ABSTRACT


Background: Hypercholesterol is one of derangement of blood’s fat level. Hypercholesterol has strong correlation with albumin level. Cholesterol, trygliseride and LDL could teroksidasi, in result of the forming free radicals that could causing damage on endotel’s cell. This damage will form inflamed reaction that affecting the level of plasma albumin, and in result of triggering the risk coronary heart disease. Caffein and chlorogenat acid on coffee also volatile oil and thymoquinone on black cumin oil are known to increase albumin level of people with hypercholesterol. This research is aiming to know the effectiveness of coffee and black cumin oil intervention toward albumin level of Sprague dawley mice with hypercholesterol.

Method: This research is true experimental research with pre-post controlled group design on 30 mice that feed with high fat woof. 30 mice are divided into 5 groups, consist of control group –, control +, coffee intervention, black cumin oil, and the combination of coffee and black cumin oil. Analyzed is done into albumin level of pre and post intervention. Statistical analysis is using one way anova, continued with Duncan.

Result: Coffee intervention could increase mice’s albumin level for about 0.905 mgdl. Black cumin oil intervention could increase mice’s albumin level for about 1.934 mgdl. Intervention of the combination of coffee and black cumin oil could increase mice’s albumin level for 1.070 mgdl, Simvastatin intervention as the control + could increase mice’s albumin level for 2.535 mgdl. Otherwise mice with –control has decreasing albumin level for 0.135mgdl.

Conclusion: There is significant difference between coffee intervention, black cumin oil, and the combination of coffee and black cumin oil toward Sprague dawley mice albumin level. The most effective intervention to increase albumin level on hypercholesterol mice is black cumin oil.

Keyword: coffee, black cumin oil, albumin