

## ABSTRACT

**AJENG FITRI WULANDARI, NIM: G2B013021, 2017. THE EXELSA COFFEE AND BLACK CUMIN INJECTION EFFECT AGAINST LOWERING LEVELS OF TRIGLYCERIDES AND BLOOD SUGARS ON SPRAGUE DAWLEY RATS. First Advisor: Ali Rosidi, Second Advisor: Yunan Kholifatuddin, Nutrition Science Program University of Muhammadiyah Semarang.**

**Introduction:** Hyperlipidemia is one of the biggest causes of death in the world characterized by elevated triglyceride levels. There is a link between elevated triglycerides and blood sugar. Exelsa coffee and black cumin oil contains high antioxidants that are believed to be able to help lower levels of triglycerides and blood sugar.

**Research Methode:** This research is true experimental research with Pre test Post test Controlled Group Design on 30 rats fed high fat diet. 30 rats were divided into 5 groups, 2 control groups and 3 experimental groups which treated by exelsa coffee and black cumin oil. Analysis of differences in triglyceride and blood sugar levels in pre and post treatment was performed. Statistical analysis used the *One Way ANOVA* nonparametric statistical difference test and continued with the Post Hoc (*Tamhane*) statistical test to determine the significant differences.

**Results:** Giving 0,18gr/day coffee can decrease triglyceride level as much as 8,45mg/dl and blood sugar levels is 49,15mg/dl. While in giving 0,27ml/day black cumin oil can decrease triglyceride levels of 40,1 mg / dl and blood sugar levels as much as 90,96mg/dl. And the other hand giving a mixture of coffee and black cumin oil can decrease triglyceride levels as much as 37,08mg/dl and blood sugar levels is 74,76mg/dl. The most effective treatment in lowering triglyceride levels and blood sugar is black cumin oil.

**Conclusions:** Giving black cumin oil and coffee mixture with black cumin oil can significantly decrease triglycerides, whereas coffee can not decrease triglycerides significantly. Giving of black cumin oil, a mixture of coffee with black cumin oil and coffee delivery can decrease blood sugar levels significantly.

**Keywords:** Exelsa coffee, Black Cumin Oil, Triglycerides, Blood Sugar, Hyperlipidaemia