

## New quality of raw material base

Editorial

Main theme of the issue is devoted to ways of in vivo meat quality formation. Main directions for quality improving are genetics, hybridization, and diet.

## Yield of finished products by using two- and three-breed crossbred pigs

G.V. Maksimov, O.N. Polozhuk, N.B. Khurum Tel.: (863) 60-3-61-39

The aim of research was to carry out comparative assessment of the results of pigs slaughter and meat products obtained from them. To do this, studies on three groups of pigs, two of which were obtained using boars of synthetic line Pic 337 of P.I.C. company: Yorkshire × Pic 337 (1<sup>st</sup> experimental), (Yorkshire × Landrace) × Pic 337 (2<sup>nd</sup> experimental); (Yorkshire × Landrace) × Duroc (3<sup>rd</sup> group), were conducted.

**Key words:** meat productivity, pork, Yorkshire, Landrace, Duroc, Pic 337.

## New genotypes of Kazakh White Head breed — a source of high quality beef production

M.P. Dubovskova Tel.: (3532) 77-63-75

The article describes scientific and economic experience that showed the best consumer qualities, manufacturability and cost effectiveness of economic use of cattle of new genotypes derived from Kazakh White Head breed.

**Key words:** meat cattle breeding, Kazakh White Head breed, Ural Hereford, beef, factory type, cross, carcass mass, bioconversion of nutrients, cost effectiveness.

## Formation of meat productivity of pigs and prediction of meat quality characteristics depending on organization of their rational nutrition

A.P. Korobov, N.K. Skorobogatova, A.V. Giro Tel.: (000) 000-00-00

In order to select industrially fit diets depending on biologically active additives in feeds, a comprehensive evaluation of animal meat productivity and pork quality was conducted. The first group consisted of pigs with a normal diet (K), the second — with addition of the feed enzyme Rovabio (RAB), the third — with multi-enzyme (MEC). Feeding was carried out during four months.

**Key words:** diets, productivity, multi-enzymes MEC-SH3, enzyme Rovabio XL z.

## Growth and development of pigs depending on sex

S.V. Burov, A.L. Alekseev, E.A. Krishtop Tel.: (000) 000-00-00

The article describes results of scientific and economic experience. It has been established that the efficiency of using feed for boars of Large White breed higher than that of hogs, while their half-carcasses are longer. Spinal fat thickness in the region of shoulder cut, back and hip of boars is less than that of hogs.

**Key words:** pig breeding, castration, feeding, protein, boar, hog, boning.

## Principles of integration processes in meat industry of AIC

N.F. Neburchilova, I.P. Volynskaya, T.A. Marinina, I.V. Petrunina Tel.: (495) 676-67-31

Theoretical and practical aspects of integration in modern conditions have been identified. Organizational and structural features of various models of integrated agro-industrial units have been considered. New forms and structures of integration relations in the meat sub-complex of AIC in Russia have been found.

**Key words:** integration, concentration, economic dependency, holdings.

## Study of diffusion processes and technological properties of pork during vibration salting

A.B. Lisitsyn, I.V. Reshetov Tel.: (495) 676-95-11

One of the ways allowing to intensify the process of meat salting and create new technologies is usage of oscillatory and wave effects — vibrations. The obtained results indicate that effect of vibration oscillations during meat salting has a positive influence on forming functional and technological properties of raw materials. It will allow to develop scientifically based technologies of meat salting in manufacture of lump meat products.

**Key words:** vibration salting, longissimus dorsi, diffusion of sodium chloride, amplitude of oscillations.

## «Technical archaism has helped nobody to build a brighter future»

A.A. Kubyshko

Interview of general director of «Intermik Rusteh» company Nikolay Pestov to magazine «All about meat». Problems of secondary raw material processing, technical modernization of meat processing plants, personnel training for modern production are being discussed.

## Technical solutions for supply of gas mixtures for food packaging

Natalia Stavtseva

The article offers an option for obtaining gas mixtures for packaging and recommendations for efficient use of equipment for supply of the gas mixture too food packaging. Calculation of equipment parameters for enterprises of different capacity is proposed.

## Development strategy — qualitative and safe products

D.V. Vladimirov

In its development company «Vladi» made a bid for production of chilled raw meat and whole-muscle semi-products. The article briefly describes a recipe for successful business, the main component of which are adjusted management actions and attention to system provision of quality and safety.

## Competitive strategy: recipes of trademark «Okraina»

Vladimir Malkov

Some «secrets» of success of the young company combining in its work the right decisions, beginning from foundation and ending with selection of suppliers and recipes. During crisis a true strategy helped to expand the market, maintain high profitability and not to lose the quality. Arguments in favor of production facilities used for equipment of the company are given.

## Histological identification of protein additives of animal origin

S.I. Khvylya, I.A. Zhebeleva, D.V. Kristaphovich, E.V. Khaustova, V.V. Melnikov Tel.: (495) 676-92-31

The article presents data on microstructural studies of additives based on animal proteins produced from pork collagen-containing connective tissue and blood plasma. It has been established that analyzed samples of powders from protein additives have a similar composition of collagen and elastin animal proteins. In general, they represent a protein preparation based on fibers of animal connective tissue alone or in combination with granular eosinophilic protein of other biological nature.

**Key words:** pork collagen, microstructural studies, basophilic coloration, eosinophilic protein, globular shape.

## Chemical safety in meat industry

S. Andre, B. Dzhiro, K.-G. Schwind, G. Wagner, F. Schvegele

An important prerequisite for food quality and safety assurance is implementation of chemical analysis throughout the food chain: from the bottom (traceability) — from primary production to the consumer, and from the top (traceability) — from the consumer to primary production. In this regard, this article focuses on chemical safety of meat and meat products, with emphasis on organic and inorganic residues and contaminants, ingress of medicines, as well as analysis of weaknesses in the system and their effects (FMEA), prioritizing vulnerable stages of the food chain to reduce or eliminate vulnerability.

**Key words:** feeds, meat, meat products, inorganic residues, organic residues, nitrite, veterinary drugs, FMEA.

## The main and newest about technical regulation in the meat industry

O.A. Kuznetsova, N.V. Maslova

Report on the seminar «Implementation of the Federal Law» «On technical regulation» in the meat industry, intended for specialists in the field of standardization, certification and quality systems of the meat branch. Discussions focused on questions concerning changes in the procedure of conformity of food products and features of regulation of the meat industry for Russia's entry into the Customs Union.

## Industry «Halal» in Russia: past, present, future

Zh.H. Azizbaev, A.G. Gazizov

Mufti Council of Russia in 2003 developed a standard of public association «Regulations on organization of production, trade, control over production and trade of products authorized for use in food to Muslims — «Halal-PPT-SMR».

Development of this standard was an attempt to combine requirements of the Islamic tradition (Shariah) and the State Russian Legislation. Experience has shown that there are no insurmountable contradictions.

## A look at meat ranks of ProdExpo 2011

A.A. Kubyshko

According to steady for many years status quo, meat products at the exhibition were mostly presented by Russian and Belarus companies, and raw meat — by representatives of foreign countries. Such distribution quite accurately reflects specificity of the meat market in Russia, where proportion of imported industrial raw materials is rather high, and finished products for more than 90 percent are domestic.

## Meat in Mediterranean cuisine

O.V. Lisova

People in the countries of Mediterranean cuisine like meat. They eat it a lot, prepare varied and tasty, and do not forget to do good advertising for their products that genuinely believe to be the best in the world. The article gives an overview of meat dishes from the Mediterranean countries and recipes for independent practice in the kitchen.

## CONTENTS

### EDITORIAL

New quality of raw material base

### MAIN THEME

G.V. Maksimov, O.N. Polozhuk, N.B. Khurum. Yield of finished products by using two- and three-breed crossbred pigs

M.P. Dubovskova. New genotypes of Kazakh White Head breed — a source of high quality beef production

A.P. Korobov, N.K. Skorobogatova, A.V. Giro. Formation of meat productivity of pigs and prediction of meat quality characteristics depending on organization of their rational nutrition

S.V. Burov, A.L. Alekseev, E.A. Krishtop. Growth and development of pigs depending on sex

### ECONOMY

N.F. Neburchilova, I.P. Volynskaya, T.A. Marinina, I.V. Petrunina. Principles of integration processes in meat industry of AIC

### TECHNOLOGIES

A.B. Lisitsyn, I.V. Reshetov. Study of diffusion processes and technological properties of pork during vibration salting

### CONCEPTUAL TALK

A.A. Kubyshko. «Technical archaism has helped nobody to build a brighter future»

### PRODUCTION EXPERIENCE

Natalia Stavtseva. Technical solutions for supply of gas mixtures for food packaging

D.V. Vladimirov. Development strategy — qualitative and safe products

### TECHNICAL SOLUTIONS

Vladimir Malkov. Competitive strategy: recipes of trademark «Okraina»

### RESEARCHES

S.I. Khvylya, I.A. Zhebeleva, D.V. Kristaphovich, E.V. Khaustova, V.V. Melnikov. Histological identification of protein additives of animal origin

S. Andre, B. Dzhiro, K.-G. Schwind, G. Wagner, F. Schvegele. Chemical safety in meat industry

### NORMATIVE BASE

O.A. Kuznetsova, N.V. Maslova. The main and newest about technical regulation in the meat industry

Zh.H. Azizbaev, A.G. Gazizov. Industry «Halal» in Russia: past, present, future

### EVENTS

A.A. Kubyshko. A look at meat ranks of ProdExpo 2011

### SECRETS OF COOKERY

O.V. Lisova. Meat in Mediterranean cuisine