

The Effect of Giving Gembili Flour Snack Bar (*Dioscorea Esculenta*) and Soybean Flour
(*Glycine Max*) on Triglyceride Levels of White Rats
(*Rattus Novergicus*) Hypercholesterolemia

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ABSTRACT

Hypercholesterolemia is a condition of impaired cholesterol metabolism caused by increased cholesterol levels that exceed normal limits. Hypercholesterolemia can occur when the concentration of total cholesterol 240 mg/dl, LDL 160 mg/dl, and triglycerides 150 mg/dl. Increased levels of triglycerides in the blood can increase the risk of coronary heart disease and metabolic syndrome. Non-pharmacological therapy is done by providing intake of high-fiber nutrients that can reduce triglyceride levels in the blood. One of the high-fiber foods is a snack bar made of 90 g of gembili flour and 10 g of soybean flour which contains 7.16% fiber. The purpose of this study was to determine the effect of giving a snack bar made from gembili tubers and soybean flour as a combination of the use of the drug simvastatin on triglyceride levels in white rats (*Rattus novergicus*) hypercholesterolemia. This type of research is True experimental with Pretest-Posttest Control Group Design approach. The samples used in this study were white rats (*Rattus novergicus*) wistar strain with male sex totaling 18, 2-3 months old and weighing 150-250 g which were divided into 3 groups, namely the negative control group (K-), positive control (K+), and treatment (P). The design in this study used the Pretest-Posttest with Control Group Design. The negative control group (K-) was only given standard feed. The positive control group (K+) was given a diet high in fat, 0.01% PTU and a standard diet. While the treatment group (P) was given a diet high in fat, 0.01% PTU, snack bar and standard feed. The results showed that there was no difference in triglyceride levels before and after the intervention in the negative control group ($p = 0.893$), positive control ($p = 0.116$), and treatment ($p = 0.345$). So it can be concluded that there is effect of giving gembili flour and soybean flour snack bars on triglyceride levels in white rats (*Rattus novergicus*) hypercholesterolemia.

Key word : *Snack bar with gembili flour and soybean flour, Triglyceride levels, Hypercholesterolemia.*