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ABSTRACT

Consumption of high-fat foods can cause various diseases such as hyperglycemia, obesity, insulin resistance, hypertension, and lipid disorders such as a decrease in High Density Lipoprotein (HDL) cholesterol and an increase in triglyceride levels in the blood. In addition, consumption of high-fat foods is also a risk factor for hypercholesterolemia. One of the efforts to reduce triglyceride levels can be done by consuming functional drinks that contain vitamin C such as starfruit and red guava juice. The purpose of this study was to determine the effect of giving a combination of starfruit and red guava juice on triglyceride levels in rats induced by a high-fat diet. This type of research is true-experimental with a pretest posttest design with a control group. The rats used were 17 male Wistar rats with a body weight of 130-230 grams, colored 2-3 months. Rats were divided into 3 groups: the negative control (K-) was given Rat Bio and drinking water ad libitum, the positive control (K+) was given HFD feed in the form of 55% rat bio, 10% margarine, 20% beef fat, and 15% coconut milk powder. 30 ml/head/day for 70 days, and treatment (P) was given HFD feed in the form of 55% rat bio, 10% margarine, 20% beef fat, and 15% coconut milk powder as much as 30 ml/head/day and a combination of starfruit juice and red guava 6.6 ml/rat/day given 2 times a day for 14 days. Triglyceride levels were measured using the GPO-PAP method and statistically analyzed using One Way Anova, Kruskal Wallis and Paired T Test. The results of the triglyceride level test on the pretest data showed that there was no significant difference between groups (p=0.267). The results of the triglyceride level test on the posttest data showed that there was no significant difference between groups (p=0.393). There was no significant difference in the test results for differences in triglyceride levels pretest and posttest (p=0.962). Administration of a combination of starfruit and guava juice had no effect on triglyceride levels in rats induced by a high-fat diet.

Keywords: High Fat Diet, Combination of Belimbing Wuluh and Red Guava Extract, Triglycerides