

**UJI EFEKTIVITAS AIR PERASAN JERUK TERHADAP KADAR
KOLESTEROL TOTAL TIKUS PUTIH JANTAN GALUR WISTAR
(*Rattus norvegicus*) YANG DIINDUKSI PAKAN TINGGI LEMAK**

LERRYAN SEPTA RIHERNATA

ABSTRAK

Dislipidemia merupakan faktor risiko utama penyakit jantung koroner dan stroke. Salah satu penatalaksanaan dislipidemia adalah pengaturan diet. Penelitian ini bertujuan untuk mengetahui efektivitas air perasan buah jeruk nipis dan jeruk manis terhadap kadar kolesterol total tikus putih. Penelitian ini bersifat eksperimen laboratorik dengan jumlah sampel 25 ekor tikus putih jantan galur wistar, diambil secara *random sampling* dan dikelompokkan menjadi: kontrol negatif (pakan standar), kontrol positif (tinggi lemak), kelompok intervensi (vitamin C dosis 45 mg/KgBB, air perasan buah jeruk nipis dosis 22,5 ml/KgBB/hari, dan air perasan buah jeruk manis dosis 22,5 ml/KgBB/hari). Pakan tinggi lemak diberikan selama 14 hari dilanjutkan dengan intervensi selama 14 hari. Hasil *paired-sample T Test* antara kelompok pre-post pakan tinggi lemak menunjukkan perbedaan signifikan; *one-way ANOVA* dan uji *Post Hoc* LSD antara kontrol negatif dan pakan tinggi lemak menunjukkan perbedaan signifikan; hasil *paired-sample T Test* kelompok pre-post intervensi menunjukkan perbedaan signifikan; *one-way ANOVA* dan uji *Post Hoc* LSD kelompok kontrol negatif dan kontrol positif dengan setiap kelompok intervensi menunjukkan perbedaan signifikan. Hasil penelitian menunjukkan air perasan buah jeruk memiliki efek hipokolesterolemik. Kandungan saponin, flavonoid, vitamin C dalam jeruk nipis dan niasin, tannin, serat, flavonoid, dan vitamin C dalam buah jeruk manis dapat memperbaiki keadaan hiperkolesterolemik.

Kata Kunci : jeruk manis, jeruk nipis, kolesterol total, vitamin C

***EFFECTS OF LIME SQUEEZED WATER (Citrus aurantiifolia) AND
ORANGE SQUEEZED WATER (Citrus sinensis) TO TOTAL
CHOLESTEROL LEVEL IN WHITE RATS INDUCED
WITH HIGH FAT DIET***

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ABSTRACT

Dyslipidemia is major risk of coronary heart disease and stroke. Management principle of dyslipidemia were controlled diet. Lime squeezed water (Citrus aurantiifolia) and orange squeezed water (Citrus sinensis) can decrease total blood cholesterol. This study aims to compare the effect of lime and orange to total cholesterol levels in 25 males white wistar strains that divided into five treatments i.e: standard diet (negative control), high fat diet (positive control), intervention (vitamin C, lime squeezed water, and orange squeezed water). Intervention was carried out for 14 days. Data was analyzed with paired-sample test between pre and post high fat diet group, showed significant difference. Result of one-way ANOVA test on post high fat diet group showed significant difference and continued with Post Hoc LSD test. There were significant difference between negative control and high fat diet group. Result of paired-sample test between pre and post intervention showed significant difference. One-way ANOVA test on post high fat diet group showed significant difference and continued with Post Hoc LSD test. There were significant difference between negative control and positive control with intervention group. In conclusion, lime containing saponin, flavonoid, vitamin C and orange containing niacin, saponin, and flavonoid have potential effects in hypocholesteremia.

Keywords: *lime, orange, total cholesterol, vitamin C*