

Hubungan Asupan Protein dan Konsumsi Suplemen dengan Massa Otot pada Member *Fitness Center* di Semarang

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ABSTRAK

Latar Belakang : Otot dapat dibentuk dengan latihan agar tubuh menjadi ideal dan atletis sehingga meningkatkan kepercayaan diri bagi laki-laki. Selain dari latihan, salah satu cara yang mudah dan cepat untuk membentuk massa otot yaitu dengan menerapkan diet tinggi protein dan mengonsumsi suplemen.

Tujuan : Penelitian ini bertujuan untuk mengetahui apakah terdapat hubungan asupan protein dan konsumsi suplemen dengan massa otot pada member *fitness center* di Semarang.

Metode : Penelitian ini merupakan penelitian observasional dengan rancangan *cross-sectional*. Jumlah subjek sebanyak 55 member *fitness* berjenis kelamin laki-laki berusia 20-50 tahun yang diambil menggunakan metode *consecutive sampling*. Data yang diambil yaitu identitas subjek, massa otot yang diukur menggunakan *Bioelectrical Impedance Analysis* (BIA), asupan energi protein yang diperoleh melalui wawancara dengan *Semi-Quantitative Food Frequency Questionnaire* (SQ-FFQ), konsumsi suplemen dan kuantitas latihan yang diperoleh melalui wawancara. Analisis data menggunakan analisis korelasi *rank spearman* dan uji regresi linier ganda.

Hasil : Sebagian besar massa otot subjek termasuk kedalam kategori sedang (87,2%) dengan rerata $58,50 \pm 7,33$ kg. Terdapat 49% subjek dengan asupan protein total lebih dari kebutuhan, dan sebanyak 45 subjek (81,8%) mengonsumsi suplemen *fitness*. Kuantitas latihan sebagai perancu memiliki hubungan positif dengan massa otot ($p=0,018$). Tidak terdapat hubungan antara asupan energi dan protein, konsumsi suplemen, usia dengan massa otot ($p>0,05$). Kuantitas latihan secara signifikan mempengaruhi massa otot sebesar 13,7%.

Simpulan : Terdapat hubungan antara kuantitas latihan dengan massa otot pada member *fitness center* di Semarang.

Kata Kunci : protein, suplemen, massa otot, kuantitas latihan, *fitness center*.

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Correlation of Protein Intake and Supplement Consumption with Body Muscle Mass in Members of a Fitness Center in Semarang

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ABSTRACT

Background: Muscle could be formed by exercising for the body to be ideal and athletic so it could increase the confidence of men. Besides exercising, one of the easiest and fastest ways to shape muscle mass was to adopt a high-protein diet and consume supplements.

Purpose: This study aimed to determine whether there is a correlation between protein intake and consumption of supplements with muscle mass in members of a *fitness center* in Semarang.

Method: This study was observational with a *cross-sectional* design. The subject were 55 male fitness members aged 20-50 years who were taken using the *consecutive sampling* method. The data were subject identity, muscle mass was measured using *Bioelectrical Impedance Analysis* (BIA), intake protein energy obtained through Interview with *Semi-Quantitative Food Frequency Questionnaire* (SQ-FFQ), consumption supplement and quantity training gained through interview. Data analysis used *spearman rank* correlation analysis and multiple linear regression test.

Result: Most muscle mass subjects were included in the category moderate (87.2%) with a mean of 58.50 ± 7.33 kg. There were 49% of subjects with more total protein intake from their needs, and as many as 45 subjects (81.8%) consumed supplement *fitness*. Quantity practice as a confounder had a positive connection with muscle mass ($p=0.018$). There was no connection between intake of energy and protein, consumption of supplements, and age with mass muscle ($p>0.05$). Quantity practice significantly influenced mass muscle by 13.7%.

Conclusion: There was a correlation between quantity practice with muscle mass in members of a *fitness center* in Semarang.

Keywords: protein, supplements, muscle mass, quantity exercise, *fitness center*.

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