

HUBUNGAN ASUPAN PROTEIN TERHADAP TEKANAN DARAH DAN KREATININ SERUM PADA ANGGOTA PUSAT KEBUGARAN DI YOGYAKARTA

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INTISARI

Latar Belakang: Dewasa ini masyarakat mulai sadar akan pentingnya olahraga untuk mencapai hidup sehat. Salah satu cara berolahraga yang praktis dan dinilai nyaman bagi sebagian orang adalah di pusat kebugaran. Berbagai metode dilakukan guna mendapatkan postur dan komposisi tubuh yang dinilai ideal dalam masyarakat. Salah satu diantaranya yaitu dengan mengonsumsi sejumlah besar protein dalam makanan sehari-hari. Disamping itu, diet tinggi protein dinilai membahayakan fungsi ginjal dalam jangka waktu lama. Namun efek positifnya, protein dinilai dapat menurunkan tekanan darah.

Tujuan Penelitian: Mengetahui hubungan antara asupan protein terhadap tekanan darah sistolik, tekanan darah diastolik dan kreatinin serum pada anggota pusat kebugaran di Yogyakarta

Metode Penelitian: Penelitian ini merupakan penelitian observasional dengan pendekatan *cross-sectional*. Data tekanan darah diambil dengan tiga kali pengulangan. Data kreatinin serum diambil dari darah oleh tenaga ahli sebanyak 3-5 ml. Data asupan dikumpulkan menggunakan *Semi Quantitative Food Frequency Questionnaire* (SQFFQ) yang dibagikan kepada 45 subyek di 7 pusat kebugaran di Yogyakarta untuk kemudian dianalisis menggunakan uji korelasi *Pearson* dan *Spearman*.

Hasil: Tidak terdapat hubungan antara asupan protein terhadap tekanan darah sistolik, tekanan darah diastolik maupun kreatinin serum ($p > 0,05$). Rata-rata tekanan darah sistolik ($125 \pm 11,23$ mmHg) dan tekanan darah diastolik ($76,76 \pm 10,7$ mmHg) subyek tergolong normal begitu pula dengan rata-rata kreatinin serum ($1,17 \pm 0,36$ mg/dL) meski asupan protein yang dikonsumsi subyek rata-rata 1,3 gram/kg berat badan per hari. Faktor lain seperti karbohidrat, lemak, natrium, kalium, kalsium dan magnesium yang dapat mempengaruhi tekanan darah nyatanya kurang terlihat pengaruhnya dalam penelitian ini. Penelitian lebih lanjut pada subyek dengan kriteria ekstrim seperti riwayat tekanan darah tinggi dan mempunyai faktor resiko gagal ginjal lebih disarankan agar hubungan ketiga variabel lebih terlihat.

Kesimpulan: Tidak ada hubungan yang berarti antara asupan protein terhadap tekanan darah dan kreatinin serum pada anggota pusat kebugaran di Yogyakarta.

Kata Kunci: pusat kebugaran, asupan protein, tekanan darah, kreatinin serum, fungsi ginjal, SQFFQ.

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THE CORRELATION BETWEEN PROTEIN INTAKE WITH BLOOD PRESSURE AND SERUM CREATININE IN MEMBER FITNESS CENTER IN YOGYAKARTA

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ABSTRACT

Background: Nowadays the community is beginning to realize the importance of exercise to achieve a healthy life. One of the practical ways of exercising and convenient for some people is in the fitness center. Various methods are done in order to obtain posture and body composition that is assessed ideal in society. One of them is to consume a large amount of protein in the daily diet. In addition, a high protein intake is considered to harm kidney function in the long term. In the contrary, protein intake also considered can lower blood pressure.

Objective: To identify the correlation between protein intake with systolic blood pressure, diastolic blood pressure and serum creatinine in the members fitness center in Yogyakarta.

Method: This research is an observational research with a cross-sectional approach. Blood pressure data were collected with three repetitions. Serum creatinine data were collected from the blood by experts as much as 3-5 ml. Protein intake data is collected using Semi Quantitative Food Frequency Questionnaire (SQFFQ) which were distributed to 45 subjects in 7 fitness centres in Yogyakarta. This data were analyzed using Pearson and Spearman correlation test.

Results: There was no relation between protein intake with systolic blood pressure, diastolic blood pressure or serum creatinine ($p > 0.05$). The average systolic blood pressure (125 ± 11.23 mmHg) and diastolic blood pressure (76.76 ± 10.7 mmHg) of the subjects was normal as well as average serum creatinine (1.17 ± 0.36 mg/dL) despite the average protein intake of the subjects was 1.3 grams/kg body weight per day. Other factors such as carbohydrates, fats, sodium, potassium, calcium and magnesium can affect blood pressure also can't represent the effect to the dependent variables in this study. Further research on subjects with extreme criteria such as high blood pressure or people in risk of renal failure was more advisable in order to gain the strong relationship of the three variables.

Conclusion: There was no significant relation between protein intake with blood pressure and serum creatinine in member fitness center in Yogyakarta. failure was more advisable in order to gain the strong relationship of the three variables.

Keywords: fitness center, protein intake, blood pressure, serum creatinine, kidney function, SQFFQ.

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