

# **HUBUNGAN ASUPAN SERAT, PERSEN LEMAK TUBUH, ASUPAN NATRIUM, ASUPAN LEMAK, DAN AKTIVITAS FISIK DENGAN PENINGKATAN TEKANAN DARAH PADA REMAJA DI SMA NEGERI 109 JAKARTA TAHUN 2025**

**Amanda Fairuz Rahmatia**

## **Abstrak**

Peningkatan tekanan darah dapat meningkatkan risiko penyakit jantung, stroke, dan komplikasi lainnya, penyakit ini sering disebut sebagai pembunuh tanpa gejala. Penelitian ini bertujuan untuk mengetahui hubungan dan korelasi antara asupan serat, natrium, lemak, aktivitas fisik, dan persen lemak tubuh dengan peningkatan tekanan darah. Desain cross-sectional digunakan dalam penelitian ini. Random sampling stratified digunakan dengan standar inklusi dan eksklusi yang telat ditetapkan. Data dikumpulkan di SMA Negeri 109 Jakarta, yang memiliki 190 responden. Pengukuran dilakukan secara langsung dengan menghitung persen lemak tubuh, serta mengumpulkan data asupan melalui kuesioner SQ-FFQ dan kuesioner IPAQ untuk data aktivitas fisik. Selanjutnya, uji Kolmogorov-Smirnow digunakan untuk menguji data normalitas. Hasil uji korelasi spearman digunakan untuk menganalisis data. Hasilnya menunjukkan tingkat lemak tubuh ( $p=0,000$ ) dan ( $p=0,096$ ), asupan serat ( $p=0,619$ ) dan ( $p=0,954$ ), asupan natrium ( $p=0,768$ ) dan ( $p=0,526$ ), asupan lemak ( $p=0,355$ ) dan ( $p=0,485$ ), dan aktivitas fisik ( $p=0,170$ ) dan ( $p=0,256$ ). Tidak ada korelasi signifikan antara tekanan darah sistolik dan asupan serat, natrium, lemak, dan aktivitas fisik dengan persen lemak tubuh.

**Kata Kunci :** Tekanan darah, Asupan Serat, Persen Lemak Tubuh, Asupan Natrium, Asupan Lemak, Aktivitas Fisik

**THE RELATIONSHIP BETWEEN FIBER INTAKE, PERCENT  
BODY FAT, SODIUM INTAKE, FAT INTAKE, AND  
PHYSICAL ACTIVITY WITH ELEVATED BLOOD  
PRESSURE IN ADOLESCENTS AT PUBLIC HIGH SCHOOL  
109 JAKARTA IN 2025**

**Amanda Fairuz Rahmatia**

**Abstract**

High blood pressure may raise the chances of developing heart disease, stroke, and other health issues, with heart disease often being labeled a silent killer. This research seeks to examine the association between elevated blood pressure and factors such as increased body fat percentage, physical activity levels, as well as fiber, sodium, and fat consumption. A cross-sectional design was used in this investigation. Stratified random sampling was used with predefined inclusion and exclusion criteria. Data was gathered from 190 respondents at SMA Negeri 109 in Jakarta. Body fat percentage was used for direct measurements, and the SQ-FFQ and IPAQ questionnaires were used to gather information on intake and physical activity. Additionally, the normality of the data was evaluated using the Kolmogorov-Smirnov test. The results of the Spearman correlation test were used to analyze the data. The results showed that body fat levels ( $p=0.000$ ) and ( $p=0.096$ ), fiber intake ( $p=0.619$ ) and ( $p=0.954$ ), sodium intake ( $p=0.768$ ) and ( $p=0.526$ ), fat intake ( $p=0.355$ ) and ( $p=0.485$ ), and physical activity ( $p=0.170$ ) and ( $p=0.256$ ). There was no significant correlation between systolic blood pressure and fiber, sodium, fat intake, and physical activity with body fat percentage

**Keyword :** Blood pressure, Fiber Intake, Percent Body Fat, Sodium Intake, Fat Intake, Physical Activity