Efektiveness of Giving a Combination of Red Dragon Fruit Juice with Virgin Coconut Oil Against HDL Levels of Sprague dawley Rats Dyslipidemia

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ABSTRACT

Dyslipidemia is an abnormality in the metabolism of lipid profile marked by an increase in total cholesterol levels, LDL cholesterol, triglyceride, and a decrease in HDL cholesterol. Combination of red dragon fruit juice with Virgin Coconut Oil contains antioxidant flavonoids that can help increase HDL levels in the blood. The purpose of this study was to determine the effectiveness of giving a combination of red dragon fruit juice with Virgin Coconut Oil against HDL levels of Sprague dawley rats dyslipidemia. This study used a True Experimental design with a Pretest-Posttest design with a Control Group Design. The sampling technique used was random sampling with a total sample of 27 rats which were divided into 3 groups. The negative control group was given a standard diet, the positive control group was given high fat feed and PTU as much as 1.08 ml/days/200 gram BB during 28 days continued until completion of research, and the treatment group was given high fat feed and PTU as much as 1.08 ml/days/200 gram BB and combination of red dragon fruit juice with Virgin Coconut Oil as much as 2 ml/days/200 gram BB during 15 days. The results of this study were analyzed using one way ANOVA test, Kruskal Wallis, and Paired T-Test. The result showed there were no differences in pretest HDL levels (p = 0.120), and no differences in posttest HDL levels (p = 0.083). However, rats have been said dyslipidemia because LDL levels have increased. And there are no differences in pretest and posttest HDL levels in the K(-) (p = 0.682), but there were significant differences in the K(+) (p = 0.017) and P (p = 0.008). There was no difference in the difference in HDL levels before and after the intervention (p = 0.192). The conclusion of this study is that after giving a combination of red dragon fruit juice with Virgin Coconut Oil still not effective in increasing HDL levels in Sprague dawley Rats Dyslipidemia.

Keywords: Dyslipidemia, flavonoids, HDL levels, combination of red dragon fruit juice with Virgin Coconut Oil