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COMPREHENSIVE QUALITY ASSESSMENT OF ORGANOLEPTIC INDICATORS OF FRUIT-VEGETABLE SAUCE WITH PINE NUTS

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Introduction. Many people lack adequate amounts of foods that are rich in the nutrients needed for health and a productive life. Deficiencies of iron, vitamin A and iodine are also widespread; about 300 million people are affected every year, and a much greater number are at risk of these deficiencies [1].

Sauce products are able to diversify the human diet, regulate the nutritional value of the main dish through a combination of prescription components, mainly of plant origin, which increase the biological value. According to world experience, the defining characteristic of food products is their quality [2].

Actuality. Organoleptic analysis allows you to quickly and easily assess the quality of raw materials, semi-finished products, culinary and food products, identify violations of recipes, production technology and design of food, which, in turn, allows to quickly take action to address identified shortcomings.

The aim of the research was to conduct an organoleptic assessment of the quality of fruit-vegetable sauce with pine nuts.

The object of research was fruit-vegetable sauce with pine nuts.

The subject of research was organoleptic quality indicators (appearance, texture, smell and taste) of fruit-vegetable sauce with pine nuts.

Research materials were: fruit-vegetable sauce with pine nuts, developed by scientists from the National University of Food Technology [3].

Research results. When conducting organoleptic analysis of the quality of food, culinary dishes, it is evaluated, as a rule, by the following indicators: appearance (including color), consistency, smell and taste. For some groups of products, additional indicators are introduced: transparency (tea, jelly, puddings), sectional view (meat, stuffed products with meat, fish, vegetables, cakes, cupcakes), crust color and crumb condition confectionery and bakery products), etc.

Food products produced in strict accordance with the recipe and technology, which has no organoleptic deviations from the established requirements, are rated excellent (5 points).

If the product is made in accordance with the recipe, but has minor or easily remediable deviations from the requirements, it is evaluated as good (4 points).

Specifically, such deviations include the characteristic but weak smell and taste, the presence of colorless or slightly colored fat, insufficiently neat or partially broken shape of the cut, slightly overcooked vegetables that have retained their shape, slightly oversalted or unsalted broth, careless design of the dish, insufficiently intense or careless color etc.

Food products that have more significant deviations from the requirements of the technology, but are suitable for sale without processing or after processing, are evaluated as satisfactory (3 points).

Thus, the fruit-vegetable sauce with pine nuts was assigned a certain score in accordance with its organoleptic characteristics, resulting in a score, which is presented in table 1.

Table 1

The system of organoleptic characteristics scoring of fruit-vegetable sauce with pine nuts by quality level

Indicator	Scores		
	5	4	3
Appearance and consistency	Homogeneous creamy product	Homogeneous product with single air bubbles, the presence of nut particles	Heterogeneous product with single air bubbles, the presence of nut particles, greens.
Taste and smell	Very well expressed, slightly sharp, with a nutty aftertaste, without extraneous tastes and smells	Well expressed, slightly sharp, with a nutty aftertaste, without extraneous tastes and smells	Unexpressed, there are foreign odors and tastes
Color	Homogeneous throughout the mass, light orange	Heterogeneous in mass, light orange	Heterogeneous, orange

To obtain a comprehensive assessment of the quality of fruit-vegetable sauce with pine nuts on its organoleptic characteristics, it was assigned to each indicator a weighting factor, the sum of which is equal to the sum of quality indicators - 3. The coefficients were distributed as follows: taste and smell - 1.8 points, appearance and consistency - 0.9 points, color - 0.3 points.

Consider the calculation of a comprehensive assessment of fruit and vegetable sauce with pine nuts:

Appearance - 5 points: $5/5 \cdot 0.9 = 0.9$ points;

Taste and smell - 4 points: $4/5 \cdot 1.8 = 1.44$ points;

Color - 5 points: $5/5 \cdot 0.3 = 0.3$ points.

Total: $\Sigma = 0.9 + 1.08 + 0.3 = 2.64$ points.

The obtained data were compared with the established requirements of DSTU 8017: 2015 "Canned food. Structured vegetable and fruit sauces. Technical conditions" (Ukrainian national standard) [4].

Conclusions. Therefore, based on the results of the evaluation of the developed fruit-vegetable sauce with pine nuts, which were compared with the requirements of the state standard, we can conclude that the studied product received a high score of a comprehensive assessment of organoleptic characteristics. This indicates the high quality of the finished product.

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