

The Effectiveness of the Combination of Red Dragon Fruit Juice with Virgin Coconut Oil to Cholesterol Levels in Sprague Dawley Rats Dyslipidemia

Winda Kristina

Clinical Nutrition Study Program

Department of Health

ABSTRACT

Red dragon fruit is a fruit that is used as a source of antioxidants, red dragon fruit is believed to reduce cholesterol levels. The content of antioxidants (flavonoids) in red dragon fruit is 38.9 mg / 100 g from laboratory results. Previous research stated that giving red dragon fruit extract to each group was very effective in reducing rat blood cholesterol. Apart from red dragon fruit, one of the processed products that can lower cholesterol is virgin coconut oil. Virgin coconut oil or VCO is pure coconut oil derived from fresh coconut which has been scientifically processed without chemical additives. antioxidant components (flavonoids) of 9.3 mg / 100 grams from laboratory results. The purpose of this study was to determine the effectiveness of giving a combination of red dragon fruit juice with virgin coconut oil on cholesterol levels in Sprague Dawley dyslipidemia rats. This type of research is experimental research (True Experimental). The research design used was a design (pretest-posttest control group design). The samples used were male white rats aged 2-3 months and weighing 150-250 g, induced by a high fat diet of HFD (High Fat Diet), PTU sonde and 0.5% Na CMC for 28 days, and given red dragon fruit juice with virgin coconut oil dose of 2 ml / day for 15 days. Total cholesterol levels were checked by the CHOD-PAP method. The results of this study were analyzed using the One Way ANOVA test, Kruskal Wallis and Paired T-Test. The results showed that there was a significant difference in pretest cholesterol levels ($p = 0.002$) and there was a significant difference in posttest cholesterol levels ($p = 0.000$). And there was no difference between pretest and

posttest cholesterol levels in the (K-) group ($p = 0.451$), there were differences in cholesterol levels in the pretest and posttest in the (K +) group ($p = 0.040$), and in the P group ($p = 0.008$). There was no difference in cholesterol levels before and after the intervention ($p = 0.295$). The conclusion of this study is that after giving a combination drink of red dragon fruit juice with virgin coconut oil, it is still not effective in reducing cholesterol levels of Sprague Dawley rats with dyslipidemia.

Keywords: Red Dragon Fruit Juice with Virgin Coconut Oil, Cholesterol Levels, Dyslipidemia