CONTENTS, ABSTRACTS AND KEYWORDS OF PAPERS

1 раздел

FORMATION OF INNOVATION ENVIRONMENT BASED DEVELOPMENT PROGRAM "UMNIK" AND "START" IN THE REGIONAL CONTEXT

L. Sovtsov

The article describes the process of forming innovative environment in the context of the region through the development of federal programs "UMNIK" and "START", which in terms of regional development provide creative teams with young people (students, young scientists) to develop and implement innovative ideas and projects . Analysis of the performance of these programs reflects the efficiency of the process of state support for science and innovation at universities with the priorities of regional development.

Keywords: innovation environment, innovation, innovative SME, the creative team, innovative project management system specialist.

FORMATION OF INNOVATION ENVIRONMENT ON THE BASIS OF CONTROL SYSTEMS RESEARCH INNOVATION ACTIVITIES IN THE REGION

S. Novoselov, L. Sovtsov

The substantiation of the formation of an innovative environment based on the development of the management of scientific and innovative activity (NID) in the conditions of the region, the industry. A schematic diagram of the basic functions of control system NID, considering support for innovative projects of the program state fund to promote small enterprises in scientific and technical sphere. Describes the development of the NID, which stipulates the need to establish youth creative groups in variant forms of organization on the basis of scientific, research and educational institutions in the region.

Keywords: innovation environment, scientific innovation, creative team, region, industry, management system, a new product, commodity.

PROBLEMS AND SOLUTIONS TRAINING FOR INNOVATION IN NUTRITION

L. Mayurnikova, L. Sovtsov, S. Novoselov

The fundamentals of training system for innovation (ID) organizations and enterprises on the example of the scope of supply, systematization of existing personnel training and the role of specialists ID as a factor of ID. Shows a system of training for ID -based federal programs "Polzunovskii grants" - "wise men" and - "START" State Fund for Assistance to Small Innovative Enterprises in Science and Technology, which are implemented in the regional context. This software system has distinctive features and advantages for innovative development organizations and enterprises in the food recommended for practical use. Shows the formation of an innovative environment for young people in regional conditions on the basis of the state program.

Keywords: catering, innovation specialists, training programs, innovative project, a program innovator.

ANALYSIS OF THE PROSPECTS INNOVATIVE ACTIVITY AT THE DESIGN STAGE TO NEW FOODSTUFF

S. Novoselov, L. Маюрникова, D. Remizov, S. Rudnev

Sets out the relevance and features to practical application of the functional and cost and functional and physical analysis in conditions of innovative activity. The specified key features to practical application of these methods analysis at the design stage of new food products on example to development of innovation project to production and sales of carrot nectar.

Key words: innovative activity, functional and cost analysis, functional and physical analysis, carrot nectar, method, design.

FEATURES OF THE SIMULATION CATERING IN REGIONAL CONDITIONS

S. Novoselov , L. Mayurnikova , N. Kokryatskaya , J. Makovskaya

The features of modeling innovation development organizations and public catering enterprises in the regional context. The basic features of the practical application of design methodology and promoting the consumer market of new food products, food, technology innovation under public catering. Shows the theoretical and methodological approach to the modeling of innovative development of public catering in the conditions of the region, the development of innovative projects and programs.

Keywords: food, innovation, new food product, technology, healthy food, innovative project, the method, model.

ALGORITHMIC AND TECHNICAL REALIZATION OF THE CONTROL SYSTEM OF THE AUTOMATED FARM OF MUSHROOMS CULTIVATION

A. Zotin, A. Nosov, E. Zolotareva

The solution of plants cultivation automation technology in artificial conditions, including in commercial projects is offered. This solution is based on development in the field of technical vision and detection of influence of destructive factors on plants. Algorithmic and technical means allowing increase efficiency of traditional methods of cultivation are offered.

Keywords: the automated farm, cultivation of mushrooms, segmentation, image analysis, automatic control

EXPANSION THE RANGE OF CHEESE IN ALTAI REGION

A. Maiorov, E. Shchetinina

Analysis of possibility to use goat's milk for production cheese in Altai Region. Analysis of the range of cheese from France, Italy as well as chemical composition and properties of goat's milk. Keywords: cheese, raw materials, cow's milk, goat's milk, goat's cheese.

MARKETING RESEARCH TO CONSUMER PREFERENCES PROCESSED GRAIN PRODUCTS

J. Ugarova

A study of consumer preferences for products of grain processing in Barnaul. The factors influencing the choice of cereals and cereal flakes to determine the prospects of development of grain processing industry.

Keywords: consumer preferences, processed grain products, the food industry.

MARKET RESEARCH OF THE MARKET PRODUCTS CONTAINING EXTRACTS AND CONCENTRATES OF FRUIT AND BERRY RAW MATERIALS, KEMEROVO

A. Mustafina, I. Bakin

For justification of production we analysed the market of syrups and the extracts realized in Kemerovo retail enterprises. The existence of natural components from fruit and berry raw materials is studied in them.

Keywords: market researches, fruit and berry raw materials, extracts, syrups, producers, range.

RESEARCH OF THE CONDITION OF THE MARKET OF VEGETABLE SOUPS

M. Vaytanis

The analysis of the market of vegetable soups offered at catering establishments in Barnaul is carried out. Preferences of consumers are established at a choice of vegetable dishes, possibility of expansion of the range of offered dishes is defined when using new raw materials.

Keywords: the analysis of the market, the range of soups, soup-puree, vegetable soups, enterprises of public nutrition.

THE MAIN BREEDS OF DAIRY GOATS IN THE TERRITORY OF THE ALTAI TERRITORY

A. Maiorov, E. Shchetinina

The pedigree structure of dairy goats in the territory of Russia, and as Altai territory is studied. Possibility of use of goat milk raw materials from certain breeds of dairy goats in the territory of the Altai territory is studied.

Keywords: raw materials, goat, goat milk, breed, lactation.

PRODUCTION AND PROCESSING OF WHEY IN RUSSIA AND THE ALTAI REGION

M. Schetinin, A. Dorokhova

The main directions of whey processing in Russia, its use for the production of food, drinks, food. Represented the largest producers, production and processing of whey in the Altai region. Keywords: whey, processing, manufacturers, products based on whey.

2 раздел

EFFECT OF STRUCTURAL AND MECHANICAL PROPERTIES OF CARROTS FOR CONSUMER PROPERTIES NECTARS BASED ON IT

S. Remizov, L. Mayurnikova, M. Kurakin

The results of the study of structural and mechanical properties and antioxidant activity of different varieties of carrot and vegetable nectars. Examined the strength characteristics of the samples of carrots, the characteristic of the structure of carrot pulp. The dependence of the solids concentration of the enzyme preparation. The dynamics of growth and dry matter yield of juice during the maceration of the pulp of various of types of carrots.

Keywords: structural and mechanical properties of raw materials, carrots, honeydew.

THE TEMPERATURE AND ACTIVE ACIDITY EFFECT ON MILK-CLOTTING ENZYME PREPARATIONS OF ANIMAL ORIGIN

Y. Sturova, E. Bezborodova

The investigation was carried out on the influence of the active acidity and temperature effect on milk-clotting enzyme prerarations of animal origin. The optimal parameters of the temperature and the active acidity are established for the buffer solutions used for dissolving milk-clotting enzyme prerarations.

Keywords: milk-clotting activity of enzyme preparations, rennet, pepsin beef, VNIIMS SG-50.

DEVELOPMENT OF MILK PROTEIN BASIS OF BIOBASED PRODUCT ON CROSS-FERILIZATION EFFECT

O. Pasko, S. Galkina, E. Anikina

This article is devoted to development of milk protein basis of curds biobased product for school meal. There was conducted research on chemical composition and physicochemical data of constructing milk protein basis, biological value of proteins is shown, biobased product manufacturing process is described. Also there was carried out an analysis of organoleptical and physicochemical data of curds biobased product for school meal.

Keywords: school meal, milk protein concentrate, buckwheat flour, curds, milk protein basis development.

THE USE OF COMMON PRINCIPLES OF PREVENTION OF RAW STAFF FROM DAMAGE WHILE SEA BUCKTHORN CONSTRVATION

E. Filimonova

The results of preservation of sea buckthorn on the basis of principles of preserving of raw staff from the damage (biosis, anabiosis, abios) are shown in the article. The ways of conserving of fruitage are researched.

Key words: sea buckthorn, preserves, conserving, technology, organoleptic assessment.

CONDUCTING AN ORGANOLEPTIC EXPERTISE OF ENERGY BEVERAGES FOR FINDING OUT PRIORITY CONSUMER CHARACTERISTICS

T. Kotova, V. Poznyakovsky

The article highlights the results of the open degustation. The mark system of organoleptic expertise of energy beverages is considered and approved. The more significant characteristics of energy beverages quality that are in priority towards other brands of similar products are revealed.

Key words: energy beverages, open degustation, mark system, organoleptic expertise, quality characteristics.

TECHNOLOGICAL FEATURES OF PRODUCTION OF JUICE WHITH PULP, PURELIKE AND PASTY PRODUCTION

E. Filimonova Y. Zaytseva

Conservation methods are described in the article. Puree is used as semi-finished goods for the production of juice with pulp, jam and confectionary product.

Key words: technological scheme, the ways of preservation, puree, preserves, juie with pulp.

SPECIALIZED PRODUCTS WITH PANTOHEMATOGEN: EVIDENCE FOR THE EFFECTIVENESS IN SPORT

N. Suslov, N. Latkov, S. Trubchanin, V. Poznyakovsky

Literary material presented and the authors of their own data on the use of pantogematogen in sports nutrition and performance evaluation of specialized products. We consider the prospects for the application of reindeer antiers on the basis of the achievements of the science of nutrition.

Keywords: specialty products, dietary supplements, pantogematogen, sports, efficiency

THE CHARACTERISTICS OF THE TONIC EFFECT OF SOFT ENERGY DRINKS

T. Kotova, A. Razumov, V. Poznyakovsky

The article deals with the results of the study of intensity and duration of soft energy drinks tonic effect. Shulte tables and Bourdon correction test were used to calculate efficiency of work, speed of reaction, mental stability of the testees; correctness, efficiency and success of task accomplishment.

Key words: intensity of tonic effect, duration of tonic effect, efficiency of work, speed of reaction, mental stability, correctness of task accomplishment, efficiency of task accomplishment, success of task accomplishment.

ORGANOLEPTIC ASSESSMENT OF QUALITY OF CAVIAR FROM COURGETTE

A. Gabinsky, O. Golub, N. Zavorokhina, N. Semenova

The point method is developed for an organoleptic assessment of quality of caviar from courgette. The nomenclature of single indicators of quality is defined, the table of characteristics of levels of quality is created, coefficients of ponderability of indicators are appointed, boundary limits of values of complex and single indicators for each category of quality are defined. The point method is approved on the goods sold in the market of the Kemerovo region.

Keywords: sensory analysis, organoleptic assessment, caviar from courgette, point method, quality indicators.

COMPARATIVE EVALUATION OF QUALITYENRICHED MICRONUTRIENTS GEMA ON THE BASIS OF STRAWBERRIES RECEIVED IN NATURAL CONDODITIONS AND MICROPROPAGATION

M. Fedorov, V. Stepanov, N. Tikhonova

A comparative evaluation of quality enriched with micronutrients jam based on strawberries grown in vivo and in cultured micropropagation. Defined organoleptic, physical and chemical quality and safety indicators. All test samples jams compliant technical standards and do not have significant differences, indicating that the identity of berry raw materials produced in the traditional way, and berries produced by the method of cultivation micropropagation.

Keywords: mikroklonirovanie, strawberry jam, quality indicators, preparation.

3 раздел

ASSESSMENT OF RAW MILK IN AKMOLA REGION OF KAZAKHSTAN

O. Koltyugina, G. Loskutova, I. Dubinets, I. Alekseenko

Analysis of raw milk and soft cheese making rationale in Akmola region, Kazakhstan. The result is a product with good taste characteristics. Use of complex coagulant (curd whey, thermophillus starter, acetic acid) increased the yield of cheese is higher than in applying the coagulant acetic acid. Keywords: raw milk, thermoacid coagulation, soft cheese.

INVESTIGATIONS OF APPLE VARIETIES OF ALTAI BREEDING FOR PRODUCTION OF HIGH QUALITY SPARKLING WINES

N. Shelkovskaya, I. Kalinina, V. Kotsuba, S. Kamayeva

Results of biochemical investigations and organoleptical qualities of natural apple juices, wine materials and sparkling wines, obtained from fruits of distributed apple varieties of apple breeding are presented. It is proved the possibility of production of high quality sparkling wines.

Keywords: apple varieties, pure culture of wine yeast, wine materials, champagnization, sparkling wine.

TECHNOLOGICAL PROPERTIES OF BARLEY GRAIN IN PROCESSING IN GROATS AND FLOUR

L. Anisimova, A. Vybornov

Technological properties of different varieties of barley which was grown in the Altai region have been investigated. Chemical composition and consumer properties of barley flour received from the original grain and grain which was subjected to the hydrothermal processing have been explored. The information about the quality of bread made from wheat flour and a mixture of wheat and barley flour is provided.

Keywords: barley, efficiency of hulling, barley flour, hydrothermal processing, chemical composition, consumer properties, bread quality.

EXPLORING THE FUNCTIONAL AND TECHNOLOGICAL PROPERTIES OF RAW MATERIALS OF THE VEGETATIVE AND ANIMAL ORIGIN IN DEVELOPING CONFECTIONERY PRODUCTS

M. Shchetinin, A. Frolova

Researched functional and technological properties of the raw materials of vegetable and animal origin. Developed possibility of using whey and sunflower meal in confectionery products.

Keywords: confectionery products, dairy whey, sunflower meal, functional and technological properties of the confectionery paste.

USE OF THE POLBYANY FLOUR FOR ENRICHMENT OF CONFECTIONERY FOOD

O. CHUGUNOVA, E. KRYUKOVA, N. ZAVOROHINA

Article is devoted to the comparative analysis of chemical, amino-acid composition, physical and chemical indicators and a nutrition value of a flour wheat and polbyany, possibilities of use of a polbyany flour for enrichment of flour confectionery

Keywords: wheat flour, polba, chemical composition, amino-acid structure, enrichment

PROSPECT USE OF PROTEINS VEGETABLE AND ANIMAL ORIGIN IN COMPOSITION PRODUCE SPORTIG NUTRITION

Z. KHODIREVA

Lead analysis possibility use of proteins vegetable origin for composition dairy products for special nutrition. In theory and experimentally give proof of condition receipt buckwheat proteins.

Key words: albumen, buckwheat proteins, cultured milk drink, buckwheat meal, sporting produce, acidity drink/

PRACTICAL USE VEGETABLE MATERIALS ALTAI KRAI DRINKS IN PRODUCTION MULTICOMPONENT

M. Shkolnikova, E. Averianova

Investigated the quality of dry plant materials collected in the foothills of the Altai Krai and Altai Republic in 2005-2012 yy and belong to the family Rosacea, Vicciniaceae, Asteraceae, Lamiaceae, Fabaceae, Ssroroulariaseae, Hypericaceae and Schisandraceae.

Keywords: plant material, extracts, compatibility of biologically active substances (BAS), multicomponent drinks physiological value.

PROSPECTS OF USE OF MEAT OF DEER IN PRODUCTION OF FOOD PRODUCTS ANTICARCINOGENIC DESTINATION

L. Meleshkina

In the article the analysis of the reasons and methods of correction of carcinogenesis, conducted evaluation ka satisfaction the nutritional status of patients with malignant neoplasms, studied the possibility of production of meat food products of special purpose of the meat of deer.

Keywords: malignant tumors, healthy nutrition, meat Mara-La pate.

PLANT COMPONENTS AS RAW MATERIALS IN THE PRODUCTION OF PROCESSED CHEESE PRODUCT

M. Schetinin, N. Bogdanova, L. Azolkina

Expanding the range of processed cheese products through the use of the quality of different starches and rice flour as a nucleators. The result is a cheese product with characteristics that meet the requirements of GOST R 53502-2009 "The processed cheese products. General specifications". The use of natural rice flour in recipes of cream cheese product can reduce calories and keep the high nutritional value of finished products, and provid a cost-effective production of the product.

Keywords: cream cheese product, potato starch, corn starch, modified starch, rice flour, nucleators.

PERSPECTIVES OF THUMUS L IN FOOD PRODUCTION

G. Gubanenko, L. Mayurnikova

Given article studies the chemical composition of biologically active substances and the safety performance of Thumus L growing in Khakassia. The opportunity of application of Thumus L for food production as raw material at the regional level is justified.

Keywords: Thumus L, biologically active substances, the indication of safety, food products.

THE ENRICHMENT OF FISH FORCEMEAT BY VEGETABLE RAW MATERIALS

M. Vaytanis

The condition of the market of fish semi-finished products is investigated. The assessment of functional and technological and organoleptic indicators of the combined fish forcemeats is carried out. The optimum quantity entering into fish forcemeat of a vegetable component is established.

Keywords: the organoleptic performance, the functional and technological properties, the combined fish forcement, fish meatballs, celery root.

INFLUENCE OF THE GLUCONO-DELTA-LACTONE ON SENSORY CHARACTERISTICS OF CHEESE PRODUCT OBTAINED FROM RECONSTITUTED MILK

Y. Sturova, I. Myronenko, Y. Upit

The effect of glucone-delta-lactone (GDL) was investigated on the active acidity and the organoleptic characteristics of cheese product. The optimal dose and the temperature of the GDL addition are established to obtain the desired physical, chemical and organoleptic characteristics of the product.

Keywords: glucone-delta-lactone, active acidity, texture, temperature, sensory characteristics.

FORMULATION AND EVALUATION OF THE QUALITY OF DIABETIC CONFECTIONERY

L. Melesnkina, L. Dzhankulieva

In article results of the researches directed on development of recipes dessert «Tiramisu» for diabetics, with the use of topinambur. Analysis of the basic indicators of the quality of semi-finished products for production of diabetic confectionery.

Keywords: diabetes mellitus, topinambur, Tiramisu, biscuits, cream custard.

DEVELOPMENT OF THERMOACID CHEESE PRODUCT WITH USE AS COAGULANT CRANBERRY AND COWBERRY PUREE

M. Shchetinin, T. Kiktenko

Physical and chemical indicators of cranberry and cowberry puree are studied, dependence of an exit of a cheese product on brought coagulants and technological parameters are investigated, organoleptic indicators of a ready-made product are estimated.

Keywords: cranberry puree, cowberry puree, thermoacid coagulation, thermoacid cheese product.

DEVELOPMENT OF TECHNOLOGY OF MELTED CHEESE PRODUCT WITH ALBUMIN

M. Shchetinin, N. Bogdanova, L. Azolkina

Solving the problem of resource conservation in technology of melted cheese product through the use of albumin- raw cheese substitute, and rice flour in the formulations. In this regard, necessity appeared for changes in the traditional scheme of production of cream cheese product. The use of dispersant as an optional equipment yielded a product with a high nutritional value by using albumin and rice flour, and reduce cost production through partial substitution of milk raw materials and speed up the processing of cheese mass.

Keywords: cream cheese product, albumin, rice flour, dispersant, technology of production of cream cheese product

DEVELOPMENT OF TECHNOLOGY OF A COTTAGE CHEESE BIOPRODUCT WITH WHEAT BRAN

O. Penzina, O. Pasko

Presented article is devoted to prospects of development of a cottage cheese bioproduct with wheat bran. Development and production of qualitatively new products of the raised nutrition value is the fastest, economically acceptable and scientifically reasonable solution of a problem of a balanced diet of the population. Creation of products of difficult raw structure became one of the major directions in increase of a nutrition value.

Keywords: Cottage cheese bioproduct, proteinaceous vegetable basis, AT-cottage cheese, pro-biotic cultures.

CULTURED MILK FOODS RICH FOR SPORTIG NUTRITION

Z. Khodireva

Present availability phytalbumin in structure dairy produce for sporting nutrition; research physicochemical and orgnoleptiec showing cultured milk drink.

Key words: phytalbumin, albumen, buckwheat protein, kefir, albuminous, beverage food.

DAIRY DESSERT FOR SCHOOL MEALS

L. Zavgorodnev, O. Pasko

Represented by the use of fruit flavors in the dairy dessert for school meals, studied organoleptic characteristics of milk dessert.

Keywords: berry purees, fruit puree, guar gum, pectin, whole milk.

CURD PUDDING WITH FRUIT-AND- BERRY FILLERS FOR SCHOOL MEALS

M. Esipova, O. Pasko

Drafting of curd pudding for school meals, computer design recipe. The possibility of use of fruitand-berry filling in the composition of curd pudding. Investigated organoleptic, physico-chemical and microbiological parameters of the product.

Keywords: curd pudding, school meals, specialized products of nutrition and micronutrients.

STUDY OF ENTRAINMENT IN A ROTARY SPRAY OF DUST COLLECTORS

A. Sorokopud, K. Plotnikov, D. Rezik

Experimental results on a rotary spray entrainment of dust collectors with internal circulation and samoorosheniem liquid. Entrainment patterns obtained from the basic parameters - the gas velocity, the velocity of the fluid from the hole, the diameter of the holes is atomized.

Keywords: entrainment, gas velocity, speed gun, hole diameter.

FORMULATION AND PRODUCTION TECHNOLOGY YOGURT FORTIFIED CANDIES

I. Novikov, V. Erdakova, J. Guryanov, G. Dorn

The results of development of formulas yogurt sugar concentration diterskih products enriched with vitamins and minerals designed to correct the daily diet of children of preschool and school age. The technology for the production of fortified candy, allowing lobilnyh maintain stability of biologically active substances.

Keywords: specialized products enriched with vitamin products, sugar confectionery, yogurt candy, food.

INFLUENCE OF ELECTROACTIVADET LIQUIDS ON THE PERSISTENCE OF CONTENTS SODIUM NITRITE IN MEAT FROM RAW MATERIALS WITH UNCONVENTIONAL COURSE ATOLIZA

M. Fedorov, E. Pershina, O. Pribytova, N. Tikhonova

The ability to use technology in meat products from raw materials with unconventional course of autolysis curing brines based catholyte electron troaktivirovannoy water with high rates of reaction (pH=11.0-11.5 units.) And low negative values of the redox potential with in order to create a suitable environment to enable the reaction of sodium nitrite in the formation of color in meat muscle tissue. The conclusion about the possibility of reducing the residual amount of sodium nitrite in meat products developed as a result of accelerating progress in its transformation nitric oxide, NO-stability of pigments (nitrozopigmentov) and save intense color during the storage period.

Keywords: meat with unconventional swing autolysis electroactivated water activated brines nitrozopigmenty, electroacnivaded fluids catholyte.

STATE OF THE MATTER ON THE USE OF RESOURCES WILD GROWING RAW MATERIALS IN PRODUCTION MULTICOMPONENT DRINKS

M. Shkolnikova, L. Mayurnikova

We studied the state of the question on use of resources of wild plants of the Altai territory and Republic of Altai in the production of multi-component drinks.

Key words: natural vegetative raw materials, biological resources, study of chemical composition of wild vegetable raw materials, the stability of biologically active substances, standardization of plant raw materials.

THE CONTENT OF KADMY IN DRINKING WATER OF EAST KAZAKHSTAN REGION

A. Karimova

In this article were studied ecological-geochemical peculiarities of content, distribution, variation of microcomponents and in a drinking water of East Kazakhstan region. Was given on ecological mark of drinking water of researching region.

Key words: drinking water, East Kazakhstan region, kadmy, microcomponental component, monytoring, gydrotaking, gidrochemical standard, geomorphological zonality)

MULTI-BLADE SCREW PILES FOR CONSTRUCTION OF ENGINEERING CONSTRUCTIONS OF THE ENTERPRISES OF THE FOOD INDUSTRY

I. Noskov, V. Kazantsev, M. Osipova, V. Kozlova, G. Merentsova

In article the design of the test bench, a technique and results of natural tests of multi-blade screw piles are given in various soil conditions. The main object of research is determination of bearing ability and a precipitation of multi-blade screw piles.

Keywords: multi-blade screw pile, the stand, the technique, bearing ability, a deposit.

COMPUTER MODELLING OF THE PARTICLE'S CONTACT VIBRATIONAL MOVING PROCESS

I. J. Fedorenko, A. S. Fedorenko

Results of computer modelling process of contact vibrational moving of the particle, concerning the plane located under some corner to the horizon, and vibrated in the plane are given in article. Dependences of average dimensionless speed of a particle by an axis Y and average effective (operating) speed value on an axis X from the parameter of cross vibration (ε) and intensity of vibration are defined.

Keywords: modeling, vibration, vibrational moving, particle, response surface.