Sodium quantification in meals: from methodology to diagnosis

C. Resende¹, S. Rodrigues¹, O. Pinho¹ and P. Graça¹

¹ Faculty of Nutrition, University of Porto, Portugal.

Hypertension is associated with high salt intake and is related to the development of cardiovascular diseases, which represent a large percentage of chronic diseases in the world. Western countries have a high salt intake and therefore, there are need to establish policies for diagnosis and intervention around the topic.

This study aimed to estimate the amount of salt present in meals served in a Restaurant, in the Oporto city, and to verify the applicability of a technique of flame photometry in the analysis of complete meals. Based on the quantification of sodium in foods, a comparison was made with the recommendations proposed by the World Health Organization (5 g salt/day) for this mineral; perception of the users about the amount of salt in the foods analyzed was also investigated through a questionnaire.

The results of the quantification showed high levels of salt in meals, when compared to the recommendations. The data relating to salt perception showed a discrepancy between the perception of users about the salt and the quantified values. The technique used was effective and thus may be a facilitator for running diagnostics on meals, favoring future interventions in the reduction of salt intake.