ABSTRAK

Putri, Dian Triana. 2016. *Pengaruh Pemberian Ekstrak Kulit Putih Semangka (Citrullus lanatus) terhadap Kadar Trigliserida Tikus Wistar Jantan Model Hiperlipidemia*. Tugas Akhir, Fakultas Kedokteran Universitas Brawijaya. Pembimbing: (1) Dr. dr. Umi Kalsum, M.Kes (2) dr. Maimun Zulhaidah Arthamin, M.Kes., Sp.PK.

Hiperlipidemia meningkatkan resiko penyakit kardiovaskuler dan menyumbang kematian dengan angka cukup tinggi di dunia. Hiperlipidemia ditandai dengan peningkatan kolesterol dan/atau trigliserida serum. Kulit putih semangka mengandung kadar antioksidan tinggi, salah satunya flavonoid, yang dapat menurunkan kadar trigliserida dengan meningkatkan aktifitas lipoprotein lipase. Penelitian ini bertujuan membuktikan bahwa ekstrak kulit putih semangka menurunkan kadar trigliserida serum. Studi eksperimental menggunakan *post test only controlled group design* ini, dilakukan terhadap 25 ekor tikus wistar jantan yang dibagi secara random menjadi 5 kelompok: kontrol positif, kontrol negatif, perlakuan 1 (ekstrak kulit putih semangka 250 mg/KgBB/hari), perlakuan 2 (ekstrak kulit putih semangka 500 mg/KgBB/hari), dan perlakuan 3 (simvastatin 0,9 mg/KgBB/hari) selama 8 minggu. Data penelitian dianalisis menggunakan ANOVA satu arah dengan variabel terikat kadar trigliserida dan variabel bebas dosis ekstrak kulit putih semangka. Hasil penelitian menunjukkan bahwa terdapat perbedaan bermakna ($p<0,05$) antara kontrol positif dengan perlakuan 2, dan tidak terdapat perbedaan bermakna ($p>0,05$) antara perlakuan 2 dengan perlakuan simvastatin. Terbukti adanya penurunan kadar trigliserida serum dengan pemberian ekstrak kulit putih semangka. Kesimpulan penelitian ini adalah ekstrak kulit putih semangka, dengan dosis optimal 250mg/KgBB/hari, memiliki efek hipotrigliserida yang sama dengan simvastatin. Disarankan penelitian selanjutnya dilakukan selama 16 minggu untuk mencapai hiperlipidemia dengan dosis lebih beragam.

Kata Kunci : trigliserida, kulit putih semangka, hiperlipidemia, flavonoid

ABSTRACT

Putri, Dian Triana. 2016. **Effect extract of white rind watermelon (*Citrullus lanatus*) for triglyceride serum level in male wistar rats hyperlipidemi's model**. Final Assignment, Medical Program, Faculty of Medicine, University of Brawijaya. Supervisors: (1) Dr. dr. Umi Kalsum, M.Kes (2) dr. Maimun Zulhaidah Arthamin, M.Kes., Sp.PK.

Hyperlipidemia increase the risk of cardiovascular dissease and can cause high number of death in the world. Hyperlipidemia signaled by the increasing of cholesterol and/or triglyceride serum. The white rind watermelon has high suitability of antioxidant capacity, such flavonoids that can decrease triglyceride level by increasing the activity of lipoprotein lipase. The aim of this research was to prove that the extract of white rind watermelon could decrease the triglyceride serum level. This experimental study using post test controlled group design, had been done to 25 male wistar rats which had been randomly divided into 5 groups: positive controlled, negative controlled, treatment 1 (extract of white rind watermelon 250mg/KgBM/day), treatment 2 (extract of white rind watermelon 500mg/KgBM/day), and treatment 3 (simvastatin 0.9mg/KgBM/day) in 8 weeks. Data analysis that used in this research was one-way ANOVA which independent variable was triglyceride level and dependent variable was the dose of extract of white rind watermelon. The result of this research showed that there was a significant difference ($p<0.05$) between positive controlled and treatment 2, and there was no-significant difference ($p>0.05$) between treatment 2 with treatment simvastatin. It had been proven that there was the decreasing of triglyceride serum level by the extract of white rind watermelon given. The conclusion of this research was the extract of white rind watermelon, with optimal dose 250mg/KgBM/ day, had the same hypotriglyceride effect with simvastatin. For the further research, it recommended to be done in 16 weeks for reach the hyperlipidemia with more diverse of dose.

Keywords: triglyseride, white rind watermelon, hyperlipidemia, flavonoids