NUTRITIONAL VALUE OF CANNED FOOD WITH THE USE OF RABBIT MEAT FOR CHILDREN'S AND DIETARY FOOD

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ABSTRACT

The modern level of knowledge about food products allows them to be developed with specified properties that correspond to a specific purpose. The creation of such products is always a search for a reasonable compromise between the numerous requirements for food products. The article reflects the results of a scientific study devoted to the development of a recipe for canned meat for baby food with a different percentage of rabbit meat and vegetables. Comprehensive studies of the consumer properties of canned food obtained according to one of the author's recipes were carried out. Microelements are basic and acidic in nature. The basic ones include calcium, magnesium, potassium, sodium, and the acidic ones include phosphorus, sulfur, and chlorine. The rabbit meat a white meat which contains macro nutrients and micro nutrients and it is a good source of minerals entering the human body is food products of plant and animal origin. Drinking water covers only up to 10% of the daily requirement for microelements such as J, Cu, Zn, Mn, Co, Mo, and only for individual microelements (F, Sr) can it serve as the main source of their intake into the body. The content of various microelements in the diet depends on the geochemical conditions of the area in which the products were obtained, as well as on the set of food products included in the diet.

Keywords: mineral substances, food products, meat products, macro and microelements.

INTRODUCTION

The most demanded group of products for baby food is canned meat, which has a high nutritional value due to the combination of proteins and fats of animal and vegetable origin. Rabbit meat is of significant value for this group of canned food due to its relatively low calorie content, high taste and aroma indicators and digestibility When developing products for baby food, such criteria as the content of protein in the finished product, its ratio with fat, the presence of vitamins and minerals necessary for the child's body must be taken into account. Table 1 shows data on the nutritional value, vitamin and mineral composition of rabbit meat in comparison with other types

of meat raw materials used to obtain dietary food [1] Just as important as minerals for the proper functioning of the body are vitamins. Their consumption ensures an improved external appearance, improves the quality of hair, skin and nails, boosts immunity, promotes the absorption of minerals into the body, or ensures proper fat burning. There is a constant search for foods that are a source of as many vitamins as possible. Rabbit meat is a great source of B vitamins and their content is illustrated in Table 5. Consumption of 100 g of meat meets the need for 8% vitamin B2, 12% vitamin B5, 21% vitamin B6 and 77% vitamin B7. It also provides the daily requirement for vitamin B12 [2]

OBJECTS AND METHODS

We do canned products as a pate and stewbased rabbit meat and adding antioxidants in our laboratory condition. Pate a shell of mostly cylindrical dough for spicy stew, a dish of minced meat, baked in a shell of dough or served in a terrine an exquisite snack dish in the form of viscous homogeneous pasty mass of boiled or fried and then pureed meat. After producing product has given following results of mineral substances from the content of finished products based rabbit meat.



The objects of the study were experimental versions of recipes for canned rabbit meat and ingredients of plant origin: olive cake, amaranth cake, pumpkin oil (Table 1).

Table 1 Composition of components in the recipe of experimental options for meat-containing canned food, wt (%)

Table 1

Ingredient name	The percentage of ingredients in the recipe (%)		
	Option 1	Option 2	Option 3
Rabbit meat	70	70 g	70 g
Olive cake			20
Amaranth cake		20	
Pumpkin oil	8,5	8,5	8,5
Salt	1,5	1,5	1,5

RESULTS AND ITS DISCUSSION

Canned food occupies a significant share among products for people. Their technology is distinguished by high requirements for the quality of raw materials, softer heat treatment modes, elimination of its direct contact (at different stages of its processing) with air oxygen, as well as the possibility of balancing the chemical composition of the finished product by introducing natural biologically active products into the formulation. When developing the production technology, modern principles of the complex use of raw materials were implemented in the design of multicomponent food systems for targeted purposes. The technological scheme for obtaining meat-containing canned food for children's.

Table 2. Mineral substances in the canned food from rabbit meat Table 2.

Minerals	Authorized document	Stew	Pate 1	Pate 2
Copper	USSR EH 14084-2014	11,32	13,41	13,48
Zinc	USSR EH 14084-2015	24,11	20,15	19,74
Iron	USSR EH 14084-2016	26,77	34,96	52,9
Sodium	USSR ISO 8070/IDF 119	404,4	395,7	420,5
Potassium	USSR ISO 8070/IDF 119	3469,9	3512,4	3387,4
Calcium	USSR ISO 8070/IDF 119	41	116	64,95
Magnesium	USSR ISO 8070/IDF 119	268,4	225,7	163,6

Table 3. Vitamin content in the canned food from rabbit meat

Table 3

Retinol	0,01 мг	0,01 мг	0,01 мг
Vitamin B1, thiamine	0,12 мг	0,12 мг	0,236 мг
Vitamin B2, riboflavin	0,18 мг	0,18 мг	0,38 мг
Vitamin B4, choline	116,9 мг	115,6 мг	185,4 мг
Vitamin B6,	0,48 мг	0,48 мг	1,071 мг
pyridoxine			
Vitamin B9, folate 7	7,7 мкг	7,7 мкг	89,7 мкг
Vitamin B12,	4,3 мкг	4,3 мкг	4,3 мкг
cobalamin			

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The obtained data and their analysis made it possible to choose the most optimal option for canned food, which will be in demand and competitive in relation to other types of products in the assortment group. Based on the results of the above analyzes we can say that to improve the special tenderness and moisture-binding ability of functional and technological properties, non-traditional additives are used in minced rabbit, such as amaranth flour and olive oil. The cake gave good results in the production of food pies from ring meat. As well as enriching the pate with non-traditional oils rich in unsaturated fatty acids. The product will serve those who suffer from blood cholesterol, as well as diabetes, including maintaining energy balance.

REFERENCES:

- 1. Merkulova, Anna, Inessa Zachesova, and Maria Gorbacheva. "Formation of properties of meat-containing canned food with the use of rabbit meat for children's and dietary food." E3S Web of Conferences. Vol. 285. EDP Sciences, 2021.
- 2. Siudak, Zuzanna, and Sylwia Pałka. "Rabbit meat as a functional food." Rocz. Nauk. Zoot 49.2 (2022): 127-139.
- 3. Ataxodjayeva, I. D., et al. "STUDY OF MINERAL SUBSTANCES IN EASILY DEGISTIBLE RABBIT MEAT." Uz-Conferences. Vol. 1. No. 1. 2023.
- 4. Kvartnikov, M. P., and E. G. Kvartnikova. "Influence of nutritional value of complete feed on the chemical composition of rabbit meat." IOP Conference Series: Earth and Environmental Science. Vol. 848. No. 1. IOP Publishing, 2021.
- 5. . A. A. Zinovev, Chemistry of Fats [in Russian], Pishchepromizdat, Moscow, 1952, p. 516
- 6. Handbook of Study Methods, Technical Chemical Control and Production Accounting in the Oil-Fat Industry [in Russian], vol. 5, VNIIZh, Leningrad, 1969, pp. 123, 151.
- 7. D. Yu. Korulkin, Zh. A. Abilov, R. A. Muzychkina, and G. A. Tolstikov, Natural Flavonoids [in Russian], Akad. Izd. GEO, Novosibirsk, 2007, p. 172.
- 9. Cattanco and G. K. de Sution, Ref. Zh. Khim., No. 2, N 331 (1961).

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