

Abstrak

PENGARUH PEMBERIAN SEDUHAN FERMENTASI KEMIRI (*Aleurites moluccana L.*) MENGUNAKAN *YOGHURT* TERHADAP KADAR TRIGLISERIDA PADA TIKUS WISTAR (*Rattus norvegicus*)

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Latar Belakang : Dislipidemia terjadi ketika ketidaknormalan pada tingkat lipid dalam darah. Hal ini ditandai dengan peningkatan kadar kolesterol total yang disertai dengan peningkatan kadar *Low Density Lipoprotein* (LDL) dan trigliserida, serta penurunan kadar *High Density Lipoprotein* (HDL). Kondisi tersebut dapat meningkatkan risiko aterosklerosis. Tujuan penelitian ini adalah untuk mengetahui pengaruh pemberian seduhan fermentasi kemiri (*Aleurites moluccana L.*) terhadap kadar trigliserida pada tikus wistar (*Rattus norvegicus*) yang diinduksi *High Fat Diet* (HFD) dan propiltiourasil (PTU).

Metodologi : Penelitian menggunakan metode *true experimental pretest-posttest with control group design*. Sampel berjumlah 24 ekor tikus yang terbagi dalam 6 kelompok perlakuan. Kelompok (A) kontrol sehat, kelompok (B) kontrol negatif, kelompok (C) dosis 50 mg/200gBB, kelompok (D) dosis 100 mg/200gBB, kelompok (E) dosis 200 mg/200gBB, dan kelompok (F) simvastatin dosis 0,18 mg/200gBB. Kadar trigliserida diukur menggunakan spektrofotometer pada λ 500 nm. Kadar trigliserida *pretest-posttest* diuji dengan *One Way ANOVA* dan dilanjutkan dengan uji *post hoc Duncan*.

Hasil Penelitian : Hasil penelitian menunjukkan pemberian seduhan fermentasi kemiri menggunakan *yoghurt* terbukti dapat menurunkan kadar trigliserida. Rerata selisih penurunan kadar trigliserida pada masing-masing dosis perlakuan adalah $153,375 \pm 37,5512$ mg/dl, $110,900 \pm 38,0414$ mg/dl, dan $133,975 \pm 31,5571$ mg/dl.

Kesimpulan : Pemberian seduhan fermentasi kemiri menggunakan *yoghurt* pada dosis 50 mg/200gBB merupakan dosis efektif dalam menurunkan kadar trigliserida.

Kata Kunci : Kadar Trigliserida, Kemiri (*Aleurites moluccana L.*), Tikus Wistar.

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Abstract

THE EFFECT OF GIVING STEEPING FERMENTED CANDLENUT (*Aleurites moluccana* L.) USING YOGHURT ON TRIGLYCERIDE LEVELS IN WISTAR RATS (*Rattus norvegicus*)

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Background : Dyslipidemia occurs when abnormalities in the level of lipids in the blood. It is characterized by increased total cholesterol levels accompanied by increased levels of Low Density Lipoprotein (LDL) and triglycerides, and decreased levels of High Density Lipoprotein (HDL). These conditions can increase the risk of atherosclerosis. The purpose of this study was to determine the effect of fermented hazelnut (*Aleurites moluccana* L.) on triglyceride levels in Wistar rats (*Rattus norvegicus*) induced by High Fat Diet (HFD) and propylthiouracil (PTU).

Methodology : The study used true experimental pretest-posttest method with control group design. The sample amounted to 24 rats which were divided into 6 treatment groups. Group (A) healthy control, group (B) negative control, group (C) dose 50 mg/200gBB, group (D) dose 100 mg/200gBB, group (E) dose 200 mg/200gBB, and group (F) simvastatin dose 0.18 mg/200gBB. Triglyceride levels were measured using a spectrophotometer at λ 500 nm. Pretest-posttest triglyceride levels were tested with One Way ANOVA and continued with Duncan's post hoc test.

Research Results : The results showed that giving fermented candlenut brew using yogurt was proven to reduce triglyceride levels. The average difference in the decrease in triglyceride levels in each treatment dose was 153.375 ± 37.5512 mg/dl, 110.900 ± 38.0414 mg/dl, and 133.975 ± 31.5571 mg/dl.

Conclusion : Giving fermented candlenut brew using yogurt at a dose of 50 mg/200gBB is an effective dose in reducing triglyceride levels.

Keywords : Candlenut (*Aleurites moluccana* L.), Triglyceride Levels, Wistar Rats.

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