

ABSTRAK

Rizki Prida Nicky : Hubungan Asupan Protein Dan Aktivitas Fisik Dengan Kekuatan Otot Pada Atlet Bela Diri Sumatera Utara. Skripsi. Program Studi Gizi. Pendidikan Kesejahteraan Keluarga. Fakultas Teknik. Universitas Negeri Medan.

Kekuatan otot merupakan salah satu komponen kebugaran yang berkaitan dengan kesehatan (*health related fitness*). Kekuatan otot merupakan komponen penting bagi atlet penggiat cabang olahraga bela diri. Protein merupakan salah satu asupan yang dapat mempengaruhi kekuatan atlet seseorang. Selain protein aktivitas fisik juga salah satu faktor yang berhubungan dengan kekuatan otot. Berdasarkan observasi pada atlet bela diri cabang olahraga judo, karate, dan pencak silat di PPLP Sumatera Utara ditemukan 7 dari 17 atlet memiliki kekuatan otot yang kurang sekali. Penelitian ini dilakukan untuk mengetahui hubungan asupan protein dan aktivitas fisik dengan kekuatan otot atlet bela diri cabang olahraga judo, karate, dan pencak silat.

Desain penelitian yang digunakan pada penelitian ini yaitu *cross sectional*. Penelitian dilaksanakan di PPLP Sumatera Utara. Teknik sampling menggunakan *total sampling* sebanyak 33 orang dari seluruh cabang olahraga judo, karate, dan pencak silat. Data yang diukur adalah asupan protein dengan menggunakan *form food recall* 2x24 jam. Aktivitas fisik diukur menggunakan PAL 1x 24 jam. Kekuatan otot diukur dengan *push up test* selama 1 menit. Analisis bivariat menggunakan uji korelasi *pearson*. Analisis multivariat menggunakan analisis regresi linear berganda.

Hasil analisis univariat menunjukkan bahwa asupan protein pada atlet bela diri judo, karate, dan pencak silat yaitu kurang. Aktivitas fisik atlet judo, karate, dan pencak silat yaitu berat. Kekuatan otot mayoritas atlet judo, karate, dan pencak silat yaitu sedang. Hasil analisis bivariat menunjukkan tidak ada hubungan antara asupan protein dengan kekuatan otot ($p=0,066$) dan ada hubungan antara aktivitas fisik dengan kekuatan otot ($p=0,000$). Analisis regresi linear berganda menunjukkan tidak terdapat hubungan antara protein dengan kekuatan otot ($p=0,229$) dan terdapat hubungan antara aktivitas fisik dengan kekuatan otot ($p=0,002$).

Kata kunci: Asupan protein, aktivitas fisik, dan kekuatan otot

ABSTRACT

Rizki Prida Nicky : *The Relationship Between Protein Intake And Physical Activity With Muscle Strength In Martial Art Athlete At PPLP North Sumatera.* Thesis. Nutrition Major. Family Welfare Education. Faculty of Engineering. Medan State University.

Muscle strength is one of the components of fitness related to health (health related fitness). Muscle strength is an important component for athletes who are active in martial arts. Protein is one of the intakes that can affect the strength of a person's athletes. In addition to protein, physical activity is also one of the factors related to muscle strength. Based on observations on martial arts athletes in judo, karate, and pencak silat at PPLP North Sumatra, it was found that 7 out of 17 athletes had very little muscle strength. This study was conducted to determine the relationship between protein intake and physical activity with the muscle strength of martial arts athletes in judo, karate, and pencak silat.

The research design used in this study is cross sectional. The research was carried out at PPLP North Sumatra. The sampling technique used a total sampling of 33 people from all branches of judo, karate, and pencak silat. The data measured was protein intake using a 2x24-hour food recall form. Physical activity was measured using a 1x 24-hour PAL. Muscle strength is measured by a 1-minute push up test. Bivariate analysis uses a Pearson correlation test. Multivariate analysis uses multiple linear regression analysis.

The results of univariate analysis showed that the protein intake in judo, karate, and pencak silat martial arts athletes was lacking. The physical activity of judo, karate, and pencak silat athletes is heavy. The muscle strength of the majority of judo, karate, and pencak silat athletes is moderate. The results of bivariate analysis showed that there was no relationship between protein intake and muscle strength ($p=0.066$) and there was a relationship between physical activity and muscle strength ($p=0.000$). Multiple linear regression analysis showed that there was no relationship between protein and muscle strength ($p=0.229$) and there was a relationship between physical activity and muscle strength ($p=0.002$).

Keywords: Protein intake, physical activity, and muscle strength

