

"THE EFFECT OF FEEDING ROBUSTA GREEN COFFEE ON TRIGLYCERIDE LEVELS IN OBESIVE RATS"

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ABSTRACT

Obesity is often associated with increased fat accumulation in adipose tissue, where this condition can affect lipid metabolism including increasing triglyceride production in the blood. Robusta green coffee brew contains antioxidants in the form of chlorogenic acid which can bind the density of lipoprotein substances by blocking the action of pancreatic amylase and lipase enzymes in the intestine, so that the process will inhibit the hydrolysis of triglycerides into fatty acids and monoglycerides. The aim of this research was to determine the effect of steeping robusta green coffee on triglyceride levels in obese mice. This research uses a true experimental design with a pretest-posttest approach with control group design. The number of samples used was 27 male white wistar rats. Random sampling was divided into 3 groups. The negative control group was given standard feed, the positive control group and the treatment group were given high-fat feed in the form of 2 grams of liquid beef fat and 1 gram of fructose for 42 days. The difference was that the treatment group was given additional steeping of 3,6 ml of Robusta green coffee per day for 28 days. Data were analyzed using the Kruskal Wallis test and Wilcoxon test. The results of the study showed that there was no difference in triglyceride levels between groups before giving the intervention ($p=0,230$) and there was a difference in triglyceride levels between groups after giving the intervention ($p=0,015$). The conclusion of this study is that there is an effect of steeping robusta green coffee on the triglyceride levels of obese mice with initial triglyceride levels in the normal range.

Keywords : *Steeping Robusta Green Coffee, Triglyceride Levels, Obesity*