

“ EFFECT OF FEEDING ROBUSTA GREEN COFFE ON HDL LEVELS IN OBESIVE RATS”

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ABSTRACT

Obesity is a disorder characterized by excessive accumulation of fat tissue in the body due to an imbalance between incoming energy and outgoing energy. Insulin resistance can occur due to obesity, this is caused by an excessive increase in free fatty acids (FFA). Prevent obesity by consuming food containing antioxidants, one of which is chlorogenic acid. Robusta green coffee is coffee beans from robusta coffee beans that have not been roasted. Chlorogenic acid effectively reduces weight gain and fat accumulation by inhibiting fat absorption and activating fat metabolism in the liver. Caffeine can suppress fat cell differentiation by preventing the release of C or EBP α and PPAR γ . The aim of this study was to determine the effect of steeping robusta green coffee on HDL levels in obese mice. This research uses a true experimental design with a pretest-posttest approach with control group design. This study used 24 male white Wistar rats, aged 2-3 months and weighing 150-200 grams. The negative control group (K-) was given standard feed of 20 gr/head/day, the positive control group (K+) was given high-fat feed in the form of 2 grams of liquid beef fat/head/day and 1 gram of fructose/head/day for 42 days, while The treatment group (P) was given high-fat feed in the form of 2 grams of liquid beef tallow/head/day and 1 gram of fructose/head/day as well as 3.6 ml of robusta green coffee brewed/day for 28 days. The results of this study showed that the HDL levels of each group before and after the Robusa green coffee brewing intervention had a significant difference in the positive control group using the Wilcoxon test ($p=0.035$) while there was no significant difference in the negative control group using the Pairet T-Test ($p =0.051$) and the treatment group used the Pairet T-Test ($p = 0.190$). Giving brewed robusta green coffee was not able to increase HDL levels in mice

Keywords: *HDL, Obesity, Robusta Green Coffee Brewing*