

**Functional foods**

Editorial

Synthesis of issues and subjects of the main theme related to production and consumption of meat-based functional foods is given.

**Meat-based functional foods**

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The article gives definitions of a functional product in accordance with national standards and the law of the EU, and the basic directions in the development of functional foods. Biological evaluation of the effectiveness of food fibers and compositions of biologically active additives on their basis demonstrated high level of excretion of heavy metals from the organs and muscle tissue of experimental animals.

**Key words:** nutrition, health, nutritional status, functional foods, biological evaluation, food fibers.

**Sausage products for elderly people reducing the risk of musculoskeletal system diseases**

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Based on systematization and generalization of physiological norms for consumption of food substances by elderly people, taking into account the most common deficiency states, scientifically grounded nutrient requirements for the composition and quality of specialized meat-based products for gerodietetic nutrition of people suffering from diseases of musculoskeletal system are formulated. Considering physiological functionality and sufficient supply of raw materials, scientists from VNIIMP developed biotechnology of complex protein-mineral additives from pork legs.

**Key words:** gerodietetic sausage products, diseases of musculoskeletal system, pork legs, protein-mineral enricher, nutrient requirements, nutritional value, biological investigations.

**Mutton and products based on it for child nutrition**

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The article determines the value of mutton and lamb meat for child nutrition and presents a number of products oriented on the new national standard «Mutton and lamb meat in carcasses for production of baby foods».

**Key words:** lamb meat, mutton, mutton-based canned food, baby foods, national standard.

**Specialized sausage products for nutrition of children suffering from diabetes**

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Specialists from the laboratory of technology for baby, therapeutic-and-preventive and specialized products of VNIIMP jointly with employees from the Scientific Research Institute of Nutrition of RAN developed and approved medical and technological requirements for the composition and quality of meat products for dietetic nutrition of children suffering from insulin-dependent diabetes mellitus. The results of clinical tests of sausages for children suffering from diabetes are given in this article.

**Key words:** insulin-dependent diabetes, glucose level, normalization of metabolic disorders, lean pork, beef, diet № 9.

**New technologies for manufacture of pork-intensive sausage products**

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Innovative technology for total rational use of food raw materials obtained during slaughter and processing of pigs (Technical Specifications TU 9213-989-00419779-09 «Cooked sausages, frankfurters and wieners»), allowing to reduce the cost of cooked sausage products as compared with pork-intensive sausage products manufactured according to GOST R 52196-2003, was developed at the V.M. Gorbатов VNIIMP.

**Key words:** rational use of raw materials, three-grade trimming, pork skin, nutrition, commodity indices.

**Usage of taste-and-roma emulsions in manufacture of meat products**

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The Russian State Scientific Institution the V.M. Gorbатов VNIIMP developed technology for taste-and-roma emulsions of CO<sub>2</sub>-extracts of spices based on the use of ultrasound for manufacture of smoked and cooked meat products. In the process of investigations a pilot batch of smoked and cooked pork products for the comparative assessment of product quality and safety indices was manufactured.

**Key words:** taste-and-roma emulsion, CO<sub>2</sub>-extract, level of dispersion, smoked-and-cooked neck, ultrasound.

**Massagers: hidden reserves, versatile possibilities**

T.B. Shugurova Tel.: (495) 721-20-77

Presentation of the new massager Vakona, allowing to perform a great variety of technological operations, is given in this article. Universality of the machine ensures its wide application in the food industry.

**Machines «Kriovak»: from success to success**

T.N. Dobrokhotova Tel.: (495) 795-01-01; 663-78-10

Presentation of the new packaging machine and illustration of its successful use by Czech partners «Sealed Air» are given in this article.

**Cooperation strategy: Consolidation and efficiency by small means**

Oder Rovani, Natalia Matveeva Tel.: (495) 258-15-37

On fundamental principles of design of refrigerated meat slaughterhouses: cooperation of small farms allows to optimize the capacity of the enterprise and to achieve high economic performance, labor productivity, and product quality.

**Traceability of biogenic metals in the structure of forming safe meat products**

N.L. Vostrikova, I.M. Chernukha Tel.: (495) 676-99-71

Studies on accumulation of biogenic elements in organs and tissues of animals and birds grown in areas with different environmental conditions were carried out. High levels of metals in samples of feed, water, soil and internal organs allowed sufficiently clearly to trace accumulation of biogenic elements in trophological chain soil-water-feeds-raw meat.

**Key words:** traceability, biogenic metals, accumulation coefficients.

**Investigation of residual activity of acid phosphatase in liver sausages and by-product pates**

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In developing the research method of residual activity of acid phosphatase, extensive production testing (jointly with Mikoyan meat processing plant) of liver sausages and pates was carried out. The results of these studies were used to establish the maximum permissible level of residual activity of acid phosphatase in liver sausages and pates.

**Key words:** liver sausages, by-product pates, phenol, acid phosphatase.

**Learning sensory analysis**

Based on the Training Centre of the Institute seminars to upgrade qualifications of the meat industry workers in accordance with the training program of tasters for organoleptic evaluation of quality of raw meat and finished products.

**Principles of classification and evaluation of quality in the new uniform national standard «Cattle for slaughter, beef and veal in carcasses, semi-carcasses and quarters»**

A.B. Lisitsyn, I.V. Sus, T.M. Mittelshtein, G.P. Legoshin, O.N. Mogilenets, E.S. Afanasieva Tel.: (495) 676-97-71

The paper presents main provisions of the new national standard for cattle intended for slaughter, as well as for meat — beef and veal.

**Key words:** national standard, beef, veal, nature of productivity, yield of carcasses, morphological composition.

**Current issues of canned food labeling**

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Proper labeling of canned food is very important for manufacture of safe products, as well as for identification of products and the manufacturer. The article describes the terms and conditions that should be observed by the manufacturer, so that his activities and the final product corresponded to the adopted normative documents and did not violate consumer rights.

**Key words:** canned food, labeling, register of assortment numbers, branch register, GOST 13534, GOST 51074.

**IFFA-2010 showed the world all the latest and best achievements over three years**

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Exhibition IFFA-2010 took place in Frankfurt. The publication provides an overview of the exposition. One of the main themes of this year was to increase the degree of automation, since compared with other branches it is still quite low.

**GK PTI: IFFA-2010 is part of our tradition and anti-crisis strategy**

PTI group of companies, following the established tradition, participated in IFFA-2010 exhibition. For the first time we presented at our own stand the latest innovations under the motto «We work for your success».

**The most modern meat processing plant in Russia opened**

Natalia Kolobova

At 20 kilometers to the south-west from St. Petersburg the most modern meat processing plant in Russia was opened. The owner of the new production and logistics complex is Finnish concern «Atria». The main products to be produced in Gorelovo are hot dogs and sausages.

**How to roast an ox in the skin and a sausage on the grill**

O.V. Lisova Mob. Tel.: (918) 557-29-62

A story on what can be cooked from meat at picnic or the backyard of a country house. In addition to skewers and braziers, there are a lot of other devices for such interesting work as cooking meat on the coals.

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