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学位論文の題名	<p>The prevalence and characteristics of microalbuminuria in the general population: a cross-sectional study (一般住民における微量アルブミン尿の出現頻度と特徴：断面研究)</p> <p>BMC Research Notes 2013, 6:256</p>
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## **Abstract**

### **BACKGROUND:**

Microalbuminuria is a marker of cardiovascular events. This study investigated the prevalence of microalbuminuria in the general population and the factors that can affect urinary excretion of albumin.

### **METHODS:**

Apparently healthy subjects who participated in a health checkup at our hospital were enrolled in this study (n = 7963, male 64.0%, 56.2 ± 11.8 years old). Urine samples were collected for the measurement of albumin concentrations, which were expressed as the ratio of urinary albumin to creatinine concentrations (UACR [mg/g Cr]). Individual salt intake was assessed by estimating the 24-hour urinary salt excretion of subjects.

### **RESULTS:**

The mean blood pressure was 124 ± 15/76 ± 10 mmHg and 31.6%, 7.4%, and 44.1% of subjects had hypertension, diabetes mellitus, and dyslipidemia, respectively. Urinary albumin was detected in 7265 subjects (91.2%: UACR ≥ 300 mg/g Cr, 0.5%; 300 > UACR ≥ 30 mg/g Cr, 4.6%; 30 > UACR ≥ 20 mg/g Cr, 2.4%; 20 > UACR ≥ 10 mg/g Cr, 8.7%; 10 > UACR ≥ 5 mg/g Cr, 21.8%; UACR < 5 mg/g Cr, 53.2%). In subjects with detectable albuminuria, UACR was independently correlated with age, systolic blood pressure, serum creatinine, fasting plasma glucose, and salt intake after adjustment for possible factors (P < 0.0001).

### **CONCLUSION:**

The prevalence of microalbuminuria was found to be 4.6% in the general population. The urinary excretion of albumin was shown to be closely associated with blood pressure and salt intake. These data indicate the importance of dietary salt restriction for the prevention of cardiovascular disease as well as end-stage renal disease.