

## ABSTRACT



ESA UNGGUL UNIVERSITY  
FACULTY OF HEALTH SCIENCES  
NUTRITION STUDIES PROGRAM  
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### THE ASSOCIATION BODY MASS INDEX, SODIUM AND POTASSIUM INTAKE, SODIUM-TO-POTASSIUM RATIO, AND BLOOD PRESSURE AMONG ESA UNGGUL UNIVERSITY'S PERSONNEL

viii, VI BAB, 78 pages, 5 table

**Background:** Riskesdas (2013) shows that prevalence of hypertension in Indonesia is 25.8%. Prevalence of hypertension in DKI Jakarta is 20.0%. Some studies have found that body mass index, sodium and potassium intake, sodium-to-potassium ratio associated with blood pressure.

**Objective:** This study examined the association between body mass index, sodium and potassium intake, sodium-to-potassium ratio and blood pressure among of Esa Unggul University's personnel .

**Design:** This was a *cross sectional* study, samples are 45 years old and less, non cardiovascular or diabetics or kidney illnesses, non-smoker (n=75). Statistics analysis using correlation.

**Result:** Mean of BMI is 24.2 kg/m<sup>2</sup> ( $\pm 4.5$ ), sodium intake 583.0 mg/day ( $\pm 200.2$ ), potassium intake 1746.2 mg/day ( $\pm 612.9$ ), sodium-to-potassium ratio 1.4 ( $\pm 0.6$ ), systolic blood pressure 123.2 mmHg ( $\pm 17.0$ ) and diastolic 81.8 mmHg ( $\pm 10.4$ ). Samples that had normal blood pressure are 33 samples (44.0%), pre-hypertension are 21 samples (28.0%) and hypertension are 21 samples (28.0%). Analysis showed that body mass index and sodium-to-potassium had significant influence with blood pressure. Sodium intake, potassium intake, and blood pressure has no significant correlation with hypertension.

**Conclusion:** Periodic medical examinations for personnel twice a year are required to improve the quality of work.

Keywords : Body Mass Index, Sodium, Potassium Intake, Sodium-to-Potassium Ratio, Blood Pressure

Reference : 64 (1996-2014)