## Effect of Giving a Combination of Red Guava Juice and Red Dragon Fruit on LDL Levels of Hypercholesterolemia White Rats

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## **ABSTRACT**

Hypercholesterolemia is a condition where lipid levels in the body exceed normal limits which can be characterized by an increase in total cholesterol levels and LDL levels. LDL becomes the main atherogenic lipoprotein that causes atherosclerosis. One of the efforts to reduce LDL levels is to eat foods that contain antioxidants and fiber, one of which is a combination of red guava and red dragon fruit. This study aims to determine the effect of giving a combination of red guava juice and red dragon fruit on LDL levels of white rat dyslipidemia. This type of research is true experimental with a pre-posttest design with control group. This study used 28 wistar male rats weighing 100-300 grams. The rats were divided into 4 groups, namely negative controls given rat bio and drinking water ad libitum, positive controls given rat bio, high-fat induction and PTU, treatment 1 given rat bio, high-fat induction, PTU, and simvastatin, treatment 2 given rat bio high-fat induction, PTU, simvastatin and a combination of red guava juice and red dragon fruit. Data analysis used Shapiro Wilk, Levene, One Way Anova, Kruskal Wallis, Paired T-Test and Wilcoxon tests. The results showed that there were no significant differences between groups before the intervention (p=0.816), no significant differences between groups after the intervention (p=0.261), no significant differences in LDL levels in each group before and after the intervention (p>0.05), and no significant differences in LDL levels between groups before and after the intervention (p = 0.645). It was concluded that there was no effect of giving a combination of red guava juice and red dragon fruit on LDL levels of hypercholesterolemia white rats.

Keywords: Hypercholesterolemia, LDL, Red Dragon Fruit, Red Guava