RESEARCH REGARDING THE QUALITY CHECKING OF THE MEAT PRODUCTS FROM DEMISMAKED GROUP

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Abstract

In this paper, the results achieved after the physical-chemical test for the following meat products belonging to the quasi-smoked group (Trandafir sausages, Ardelenesti sausages, Csabay sausages and Summer Salami) are presented.The water quantity, NaCl and nitrites were examined. Water quantity for the preparations under study present average values of 52.85% for Trandafir sausages, 57.7% for Ardeleneşti sausages, 51.71% for Csabay sausages, 48.63% for Summer salami; NaCl quantity presents average value of 2.16% for Trandafir sausages, 2.13% for Ardeleneşti sausages, 2% for Csabay sausages, 2.13% for Summer salami;nitrite quantity has the following average values: 2.03 mg/100 g product for Trandafir sausages, 1.67 mg/100 g product for Ardeleneşti sausages, 2.22 mg/100 g product for Csabay sausages, 1.78 mg/100 g product for Summer salami.

Key words: demismaked, quality control, nitrite quantity

INTRODUCTION

The sanitary-veterinary control for the estimation/evaluation of the integrity provides the emphasis of the constitutive elements, both from a quantitative and qualitative point of view. The evaluation of the integrity refers to the highlighting of the natural elements existent in food, as well as to the ingredients of the factory receipts of different preparations. These determinations are made for the natural food per se (meat, milk, eggs, fish), as well as for their derived food (meat products, dairy products, fish and egg products). The determination of the integrity removes the suspicions regarding the frauds and defines the quality of the product from an alimentary point of view.

The quality control in all the food branches must have a preventive role that consists in the impiedicarea of achieving the non-suitable products from a qualitative point of view, but in the same time it must have an active role in the achieving of some products with high-qulitative features.

The nutritive value of the products is determined by their caloric value as well as by their gustative qualities, by the assimilation degree and by their hygienical-sanitary value. The accomplishment of the qualitative indices corresponding for different food products depends on more factors,

that is: the quality of the used raw material, the working process, the qualification degree of the workers.

MATERIAL AND METHOD

In this paper, the results achieved after the physical-chemical test for the following meat products belonging to the quasi-smoked group (Trandafir sausages, Ardelenesti sausages, Csabay sausages and Summer Salami) are presented.

The water quantity, NaCl and nitrites were examined.

The determination of water was made through the drying method in the drying chamber of the sample at a temperature of 105^0C for 4-5 hours.

The determination of the sodium chloride was made through Mohr method by the titration of the chlorine ions from the aqueous extract with a solution of silver nitrate in the presence of the potassium chromate used as an indicator.

The Griess method was used for the determination of the nitrites which consists in the measurement of the pink colour intensity in the azotic compound formed as a consequence of the reaction between the nitrites in the aqueous deproteinized extract and Griess reactive.

Fourteen samples of Trandafir sausages, fourteen samples of Ardelenesti sausages, fourteen samples of Csabay sausages and 13 samples of Summer salami have been assessed.

RESULTS AND DISCUSSIONS

For Trandafir sausages, the following results have been achieved:

- The water quantity ranges between 49.8% - 55.9%, with an average value of 52.85%, being below the limit accepted by STAS (56%);
- The salt quantity ranges between the limits 1.51% - 2.60%, with an average value of 2.16% being below the maximum limit admitted by STAT (3%);
- The nitrites quantity has values ranging between 0.98 – 2.66 mg/100 g product, with an average value of 2.03 mg/100 g product, being below the maximum limit admitted by STAS(7 mg/100 g product).

For Ardelenesti sausage, the following results have been achieved:

- The water quantity ranges between 48.9% and 57.4%, with an average value of 52.70%, being under the maximum limit admitted by STAS (58%);
- The salt percent ranges between 1.63% - 2.88%, with an average value of 2.13%, being under the limit admitted by STAS (2%);

- The nitrite values range between 0.74 – 2.62 mg/100 g product, being under the limit admitted by STAS (7 mg/100 g product).

For Csabay sausage, the following results have been achieved:

- Water had values ranging between 49.12% - 55.42%, with an average value of 51.71%, being under the limit admitted by STAS (58%);
- Salt quantity ranges between 1.35% and 2.48%, with an average value of 2.00%.
- Nitrite quantity has values ranging between 1.29 – 3.04 mg/ 100 g product, being under the limit admitted by STAS (7 mg/100 g product).

For the summer salami, the following results have been achieved:

- Water quantity ranges between 44.6% - 51.6%, being over the maximum limit admitted by STAS (45%). 90% of the samples were over the maximum admitted limit.
- Salt quantity ranges between 1.95% - 2.4%, with an average value of 2.13%, being under the maximum admitted limit (3%);
- Nitrite quantity has values ranging between 1.01 – 2.52 mg/100 g finite product, with an average value of 1.78 mg/100 g product, being under the maximum value admitted by STAS (7 mg/100 g product).

The achieved results are presented in figures 1, 2 and 3.

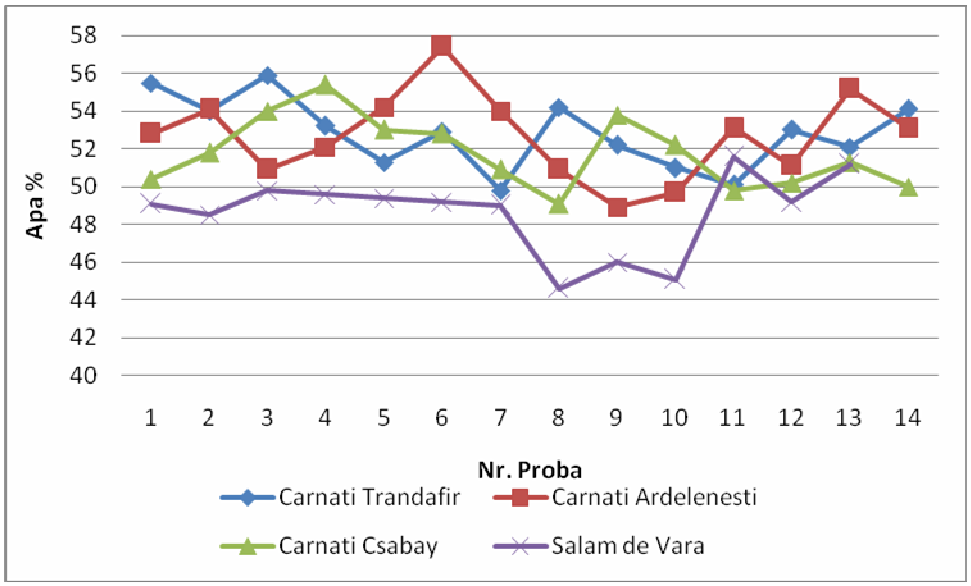

Figure 1. Water content variation for the quasi-smoked products – Trandafir sausages, Ardelenesti sausages, Csabay sausages and Summer salami

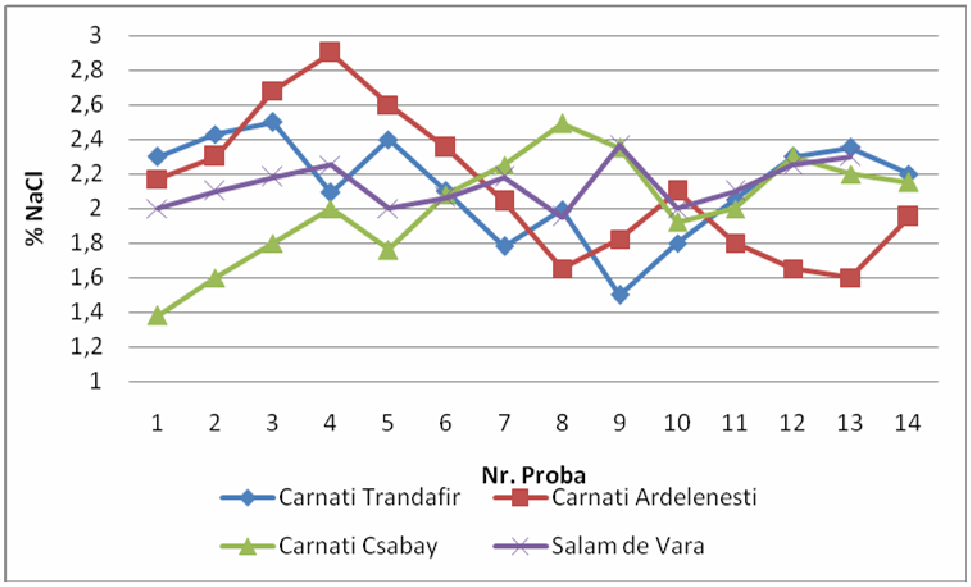

Figure 2. Salt content variation for the quasi-smoked products – Trandafir sausages, Ardelenesti sausages, Csabay sausages and Summer salami

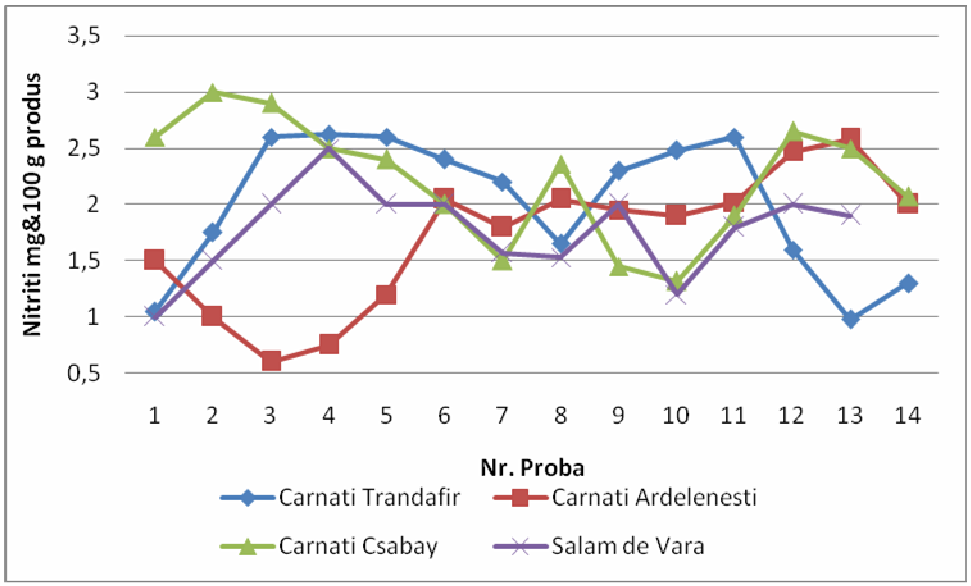

Figure 3. Nitrite content variation for the quasi-smoked products – Trandafir sausages, Ardelenesti sausages, Csabay sausages and Summer salami

CONCLUSIONS

The following conclusions were drawn at the end of this study:

- Water quantity for the preparations under study present average values of 52.85% for Trandafir sausages, 57.7% for Ardeleneşti sausages, 51.71% for Csabay sausages, 48.63% for Summer salami;
- NaCl quantity presents average value of 2.16% for Trandafir sausages, 2.13% for Ardeleneşti sausages, 2% for Csabay sausages, 2.13% for Summer salami;
- Nitrite quantity has the following average values: 2.03 mg/100 g product for Trandafir sausages, 1.67 mg/100 g product for Ardeleneşti sausages, 2.22 mg/100 g product for Csabay sausages, 1.78 mg/100 g product for Summer salami.

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