

***The Effect of Giving a Combination of Red Guava and Red Dragon Juice on Total Cholesterol Levels in White Rats Hypercholesterolemia***

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**ABSTRACT**

*Hypercholesterolemia is a condition which cholesterol levels in blood exceed normal limit, which is > 200 mg/dL. The combination of red guava juice and red dragon fruit contains flavonoids, fiber, and vitamin C which have an effect on reducing total cholesterol levels. This study aims to determine the effect of the combination of red guava juice and red dragon fruit on total cholesterol levels in hypercholesterolemic rats. This type of research is True Experimental with Pretest-Posttest Control Group Design. This study used 26 male wistar white rats aged 2-3 months with a body weight of 150-300 grams. Rats were divided into 4 groups: the negative control group (K-) was given Rat Bio feed, the positive control group (K+) was given a high-fat diet, treatment group 1 (P1) was given a high-fat diet and simvastatin, and treatment group 2 (P2) given a high-fat diet, simvastatin, and a combination of red guava juice and red dragon fruit 8.8 ml/day. Total cholesterol levels were checked using the CHOD-PAP method. Data were analyzed using SPSS v.25 software. The results showed that there was a significant difference in the total cholesterol level of the hypercholesterolemic rats before the intervention ( $p=0.038$ ), there was no significant difference in the total cholesterol level of the hypercholesterolemic rats between the groups after the intervention ( $p=0.122$ ), there was a significant difference in the total cholesterol level of the treatment group. 2 (P2) before and after the intervention ( $p=0.025$ ), the difference in total cholesterol levels of hypercholesterolemic rats between groups before and after the intervention showed no significant difference ( $p=0.280$ ). The conclusion of this study was that the combination of red guava juice and red dragon fruit had no effect on total cholesterol levels in hypercholesterolemic rats.*

**Keywords:** *Hypercholesterolemia, red dragon fruit, red guava, total cholesterol.*