

The Effect of Steeping Salak Bean Coffee (*Salacca edulis* Reinw) on Blood
Glucose 2 Hours Post-prandial in Diabetes Mellitus Rats

Maghfirotul Fathimiyah

Clinical Nutrition Study Program

Department of Health

ABSTRACT

Salak Seed Coffee contains high levels of antioxidants. The content of flavonoids affects blood glucose 2 hours post prandial, there is a mechanism in inhibiting phosphodiesterase by preventing oxidative stress that causes complications in DM patients. The purpose of this study was to determine the effect of steeping salak coffee (*Salacca edulis* Reinw) on diabetic rats. This study used 24 male wistar rats with a body weight of 200-350 grams, aged 2-3 months. Rats were divided into 3 groups, a negative control group, a positive control group induced by streptozotocin, and a treatment group induced by streptozotocin and intervention with 4 ml of salak coffee beans for 14 days. Data were collected pretest and posttest by fasting for 2 hours after eating the mice and then taking blood through the orbital sinus of the eye. The results were analyzed by the Kruskal Wallis test, followed by the Mann-Whitney test. The test results of the treatment group had a median blood glucose level of 2 hours postprandial pretest of 209.5 mg/dL and posttest of 179 mg/dL had a significant value of $p = 0.575$ which means there is no significant difference between blood glucose levels 2 hours postprandial pretest and posttest . It can be concluded that there is no effect of steeping salak coffee beans on blood glucose levels 2 hours postprandial in diabetes mellitus rats before and after treatment.

Keywords: Salak coffee beans, Blood Glucose Levels 2 Hours Post-Prandial, Antioxidants.