

# Hubungan status gizi, aktivitas fisik, asupan gizi, dan faktor lainnya dengan nilai VO2MAX mahasiswa Fakultas Ilmu Keolahragaan Universitas Negeri Jakarta tahun 2016 = Relationship between nutritional status physical activity nutrient intake and other factors with VO2MAX among Sport Science Students in State University of Jkarta 2016

Aridianti Nisa Karima, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20430791&lokasi=lokal>

---

## Abstrak

Nilai VO<sub>2</sub>max merupakan salah satu pengukuran terbaik untuk status kebugaran kardiorespiratori. Penelitian ini bertujuan untuk mengetahui hubungan status gizi, aktivitas fisik, asupan zat gizi, status merokok, tingkat stres dan durasi tidur dengan nilai VO<sub>2</sub>max pada mahasiswa Fakultas Ilmu Keolahragaan UNJ tahun 2016.

Penelitian dilakukan dengan desain studi cross-sectional dengan sampel 114 mahasiswa laki-laki yang dilakukan pada bulan April-Mei tahun 2016. Data yang dikumpulkan antara lain nilai VO<sub>2</sub>max dengan 20-m shuttle run, status gizi dengan pengukuran berat badan, tinggi badan dan persen lemak tubuh, aktivitas fisik dengan kuesioner aktivitas fisik GPAQ, asupan zat gizi dengan food recall 2x24 jam, tingkat stres dengan kuesioner tingkat stres SRQ (Self Reporting Questionnaire), status merokok dan durasi tidur dengan kuesioner. Analisis statistik menggunakan uji t-independen dan uji korelasi.

Hasil penelitian menunjukkan terdapat hubungan yang bermakna antara aktivitas fisik, IMT, persen lemak tubuh, status merokok, durasi tidur, asupan protein, asupan vitamin B1, B2, B6 dan vitamin C dengan nilai VO<sub>2</sub>max. Berdasarkan hasil tersebut diharapkan mahasiswa dapat meminimalkan faktor-faktor yang dapat menyebabkan penurunan nilai VO<sub>2</sub>max sehingga berdampak baik bagi kesehatan dan performa saat latihan maupun bertanding.

.....

VO<sub>2</sub>max is one of the best indicators to measure cardiorespiratory fitness. This study was conducted to determine the relationship between nutritional status, physical activity, nutrient intake, smoking status, level of stress, sleep duration and VO<sub>2</sub>max among Sport Science Students in State University of Jakarta 2016. The study design was cross-sectional study with 114 samples of male sport science students in State University of Jakarta, conducted in April-May 2015. Data were collected include the estimated value of with VO<sub>2</sub>max using 20-m shuttle run test, nutritional status determined by BMI and percent body fat, physical activity using GPAQ (Global Physical Activity Questionnaire), nutrient intake was collected by food recall 2x24 hours, level of stress using Self Reported Questionnaire (SRQ), smoking status and sleep duration by questionnaire. Statistical analysis was using independent t-test and correlation-test.

The result of this study showed the variables BMI, percent body fat, physical activity, smoking status, sleep duration, protein intake and vitamin B1, B2, B6, and C intake was significantly associated with VO<sub>2</sub>max. According to that, it was expected that students can minimize factors which will reduce cardiorespiratory fitness to get health benefit and increase sport performance.