# Relationship of Fiber Intake and Central Obesity with Hypertension in Teachers of SMA 1 and SMA 2 Sumenep

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## ABSTRACT

*Hypertension is often referred to as "the silent killer" due to its asymptomatic nature and lack of complaints, which can ultimately lead to death. In Sumenep Regency, the prevalence of hypertension has shown an upward trend, increasing from 70,870 cases in 2022 to 103,873 cases in 2023. Central obesity is a contributing factor to hypertension, as individuals with central obesity tend to have higher cardiac output and blood volume circulation compared to those without. Dietary intake, particularly fiber consumption, also plays a role in the development of hypertension. Low fiber intake may reduce the excretion of fat and bile through feces, leading to their reabsorption into the bloodstream. This increases circulating cholesterol levels, which may obstruct blood flow and result in elevated blood pressure.This study aims to analyze the association between fiber intake and central obesity with hypertension among teachers at SMA 1 and SMA 2 in Sumenep. The study employed a descriptive-analytic method with a cross-sectional design. A total of 68 respondents were selected through simple random sampling. Blood pressure measurements were obtained using a digital sphygmomanometer, central obesity was assessed based on waist circumference using a measuring tape (metline), and fiber intake was measured using the (SQ-FFQ). Statistical analysis was conducted using the Chi-square test. The findings indicated that there was no statistically significant association between fiber intake and hypertension (p-value = 0.248), whereas a significant association was found between central obesity and the incidence of hypertension (p-value = 0.006) among the teachers at SMA 1 and SMA 2 in Sumenep*

*Keywords: Hypertension, Fiber Intake, Central Obesity, Teachers.*