ABSTRACT

The Effect of Ethanol Extract 95% of Long Pepper (*Piper retrofractum* Vahl.) on HDL Levels in Male Sprague-Dawley Rats Administrated by High Fat Diet

By

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Cardiovascular disease is the major cause of mortality worldwide. Low level of *High Density Lipoprotein* (HDL) is the predisposition factor of this diseases. Existing treatments can causes several side effects. The negative impacts can be minimalized by using *Piper longum*.

The aim of this research is to know the effect of long pepper (*piper retrofractum* vahl.) extract on HDL levels. This is an experimental research with Post Test Only Control Group Design, used 21 male sprague dawley rats and simply randomize into 3 groups. Group A had standard diet in 7 weeks. Group B had high fat diet in 7 weeks. Group C had high fat diet in 4 weeks, then standard diet and ethanol extract 95% of long pepper with the dose 160 mg/kg in 3 weeks. The sample of blood was taken out in the end of 8th week.

The average of HDL levels are A (55.57 ± 2.07), B (22.00 ± 2.30), and C (38.71 ± 4.49). With one way ANOVA and continued with post hoc test, there are significantly difference between groups (p<0.05). So that ethanol extract 95% of long pepper has effect on HDL levels in male sprague dawley rats administrated by high fat diet.

**Key words**: hdl, high fat diet, long pepper