

## Events in 2011

### Editorial

Review of the events of the outgoing year, reflected in the main theme of the issue. Exhibitions, international cooperation, conferences.

### World Congress in Ghent: a scientific answer to challenges of time

I.M. Chernukha

Review of reports of the 57th International Congress on Meat Science and Technology, held from 7 to 12 August, 2011, in Ghent, Belgium.

**Key words:** glycolytic potential, chemometric analysis, oxidation of proteins, verotoxigenic *Escherichia coli*, heme iron.

### Exhibition "Agroprodmas-2011" confirmed its status

A.A. Kubyshko

Report on Russia's largest exhibition of industrial equipment, ingredients and materials for the meat industry.

### Meat Congress at exhibition "Agroprodmas-2011"

A.A. Kubyshko

In the framework of the business program of the exhibition Meat Congress was held. Such issues as priorities and scientific support for development of the industry, the basis for economic efficiency, technical regulation within the common economic space of Belarus, Russia and Kazakhstan, were discussed.

### Canada-Russia dialogue: not only commodity-money relations

A.A. Kubyshko

On October 14, 2011, within the walls of the V.M. Gorbatov All-Russian Meat Research Institute, a dialogue between representatives of the Russian and Canadian branch unions, the Ministry of Agriculture of Canada, and research organizations on development of mutually beneficial cooperation in the livestock and meat industry, adaptation of the Russian system of technical regulation to conditions of international meat trade took place.

### MAX-2011: special consumers were offered a new menu

V.B. Krylova, T.V. Gustova, M.I. Savelieva

The V.M. Gorbatov All-Russian Meat Research Institute for the first time participated in the 10th International Aerospace Show MAKS-2011. In the framework of the business program specialists from the Institute held degustation of products for flight catering of air passengers, presented the menu for astronauts, developed in VNIIMP.

### World Food: twenty years in Russia

A.A. Kubyshko

Report on the jubilee exhibition World Food. The exhibition was attended by 1420 companies from 64 countries of the world. The exposition area exceeded 50 000 sq. m. National expositions were presented by 56 countries.

### PTI Group of Companies: by standards of history, by standards of scientific and technical progress

Congratulations to company "Protein, Technologies, Ingredients" on the occasion of its fifteenth anniversary.

### Complex biologically active additives for prevention of osteoporosis in composition of meat products

A.V. Ustinova, A.S. Dydykin, A.P. Popova, E.V. Surnin

At the present time great interest in osteoporosis is aroused by its high prevalence among the population. By the results of carried out researches, biotechnology for obtaining protein hydrolyzate and the mineral component of pigs feet bone residue, recipe composition on their basis, and technical documents for complex biologically active additive designed for use in functional meat products to reduce the risk or prevent diseases of musculoskeletal system, were developed.

**Key words:** osteoporosis, collagen hydrolyzate, bone preparation, vitamins, minerals, protein and mineral enricher

### Successful course of company "Veviba"

M. Surnin

CSB-system introduced an integrated enterprise management system based on information technologies at one of the factories of company "Veviba" (Belgium). Benefits of through automation and optimization of processes introduced at the enterprise are described.

### Mixtures of nutraceuticals with purifying and enriching effect for meat-based functional products

A.B. Lisitsyn, A.V. Ustinova, A.I. Surnina

Results of comprehensive studies on motivation of composition of nutraceutical mixtures based on soluble and insoluble dietary fibers, animal protein and vitamin and mineral complex with purifying and enriching effect are presented. According to investigations, the mixtures provide reduction of lead and cadmium in all tissues by 81-98 %, contribute to increase in the amount of calcium in bones and blood hemoglobin. Based on the results, technical documents for "KomBioMiks" mixtures with purifying ef-

fect for meat and meat-containing products have been developed.

**Key words:** environmental pollution, heavy metals, fibers, nutraceuticals, purification, medical and biological assessment, functional products.

### Influence of cultural liquid of propionic acid bacteria on forming quality of cooked sausages

I.S. Khamagaeva, I.V. Khamaganova, N.V. Darbakova, N.A. Zambalova

The authors studied the effect of disintegrating cultural liquid of propionic acid bacteria on consumer properties of cooked sausages. It has been established that introduction of disintegrating cultural liquid improves organoleptic characteristics, increases the content of vitamin B12, reduces proportion of residual sodium nitrite.

**Key words:** propionic acid bacteria, biomass, cultural liquid, disintegration, cooked sausages, consumer properties

### Functional properties of animal protein with low pH and prospects for its use in technology in raw-smoked sausages

A.A. Semenova, E.K. Tunieva, A.I. Rogatin

Composition of raw-smoked sausages greatly influences their quality and storage capacity. The article reflects the main functional and technological properties of animal protein with low pH and prospects for its use in the technology of raw-smoked sausages with a view to accelerate biochemical and microbiological processes by reducing pH value and water activity.

**Key words:** animal protein, raw-smoked sausage, pH, water activity

### Market pricing strategies at meat industry enterprises of AIC

N.F. Neburchilova, I.P. Volynskaya, E.A. Mishenina

The article deals with all kinds of pricing strategies. Examples of practical realization of various strategies by successful companies are given.

**Key words:** assortment strategy, random discount, differential pricing, competition, dumping.

### Nutrition: traditions and modernity in industrial performance

V.B. Krylova, T.V. Gustova

The article describes the current situation in catering. Prospects for using ready meals of industrial production in catering for the general population and specific consumers are shown. Advanced developments of laboratory of technology for canned food production of the V.M. Gorbatov All-Russian Meat Research Institute in technology of ready meals in modern consumer packaging are described.

**Key words:** fast food, first and second lunch dishes, canned food

### Analysis and comparative evaluation of technological properties of horse meat cuts

A.A. Semenova, I.V. Sus, E.K. Tunieva, A.G. Gazizov

Results of the study on nutritional value and technological properties of horse meat cuts, including protein content, collagen cooking capacity, pH, moisture-binding capacity, structural and mechanical properties of horse meat cuts and individual muscles to justify a fundamentally new technological scheme for horse carcasses cutting, taking into account consumer demands, rational processing technology and more objective pricing, are presented.

**Key words:** horse meat, rational cutting, nutritional value, connective tissue, structural and mechanical properties, pH of meat, moisture-binding capacity.

### Electrical conductivity of meat

A.N. Zakharov, E.B. Sus

Results of investigating the influence of various biochemical factors on electrical conductivity of meat are presented. As a result of established regularities, the norms of electrical conductivity and express-method for determining meat freshness will be determined.

**Key words:** electrical conductivity, dispersion of electrical conductivity, compartmentalization, ferroelectric properties, meat freshness.

### Meat productivity of sheep of edilbaevskaya breed at different levels of raising and feeding

V.E. Nikitchenko, R.D. Ibragimov, T.A. Magomadov, D.V. Nikitchenko

Results of investigating the growth of tissues as sheep of edilbaevskaya breed grow older, depending on conditions of their keeping and diet, are presented in the article.

**Key words:** sheep, breed, rams, carcasses, tissues, level of feeding.

### Methodological basis for valuation of natural losses of meat during refrigerated processing and storage

V.N. Koreshkov, L.M. Khokhlova, S.A. Popov, S.V. Koreshkov

The article describes the structure and function of methodology for development of norms for natural losses. Peculiarities of statement and carrying out of work and processing of experimental data with control of basic parameters of refrigeration and technological processes are given.

**Key words:** natural losses, losses of meat weight, methodology, methodological basis, refrigerated processing, metrology.

### Spirit of the times and national cuisines

O.V. Lisova

On current trends in public and private cooking. Globalization facilitates the spread of national traditions outside the historical homeland. Depletion of agrarian resources puts on the agenda the question of alternative sources of protein, and development of dietetics leads to appearance of new concepts of nutrition, not always reasonable, but original.

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