ABSTRACT

The Effect of 95% Ethanol Extract of Javanese Long Pepper (*Piper retrofractum* Vahl.) to Total Cholesterol and Triglyceride Levels in Male Sprague Dawley Rats (*Rattus novergicus*) Administrated by High Fat Diet

by

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Background: Coronary heart disease is the leading causes of death in the world. One of its predisposing factor is high levels of total cholesterol and triglycerides. Javanese long pepper has piperine that can lowering the levels of total cholesterol and triglycerides. The purpose of this research was to find out the effect of javanese long pepper extract to total cholesterol and trygliceride levels in rats administrated by high fat diet.

Methods: 21 rats were randomly divided into 3 groups. Group A were given standard diet for 7 weeks. Group B were given 10 gram of high fat diet for 7 weeks. Group C were given 10 gram of high fat diet for 4 weeks and given 160 mg/Kg of javanese long pepper extract from 5th week until 7th week. Blood sample was taken from the heart in the end of the 7th week.

Results: Based on the *Post Hoc LSD* test, there was siginficant difference to total cholesterol and triglyceride levels between group A and group B ($p<0,05$), group B and group C ($p<0,05$) and group A and group C ($p<0,05$).

Conclusions: The results show that javanese long pepper extract has an effect to total cholesterol and triglyceride levels in rats administrated by high fat diet ($p=0,000$).

Keywords: high fat diet, javanese long pepper, total cholesterol, triglycerides