

ABSTRACT

Background: Hypercholesterolemia is a condition where cholesterol levels in the blood are at least 240 mg/dL. *Solanum betaceum* contains active substances that can lower total blood cholesterol levels. This study aimed to see the effect of giving tamarillo (*Solanum betaceum*) juice on reducing total cholesterol levels in Wistar white rats.

Method: This research is experimental research with Pre and Post Test Randomized Controlled Group Design. using 24 male white rats of the Wistar strain, the rats were grouped into 4 groups which were randomly selected, namely the basal group A without treatment, treatment groups B, C and D given a high fat diet + PTU induction and tamarillo juice (*Solanum betaceum*) dose of 75 mg / ml, 150 mg / ml and 250 mg / ml, for 26 days. Data analysis used the T-paired test, then the Oneway-ANOVA test and continued with the Post Hoc Test.

Results: The results of the paired T test showed a significant difference in total cholesterol levels in each treatment group between after induction of a high-fat diet + PTU and after administration of tamarillo juice ($P < 0.05$). In the results of the Oneway ANOVA test, P value = 0.040 ($P < 0.05$), it can be concluded that there is a significant difference in total cholesterol levels between the treatment groups after giving juice.

Conclusion: From the results of the study it was concluded that the administration of turquoise eggplant (*Solanum betaceum*) juice had an effect on reducing total cholesterol levels in white rats.

Keywords: Tamarillo (*Solanum betaceum*), hypercholesterolemia, cholesterol level, *Rattus novergicus*