The Effct of Giving Gembili Flour (Dioscorea Esculenta) and Soybean Flour (Glycine Max) Snack Bar on Body Weight Changes in White Rats Strain Wistar Hypercholesterolemia

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ABSTRACT

Hypercholesterolemia is a disorder in which cholesterol levels that exceed the normal limit are a total of 200 mg/dl. Non-pharmacological therapy for people with hypercholesterolemia is to consume high fiber. One of the high-fiber foods is a snack bar made with 90 grams of gembili tubers and 10 grams of soybean flour which contains 7.16% fiber. The purpose of this study was to determine the effect of giving gembili flour and soy flour snack bars as a combination of the use of the drug simvastatin on changes in body weight of hypercholesterolemic Wistar rats. The research design used in this study is a True Experimental study with a Randomized Pretest-Posttest Control Group Design approach. This study used 18 rats with the age of 2-3 months and body weight of 150-250 grams which were divided into 3 groups, namely the negative control group, the positive control group, and the treatment group. The negative control group was only given standard feed and drinking water ad libitum. The positive control group was given a high fat diet, simvastatin drug, standard feed and PTU 0.01% ad libitum. While the treatment group was given a high-fat diet, simvastatin, snack bar with gembili flour and soybean flour, standard feed and PTU 0.01% ad libitum. The results showed that there was a difference in body weight between the pretest negative control group and the posttest negative control group (p = 0.028) and the pretest and posttest treatment

groups (p = 0.046). However, there was no difference in body weight between the positive pretest group and the positive posttest group (p = 0.249). So it can be said that there is an effect of giving gembili flour and soybean flour snack bars on the body weight of hypercholesterolemic wistar rats.

Keywords: Gembili flour and soybean flour snack bar, Body Weight, Hypercholesterolemia.