

## Perbedaan Kualitas Diet dan Kebugaran Kardiorespiratori pada Atlet Klasifikasi Cabang Olahraga *Endurance* dan *Power* di PPLOP Jawa Tengah

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### ABSTRAK

**Latar belakang:** Hasil studi tentang perbedaan kualitas diet dan kebugaran kardiorespiratori pada atlet cabang olahraga *endurance* dan *power* di Indonesia masih terbatas. Jika tidak terdapat perbedaan signifikan dalam kualitas diet dan kebugaran kardiorespiratori antara atlet cabang olahraga *endurance* dan *power*, hal ini dapat mengindikasikan kemungkinan adanya kekurangan kualitas diet, pelatihan, dan performa pada atlet *endurance*.

**Tujuan:** Perbedaan kualitas diet dan kebugaran kardiorespiratori pada atlet *endurance* dan *power* di PPLOP Jawa Tengah dapat diketahui.

**Metode:** Desain penelitian *cross sectional*, jumlah sampel ditentukan dengan rumus dua proporsi sampel dan diambil dengan teknik *consecutive sampling*. Subjek penelitian terdiri dari atlet *endurance* dan atlet *power* yang terdaftar di Pemusatan Pendidikan dan Latihan Olahraga Pelajar (PPLOP) Jawa Tengah. Instrumen pengambilan data kualitas diet yaitu *athlete diet index* (ADI), sedangkan data kebugaran kardiorespiratori menggunakan *harvard step-test*. Analisis data dilakukan menggunakan *Independent T-test*.

**Hasil:** Mayoritas atlet memiliki IMT normal, persen lemak tubuh cukup, skor ADI rendah, dan skor *Harvard Step-Test* sangat baik. Analisis bivariat menunjukkan tidak ada perbedaan signifikan antara kualitas diet ( $p = 0,826$ ) dan kebugaran kardiorespiratori ( $p = 0,429$ ) pada atlet klasifikasi cabang olahraga *endurance* dan *power*.

**Simpulan:** Tidak ada perbedaan signifikan antara kualitas diet dan kebugaran kardiorespiratori pada atlet klasifikasi cabang olahraga *endurance* dan *power* di PPLOP Jawa Tengah.

**Kata kunci:** Kualitas diet, *athlete diet index*, kebugaran kardiorespiratori, atlet *endurance*, atlet *power*

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## **Difference in Diet Quality and Cardiorespiratory Fitness Between Endurance and Power Athletes Classified at the PPLOP Central Java**

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### **ABSTRACT**

**Background:** The results of studies on the differences in diet quality and cardiorespiratory fitness between endurance and power athletes in Indonesia are still limited. If no significant differences are found in diet quality and cardiorespiratory fitness between endurance and power sports athletes, this may indicate potential deficiencies in diet quality, training, and performance among endurance athletes.

**Objective:** Differences in diet quality and cardiorespiratory fitness between endurance and power athletes at the PPLOP Central Java are to be determined.

**Methods:** A cross-sectional study design was employed, with sample size determined using the two-sample proportion formula and selected via consecutive sampling technique. Study subjects consisted of endurance and power athletes registered in the Central Java Student Sports Education and Training Center (PPLOP). Data on diet quality were collected using the Athlete Diet Index (ADI), while cardiorespiratory fitness data were obtained using the Harvard Step Test. Data analysis was performed using Independent T-test.

**Results:** The majority of athletes have a normal BMI, sufficient body fat percentage, low ADI scores, and excellent Harvard Step-Test scores. Bivariate analysis showed no significant difference between diet quality ( $p = 0.826$ ) and cardiorespiratory fitness ( $p = 0.429$ ) among endurance and power sports athletes.

**Conclusion:** There were no significant differences in diet quality and cardiorespiratory fitness between endurance and power sports athletes at the PPLOP Central Java.

**Keywords:** Diet quality, athlete diet index, cardiorespiratory fitness, endurance athletes, power athletes

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