INTISARI

KLAU HSAL. 2015. EFEK EKSTRAK ETANOL KULIT BUAH ALPUKAT (*Persea americana* Mill) TERHADAP KADAR LDL DAN HDL SERUM DARAH TIKUS PUTIH JANTAN HIPERLIPIDEMIA. SKRIPSI. FAKULTAS FARMASI. UNIVERSITAS SETIA BUDI.

Hiperlipidemia merupakan keadaan meningkatnya kadar LDL dan menurunnya kadar HDL dalam darah. Hal tersebut mengakibatkan terbentuknya plak pada dinding pembuluh darah sehingga menyebabkan aterosklerosis yang membahayakan tubuh manusia. Kulit buah alpukat mengandung senyawa flavonoid yang berfungsi sebagai antioksidan yang memiliki kemampuan menangkal radikal bebas sehingga mencegah proses oksidasi LDL. Penelitian ini bertujuan mengetahui efek ekstrak kulit buah alpukat terhadap kadar LDL dan HDL serum darah tikus putih jantan hiperlipidemia.

Penelitian ini menggunakan hewan percobaan tikus putih jantan yang berumur 2-3 bulan dengan berat badan 150-200 gram. Sebanyak 30 ekor tikus dibagi secara acak ke dalam 6 kelompok perlakuan, diberi minum air putih matang dan diberi pakan BR II. Kecuali kontrol normal, lima kelompok perlakuan lainnya diinduksi pakan tinggi lemak berupa lemak babi dan kuning telur puyuh. Hari ke-21, kelompok IV, V dan VI diberi ekstrak etanol kulit buah alpukat dosis 7 mg/200 gram BB tikus, 14 mg/200 gram BB tikus dan 21 mg/200 gram BB tikus. Kontrol positif diberi simvastatin dosis 0,18 mg/200 gram BB tikus. Kontrol negatif dan kontrol normal diberi CMC 0,5%. Kadar LDL dan HDL diukur dengan metode CHOD-PAP pada hari ke-0, 21 dan 35. Data hasil pengukuran kadar LDL dan HDL dianalisis menggunakan *Paired-Samples T Test* dan *Two Way Anova*.

Hasil penelitian menunjukkan ekstrak kulit buah alpukat dosis 7 mg/200 gram BB tikus, 14 mg/200 gram BB tikus dan 21 mg/200 gram BB tikus memiliki kemampuan menurunkan kadar LDL dan meningkatkan kadar HDL tikus. Efek yang paling baik ditunjukkan pada dosis 21 mg/200 gram BB tikus.

Kata kunci: hiperlipidemia, LDL, HDL, *Persea americana* Mill

ABSTRACT

KLAU HSAL. 2015. EFFECTS OF ETHANOL EXTRACT OF AVOCADO *(Persea americana Mill)* PEEL TO THE LDL AND HDL LEVELS OF BLOOD SERUM OF HYPERLIPIDEMIA MALE WHITE RATS. THESIS. PHARMACY FACULTY. SETIA BUDI UNIVERSITY.

Hyperlipidemia is condition of increasing LDL levels and decrease HDL levels in the blood. This was caused plaque formation on blood vessel walls, causing atherosclerosis which harms human body. Avocado peel is contains flavonoids that act as antioxidants that have ability to ward off free radicals thus preventing LDL oxidation. This study aims was determined effect of avocado peel extract on LDL and HDL levels of blood serum on hyperlipidemia male white rats.

This study was used experimental animals male white rats aged 2-3 months with weight 150 to 200 grams. 30 rats were randomly divided into six treatment groups, given to drink boiled water and fed BR II. Except to the normal control, other five treatments groups are given high-fat feeding-induced in the form of lard and quail yolk. Day of 21st, group 4th, 5th and 6th were given ethanol extract of the avocado peel dose of 7 mg/200 grams BW of rat, 14 mg/200 grams BW of rats and 21 mg/200 grams BW of rats. Positive control were given simvastatin dose of 0.18 mg/200 g BW of rats. Negative controls and normal controls were given 0.5% CMC. The LDL and HDL levels were measured with CHOD-PAP method on days of 0, 21st and 35th. Data from measurement of LDL and HDL levels were analyzed using *Paired-Samples T Test* and *Two Way Anova*.

The results showed extract of avocado peel dose of 7 mg/200 grams BW of rat, 14 mg/200 grams BW of rats and 21 mg/200 grams BW of rats have ability to decrease LDL levels and increase HDL levels. The best effect is shown in dose of 21 mg/200 grams BW of rats.

Keywords : hyperlipidemia, LDL, HDL, *Persea americana* Mill