The Effect of Salak Beans Coffee Steeping (*Salacca edulis Reinw*) on Fasting Blood Glucose Levels in Diabetes Mellitus Rat

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ABSTRACT

Diabetes mellitus is a metabolic disease characterized by hyperglycemia due to disturbances in insulin secretion, insulin activity or both. Efforts that can be made to reduce fasting blood glucose levels are by consuming functional drinks that contain flavonoid antioxidants, one of which is salak bean coffee. The purpose of this study was to determine the effect of steeping salak coffee (*Salacca edulis reinw*) on fasting blood glucose levels in diabetic rats. This type of research is *true-experimental* with *pretest-posttest with control group design*. This study used 24 male white rats of the wistar strain aged 2-3 months, weighing 200-300 grams. Rats were divided into three groups (K-, K+, P). Blood glucose levels were checked by the GOD-PAP method. Data were analyzed using the *Shapiro Wilk normality test, One Way Anova test, Kruskall Wallis test, Mann-Whitney test*, and *Wilcoxon test*. The results showed that there were differences in fasting blood glucose levels between groups before treatment (p=0.037), there were differences in fasting blood glucose levels between groups after treatment (p=0.006), there were no differences in fasting blood glucose levels before and after treatment (p>0 0.05), there was a difference in fasting blood glucose levels before and after treatment (p = 0.015). It can be concluded that give of salak beans coffee steeping has an effect on reducing fasting blood glucose levels, but has not yet reached the normal value for fasting glucose levels.

Keywords: *Diabetes Mellitus, Fasting Blood Glucose Level, Salak Bean Coffee*