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ANALYSIS THE QUALITY OF MEAT PRODUCTS

CASSIAN DENISA MIHAELA<sup>1</sup>, CASSIAN ANDRADA GABRIELA<sup>1</sup>, POPESCU  
GABRIELA<sup>1</sup>, PÎRVULESCU LUMINIȚA<sup>1</sup>

<sup>1</sup>*Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Faculty of Management and Rural Tourism, Romania*

**Abstract:** *The meat is considered an basic aliment due to its high nutritional value, and the share of meat and meat products in the diet is high. The paper carries out a study on the comparative analysis of the quality of some meat products using for this purpose an method of calimetry. Following the application of that method, the product variants chosen in the study are ranked according to the values of the quality indicators determined by calculation.*

**Key words:** *meat products, quality, comparative analysis*

### INTRODUCTION

The dynamism of the quality of foodstuffs is due to the ever-increasing quality demands of consumers of foodstuffs, as well as the emergence of new food processing technologies.

Meat is a basic food source. By the balanced chemical composition in nutrients with high biological value, meat is an indispensable food in human food.

Sausages are foodstuffs obtained from minced and seasoned meat, inserted into the artificial or natural membrane and subjected to heat treatments that differ depending on the type and assortment made.

Raw and dried meat products have high nutritional value, upon obtaining it heat treatments do not intervene. The degree of a products to be eatable, the taste and the aroma of these products are due to a natural or directed ripening process, which takes place during the manufacturing process, especially under the action of enzymes secreted by the natural microflora or by the culture of microorganisms added to the paste or on the sausage surface.

The main physico-chemical characteristics of raw and dried salami are: water content 30-35%, fat content 46-55% and protein substances 18-20%.

### MATERIALS AND METHODS

The quality of goods is considered a function of the main characteristics seen in correspondence with the requirements and needs of consumers. The comparative analysis of the quality consists in the application of methodologies that suppose the comparison of two or more goods, based on their representative characteristics.

This scientific paper makes a comparative analysis of the quality of an assortment of raw, dry salami, using for this purpose a method of calorimetry: the Fishbein-Rosenberg model.

The following product variants were chosen for the study Banatean salami by:

- S.C. Agil S.A.
- S.C Caroli Foods S.A.
- S.C. Agricola International S.A. Bacau
- S.C. Salonta S.A.

The quality characteristics selected for the studied product types are the following:

- section appearance;
- consistency;
- taste and smell;
- presentation mode;

- fat content, in%;
- humidity, in%.

### RESEARCH RESULTS

Table 1 contains data regarding the weight given by the three categories of subjects (consumers) to the quality characteristics and the average values of the ratings of these subjects on the quality characteristics of the product variants studied, in the form of points on a scale from 0 to 1. The three categories of consumers are formed according to the age of the interviewed subjects, as follows: (I) 15-25 years, (II) 35-45 years and (III) over 55 years.

**Table 1.**

#### Centralization of data from Fishbein - Rosenberg model

Quality characteristics	Agil			Caroli			Agricola Bacau			Salonta			$W_{ik}$		
	$O^1_{i1}$	$O^2_{i1}$	$O^3_{i1}$	$O^1_{i2}$	$O^2_{i2}$	$O^3_{i2}$	$O^1_{i3}$	$O^2_{i3}$	$O^3_{i3}$	$O^1_{i4}$	$O^2_{i4}$	$O^3_{i4}$	$W_{i1}$	$W_{i2}$	$W_{i3}$
Section appearance	0,8	1	0,5	0,7	0,7	1	0,4	0,6	0,3	1	1	0,7	0,35	0,06	0,05
Consistency	0,5	0,7	0,6	0,3	0,4	0,6	0,5	0,7	0,4	0,8	0,7	0,6	0,2	0,1	0,3
Taste and smell	1	0,8	0,9	0,7	0,8	0,7	0,9	0,8	0,6	0,9	0,9	1	0,25	0,35	0,18
Presentation mode	0,7	0,9	0,8	1	0,9	0,9	0,6	0,3	0,7	0,9	0,9	0,9	0,03	0,04	0,1
Fat content	0,8	0,5	0,6	0,7	0,8	0,8	0,7	0,7	0,9	0,8	0,4	0,6	0,07	0,15	0,25
Humidity	0,7	0,7	0,7	0,9	0,2	0,1	0,3	0,7	0,8	0,7	0,9	0,6	0,1	0,3	0,12

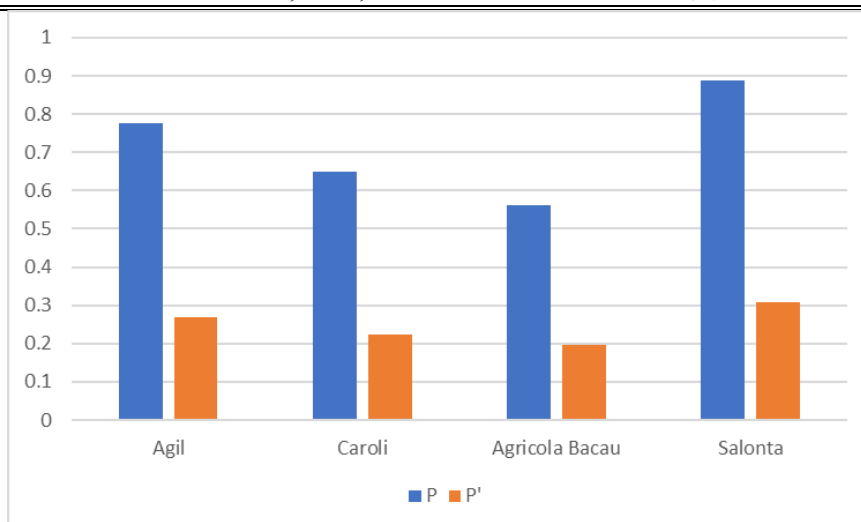
By applying the Fishbein-Rosenberg model and the standardized formula on the data provided by the three categories of consumers, the results from table 2 are obtained.

**Table 2.**

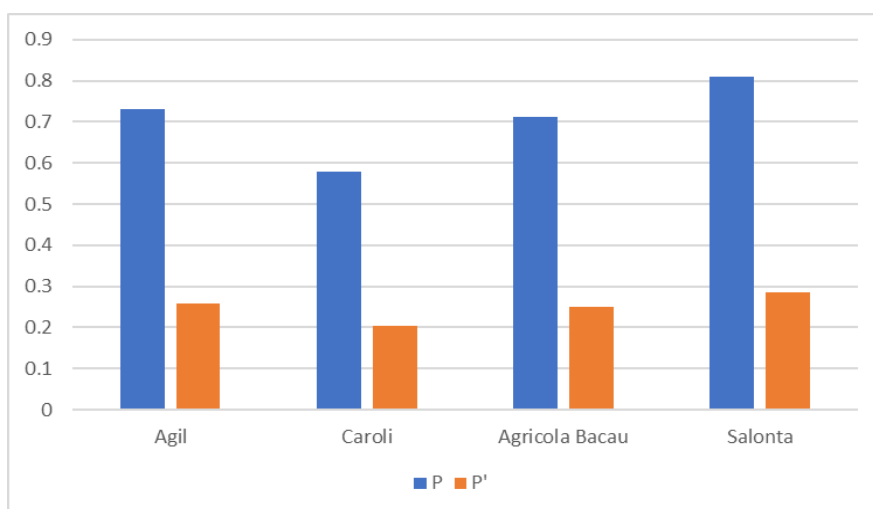
#### The values of the quality indicators calculated

Product variants	The attitude of category I subjects towards product brand		The attitude of category II subjects towards product brand		The attitude of category III subjects towards product brand	
	P	P'	P	P'	P	P'
Agil	0,777	0,270	0,731	0,258	0,681	0,255
Caroli	0,649	0,225	0,578	0,204	0,658	0,245
Agricola Bacau	0,562	0,196	0,713	0,251	0,634	0,236
Salonta	0,888	0,308	0,811	0,286	0,707	0,263

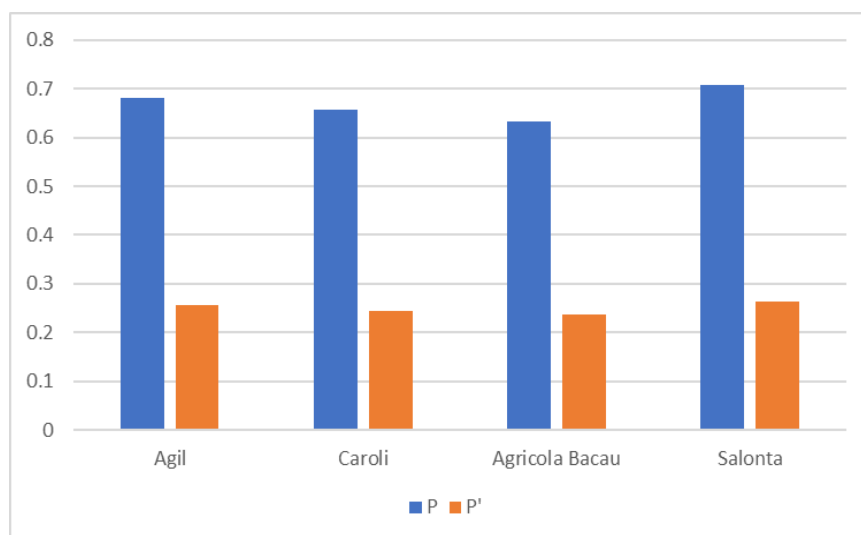
The graphs below show the attitudes of the three categories of subjects to the 4 product variants, obtained with the simple and standardized formula (Figures 1, 2 and 3).



**Figure 1. The attitude of category I subjects to the studied product variants**



**Figure 2. The attitude of category II subjects to the studied product variants**



**Figure 3. The attitude of category III subjects to the studied product variants**

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**CONCLUSIONS**

By analyzing the quality, are identified those quality characteristics of the food products that are important for the consumer, the producer acting on them, in order to meet and even exceed the expectations of his customers.

The values of the indicators determined by applying the Fishbein-Rosenberg model indicate the qualitative superiority of the Banatean salami produced by S.C. Salonta S.A.

Analyzing the results obtained by the method calimetriei used, it can be seen that there is obtained the same hierarchy of product variants selected for the study, only the second category of subjects last two positions are reversed.

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