EVALUATION OF THE SODIUM CONCENTRATION IN BRAZILIAN INSTANT SOUPS BY FLAME PHOTOMETRY


The consumption of food easy to prepare, as the instant soups, has grown in Brazil, and a major component of these products is sodium chloride used like a preservative and flavoring. The presence of high concentrations of sodium (Na) in ready-to-eat food has been the subject of worldwide concern because of its health effects. In Brazil, the population consumes an average of 3.8 g of Na per day, and recommended by the World Health Organization (WHO) is 2.4 g. Based of these, the aim of this work was to assess the Na concentration in Brazilian instant soups. The Na quantification was made by flame photometry and wet digestion was used as sample preparation. The correlation coefficient was higher than 0.99 and the limit of quantification was 2.0 mg g⁻¹. In addition and recovery tests were obtained recoveries between 83-120% with coefficients of variation less than 13%. The Na concentrations in five samples ranged from 30 to 47 mg g⁻¹ and did not differ significantly (p =0.01) of values indicated on the labels. The results suggested that an individual consume two sachets of instant soups per day will have consumed approximately half of the maximum allowed amount of Na daily. In this context, individuals who have in their diet the presence of food easy to prepare can ingest an amount of Na above the values allowed by the WHO. The excessive intake of these products should be avoided, particularly in persons with hypertension, as can be a significant source of Na.