ABSTRAK

Felivia Angelina Munte, NIM 4173510005, Pengaruh Penambahan Ekstrak Etanol Daun Tanaman Sijukkot *(Lactuca Indica L)* Terhadap Penurunan Kolesterol Pada Tikus Jantan Galur *Wistar (Rattus norvegicus)''*.

Kolesterol merupakan salah satu lipid yang dapat membentuk membrane sel dan lapisan ekstrema lipoprotein plasma. Peningkatan kadar kolesterol total dapat menyebabkan berbagai macam penyakit seperti hihiperdislipidemia. Daun tanaman sijukkot merupakan tanaman yang mengandung metabolit sekunder seperti Flavonoid, Alkaloid, Saponin, Tanin, Steroid dan Terpenoid yang efektif menurunkan kadar kolesterol. Penelitian ini bertujuan menganalisis pengaruh penambahan ektrak daun tanaman sijukkot terhadap kadar kolesterol tikus jantan galur wistar hanh diberikan pakan tinggi lemak. Penelitian ini bersifat eksperimental, perlakuan selama 21 hari pada 30 ekor tikus jantan galur wistar (Rattus norvegicus) yang telah diberikan pakan tinggi lemak yang diberikan 3 kelompok kontrol yaitu tikus yang diberikan pakan standar, kelompok tikus yang diberikan pakan standar dan pakan tinggi lemak, dan kelompok tikus yany diberikan simvastatin. Kelompok dengan dosis yang berbeda yaitu 100 mg/kg bb, 200 mg/kg bb, 300 mg/kg bb dan dosis 400 mg/ kgbb. Simvastatin dan dosis ekstrak diberikan selama 14 hari dengan cara disonde. Kadar kolesterol total tikus dianalisis dengan menggunakan analisis statistik Anova one Way dengan software SPSS for windows. Pemberian ekstrak etanol daun tanaman sijukkot pengaruh terhadap penurunan kadan kolesterol total. Nilai rata-rata penurunan kadar kolesterol sebesar Nilai rata-rata penurunan kadar kolesterol kelompok control adalah adalah 54,50 (mg/dL) ± 6,455, 81,50 (mg/dL) ± 6,455 dan kelompok tikus yang diberikan simvastatin memiliki kolesterol 53,00) ± 10,8012. Sedangkan uuntuk pemberian ekstrak etanol daun tanaman sijukkot dengan dosis 100 mg/kg bb memiliki kadar kolesterol sebesar 75,00 ± 21,2132, kelompok tikus dosis 200 mg /kgBB menunjukkan kadar kolesterol 62,75 (mg/dL) ± 8,5391. 300 mg/kgbb menunjukkan kadar kolesterol 61,00 (mg/dL) ± 7,01711 dan kelompok tikus dengan dosis 400 mg/kgbb menunjukkan kadar kolesterol 55,25 (mg/dL) ± 4,7871. Dengan analisis diperoleh bahwa Uji Normalitas Shapiro-Wilk dengan nilai sig > 0,05, data berdistribusi normal. Hasil analisis pada tabel Test of Homogeneity of Variances diperoleh nilai Sig sebesar 0,510. Dengan demikian nilai Sig = 0,510 > 0,05, maka Ho diterima. Dengan demikian, ekstrak etanol daun sijukkot berpotensi menurunkan kadar kolesterol.

Kata kunci: Sijukkot, Kadar Kolesterol Total Ekstrak Etanol, Tikus Galur Wistar

ABSTRAK

Felivia Angelina Munte, NIM 4173510005, Effect of Addition of Ethanol Extract of Sijukkot Leaves (*Lactuca Indica L*) on Cholesterol Reduction in Wistar (*Rattus norvegicus*) Male Rats

.

Cholesterol is one of the lipids that can form cell membranes and the extreme layers of plasma lipoproteins. Increased levels of total cholesterol can cause various diseases such as hyperdyslipidemia. Sijukkot leaves are plants that contain secondary metabolites such as Flavonoids, Alkaloids, Saponins, Tannins, Steroids and Terpenoids which are effective in lowering cholesterol levels. This study aimed to analyze the effect of the addition of sijukkot leaf extract on cholesterol levels of male rats of the Wistar strain when fed a high-fat diet. This study was experimental, treated for 21 days on 30 male Wistar (Rattus norvegicus) rats that had been given a high-fat diet given 3 control groups, namely rats given standard feed, a group of rats given standard feed and high-fat diet, and group of mice that was given simvastatin. The groups with different doses were 100 mg/kg bw, 200 mg/kg bw, 300 mg/kg bw and a dose of 400 mg/kgbw. Simvastatin and extract doses were administered for 14 days by disonde. Total cholesterol levels of rats were analyzed using Anova One Way statistical analysis with SPSS for windows software. Giving ethanol extract of sijukkot leaves has an effect on decreasing total cholesterol levels. The average value of reducing cholesterol levels was 54.50 (mg/dL) ± 6.455, 81.50 (mg/dL) ± 6.455 and the group of rats given simvastatin had cholesterol of 53, 00) ± 10.8012. Meanwhile, for the administration of ethanolic extract of sijukkot leaves at a dose of 100 mg/kg bw had cholesterol levels of 75.00 ± 21.2132, the rat group at a dose of 200 mg/kgBW showed cholesterol levels of 62.75 (mg/dL) ± 8.5391. 300 mg/kgbw showed cholesterol levels of 61.00 (mg/dL) ± 7.01711 and a group of rats with a dose of 400 mg/kgbw showed cholesterol levels of 55.25 (mg/dL) ± 4.7871. With the analysis obtained that the Shapiro-Wilk Normality Test with a value of sig> 0.05, the data is normally distributed. The results of the analysis in the Test of Homogeneity of Variances table obtained a Sig value of 0.510. Thus the value of Sig = 0.510 > 0.05, then Ho is accepted. Thus, the ethanol extract of sijukkot leaves has the potential to reduce cholesterol levels.

Keywords: Sijukkot, Total Cholesterol Levels of Ethanol Extract, Wistar Strain Rats