

## ***ABSTRACT***

### **Anti-hypercholesterol Activity Test Using Combination of Dry Extract of Mangosteen Pericarp (*Garcinia mangostana* Linn.) and Garlic (*Allium sativum* Linn.) on mice induced by Alloxan**

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Many people often consume foods with high fat that increase the cholesterol level which consists of increasing the amount of cholesterol, LDL (Low Density Lipoprotein), triglycerides, and decreasing the level of HDL (High Density Lipoprotein). The purpose of this study is to test the activity of anti-cholesterol, it use a combination of dry extract of mangosteen pericarp (*Garcinia mangostana* L.) and garlic (*Allium sativum* L.) on alloxan-induced mice. For inducing the cholesterol, 25 mice were induced by alloxan (150 mg /kg body weight of mice) with intraperitoneal route and fed by high cholesterol diet (PTU 0.02%, 2%, pure cholesterol, and quail eggs). Then 25 mice were divided into 5 groups with 5 animals per group.

As a positive control is used atorvastatin (0.026 mg/20g body weight of mice). Negative control, 0.5% CMC-Na, corn starch, and compresscell. This study used three types of dose from the combination of dry extract of mangosteen perikarp and garlic (1:1; 2:1; 1:2) were used. Treatment and observation of blood cholesterol levels were done four times a week using a blood test measurement.

The results of analysis using SPSS showed that the combination of dry extract of mangosteen pericarp and garlic with ratio of 1:1 and 1:2 gave a significant different as compared to negative control, with the percentage of reduction value 21.35% and 19.73% respectively.

**Keywords :** Dry extract, *Garcinia mangostana* Linn., *Allium sativum* Linn., Anti-hypercholesterol, Alloxan.