Fat Diet and Fruktose 66%

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ABSTRACT

This study discusses the changes in body weight which can lead to the occurrence of overweight where the conditions of excess only fat in the body. Purple sweet potato flour has a high anthocyanin content, which can affect weight loss or obesity. The content of anthocyanin in purple sweet potato serves as a catcher of free radicals and can inhibit the peroxidation of fats. The purpose of this research is to analyze the changes in body weight of male rats that were given the intervention purple sweet potato flour. This research was conducted in October to December 2021 in Biomedical Laboratory, Faculty of Dentistry, Jember University. This study uses a type of experimental research or True Experimental. The design used was a pretest-posttest with control group. The sample in this study 30 of the white male rats strain wistar, aged 2-3 months with a body weight of 200-300 grams and divided into 3 groups, namely (K-) fed with standard rat bio and drinking water ad libitum, (K+) fed a high-fat diet and drinking water solution of fructose 66% of ad libitum, and (P) fed a high-fat diet and drinking water solution of fructose 66% of ad libitum and intervention purple sweet potato flour for 6 days. There are significant differences in the body weight of the rats before the intervention ($p = 0.000$) and after the intervention ($p = 0.000$). The test results of Paired T-Test body weight before and after the intervention was not significantly different (K-) $p = 0.064$; (K+) $p = 0,083$; (P) $p = 0.129$; The value of the different in body weight pretest and posttest , namely ($p = 0,017$), which means there is perbedaan significant to thath body weight.

Keywords: Body Weight, Overweight, Purple Sweet Potato Flour