Potential of Robusta Green Coffee Powder Sediment against HDL Levels Rat Hyperlipidemia

Atika Arifiana Yaumil Isri

Clinical Nutrition Study Program
Department of Health

ABSTRACT

Hyperlipidemia is a condition of excess lipid levels or cholesterol metabolism disorders caused by cholesterol levels in the blood exceeding normal limits. Steeping robusta green coffee powder contains chlorogenic acid which functions as an antioxidant and can help increase HDL levels. The purpose of this study was to determine the potency of steeping robusta green coffee powder on HDL levels of hyperlipidemic rats. This study used a True Experimental experimental method with a pretest-posttest control group design research design. The sampling technique used was random sampling with a sample size of 27 rats which were divided into 3 groups, namely the negative control group, the positive control group and the treatment with the provision of robusta green coffee powder as much as 3.6 ml/ day containing 4.37 mg chlorogenic acid for 28 day. The results of this study were analyzed using the Paired t-test and One Way Anova test. There was a difference in the reduction of HDL levels in the pretest and posttest of 5.69 \pm 12.77 in the treatment group by consuming robusta green coffee powder brew. There was no difference in the provision of robusta green coffee powder brewing on the HDL levels of rats. The conclusion of this study is that there is no significant difference in HDL levels between the negative control group, the positive control group and the treatment group before giving robusta green coffee powder with a p value of 0.940, there is no significant difference in HDL levels between the negative control group, the positive control group and the treatment group, treatment group after giving robusta green coffee powder p value 0.416, there was no significant difference between treatment groups before and after with p value 0.154, the percentage change in HDL levels before and after steeping robusta green coffee powder was 14.01%, no potential steeping robusta green coffee powder against HDL levels of Hyperlipidemic rats.

Keywords: Hyperlipidemia, Robusta Green Coffee, HDL levels