## Differences Of Giving Sugar Solution And Palm Sugar Solution Towards Triglyceride Levels In Male Wistar Rats (Rattus Norvegicus)

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## ABSTRACT

Sugar is a carbohydrate compound, when it enters the body it will be absorbed directly to be converted into energy. Granulated sugar is made from sugar cane juice while palm sugar is made from palm sap. The high consumption of sugar and carbohydrates can result in increased blood glucose levels followed by increased triglyceride levels. This study aims to analyze the difference between giving a solution of granulated sugar and palm sugar solution to the triglyceride levels of male wistar rats (Rattus norvegicus). This type of research is pure experimental (True experimental) with a pretest-posttest research design with control group design. This study used a sample of 25 male wistar rats with criteria aged 2-3 months with a body weight of 150-250 grams. Rats were divided into 5 groups, namely control group (only given standard feed), P1 (standard feed and palm sugar solution 4.5 grams/day, P2 (standard feed and sugar solution 4.5 grams/day), P3 (standard feed and sugar solution 4.5 grams/day). and palm sugar solution 2.25 gram/day), and P4 (standard feed and granulated sugar 2.25 gram/day). The granulated sugar solution and palm sugar solution were given to the treatment group for 28 days. Triglyceride levels were checked by the Enzymatic End method. Point, Data were analyzed using One Way Anova test, Kruskal Wallis test, Paired T-Test, and Wwilcoxon test. The results of pre-test and post - test showed that there were differences in triglyceride levels in the control group, P2, and P3 (p < 0.05), while there was no difference in groups P1 and P4 (p>0.05), so it can be concluded that in normal doses of 4.5 grams and 2.25 grams, granulated sugar solution and palm sugar solution are safe to consume as long as they are within normal limits and appropriate with need.

Keywords : Granulated Sugar, Palm Sugar, Triglyceride Level