

The Effect of Giving Red Dragon Fruit Syrup on Total Cholesterol Level in Hypercholesterolemia White Rats (*The Effect of Giving Red Dragon Fruit Syrup on Cholesterol Level in Hypercholesterolemia White Rats*).

Ruhil Fara Ziela

Clinical Nutrition Study Program
Department of Health

ABSTRACT

Hypercholesterolemia is the presence of high levels of cholesterol in the blood. Efforts to reduce cholesterol levels are by consuming functional drinks that contain antioxidants, one of which is red dragon fruit syrup. The purpose of this study was to determine the effect of giving red dragon fruit syrup on total cholesterol levels in hypercholesterolemia white rats. The type of research is true-experimental with pretest posttest with control group design. This study used 15 wistar rats with body weight ranging from 130-230 grams and 2-3 months old. Rats were divided into 3 groups: negative control (K-) given Rat Bio feed and drinking water ad libitum, positive control (K+) given additional quail egg yolk 2 ml/rat/day and PTU 0.01% ad libitum for 28 days, and the treatment group (P) was given additional quail egg yolk 2 ml/rat/day, PTU 0.01% ad libitum, red dragon fruit syrup 10.3 ml/day given 3 times/day for 14 days. Total cholesterol levels were measured by the CHOD-PAP method. Data were analyzed by One Way Anova, Kruskal Wallis, Man Whitney, Paired T-Test. The results showed that there were significant differences in pretest total cholesterol levels ($p=0.002$). There was a significant difference in posttest total cholesterol levels ($p=0.042$). There was no difference in pretest and posttest total cholesterol levels in group K(-) ($p=0.137$) and K(+) ($p=0.398$), there was a difference in total cholesterol levels in pretest and posttest in group P ($p=0.013$). There is a difference between the total cholesterol pretest and posttest (0.006). The conclusion of this study is that red dragon fruit syrup can reduce total cholesterol levels in hypercholesterolemia white rats.

Keywords: Hypercholesterolemia, Red Dragon Fruit Syrup, Total Cholesterol