

OVERVIEW OF TOTAL CHOLESTEROL LEVELS IN PEOPLE WHO REGULARLY DO WEIGHTLIFTING

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ABSTRACT

Background: Regular weightlifting training is effective for increasing muscle mass and maintaining total cholesterol levels by optimizing lipid metabolism. This study at the Tritunggal Fitness Center examined how high-intensity physical activity maintains normal cholesterol levels to prevent the risk of hypercholesterolemia and chronic disease.

Objective: To determine the total cholesterol levels in Tritunggal Fitness Center members with a minimum of one year of weightlifting experience, as assessed by age, training frequency, and Body Mass Index (BMI) category.

Method: This descriptive study used a cross-sectional design. A sample of 30 men was selected using purposive sampling. Total cholesterol levels were measured using the CHOD-PAP method with a spectrophotometer at a wavelength of 500 nm. Data were analyzed descriptively, including mean, median, standard deviation, minimum, and maximum values.

Results: Of the 30 study subjects, 23 (76.7%) had normal total cholesterol levels (mean 160 mg/dL, median 166 mg/dL, SD ± 31 mg/dL, min 101 – max 198 mg/dL), and 7 (23.3%) had abnormal total cholesterol levels (mean 227 mg/dL, median 233 mg/dL, SD ± 14 mg/dL, min 207 – max 243 mg/dL). Abnormal total cholesterol levels were mostly found in the group that increased animal protein intake.

Conclusion: A study of members of the Trinity Fitness Center showed that the majority of subjects (76.7%) had normal total cholesterol levels. Total cholesterol levels tended to be lower in subjects who weight-trained ≥ 3 times per week and were younger (19-30 years old). The overweight group had a slightly lower average cholesterol level (175 mg/dL) compared to the group with a normal BMI (178 mg/dL).

Keywords: total cholesterol, weight-bearing exercise, lipid metabolism

GAMBARAN KADAR KOLESTEROL TOTAL PADA ORANG YANG RUTIN MELAKUKAN LATIHAN ANGKAT BEBAN

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ABSTRAK

Latar Belakang: Latihan angkat beban secara rutin efektif untuk meningkatkan massa otot dan menjaga kadar kolesterol total melalui optimalisasi metabolisme lipid. Penelitian di Tempat Olahraga Tritunggal mengkaji bagaimana aktivitas fisik intensitas tinggi menjaga kadar kolesterol tetap normal guna mencegah risiko hiperkolesterolemia dan penyakit kronis.

Tujuan: Mengetahui gambaran kadar kolesterol total pada anggota Tempat Olahraga Tritunggal dengan lamanya waktu angkat beban minimal satu tahun yang ditinjau melalui variabel usia, frekuensi latihan, serta kategori Indeks Massa Tubuh (IMT).

Metode: Penelitian deskriptif dengan desain *cross sectional*. Sampel dari 30 orang laki-laki yang dipisahkan serumnya dan diambil secara *purposive sampling*. Pemeriksaan kadar kolesterol total dilakukan dengan menggunakan metode CHOD-PAP dengan spektrofotometer pada panjang gelombang 500 nm. Data dianalisis secara deskriptif meliputi mean, median, standar deviasi, nilai minimum, dan maksimum.

Hasil: Dari 30 subjek penelitian, 23 orang (76,7%) memiliki kadar kolesterol total normal (mean 160 mg/dL, median 166 mg/dL, SD ± 31 mg/dL, min 101 – maks 198 mg/dL) dan 7 orang (23,3%) memiliki kadar kolesterol total tidak normal (mean 227 mg/dL, median 233 mg/dL, SD ± 14 mg/dL, min 207 – maks 243 mg/dL). Kadar kolesterol total tidak normal kebanyakan ditemukan pada kelompok yang meningkatkan asupan protein hewani.

Kesimpulan: Penelitian terhadap anggota Tempat Olahraga Tritunggal menunjukkan mayoritas subjek penelitian (76,7%) memiliki kadar kolesterol total normal. Kadar kolesterol total cenderung lebih rendah pada subjek penelitian yang berlatih beban ≥ 3 kali seminggu dan berusia muda (19-30 tahun). Kelompok *overweight* memiliki rata-rata kolesterol sedikit lebih rendah (175 mg/dL) dibandingkan kelompok dengan IMT normal (178 mg/dL).

Kata Kunci: kolesterol total, latihan angkat beban, metabolisme lipid