

**Applied Science for meat industry**

Editorial. It is about the interaction of the practice and science, which is a prerequisite for the development of innovative meat industry.

**Science and Industry: Partners in modern conditions**

A.B. Lisitsyn, A.A. Semenova, I.M. Tchernukha, L.A. Veretov

Applied science has never separated itself from the industry, but it is not enough one-sided enthusiasm of scientists to satisfy the industry in innovation. Enterprises should strive to become full participants in the development of science and technology, to cooperate closely with research organizations.

**Keywords:** meat processing industry, applied science, innovative technologies, raw meat, meat products, quality and safety, shelf life.

**Nutritional protein ingredients derived from by-products of meat processing**

V.E. Kutsakova, A.A. Semenova

This article describes a number of meat processing by-products used for food purposes. It is shown that the most expedient method of processing is the hydrolysis in the presence of catalysts. Depending on the mode of hydrolysis and the concentration of the catalyst it can be edible protein ingredients with different properties.

**Keywords:** by-products, recycling, hydrolysis, collagen, catalyst, molecular weight

**The role of starter cultures in the production of uncooked smoked and uncooked jerked sausages**

A.A. Semenova, V.V. Nasonova, M.Yu. Minaev, D.E. Krovopuskov, A.I. Rohatyn

The article describes the application of technology in the natural ripening process of the production uncooked smoked and uncooked jerked sausages, it is given rationale for the choice in favor of starter cultures for industrial production of meat products.

**Keywords:** start-up culture, summer sausage, a natural ripening, lactobacilli, Pseudomonas, Clostridium.

**Improved profitability for account of the efficient use of raw materials**

Igor Demin, German Schalke

The device CSB-Image-Meater automates and streamlines the process of classification, the slaughter, as well as the acceptance and placement of a suspension of pig halves stock. In addition, it is performed effective planning cutting, as well as its monitoring and thus creates a basis for evaluating the process of cutting.

**Guidelines for assessing the adequacy and stability properties of the produced meat products with respect to specified requirements**

G.P. Goroshko

This paper sets out recommendations of the evaluation of accuracy and stability of the process, and one indicator of the adequacy of indicators with respect to meat products produced to requirements. Recommendations can be applied during the audit process to assess the adequacy of the supplied raw materials, non-meat ingredients, food additives, as well as the stability and adequacy of the process parameters or the individual stages of performance with set out the requirements in scientific-and-technical documentation or other.

**Keywords:** technology audit, the adequacy of the properties of meat products, a single indicator, the statistical characteristics of the adequacy of the product.

**Effect of heat treatment on the quality of heterogeneous canned products**

V.B. Krylova, A.B. Polukarova

It is identified modes of heat preservation effect to changes in quality of products by experimental studies of heterogeneous canned products. It is shown that the developed pasteurization regimes have less impact on product quality than sterilization.

**Keywords:** heterogeneous canned product, chemical composition, water-soluble vitamins, physico-chemical parameters, nitrogenous substances, the fractional composition of protein, amino acid composition of proteins, the mode of pasteurization, sterilization mode.

**Dietary fiber: a promising product is produced in Russia nowadays**

V.A. Perchun

Company group "Protein Ingredients Technology" - is the largest manufacturer and supplier of integrated products and ingredients for the food industry and it starts producing dietary fiber from raw materials of plant origin.

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**Meat products: the continued benefits of modified atmosphere**

Saida Rashitova

Application of properly selected gases and packaging provides safety of fresh product quality and increase shelf life. The technology of modified atmosphere packaging presented since 1994 in Russia. The company "Linde Gas" is the technological solutions and gas mixtures for packing convenience foods.

**The equipment of vertical cutting and deboning of cattle in meat-processing plants**

V.I. Ivashov, O.E. Kozhevnikova

The article reviews the techniques of vertical cutting and deboning halves of pigs and cattle. Today there is a tendency to increased production of domestic raw materials that makes it necessary to increase the current capacity to slaughter, to increase the quality requirements of raw meat, to increase productivity and reduce costs by introducing new technologies and equipment.

**Keywords:** vertical boning, cutting, hanging way rolgan, trolls, auto mode.

**The most interesting solutions for sausage production: a review of patents**

A.N. Zakharov, M.V. Trifonov, M.D. Askhabova, S.M. Oplachko

Review of patents granted in Russia, Europe, USA and Japan for the invention are applicable to the manufacture of sausages. The paper presents statistics of patenting in 2007-2010.

**Keywords:** patents, equipment, sausage production, boning, shpigovanie, sausage casings, tray, product, meat portions, a block of meat, meat with a high content of amino acids, tumblirovanie meat, forming a decorative image, the product of a given geometric shape, sawing bones

**Technology preservation of fresh meat**

N. A. Gorbunova

Review of research on the problems of protection from microbial spoilage of meat during production, storage and transportation. This review presents and briefly describes some of the technology to extend the shelf life of meat.

**Keywords:** inactivation, Supercooling, active packaging, irradiation, high hydrostatic pressure and nisin

**Proteomic technologies in studies of protein composition of cooked sausages**

M.A. Kovaleva, A.V. Ivanov, L.I. Kovalev, S.S. Shishkin, E.V. Hryapova, V.N. Orekhovicha, A.B. Lisitsyn, I.M. Chernukha, N.L. Vostrikova

The paper presents the results of a pilot study of proteomic samples sausage Doctor and source of raw meat, as well as comparative analysis of other samples of cooked sausages, and some protein supplements. It was revealed a number of proteins in the studied materials that can be used as potential biomarkers of muscle tissue.

**Keywords:** boiled sausages, proteomics, muscle proteins, biomarkers

**Convenience food from "KampoMos": European-made**

I. K. Petrova

Presentation of new products "Kampomos." Chilled foods high degree of readiness make a serious competition with frozen food.

**Forum "Meat Industry": contests, debates, exposure**

B. E. Gutnick, M. V. Trifonov

Report of the Forum "Meat Industry 2012", held March 13-16 in Moscow. The forum provided machines and equipment for production of meat products, the business program hosted contests and discussion of the major problems of the meat market and meat products.

**Sheep's side, burgers and "roast beef bloody" as figurative-expressive means in Russian literature of the XIX century**

O.V. Lisova

It is a story about the dishes that have occupied an important place the works of great Russian writers of the XIX century. Recipes that received fame for literary works.

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