

Efek Pemberian Teh Daun Jambu Biji Terhadap Kadar Kolesterol Total Tikus Galur Wistar Dislipidemia

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ABSTRAK

Dislipidemia adalah kelainan metabolisme lipid ditandai peningkatan serta penurunan fraksi lipid dalam darah. Beberapa kelainan fraksi lipid yang utama adalah kenaikan kadar kolesterol total, LDL, trigliserida, dan penurunan kadar HDL. Pengobatan dislipidemia untuk menurunkan kadar kolesterol darah seperti daun jambu biji. Daun jambu biji bisa dijadikan bahan minuman fungsional teh daun jambu biji. Pada daun jambu biji terdapat senyawa aktif yang bisa menurunkan kadar kolesterol seperti *flavonoid*, *tannin* dan *saponin*. Penelitian ini bertujuan untuk mengetahui efek pemberian teh daun jambu biji terhadap kadar kolesterol total pada tikus galur wistar dengan kondisi dislipidemia. Jenis penelitian yang digunakan adalah *True Eksperimental* dengan desain penelitian Rancangan *Pre test-Post test* menggunakan Kelompok Kontrol (*Pre test-Post Test ith Control Group Design*) yang dilakukan secara *random*. Pada penelitian ini menggunakan sampel hewan uji coba tikus galur wistar berjenis kelamin jantan sebanyak 18 dengan usia 2-3 bulan, berat badan tikus 150-200 gram, tikus dalam kondisi sehat dan memiliki kadar kolesterol total normal tikus yaitu 10-54 mg/dL. Kemudian dibagi menjadi 3 Kelompok kelompok K (-) diberikan pakan standart RatBio dan air minum, Kelompok K (+) dan Kelompok P diberikan diet tinggi lemak (Lemak sapi, kuning telur puyuh dan minyak jelantah) 4 ml/hari dan air minum secara sonde selama 30 hari kemudian pemeriksaan kadar kolesterol total (*Pretest*) setelah didapatkan tikus dislipidemia kelompok K (-) diberikan pakan standart RatBio dan air minum secara sonde, Kelompok K (+) diberikan diet tinggi lemak 4 ml/hari secara sonde, air dan pakan standart RatBio, dan Kelompok P diberikan diet tinggi lemak 4 ml/hari secara sonde, air, pakan standart RatBio dan seduhan teh daun jambu biji 4 ml/hari secara sonde selama 30 hari. Hasil penelitian menunjukkan terdapat perbedaan signifikan sebelum dan sesudah intervensi, pada kelompok kontrol negatif (K-) ($p=0,005$), kontrol positif (K+) ($p=0,057$), kelompok perlakuan (P) ($p=0,049$). Disimpulkan jika terdapat efek seduhan teh daun jambu biji terhadap penurunan kadar kolesterol total pada tikus.

Kata Kunci: Teh daun jambu biji, kadar kolesterol total, tikus dislipidemia, dislipidemia

Effect of Giving Guava Leaf Tea on Total Cholesterol Levels of Wistar Strain Dyslipidemia Rats

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ABSTRACT

Dyslipidemia is a disorder of lipid metabolism characterized by an increase or decrease in lipid fractions in the blood. Some of the major lipid fraction abnormalities are increased levels of total cholesterol, LDL, triglycerides, and decreased HDL levels. Dyslipidemia treatment to lower blood cholesterol levels such as guava leaves. Guava leaves can be used as raw materials for guava leaf tea functional drinks. In guava leaves there are active compounds that can lower cholesterol levels such as flavonoids, tannins and saponins, which function as potential antioxidants. This study aims to determine the effect of giving guava leaf tea on total cholesterol levels in wistar strain rats with dyslipidemia. This study aims to determine the effect of giving guava leaf tea on total cholesterol levels in wistar strain rats with dyslipidemia. The type of research used is experimental (True Experimental) with a research design of the Pre test-Post Test with Control Group Design which is carried out randomly or randomly. In this study, 18 male wistar strain rat samples were used, with a body weight of 150-200 grams, rats in healthy condition and with a normal total cholesterol level of 10-54 mg/dL. Then divided into 3 groups of group K (-) were given standard RatBio feed and drinking water, Group K (+) and Group P were given a high-fat diet (cow fat, quail egg yolk and used cooking oil) 4 ml/day and drinking water by sonde for 30 days then a total cholesterol level examination (Pretest) after group K dyslipidemia rats were given standard RatBio feed and drinking water by sonde, Group K (+) was given a high-fat diet of 4 ml/day by sonde, water and RatBio standard feed, and Group P was given a high-fat diet of 4 ml/day by sonde, water, RatBio standard feed and 4 ml/day of guava leaf tea brewing by sonde for 30 days. The results of this study showed that there were significant differences before and after the intervention, in the negative control group (K-) ($p=0.005$), positive control (K+) ($p=0.057$), treatment group (P) ($p=0.049$). So it is concluded that there is an effect of guava leaf tea infusion on reducing total cholesterol levels in mice.

Keywords: Tea Guava Leaf, total cholesterol levels, rat dyslipidemia, dyslipidemia