

ABSTRACT

ANDHITYA PARAMITHA SUHARINI, NIM : G2B013017, 2017. THE EFFECTIVENESS OF COFFEE INTERVENTION (DEWEVREI COFFE) AND BLACK CUMIN (NIGELLA SATIVA) TOWARD SGOT AND SGPT LEVEL ON RATS SPRAGUE DAWLEY WITH HYPERCHOLESTEROL. First Advisor : Ali Rosidi, Second Advisor : Joko Teguh Isworo, Nutrition Science Program University of Muhammadiyah Semarang.

Introduction : The tendency to consume high cholesterol and fatty foods are being the risk of the raising level of blood lipid profile. The raising level of hypercholesterol may trigger fat piles in liver in result the raising of SGOT and SGPT level in blood. Excelsa coffee has hepatoprotective because it has anti oxidants activity, chemoprotective mechanism and anti fibrogenetic. The characteristic of hepaprotective on coffee is coming from main bioactive component which is caffeine, chlorogenant acid, cafestol, kahweol. The cumin oil contains thymoquinone which has a protective effect on the mechanism of liver toxicity. The effect of black cumin oil on blood cholesterol levels has hypocholesterolemic activity in the blood. This research is aiming to know the effectiveness of coffee intervention and black caraway seed toward SGOT and SGPT level on mice with hypercholesterol.

Methode : This research is experiment with *pre-post test group control design* conducted in PAU UGM Yogyakarta Laboratory as much as 30 male Sprague Dawley rats divided into 5 groups of treatment, control-, control+, coffee, black cumin oil and mixture between coffee and black cumin oil. Statistic analysis using different Anova test to determine the difference of SGOT and SGPT decrease in the five treatment groups. Followed by a Post Hoc Test to determine the level of significance in each of the different groups compared to the control.

Result : Coffee intervention for about 0.18 grams could lowering level of SGOT for about 3.48 U/I and SGPT for 2.18 U/I on rats with hypercholesterol. On giving black cumin oil for about 0.27 ml could lowering SGOT level for 17.80 U/I and SGPT for 5.18 U/I on rats with hypercholesterole. The intervention of the mixing of coffee and black cumin oil could lowering SGOT level for 9.63 U/I and SGPT for 3.97 U/I on mice with hypercholesterol.

Conclusion : Provision of coffee, black cumin oil, and a mixture of coffee and black cumin oil may decrease SGOT and SGPT levels and decrease in SGOT and SGPT levels by treatment 1 can't decrease significantly and treatment 2.3 significantly decreases

Keywords : Excelsa coffee, Black Cumin oil, sgot level, sgpt level, hypercholesterole