

The Effect of giving the steeped Rosella Purple (Hibiscus sabdariffa) towards the amount of LDL and HDL blood serum in hypercholesterolemia white rats (Rattus novergicus strain wistar) Pengaruh Pemberian Seduhan Rosella Ungu (*Hibiscus sabdariffa*) Terhadap Kadar LDL dan HDL Serum Darah Tikus Putih (*Rattus novergicus strain wistar*) Hiperkolesterolemia

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ABSTRACT

Hypercholesterolemia is one of the disruptions about the amount of the lipid inside blood marked by the increase of lipid fraction in form of total cholesterol, LDL and triglyceride, and also the decrease of the amount of HDL serum. Non pharmacology therapy is more favorable to society because of its less possibility of side effect compares to medical pharmacology therapy. One of the alternatives to reduce the amount of cholesterol inside blood is the consumption of healthy food which contains vitamin C, for example like steeped rosella. The amount of vitamin C in rosella purple's petal is as much as 214,68 mg per 100 gr. Several researches proved that vitamin C has the significant effect in reducing the amount of LDL serum and increasing the amount of HDL serum. The purpose of this research is to find out the effect of rosella steeped towards the level of LDL and HDL serum of hypercholesterolemia mice. This is a true-experimental with pretest - posttest and control group design. As many as 25 male mice weighed 100-200 gram aged 2-3 months are being experimented through this research. Mice are divided into 2 control groups and 3 treatment groups which rosella steeped were given to, by dose I 1,68 ml/day, dose II 2,52 ml/day and dose III 3,36 ml/day. The amount of LDL and HDL cholesterol were tested using Enzymatic End Point method. The data was examined with Paired T-Test and Kruskal-Wallis, continued by Mann Whitney, proceeded by One Way Anova and finished by Duncan. Rosella Steeped has significantly affected the decrease of cholesterol LDL serum of mice in treatment dose I ($p = 0,001$; $p < \alpha$), treatment dose II ($p = 0,010$; $p < \alpha$) dan group of dose III ($p = 0,001$; $p < \alpha$). It also increase the amount of HDL cholesterol in dose I ($p = 0,012$; $p < \alpha$), dose II ($p = 0,025$; $p < \alpha$) and treatment group within dose III ($p = 0,001$; $p < \alpha$).

Keywords: *Steeped rosella purple (*Hibiscus sabdariffa*), the amount of LDL and HDL serum, hypercholesterolemia.*