

## ABSTRAK

Nurul Fadilah Ardi: *Hubungan Komposisi Tubuh dan Asupan Energi Sarapan dengan Kebugaran Fisik Atlet Cabor Atletik Pemusatan Latihan Daerah (Pelatda) PON Sumatera Utara.* Skripsi. Fakultas Teknik Universitas Negeri Medan 2023.

**Latar Belakang :** Atlet adalah pengolahraga yang mengikuti pelatihan secara teratur dan kejuaraan dengan penuh dedikasi untuk mencapai prestasi, yang harus memperhatikan komposisi tubuh dan asupan makanan, terutama sarapan pagi yang dibutuhkan untuk memenuhi kebutuhan energi saat latihan di pagi hari. Sehingga dapat memiliki kebugaran fisik yang baik pada saat latihan. Atlet cabor atletik terbagi menjadi 4 nomor perlomba yang memiliki jenis latihan yang berbeda-beda sehingga kebutuhan setiap atlet dan nomor perlombaan berbeda pula.

**Tujuan :** Mengetahui hubungan komposisi tubuh dan asupan energi sarapan dengan kebugaran fisik atlet cabor atletik Pemusatan Latihan Daerah (Pelatda) PON Sumatera Utara.

**Metode :** Desain penelitian ini adalah *cross sectional*, sampel diambil dengan teknik *purposive sampling* sebanyak 34 orang. Teknik pengumpulan data dilakukan dengan wawancara (*food recall*) selama 3 hari, pengukuran (BIA), dan tes kebugaran fisik (*leep test*). Analisis dilakukan secara univariat, bivariat, dan multivariat. Analisis bivariat dilakukan dengan uji *Pearson product moment* dan *Spearman-rank*, sedangkan untuk analisis multivariat menggunakan uji regresi logistik multinomial.

**Hasil penelitian :** Menunjukkan tidak terdapat hubungan antara komposisi tubuh dan asupan energi sarapan atlet dengan kebugaran fisik ( $p=0,001$ ) dengan nilai  $R-Square=0,813$  dengan nilai OR 0,017 kali rasio otot kerangka yang tinggi lebih memungkinkan untuk mengalami kebugaran fisik tingkat *fair, average, good, very good, dan excellent*. *Body fat* dan lemak *visceral* memiliki hubungan tidak searah dengan kebugaran fisik, yaitu semakin tinggi persentase *body fat* dan lemak *visceral* maka akan semakin rendah  $VO_{2max}$ . Sedangkan untuk rasio otot kerangka memiliki hubungan searah yaitu semakin tinggi persentasi rasio otot kerangka maka akan semakin tinggi kebugaran fisik pada atlet. Asupan energy sarapan menunjukkan tidak ada hubungan secara signifikan dengan kebugaran fisik

**Kesimpulan :** Tidak terdapat hubungan antara komposisi tubuh dan asupan energi sarapan atlet dengan kebugaran fisik.

Kata kunci : Komposisi tubuh, asupan energi sarapan, kebugaran fisik, *body fat*, lemak *visceral*, rasio otot kerangka.

## **ABSTRACT**

Nurul Fadilah Ardi: *The Relationship between Body Composition and Breakfast Energi Intake with the Physical Fitness of Athletes in Athletics at the North Sumatra PON Regional Training Center (Pelatda).* Essay. Faculty of Engineering, Unimed 2023.

**Background :** Athletes are athletes who participate in regular training and championships with full dedication to achieving achievements, who must pay attention to body composition and food intake, especially breakfast which is needed to meet energi needs during training in the morning. So that you can have good physical fitness during training. Athletics sports athletes are divided into 4 race numbers which have different types of training so that the needs of each athlete and race number are different.

**Aim :** To determine the relationship between body composition and breakfast energi intake with the physical fitness of North Sumatra PON Regional Athletics Training Center (Platda).

**Methods :** The design of this study was cross-sectional, samples were taken using purposive sampling technique as many as 34 people. Data collection techniques were carried out by interviews (food recall) for 3 days, measurements (BIA), and physical fitness tests (bleep tests). The analysis was carried out using univariate, bivariate and multivariate methods. Bivariate analysis was performed using Pearson product moment and Spearman-rank tests, while for multivariate analysis using multinomial logistic regression.

**Result :** The results of the study showed that there was no relationship between body composition and energy intake of athletes' breakfast with physical fitness ( $p = 0.001$ ) with an R-Square value = 0.813 with an OR value of 0.017 times the high skeletal muscle ratio more likely to experience a fair, average level of physical fitness , good, very good, and excellent. Body fat and visceral fat have a non-directional relationship with physical fitness, that is, the higher the percentage of body fat and visceral fat, the lower the VO<sub>2max</sub>. Meanwhile, the skeletal muscle ratio has a unidirectional relationship, namely the higher the percentage of skeletal muscle ratio, the higher the physical fitness of the athlete. Breakfast energy intake showed no significant relationship with physical fitness.

**Conclusion :** There is no relationship between body composition and athletes' breakfast energy intake with physical fitness..

**Keywords:** Body composition, breakfast energi intake, physical fitness, body fat, visceral fat, skeletal muscle ratio.