

Brewed Red Betel Leaf Powder and Black Tea Against HDL Levels in Hyperlipidemic White Rats

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ABSTRACT

Hyperlipidemia is a lipid profile abnormality that occurs due to increased triglyceride levels, total cholesterol, LDL, and decreased HDL levels. Antioxidants including flavonoids found in red betel leaves and black tea can help to increase HDL cholesterol levels. The purpose of this study was to determine the potential of steeping red betel leaf powder and black tea against HDL levels of hyperlipidemic white rats. The type of research used is True Experimental with a pretest-posttest with control Group research design with purposive sampling. The sample used was Wistar rats with male sex aged 2-3 months, body weight 150-300 grams. The sample is then grouped into 3 groups: Control (-), Control (+), and treatment. Brewed red betel leaf powder and black tea were given at a dose of 0.642 ml / kg per day for the treatment group. HDL cholesterol levels were measured by the Direct Immunoinhibition method. Then the data were analyzed using the Shapiro Wilk normality test and the One Way Anova test to analyze differences between groups. Paired T-Test to analyze the differences in the pretest-posttest of each group and determine the potential steeping of red betel leaf powder and black tea. Paired T-Test results HDL cholesterol levels increased 0,7 mg/dL in the treatment group and there was no significant difference ($p = 0.870$). Intervention of steeping red betel leaf powder and black tea with a dose of 16,05 / kgBB doesn't have the potential to change HDL cholesterol levels..

Keyword: Steep red betel leaf powder and black tea, Hyperlipidemia, Flavonoids