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FRESH MEAT PREPARATIONS AND THEIR SALT CONTENT - IS IT A CONCERN?

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I. INTRODUCTION

Meat and meat preparations are a significant part of the diet for many people [1,2]. Salt is a common ingredient used in meat preparation for various purposes, including enhancing flavor, preserving meat, and improving texture [3,4]. However, excessive salt consumption has been associated with health issues, such as high blood pressure and cardiovascular diseases [5]. Therefore, it is important to regulate and monitor the salt content in meat products to ensure they meet acceptable levels for consumer health [5,6]. This can be achieved through appropriate labeling, nutritional guidelines, and industry practices that promote responsible salt usage in meat preparation
The aim of this study is to evaluate the salt content in meat preparations obtained in commercial areas of the city of Vila Real, from the Northern of Portugal.

II. MATERIALS AND METHODS

Fifty-one samples of meat preparations were collected from hypermarkets (N=26) and local butcheries (N=25). The samples included meat puffs (N=8), meat loaves (N=9), hamburgers and meatballs (N=25) and breaded meat (N=9). Samples were evaluated for salt content based on the ISO 1841-1/1996 standard for determining the chloride content. ANOVA was conducted to test the effect of “type of product” and “type of establishment” on microbiological counts, using the SPSS 22.0 software (SPSS, IBM, Armonk, NY, USA) at 5% level of probability.
A salt limit of 1% for minced meat was used as reference for the salt concentration in the samples, as it is according to Portuguese legislation (Decree-Law No 147/2006).

III. RESULTS AND DISCUSSION

No statistical differences were observed among different type of products and establishments. However, hamburgers and meatballs purchased from local butcheries displayed the highest NaCl content. Twenty per cent of the samples had a salt content higher than 1%, and all of these were from small local shops. Breaded meat samples were the class of products with the lowest salt content.

IV. CONCLUSION

Besides obtained data show us that the amount of chlorides in meat preparations in Vila Real, Portugal is in general acceptable, it is important to take measures to make it easier for the end consumer to quickly and clearly identify the salt content of meat preparations through labelling. It is hoped that specific legislation will be created to limit the salt content of meat preparations, and that the competent authorities will promote training activities aimed at the general public on the harmful effects of salt, strategies for gradually reducing it and healthy eating.

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