### Knowledge and behaviors regarding salt intake according to urinary Na excretion and blood pressure Tânia da Silva Santos

T Silva-Santos<sup>1</sup>, P Moreira<sup>1,2,3</sup>, P Padrão<sup>1,3</sup>, S Abreu<sup>2,4</sup>, O Pinho<sup>1,5</sup>, C Gonçalves<sup>1,2,6</sup>

<sup>1</sup>Faculty of Nutrition and Food Science, Porto, Portugal

<sup>2</sup>CIAFEL - Research Centre in Physical Activity, Health and Leisure, Faculty of Sport, University of Porto, Porto, Portugal

<sup>3</sup>EPIUnit, Institute of Public Health, University of Porto, Porto, Portugal <sup>4</sup>Faculty of Psychology, Education and Sports, Lusófona University, Porto, Portugal

<sup>5</sup>LAQV-REQUIMTE, Laboratory of Bromatology and Hydrology, Faculty of Pharmacy, University of Porto, Porto, Portugal

<sup>6</sup>University of Trás-os-Montes and Alto Douro, Vila Real, Portugal Contact: taniiasilvasantos@gmail.com

## Background:

Understanding salt-related knowledge, attitudes and behaviors can help the design of effective health interventions. Therefore, our objective was to describe knowledge and behaviors related to salt intake according to urinary sodium excretion and blood pressure in University workers.

## Methods:

We performed our study in a subsample of the participants of the iMC Salt project (n = 60 subjects, 60.5% women, mean age 48±9.5 years). Sodium excretion were measured by one 24-h urinary collection, validated by creatinine excretion and participants were grouped according to the WHO sodium recommendations (<2.0 g/day; high,  $\geq$ 2.0 g/day). Subjects were classified as hypertensive if the systolic blood pressure was  $\geq$ 130 mmHg and/or diastolic blood pressure was  $\geq$ 80mmHg. Knowledge and behaviors regarding salt intake were assessed by the WHO Stepwise Approach to Chronic Disease Risk Factor Surveillance.

## **Results:**

About 74.6% of the participants reported that reducing salt in their diet was very important and 93.2% think that salt is harmful to health. However, 76.3% always add salt during cooking, 42.4% said that they always or often consume processed foods high in salt, 79.7% reported that they don't look at the salt on food labels, 50.8% don't buy low salt alternatives and 30.5% don't use spices as one substitute for salt when cooking. Hypertensive subjects had a higher mean sodium excretion  $(3710\pm1508\text{mg/day vs } 2478\pm871\text{mg/day}, p=0.002)$  and reported a significant higher frequency of consumption of processed foods high in salt (53.1% vs 29.6%, p=0.024). No significant differences were found with the other variables.

#### **Conclusions:**

Most university workers were aware that high salt intake can cause health problems, but they reported low adherence to behaviors to control their salt intake. Hypertensive subjects recognized that frequently consume processed foods high in salt, so reduce salt content on those products could have important impact on their daily salt consumption. **Key messages:** 

# • This study provides evidence on knowledge and behaviors regarding salt intake to guide salt reduction policies.

• Hypertensive participants reported a higher frequency of eating processed foods rich in salt.