

## OVERVIEW OF URIC ACID LEVELS IN PEOPLE WHO REGULARLY PERFORM WEIGHTLIFTING EXERCISES

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### ABSTRACT

**Background:** Weightlifting training can be a temporary trigger for elevated uric acid levels if performed too vigorously and too frequently. Uric acid levels in weightlifters at Tritunggal Gym, Yogyakarta, need to be monitored to monitor kidney health.

**Objective:** To determine the percentage and average uric acid levels in men who perform weightlifting at Tritunggal Gym, based on training frequency, age, and Body Mass Index (BMI).

**Method:** This descriptive study used a cross-sectional design. A sample of 30 respondents was selected using purposive sampling. Uric acid levels were examined using the Uricase-PAP method with a spectrophotometer at a wavelength of 520 nm. Data were analyzed descriptively, including the percentage and average uric acid levels.

**Results:** Of the 30 respondents, 23 (76.7%) had normal uric acid levels with an average of 5.6 mg/dL, and 7 (23.3%) had high uric acid levels with an average of 7.8 mg/dL. High uric acid levels were found in all groups with an overweight BMI (25-29.9 kg/m<sup>2</sup>).

**Conclusion:** The majority of respondents at Tritunggal Gym (76.7%) had normal uric acid levels, while 23.3% had abnormal levels. Higher uric acid levels were found in the 31-57 age group, those who exercised less than three times per week, and those with an overweight BMI.

**Keywords:** Uric Acid, Weightlifting Exercise, Hyperuricemia

## GAMBARAN KADAR ASAM URAT PADA ORANG YANG RUTIN MELAKUKAN LATIHAN ANGKAT BESI

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### ABSTRAK

**Latar Belakang:** Latihan angkat besi dapat menjadi faktor pemicu sementara naiknya kadar asam urat bila dilakukan sangat berat dan terlalu sering. Kadar asam urat pada penggiat angkat besi di Gym Tritunggal, Yogyakarta perlu diperhatikan untuk memantau kesehatan organ ginjal.

**Tujuan:** Mengetahui gambaran meliputi persentase dan rata-rata kadar asam urat pada laki-laki yang melakukan latihan angkat besi di Gym Tritunggal berdasarkan frekuensi latihan, usia, dan Indeks Massa Tubuh (IMT).

**Metode:** Penelitian deskriptif dengan desain *cross sectional*. Sampel berjumlah 30 responden yang diambil secara *purposive sampling*. Pemeriksaan kadar asam urat menggunakan metode *Uricase-PAP* dengan spektrofotometer pada panjang gelombang 520 nm. Data dianalisis secara deskriptif meliputi persentase dan rata-rata kadar asam urat.

**Hasil:** Dari 30 responden, 23 orang (76,7%) memiliki kadar asam urat normal dengan rata-rata 5,6 mg/dL dan 7 orang (23,3%) memiliki kadar asam urat tinggi dengan rata-rata 7,8 mg/dL. Kadar asam urat tinggi, semuanya ditemukan pada kelompok dengan IMT *overweight* (25-29,9 kg/m<sup>2</sup>).

**Kesimpulan:** Mayoritas responden di Gym Tritunggal (76,7%) memiliki kadar asam urat normal, sementara 23,3% tidak normal. Kadar asam urat lebih tinggi ditemukan pada kelompok usia 31-57 tahun, frekuensi latihan < 3 kali per minggu, serta responden dengan kategori IMT *overweight*.

**Kata Kunci:** Asam Urat, Latihan Angkat Besi, Hiperurisemia