The Effect of Chocolate Drink on Total Cholesterol Levels in White Rats
Galur Wistar Dyslipidemia Model (Pengaruh Minuman Cokelat Terhadap Kadar Kolesterol Total Pada Tikus Putih Galur wistar Model Dislipidemia)

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ABSTRACT

Dyslipidemia is a disorder in lipid metabolism characterized by increased concentrations of total cholesterol levels, LDL levels, triglyceride levels and decreased HDL levels. High cholesterol levels can be non pharmacological. Pharmacological ways of using the drug simvastatin, which is a first-line therapeutic drug used to lower cholesterol levels, and non-pharmacological ways to use chocolate drinks with cocoa powder as a base ingredient which contains antioxidants and phenolic compounds including catechins, epicatechins, proanthocyanidins, folic acid, tannins, and flavonoids. Which can lower total cholesterol levels in the blood. The purpose of this study was to determine the effect of chocolate drinks on changes in total cholesterol levels in dyslipidemic white rats (Wistar's line). 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 months and weighing 150-200 grams, induced by a high-fat diet in the form of PTU and yellow quail eggs for 65 days, and intervened using simvastatin at a dose of 9ml / KgBB / day and a dose of 5 chocolate drink, 3ml containing 0.54 grams of cocoa powder/2xhari. Total cholesterol levels were checked by the CHOD-PAP method. Data were analyzed using the Shapiro Wilk test. The pretest and posttest data were analyzed using the Oneway Anova test. The average total cholesterol levels in the treatment group after the intervention were $P_1 = 42.00$ mg/dL, $P_2 = 49.60$ mg/dL and $P_3 = 69.40$ mg/dL. Chocolate drink did not significantly influence the reduction of total cholesterol levels $p = 0.253$ ($p > 0.05$) derived by means of pharmacology.

Key words: Chocolate Drink, Dyslipidemia, Total Cholesterol Levels