

## **The Effect of Breadfruit (*Artocarpus altilis*) Leaves Stew on The Triglyceride Level of White Rats (*Rattus norvegicus*)**

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### **ABSTRACT**

*The background of the high level of SAFA (saturated fatty acid) may enhance the risk of diseases due to dyslipidemia. Dyslipidemia is lipid metabolism deviation of either increasing or decreasing one or more lipid profile in blood. The deviation on lipid metabolism often found is in both the increase of cholesterol content of triglyceride, LDL and the decrease of HDL, which becomes the first major factor that causes coroner attack. Herbs have long and mostly used by Indonesian as medicines. The herbs is both widely and easily accepted by the people due to the fact that they are easy to get and cheaper. One of which is the leaves of *Artocarpus altilis* containing flavonoid substance. Flavonoid resists and prevents people against cardiovascular diseases so that it is recommended that experts should act further research on efficacy of breadfruit leaves.*

*The design of the research is totally experiment conducted for nearly 28 days with a subject is 24 white-mice (*Rattus norvegicus*) which in fact are divided into four groups. One belongs to a negative control group, three groups of treatment mice (given decoction for 1,4 ml; 2,8 ml; 4,2 ml). Triglyceride level in blood is the triglyceride level taken from blood serum of three-time tested mice – prior to induces of high level fat food; before treatment (after one week induced with high level fat food), and after two-week treatment.*

*Anova analysis treatment shows that the differences are significant, with the value of significance 0, 00 ( $p < 0, 05$ ) between stewed group of 4,2 ml; 2,8 ml; 1,4 ml against aquades group. The most effective dose to decrease triglyceride level is 4,2 ml.*

*The conclusion of the research is that the giving stewed of *Artocarpus altilis* leaves is highly effective to decrease triglyceride level so that it might be able to prevent the coroner attack.*

*Key words: *Artocarpus altilis* triglyceride dyslipidemia*

## **Pengaruh Rebusan Daun Sukun (*Artocarpus altilis*) Terhadap Kadar Trigliserida Serum Darah Tikus Putih (*Rattus norvegicus*)**

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### **ABSTRAK**

Tingginya asupan SAFA (saturated fatty acid) dapat meningkatkan risiko penyakit yang dipicu oleh dislipidemia. Kelainan metabolisme lipid yang paling sering ditemukan adalah peningkatan kadar kolesterol, trigliserida, LDL dan penurunan HDL, yang merupakan faktor risiko utama terjadinya penyakit jantung koroner. Salah satu contoh obat tradisional adalah daun sukun (*Artocarpus altilis*) yang memiliki kandungan flavonoid. Flavonoid mempunyai efek positif terhadap pencegahan penyakit kardiovaskular. Sehingga perlu dilakukan penelitian lebih lanjut mengenai efikasi flavonoid.

Desain penelitian ini adalah eksperimental murni yang dilakukan selama 28 hari dengan subjek penelitian tikus putih (*Rattus norvegicus*) berjumlah 24 ekor, yang terbagi menjadi 4 kelompok, dan terdiri dari kelompok kontrol negative (aquades), tiga kelompok perlakuan (pemberian rebusan sebanyak 1,4 ml; 2,8 ml; 4,2 ml). Kadar trigliserida darah adalah kadar trigliserida yang diambil dari serum darah hewan uji sebanyak 3 kali, yaitu sebelum induksi minyak babi, sebelum perlakuan (setelah 1 minggu diinduksi minyak babi), dan setelah perlakuan selama 2 minggu.

Hasil analisis anova menunjukkan perbedaan yang signifikan, dengan nilai signifikansi 0,00 ( $p < 0,05$ ) antara kelompok rebusan 4,2 ml; 2,8 ml; 1,4 ml terhadap kelompok aquades. Dosis yang paling efektif untuk menurunkan trigliserida ialah 4,2 ml.

Kesimpulan dari hasil penelitian, dapat disimpulkan bahwa pemberian rebusan daun sukun efektif untuk menurunkan kadar trigliserida serum, sehingga dapat mencegah terjadinya penyakit jantung koroner.

Kata kunci: *Artocarpus altilis* trigliserida dislipidemia