ABSTRAK


**Kata kunci**: Cholesterol, Fatty Liver.

Cholesterol is a component of fat, and one of the nutrients needed by the body as well as other nutrients. Fat to be one source of energy that have the highest calories. Normal cholesterol levels 200mg/dl, but if the excess cholesterol in the blood, it will cause disease, such as coronary heart disease, stroke, diabetes, impotence, and fatty liver. Research was conducted aiming to find out is there any difference in the Old Giving effect on fatty liver Cholesterol Diet (Fatty Liver) on the White Rat (Rattus norvegicus).

This research is experimental with a Completely Randomized Design (CRD). The sample consisted of 50 fish-sex male Rattus norvegicus 2 months old and weighed 100-150 grams. Rats treated with 2 kinds of diets, namely a normal diet and dietary cholesterol. By using 4 treatments which is 2 weeks, 4 weeks, 8 weeks and 12 weeks. Rats were divided into 5 replicates. Data percentage of fatty tested using ANOVA two-lane (two way) who previously performed with the parametric test Levenes test Test, Kolmogorov-Smirnov test and further tested with LSD 5% level. If the data does not meet the criteria of the test parameters of Brown-Forsythe and Welch then tested further by Thamhane test.

The results showed that the Brown-Forsythe test calculation of the level of fatty liver cells obtained Fcount 79,73 with sig 0.00 or α <0,05, whereas the Welch test is obtained Fcount 201,29 with sig 0,00 or α <0,05. It shows that there is significant difference in duration of dietary cholesterol on the fatty liver (Fatty Liver) on Rattus norvegicus. While the ANOVA calculation mikroanatomi damage liver cells obtained Fcount 196,565 with sig 0,00 or α <0,05. It shows that with treatment duration of 2 weeks, 4 weeks and 8 weeks may cause fatty liver in the cell. At 12 weeks old, poorer not so significant for the increase in fatty liver, this is because the 8-week treatment on rat liver cells already have the maximum fatty.