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## Epidemiology

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### 3.6 Sodium Intake in a Sample of Males Working in Campania: Results of the Olivetti Heart Study

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**Aim.** To assess dietary habitual sodium intake, the association between sodium intake and anthropometric indexes, food habits and hypertension in the sample of adult male population participating in the Olivetti Heart Study.

**Methods.** The data included in the present analysis were collected during the follow up examination visit performed in 2002-2004 on a total of 940 men (age:  $59.7 \pm 6.7$  years,  $M \pm DS$ ). The study included anthropometric and haemodynamic measurements, a blood test and a food frequency questionnaire (FFQ, 1- year close-ended, 120 items). Dietary sodium intake was estimated by 24-hour urinary sodium excretion.

**Results.** 58% of participants were overweight and 17% were obese. The prevalence of hypertension was 70.6% (BP >140 and/or 90 mmHg or current antihypertensive therapy). Urinary sodium excretion was  $203.2$  mmol/24-hour (median 194.8), urinary volume  $1537 \pm 485$ ml and creatinine excretion  $1.5 \pm 0.4$ /24-hour. Estimated dietary sodium intake was thus approximately 12 g/day. Urinary sodium excretion was not significantly related to age or blood pressure. In hypertensive participants on regular antihypertensive treatment urinary sodium excretion was slightly and significantly lower (median 188.2 mmol/24-hour) than in subjects patients not on drug therapy (median 201 mmol/24 hour,  $p < 0.05$ ). Sodium excretion was significantly associated with anthropometric indexes of total adiposity (BMI), waist circumference ( $p < 0.01$ ) and with daily intake of salami ( $p < 0.01$ ), pasta ( $p < 0.01$ ) and meat products ( $p < 0.01$ ).

**Conclusions.** Habitual salt intake in Campania is still very high, averaging about 12 g/day. Sodium intake was higher in participants with overweight and obesity and only slightly lower in hypertensive participants on pharmacological therapy.