Researches Concerning the Quality of some Semi-Smoked Meat Products Obtained in a Meat Processing Unit

Claudiu-Dan SĂLĂGEAN, Dorin ȚIBULCĂ, Mirela JIMBOREAN, Daniel CHERECHEȘ

University of Agricultural Sciences and Veterinary Medicine, Faculty of Agriculture, 3-5 Mănăștir Street, 400372 Cluj-Napoca, Romania, salageancd@yahoo.com

Abstract. The purpose of the performed researche was to establish the quality of some meat products in casings belonging to the semi-smoked group obtained in a meat processing factory. In this respect, organoleptic and physical-chemical analysis have been performed on ten assortments belonging to the specified group of the meat products in casings.

The obtained results highlight that, from organoleptic point of view the finished products are in compliance with the standard provisions excepting some assortments in which case were found some physical faults such as: wrinkled casings (in case of the Italian and pork salamis), the presence of conjunctive tissue on section (in case of the Victoria salami) or pork skin improperly minced (the Salajeni sausages), exuding fat at the ends of the bar-salamis (in case of the Crakauer salami), air holes under the casing (in case of the Trandafir sausages) or on section (in case of the Vara salami). These physical faults are caused by the non-observance of some technological parameters. The incidence of these faults does not exceed 12.8% of the total number of analyzed samples.

From physical-chemical point of view the obtained values for the finished products are in accordance with the in force quality standards, excepting 10% from the total number of analyzed samples (small exceedings of the maximum admitted limit of the moisture content in case of the Vara, Italian and pork salamis and the salt content for the Populari sausages).

There have been analysed the causes of these faults and the necessary measures to prevent occurrence of these faults and insuring the quality of the finished products

Keywords: semi-smoked meat products, organoleptic and physical-chemical quality indicators, maximum admitted limits, physical and chemical faults.

Introduction. As the food industry develops there is a higher and higher need for the increase in product quality. The food quality is a major objective both for the consumers and the producers [3].

The number and the diversity of the food producers caused an increase of competition in this field, their efforts for imposing on the market being decisively influenced by the quality criterion.

Aim and objectives. The research aims to establish the quality of some meat products in casings belonging to the semi-smoked group obtained in a meat processing factory.

The objectives of research consisted in performing of organoleptic and physical-chemical analyses on 78 samples of ten assortments belonging to the specified group of meat products in casings.

There have also been analysed the causes of these faults and the necessary measures to prevent occurrence of these faults and insuring the quality of the finished products.

Materials and methods. Organoleptic and physical-chemical analyses have been performed on seventyeight samples of ten semi-smoked meat products obtained in a meat processing factory (Tab. 1).
The organoleptic exam consisted in the appraisal of some characteristics like the exterior and slice aspect, consistency, taste and odour.

The physical-chemical exam consisted in determination of the water content (Drying-oven at 105 °C), salt (Mohr method) and nitrates content (Griess method).

**Results and Discussion.** The organoleptic exam highlighted some physical faults such as: wrinkled casings in the case of 2 from 9 samples (22.2%) of the Italian salami and 1 from 12 samples (8.3%) of the Pork salami, the presence of conjunctive tissue on the section in the case of 2 from 7 samples (28.5%) of the Victoria salami, pork skin improperly minced in the case of 1 from 7 samples (14.2%) of the Salajeni sausages, exuding fat at the ends of the bar-salamis in the case of 1 from 4 samples (25%) of the Crakauer salami, air holes under the casing in the case of 1 from 7 samples (14.2%) of the Trandafir sausages and air holes on the section in the case of 2 from 17 samples (11.7%) of the Vara salami.

There were registered small exceedings of the maximum admitted limit of the moisture content in the case of 4 from 17 samples (23.53%) of the Vara salami, 2 from 9 samples (22.22%) of the Italian salami and 1 from 12 samples (8.33%) of the Pork salami.

Concerning the salt content there was also registered a small exceeding of the maximum admitted limit (3%) in the case of 1 from 4 samples (25%) of Populari sausages.

**Conclusions**

- The obtained results highlighted that from organoleptic point of view the finished products are in compliance with the standard provisions [1], [2] excepting some assortments in which case were found some physical faults caused by the non-observance of some technological parameters. The incidence of these faults does not exceed 12.8% of the total number of analyzed samples;

---

**Table 1**

<table>
<thead>
<tr>
<th>No.</th>
<th>Assortment</th>
<th>No. of samples examined</th>
<th>Water, g%</th>
<th>NaCl, g%</th>
<th>Nitrates, mg%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vară salami</td>
<td>17</td>
<td>49.28</td>
<td>50</td>
<td>2.04</td>
</tr>
<tr>
<td>2</td>
<td>Italian salami</td>
<td>9</td>
<td>54.98</td>
<td>56</td>
<td>1.86</td>
</tr>
<tr>
<td>3</td>
<td>București salami</td>
<td>8</td>
<td>55.15</td>
<td>60</td>
<td>1.69</td>
</tr>
<tr>
<td>4</td>
<td>Pork salami</td>
<td>12</td>
<td>56.11</td>
<td>56</td>
<td>2.25</td>
</tr>
<tr>
<td>5</td>
<td>Victoria salami</td>
<td>7</td>
<td>58.11</td>
<td>68</td>
<td>2.01</td>
</tr>
<tr>
<td>6</td>
<td>Crakauer sausages</td>
<td>4</td>
<td>54.90</td>
<td>62</td>
<td>1.94</td>
</tr>
<tr>
<td>7</td>
<td>Trandafir sausages</td>
<td>7</td>
<td>53.61</td>
<td>56</td>
<td>2.36</td>
</tr>
<tr>
<td>8</td>
<td>Salajeni sausages</td>
<td>7</td>
<td>52.2</td>
<td>51</td>
<td>2.04</td>
</tr>
<tr>
<td>9</td>
<td>Populari sausages</td>
<td>4</td>
<td>54.16</td>
<td>59</td>
<td>2.55</td>
</tr>
<tr>
<td>10</td>
<td>Cabanos sausages</td>
<td>3</td>
<td>48.62</td>
<td>50</td>
<td>1.96</td>
</tr>
</tbody>
</table>

The results of the physical-chemical examine of the analysed semi-smoked products
✓ From physical-chemical point of view the obtained values are in accordance with the in force quality standards [1], [2] excepting 10% from the total number of the analyzed samples;
✓ It comes as a compulsory condition observing de technological parameters on the processing flow for insuring the quality of the finished products.

REFERENCES