The Effect of Giving Salak Beans Coffee Brewing (Salacca edulis Reinw.) to Total Cholesterol Levels in Rats Induced by a High Fat Diet

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ABSTRACT

Total cholesterol is the amount of cholesterol carried in all cholesterolcarrying particles in the blood, including High Density Lipoprotein (HDL), Low Density Lipoprotein (LDL), and Very Low Density Lipoprotein (VLDL). Increased total cholesterol level is one of the causes of the increased risk of noncommunicable diseases as well as the main factor causing dyslipidemia. Efforts that can be made to reduce total cholesterol levels are non-pharmacological therapies containing flavonoids, one of which is salak beans coffee brewing. The purpose of this study was to determine the effect of Salak Beans Coffee Brewing (Salacca edulis Reinw.) on total cholesterol levels in dyslipidemic rats. This type of research is true-experimental pretest – posttest with control group design. This study used 24 male wistar rats aged 2-3 months with a body weight of 170-200 grams. Rats were divided into three groups (K-, K+ and P). Cholesterol levels were checked by the CHOD-PAP method. Data analysis used the normality Shapiro-Wilk test, One Way Anova Test, Bonferroni Post Hoc test, Kruskal-Wallis test, and Paired T-Test. The results showed that there were no differences in total cholesterol levels between groups before treatment (p=0.086), there were differences in total cholesterol levels between groups after treatment (p = 0.012), there were differences in total cholesterol levels in the treatment group (P) before and after treatment (p=0.045), there was no difference in difference in total cholesterol levels before and after treatment (p = 0.080), there was no effect of salak beans coffee brewing on total cholesterol levels in rats induced by high-fat diet.

Keywords: High-fat diet, total cholesterol, flavonoids, salak beans coffee brewing