

ABSTRACT

Basketball is one of the world's most popular sport which needs great muscular tenacity to obtain good performances during training session and exhibition. There are many factors which affects muscular tenacity: physical training and activity, fat mass, and adequate nutrients. This research aimed to analyze the correlation between nutrients intake and fat mass to muscular tenacity of UNESA Basketball Student Club's players.

This research was an analytical and observational study with *cross sectional* design. Twenty five (25) students were involved as samples of study and chosen randomly *simple random sampling* method. There were several data collected in this research: weight and height measurements, 1-minute push-up counting, 24 hours food recall, food frequency questionnaire, and interview which were consisted of physical training and the usual training duration.

The results of research indicated that there were correlation between body fat mass ($p = 0.010$) and muscular tenacity. Energy consumption level ($p = -$), proteins consumption level ($p = 0.944$), fat consumption level ($p = 0.203$), Carbohydrate consumption level ($p = 0.828$), training frequency ($p = 0.780$), and training duration ($p = 0.362$) were not significantly related to muscular tenacity.

As a recapitulation, it is evident that fat mass could affect muscular tenacity. Thus, players which are members of UNESA Basketball Student Club are recommended to maintain their fat mass ideally and gain their macronutrients intake properly, especially proteins, to acquire optimum fat mass as well as muscular tenacity.

Keywords: Muscular Tenacity, Fat Mass, UNESA Basketball Student Club.

ABSTRAK

Bola basket merupakan salah satu olahraga populer di dunia yang membutuhkan tingkat daya tahan otot yang baik agar dapat memberikan performa yang baik saat latihan atau bertanding. Terdapat banyak faktor yang mempengaruhi daya tahan otot diantaranya adalah latihan fisik dan aktifitas fisik, massa lemak, dan asupan zat gizi. Tujuan dari penelitian ini adalah untuk menganalisis hubungan antara asupan zat gizi dan massa lemak tubuh dengan daya tahan otot pada mahasiswa anggota Tim UKM Bola Basket UNESA.

Penelitian ini merupakan penelitian observasional analitik dengan desain penelitian *cross sectional*. Sampel penelitian sebanyak 25 orang yang diambil secara acak menggunakan metode *simple random sampling*. Pengumpulan data meliputi penimbangan berat badan, pengukuran tinggi badan, tes *push up* 1 menit, *food recall* 24 jam, *food frequency questionnaire*, wawancara tentang latihan fisik dan durasi latihan fisik.

Hasil penelitian menunjukkan terdapat hubungan antara massa lemak tubuh ($p = 0,010$) dengan daya tahan otot. Tingkat konsumsi energi ($p = -$), tingkat konsumsi protein ($p = 0,944$), tingkat konsumsi lemak ($p = 0,203$), tingkat konsumsi karbohidrat ($p = 0,828$), frekuensi latihan ($p = 0,780$), dan durasi latihan ($p = 0,362$) tidak berhubungan dengan daya tahan otot.

Kesimpulan dalam penelitian ini adalah massa lemak dapat mempengaruhi daya tahan otot. Dalam penelitian ini disarankan mahasiswa anggota Tim UKM Bola Basket UNESA untuk menjaga massa lemak tubuh dan meningkatkan asupan zat gizi makro terutama protein untuk mencapai massa lemak dan daya tahan otot yang baik.

Kata kunci: Daya Tahan Otot, Massa Lemak, UKM Bola Basket UNESA.