The Effect of Giving Red Dragon Fruit Syrup on HDL Levels in Hypercholesterolemia White Rats

(The Effect of Giving Red Dragon Fruit Syrup on HDL Levels in Hypercholesterolemia White Rats)

> Nur Erlina Wulan Dari Clinical Nutrition Study Program Department of Healt

ABSTRACT

Hypercholesterolemia is a disorder of lipid metabolism, one of which is characterized by a decrease in HDL levels in blood plasma. Red dragon fruit is a fruit that contains flavonoids in the flesh and skin of the fruit. The content of flavonoids can increase HDL levels in the blood by increasing the activity of LCAT (Lecithin Cholester Transferase). The purpose of this study was to determine the effect of giving red dragon fruit syrup on HDL levels of hypercholesterolemic white rats. This type of research is true-experimental with pretest-posttest design with control group. The rats used were 15 male wistar rats weighing 130-230 grams aged 3-4 months. Rats were divided into 3 groups, namely group (K-), group (K+) and group (P). The group (K+) was given a highfat diet in the form of egg yolk at a dose of 2 ml/day by sonde and PTU 0.01% ad libitum for 28 days. Group (P) was given red dragon fruit syrup at a dose of 10.3 ml/rat/day for 14 days. HDL level data were statistically analyzed using One Way Anova or Kruskal Wallis and Willcoxon tests. The results of the HDL level test on pretest and posttest data showed that there was no significant difference between groups. The results of the HDL level test between the pretest and posttest showed that there was no significant difference in the (K-) group and the (K+) group, there was a significant difference in the (P) group. The results of the test of the difference between the pretest and posttest HDL levels, the significance value was P=0.097 (p>0.05), meaning that there was no significant difference between groups. Giving red dragon fruit syrup had no effect on HDL levels of hypercholesterolemic white rats.

Keywords: Hypercholesterolemia, HDL, Red Dragon Fruit Syrup