THE EFFECT OF 96% ETHANOL GARLIC EXTRACT
(*Allium sativum* L.) ON HIGH DENSITY LIPOPROTEIN (HDL) LEVEL
OF MALE WHITE RAT (*Rattus norvegicus*) Sprague dawley STRAIN ON
HIGH FAT DIET

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ABSTRACT

Dyslipidemia is a condition in which the body suffer from abnormal fat metabolism, and cannot continue its normal functions which is caused by intolerable high amount of fat in the body. This anomaly may trigger the occurrence of cardiovascular disease, such as heart disease and stroke. There are active compounds found in garlic that shows anticholesterol effect that is able to decrease the risk of dyslipidemia. This research was conducted to study the effect of 96% ethanol garlic extract on the escalation of HDL cholesterol level of rat on high fat diet.

The experiment was conducted for 28 days study of the effect of garlic extract. The result was investigated in a post-test only control group in 25 white male rats (*Rattus norvegicus* Sprague Dawley strain divided into 5 group (5 rats each). The negative control group (N) was given standard diet. Positive control group (KT) was given high fat diet. P1, P2, and P3 group was given high fat diet plus garlic extract accordingly 0.5 ml, 0.025 ml and 0.1 ml.

One-Way ANOVA test shows $p<0.05$ ($p=0.041$). Whereas the post hoc between KT-P1 ($p=0.182$) and KT-P3 ($p=0.603$) showed no significant mean different While N-KT ($p=0.034$) and KT-P2 ($p=0.060$) showed significant mean different.

The conclusion of this study is that garlic extract statistically showed no significant result in the escalation of HDL cholesterol level.

**Keywords**: Dyslipidemia, garlic, LDL cholesterol level.