

ABSTRAK

PERBANDINGAN EFEK SEDUHAN TEH HITAM, TEH HIJAU DAN TEH PUTIH TERHADAP KADAR *LOW DENSITY LIPOPROTEIN (LDL)* TIKUS PUTIH (*Rattus norvegicus*) JANTAN WISTAR YANG DIINDUKSI PAKAN TINGGI LEMAK

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Dislipidemia dapat terjadi akibat peningkatan kolesterol LDL yang berfungsi membawa kolesterol dari hati ke jaringan perifer. Salah satu bahan herbal yang digunakan untuk menurunkan kolesterol adalah teh. Terdapat beberapa jenis teh, diantaranya teh hitam, teh hijau, dan teh putih. Penelitian ini bertujuan membandingkan efek seduhan teh hitam, teh hijau, dan teh putih dalam menurunkan kadar LDL.

Desain penelitian ini bersifat eksperimental sungguhan. Subjek penelitian adalah 30 ekor tikus yang dibagi enam kelompok; diberikan masing – masing 4,5 ml STH (seduhan teh hitam), STHJ (seduhan teh hijau), dan STP (seduhan teh putih); KP (diberi simvastatin 0,18 mg); KN (diet tinggi lemak); KNorm (pakan standar); perlakuan diberikan selama 14 hari. Pemeriksaan kadar LDL dilakukan sebelum dan sesudah perlakuan. Analisis data menggunakan uji ANAVA dilanjutkan uji Tukey HSD, $\alpha = 0,05$, dengan nilai kemaknaan 0,05 .

Hasil penelitian penurunan kadar LDL sesudah diberikan STH (6,58 %), STHJ (5,86 %), dan STP (8,41%), yang berbeda bermakna dengan kelompok kontrol negatif (-29,10%). Kelompok STH, STHJ, dan STP memiliki efek yang sama dengan simvastatin (11,40%) ($p > 0,05$).

Simpulan penelitian teh hitam, teh hijau dan teh putih berefek sama dalam menurunkan kadar LDL dan memiliki efek setara dengan simvastatin.

Kata kunci : Dislipidemia, kolesterol LDL, teh hitam, teh hijau, teh putih

ABSTRACT

THE COMPARISON OF EFFECT OF BLACK TEA, GREEN TEA, AND WHITE TEA STEEPING TOWARDS LOW DENSITY LIPOPROTEIN (LDL) LEVEL ON MALE WISTAR RAT (*Rattus norvegicus*) INDUCED WITH HIGH-FAT FEED

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Dyslipidemia occurs due to an increase in LDL cholesterol which serves to carry cholesterol from the heart to peripheral tissues. One of herbal ingredients used to lowering cholesterol is tea. There are types of tea, including black tea, green tea, and white tea. This research aims to compare the effect of black tea, green tea, and white tea steeping in lowering LDL level.

This research was true experimental research design. Subjects were 30 rats divided into six group; given 4,5 ml STH (black tea steeping), STHJ (green tea steeping), and STP (white tea steeping); positive control group was given simvastatin 0,18 mg; negative control group (high-fat feed); normal group (standard feed); given for 14 days. LDL level was examined before and after treatment. Data was analyzed with ANOVA then tested with Tukey HSD, $\alpha = 0,05$, with p value $< 0,05$.

This research results LDL levels decrease after given STH (6.58%), STHJ (5.86%), and STP (8,41%), have significance difference with negative control group (-29.10%). STH, STHJ, and STP have same effect with simvastatin (11.40%) ($p > 0.05$).

The conclusion is black tea, green tea and white tea have same effect in lowering LDL levels and have same effect with simvastatin.

Keywords: *Dyslipidemia, LDL cholesterol, black tea, green tea, white tea*

DAFTAR ISI

| | |
|-----------------------------------------|-------------|
| JUDUL | i |
| LEMBAR PERSETUJUAN | ii |
| SURAT PERNYATAAN | iii |
| ABSTRAK | iv |
| ABSTRACT | v |
| KATA PENGANTAR | vi |
| DAFTAR ISI | viii |
| DAFTAR GAMBAR | xii |
| DAFTAR TABEL | xiii |
| DAFTAR LAMPIRAN | xiv |
| BAB I PENDAHULUAN | 1 |
| 1.1 Latar belakang | 1 |
| 1.2. Identifikasi Masalah | 3 |
| 1.3. Maksud dan Tujuan Penelitian | 3 |
| 1.3.1 Maksud Penelitian | 3 |
| 1.3.2 Tujuan Penelitian | 3 |
| 1.4 Manfaat Penelitian | 3 |
| 1.4.1 Manfaat Akademis | 3 |
| 1.4.2 Manfaat Praktis | 4 |
| 1.5 Kerangka Pemikiran | 4 |
| 1.6 Hipotesis Pemikiran | 5 |
| BAB II TINJAUAN PUSTAKA | 6 |
| 2.1 Dislipidemia | 6 |
| 2.1.1 Definisi | 6 |

| | |
|-------------------------------------------------------------|----|
| 2.1.2 Terapi Dislipidemia..... | 6 |
| 2.2 Lemak..... | 7 |
| 2.2.1 Fosfolipid..... | 7 |
| 2.2.2 Triglisericid..... | 8 |
| 2.2.3 Kolesterol..... | 8 |
| 2.2.4 Asam Lemak..... | 8 |
| 2.2.5 Lipoprotein..... | 9 |
| 2.2.5.1 Kilomikron..... | 9 |
| 2.2.5.2 <i>Very Low Density Lipoprotein (VLDL)</i> | 9 |
| 2.2.5.3 <i>Intermediate Density Lipoprotein (IDL)</i> | 9 |
| 2.2.5.4 <i>Low Density Lipoprotein (LDL)</i> | 10 |
| 2.2.5.5 <i>High Density Lipoprotein (HDL)</i> | 10 |
| 2.2.5.6 Apoprotein..... | 11 |
| 2.2.6 Metabolisme Lemak..... | 11 |
| 2.2.7 Transportasi Lemak..... | 11 |
| 2.2.7.1 Jalur Eksogen..... | 12 |
| 2.2.7.2 Jalur Endogen..... | 12 |
| 2.3 Teh..... | 13 |
| 2.3.1 Taksonomi Teh..... | 13 |
| 2.3.2 Deskripsi Teh..... | 13 |
| 2.3.3 Teh Hitam..... | 14 |
| 2.3.3.1 Komposisi Teh Hitam..... | 15 |
| 2.3.3.2 Hubungan Teh Hitam dengan Profil Lemak..... | 15 |
| 2.3.4 Teh Hijau..... | 16 |
| 2.3.4.1 Komposisi Teh Hijau..... | 16 |
| 2.3.4.2 Hubungan Teh Hijau dengan Profil Lemak..... | 17 |
| 2.3.5 Teh Putih..... | 17 |
| 2.3.5.1 Komposisi Teh Putih..... | 18 |
| 2.3.5.2 Hubungan Teh Putih dengan Profil Lemak..... | 19 |
| 2.4 Simvastatin..... | 19 |
| 2.5 Propiltiourasil (PTU)..... | 20 |

| | |
|------------------------------------------------------------------------|---------------|
| BAB III BAHAN DAN METODE PENELITIAN | 21 |
| 3.1 Alat, Bahan dan Subjek Penelitian | 21 |
| 3.1.1 Alat Penelitian | 21 |
| 3.1.2 Bahan Penelitian..... | 21 |
| 3.1.3 Subjek penelitian..... | 22 |
| 3.2 Lokasi dan Waktu Penelitian | 22 |
| 3.2.1 Lokasi Penelitian | 22 |
| 3.2.2 Waktu Penelitian | 22 |
| 3.3 Persiapan Penelitian | 22 |
| 3.3.1 Pembuatan pakan tinggi lemak | 22 |
| 3.3.2 Persiapan hewan coba | 23 |
| 3.3.3 Persiapan bahan uji | 23 |
| 3.4 Metode Penelitian..... | 23 |
| 3.4.1 Desain Penelitian..... | 23 |
| 3.4.2 Variabel penelitian dan Definisi Operasional | 23 |
| 3.4.2.1 Variabel Terkendali, Variabel Perlakuan, Variabel Respon | 23 |
| 3.4.2.2 Definisi Operasional Variabel..... | 24 |
| 3.4.3 Besar Sampel Penelitian..... | 25 |
| 3.5 Prosedur Kerja..... | 25 |
| 3.6 Metode Analisis | 26 |
| 3.6.1 Hipotesis Penelitian..... | 27 |
| 3.6.2 Kriteria Uji | 27 |
| 3.7 Aspek Etik Penelitian | 27 |
| BAB IV HASIL DAN PEMBAHASAN | 29 |
| 4.1 Hasil penelitian..... | 29 |
| 4.2 Pembahasan Penelitian | 31 |
| 4.3 Pengujian Hipotesis Penelitian | 32 |

| | |
|---------------------------------------|-----------|
| BAB V SIMPULAN DAN SARAN | 34 |
| 5.1 Simpulan..... | 34 |
| 5.2 Saran..... | 34 |
| DAFTAR PUSTAKA | 35 |
| LAMPIRAN | 39 |
| RIWAYAT HIDUP | 50 |



DAFTAR GAMBAR

| | |
|----------------------------------------|----|
| Gambar 2.1 Tanaman Teh..... | 14 |
| Gambar 2.2 Teh Hitam..... | 14 |
| Gambar 2.3 Teh Hijau..... | 16 |
| Gambar 2.4 Teh Putih | 18 |
| Gambar 2.5 Struktur Kimia Ketekin..... | 18 |



DAFTAR TABEL

| | |
|---------------------------------------------------------------------------|----|
| Tabel 2.1 Interpretasi kadar lipid plasma..... | 6 |
| Tabel 4.1 Rerata Kadar LDL Sebelum dan Sesudah Perlakuan..... | 29 |
| Tabel 4.2 Tes Homogenitas Varian Levene Test..... | 30 |
| Tabel 4.3 Uji ANAVA | 30 |
| Tabel 4.4 Uji Beda Rerata Metode Tukey <i>HSD</i> Terhadap Kadar LDL..... | 30 |



DAFTAR LAMPIRAN

| | |
|--------------------------------------------------------------------|----|
| Lampiran 1 Alur penelitian | 39 |
| Lampiran 2 Berat Badan Tikus | 40 |
| Lampiran 3 Perhitungan Dosis dan Cara Pembuatan Bahan Uji | 41 |
| Lampiran 4 Kadar LDL Hewan Coba Sebelum dan Sesudah Perlakuan..... | 43 |
| Lampiran 5 Analisis Data Statistik | 44 |
| Lampiran 6 Dokumentasi Penelitian..... | 46 |
| Lampiran 7 Surat Keputusan Komisi Etik Penelitian | 49 |

