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Experimental studies were made into the quality indicators of white flour yeast-leavened dough buns during storage. Reasonability for introduction of ascorbic acid, modified starch of hot swelling as well as maltodextrin and glucose into the formula of yeast-leavened dough bakery goods to increase their quality and preserve freshness over a long period has been shown.

SUBSTANTIATION FOR THE DEVELOPMENT OF NEW METHODS OF PREPARING RYE FOR ALCOHOL PRODUCTION

A.A.Mirontseva, E.A. Tsed, S. V. Volkova, A. V.Surovets

Qualitative indicators of dry and soaked for a short period of time rye variety «Niva», wort and wash obtained in accordance with new operating conditions are studied. Possibility of using amaranth meal as an antiseptic agent and feasibility of new operating conditions without introduction of the enzymatic agent at the stage of batch liquefying for soaked rye processing have been shown.

OPTIMUM DOSAGES OF COWBERRY FOOD POWDER FOR PASTA ENRICHMENT

J. V. Koshak, E.L. Volynskaya, A. V. Pokrashinskaya

The possibility of using cowberry food powder for manufacturing functional pasta from durum high-grade flour (semolina) of Belarusian selection durum wheat is studied. The effect of different powder dosages on the pasta properties of flour is considered. The optimal dosages of cowberry food powder to produce pasta complying with the requirements of STB 1963-2009 have been determined.

CHARACTERISTICSOFCAPELINANDCARPROE LIPIDS

A. A. Menchynskaya, T. K. Lebskaya

The many-sidedness of the lipid functions depends on the variety of its biochemical composition. That's why when the roe based food products are made it is necessary to consider not only quantitative but also qualitative lipid content and its fractional characteristics of the fat components. In this article the lipid content and its fractional composition in the capelin and carp roe are investigated. It is found that the main lipid fractions are triglycerides, phospholipids and cholesterol. The phosphatidylcholine prevails in the phospholipid composition, which defines the roe emulsification ability. The content of the individual fat acids and its groups is determined. The correspondence between fatty-acid lipid content of the objects under study and the recommended consumption rate is estimated.

CALCULATION AND GENERALIZATION OFDENSITY IN LIQUID 1-ALKENES

T.S. Khasanshin, O.G Poddubsky

Density in liquid 1-alkenes at the temperatures of 303-433 K and the pressures of 0.1-100 MPa was calculated on the basis of sound velocity data. The parameters of the generalizing function to describe the density of 1-alkenes, depending on the structure, temperature and pressure were determined. The calculation results were compared with the experimental values. The error for the most reliable data averages out to 0.3%.

EFFICIENCY INCREASE OF CUTTER OPERATION

A.L. Zheludkov, S. V. Akulenko, K.K. Guliaev

The ways for intensification of cutting meat raw materials aimed at applying systems of the process automation, optimization of cutting conditions and cutting unit designs are considered. It is shown that effectiveness increase of cutting process (increase of cutting speed and linear velocity of the bowl) results in raw material temperature increase and specific energy intensity of the process.

MODELLING OF JET - MIXING MILK HOMOGENIZATION WITH SEPARATE CREAM FEED

K.O.Samoichuk, A.A.Kovalyov, A.A.Bezditnyi

The work deals with the computer simulation of jet-mixing milk homogenization with separate cream feed in ANSYS simulation software. Influence of pressure of skim milk in the central channel, diameter of central channel in the area of the most narrowing of stream and diameter of fatty phase feed channel on the velocity fields of milk emulsion was studied. Influence of these parameters on the degree of dispersing has been defined. Formulas to determine coordinates of localization area of the maximum velocity of the emulsion in order to obtain the highest homogenization degree as well as to determine the medium diameter of fat globules and specific power inputs of the investigated homogenizer were got. The data obtained give a more clear idea about the process of jet-mixing milk homogenization with the separate cream feed and allow the amount of experimental studies to be decreased.

EXTRACTIONOF BIOLOGICALLY ACTIVE SUBSTANCES FROM GRAPE POMACE WITH SUBCRITICAL WATER AND DEVELOPMENT OF PROPER EXPERIMENTAL EQUIPMENT TO IMPLEMENT THE PROCESS

V.A.Sukmanov.V.B.Zakharevych, A.I.Marynin, I. S.Rogovoy, A.G.Fariseev

This paper presents the results of experimental studies of extraction process of grapepomace with subcritical water. The data on the installation for implementing the extraction process as well as calculations data and computer modeling of stress-strain state of the walls of the working chamber in the system ANSYS are given.

EVAPORATIONFROMTHEADJACENTCYLINDRICALCHANNELSINTHEPRESENCEOFTRANSVERSETEMPERAT UREGRADIENT

V.L. Malyshev, A. V. Shlapakov

The influence of fluid supply from adjacent poreson evaporating was theoretically considered in the binary capillary mode . The process is complicated by the presence of inhomogeneous temperature field between communicating channels.

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SOME ASPECTS FOR THE CONTROL OF SUSTAINABLE OPERATION AND DEVELOPMENT OF ENTERPRISES

D.N. Vetoshko, N. V. Gracheva

The problems of operation and development of enterprises in the conditions of current economic challenges and trends are considered. The need for business modeling based on the modern technologies allowing quick adapting to the changes in the external environment is shown in relation to the strategic development. Some methods of approach ensuring quality of the development and implementation of strategic planning and program development projects were studied as the tools for its sustainment. Ranking method for the distribution of added value and subsidizing enterprises, depending on the achieved level of profitability and thus ensuring the capitalization of internal funds for the development is suggested.

STATE AND DEVELOPMENT OF PRODUCTION COSTS CALCULATION OF MEAT PROCESSING ENTERPRISES

O.O. Sudareva

Studies were made into the current state of the methods for calculation of production costs of meat processing enterprises with regard to technological and organizational characteristics of meat industry enterprises. There were given the recommendations for improving the methods under consideration. The methods applicable today in meat industry fornet cost calculation of sausage goods were compared with those proposed in the paper.

IMPROVING TAXATION IN THE FIELD OF ENERGY EFFICIENCY IN THE REPUBLIC OF BELARUS

E.A. Radzishevskaya

The article develops a mechanism of energy taxation of enterprisesin the Republic of Belarus consuming fuel and energy resources. The need for reforming existing national taxation of energy efficiency as well as the main advantages of introduction energy tax for all participants of tax relations in this sphereisidentified.

ON THE PARTICIPATION OF MOGILEV STATE UNIVERSITY OF FOOD TECHNOLOGIES IN INTERNATIONAL PROGRAM TEMPUS

A.S. Nosikov, L.A. Shcherbina, I.A. Budkute

The paper presents the results of the participation of Mogilev State University of Food Technologies in international program Tempus.