

## Hubungan Kualitas Diet dan Status Gizi dengan Tekanan Darah pada Pra Lansia dan Lansia di Kecamatan Semarang Tengah

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### ABSTRAK

**Latar Belakang:** Prevalensi hipertensi pada usia lanjut, khususnya di Semarang Tengah terus mengalami peningkatan setiap tahunnya. Kecamatan Semarang Tengah diketahui sebagai daerah pusat perkotaan di Kota Semarang yang memungkinkan penduduk usia lanjut terpapar makanan berisiko dan mengalami penurunan kualitas diet yang erat dengan masalah hipertensi. Status gizi lebih juga berkaitan erat dengan masalah hipertensi pada usia lanjut.

**Tujuan:** Mengetahui hubungan antara kualitas diet dan status gizi dengan tekanan darah pada pra lansia dan lansia di Kecamatan Semarang Tengah.

**Metode:** Penelitian ini merupakan studi *cross-sectional*. Subjek penelitian sejumlah 75 orang yang memenuhi kriteria inklusi dan eksklusi. Kualitas diet diukur berdasarkan formulir *Diet Quality Index-International (DQI-I)*. Status gizi ditinjau berdasarkan indeks massa tubuh, persen lemak tubuh dan lingkar pinggang. Tekanan darah diukur menggunakan *sphygmomanometer* digital. Data dianalisis menggunakan uji *Pearson*, *Rank Spearman* dan regresi linear metode *backward*.

**Hasil:** Sebanyak 37,34% subjek mengalami hipertensi. Subjek yang mengalami gizi lebih berdasarkan indeks massa tubuh sebanyak 61,3%, persen lemak tubuh sebanyak 70,7% dan lingkar pinggang sebanyak 73,3%. Mayoritas subjek (93,3%) memiliki kualitas diet yang rendah. Terdapat korelasi negatif antara kualitas diet dengan tekanan darah sistolik ( $r = -0,554$ ;  $p = 0,000$ ) dan diastolik ( $r = -0,388$ ;  $p = 0,001$ ). Sementara itu, terdapat korelasi positif antara status gizi yang ditinjau berdasarkan lingkar pinggang dengan tekanan darah sistolik ( $r = 0,348$ ;  $p = 0,002$ ).

**Kesimpulan:** Kualitas diet berkorelasi negatif terhadap tekanan darah sistolik dan diastolik. Lingkar pinggang berkorelasi positif terhadap tekanan darah sistolik.

**Kata kunci:** Pra lansia, Lansia, Kualitas Diet, Status Gizi, Tekanan Darah

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## ***Correlation between Diet Quality and Nutritional Status with Pre-Elderly and Elderly Blood Pressure in Central Semarang District***

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### **ABSTRACT**

**Background:** The prevalence of hypertension in elderly at Central Semarang District have been increase every year. The Central Semarang district is known as the urban center of Semarang, potentially exposing the elderly residents to high-risk foods and low diet quality, which is associated with hypertension. Moreover, overnutrition is also related to hypertension in elderly.

**Objectives:** To determine the relationship between diet quality and nutritional status with pre-elderly and elderly blood pressure in Central Semarang District.

**Methods:** This study used a cross-sectional method with 75 participants who fulfill an inclusion and exclusion criterias. Diet quality was measured by Diet Quality Index-International (DQI-I). Nutritional status was evaluated based on body mass index, percentage of body fat, and waist circumference. Blood pressure was measured by digital sphygmomanometer. Data were analyzed using Pearson's correlation, Spearman's rank correlation, and linear regression with backward methods.

**Results:** There were 37,34% of subjects had hypertension, 61,3% of subjects had high body mass index, 70,7% of subjects had high percent body fat and 73,3% of subjects had high waist circumference. The majority of subjects (93,3%) had low diet quality. This study showed a negative correlation between diet quality with systolic ( $r = -0,554$ ;  $p = 0,000$ ) and diastolic ( $r = -0,388$ ;  $p = 0,001$ ) blood pressure, also positive correlation between nutritional status based on waist circumference with systolic blood pressure ( $r = 0,348$ ;  $p = 0,002$ ).

**Conclusions:** Diet quality was negatively correlated with systolic and diastolic blood pressure. Waist circumference was positively correlated with systolic blood pressure.

**Keywords:** Pre-elderly, Elderly, Diet Quality, Nutritional Status, Blood Pressure

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