

The Effect of Giving a Combination of Starfruit Wuluh and Red Guava Juice on Total Cholesterol Levels in White Rats Wistar 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 wuluh starfruit and red guava juice contains antioxidants such as vitamin C, flavonoids, saponins and pectin which act as antihypercholesterolemic affects of decrease in total cholesterol levels. This study was aimed to determine the effect of the combination of starfruit and red guava juice on total cholesterol levels of hypercholesterolemic Wistar white rats. The type of research used is True Experimental with Pretest-Posttest Control Group Design. This study used 20 male Wistar rats aged 3-4 months with weighing 100-300 grams. Rats were divided into three groups: negative control group (K-) was given standard Rat Bio feed, positive control group (K+) was given a high cholesterol diet and treatment group (P) was given a high cholesterol diet and combination of wuluh starfruit and red guava juice 7,2 ml/rat/day. Total cholesterol levels were checked using CHOD-PAP method. Data were analyzed using SPSS v.25. The results showed that there was a significant difference in total blood cholesterol levels of hypercholesterolemic white rats between groups before intervention ($p=0.023$), there was a significant difference in total blood cholesterol levels of hypercholesterolemic white rats between groups after intervention ($p=0.004$), there was no significant difference the total blood cholesterol level in treatment group (P) before and after intervention ($p=0.172$), the results of the difference test in total blood cholesterol levels of hypercholesterolemic white rats between groups before and after the intervention there was no significant difference ($p = 0.086$). The conclusion of this study was that the combination of star fruit juice and red guava had no effect on total cholesterol levels in hypercholesterolemic rats.

Keywords: *Star fruit wuluh, red guava, hypercholesterolemia, total cholesterol.*