

***The Effect of Purple Sweet Potato Flour on Body Mass Index Changes of Male White Rat Wistar Strain Induced with High Fat-Fructose Diet***

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**ABSTRACT**

*Obesity can occur because the calorie intake consumed is higher than the calories expended so that excess energy will increase body fat stores and if it occurs in the long term the weight will continue to increase until it reaches an overweight or obese status. Obesity can be overcome by using products that contain anthocyanins such as purple sweet potato. The anthocyanin content in purple sweet potato works to reduce the expression of fat metabolism by inhibiting the anabolic process and stimulating the catabolic process, resulting in a decrease in appetite and a decrease in BMI. The purpose of this study was to determine the effect of purple sweet potato flour intervention on changes in body mass index in male white rats of wistar strain induced by High Fat-Fructose Diet. The type of research used is True Experimental with a Pretest-Posttest research design with Control Group Design. The samples used were 24 male Wistar rats with a body weight of 200-300 grams, aged 2-3 months which were divided into 3 treatment groups, namely negative control (K-) given a standard bio-rat diet, positive control (K+) induced High Fat-Fructose Diet, and treatment (P) induced by High Fat-Fructose Diet and purple sweet potato flour as much as 3.89 ml/day for 6 days. The test was carried out with One Way Anova test, Paired T-Test and Kruskal Wallis test. The results showed that there was a difference in the pretest BMI value ( $p=0.001$ ), posttest ( $p=0.001$ ), and there was no difference in the pretest-posttest BMI value in the three groups and the pretest-posttest BMI value difference ( $p=0.707$ ). The conclusion of this study was that administration of purple sweet potato flour had no effect on changes in BMI values in rats.*

**Keywords:** *BMI, Purple sweet potato flour.*