CONTENTS

INNOVATIVE TECHNOLOGIES AS A COMPONENT
OF LEAN PRODUCTION
SECTION 1. INTENSIFICATION OF CHOPPING COLLAGEN-CONTAINING MEAT RAW MATERIALS (Batrachenko O. V.)
SECTION 2. APPLICATION OF THE PRINCIPLES OF IONOTROPIC GEL FORMATION IN THE TECHNOLOGY OF RESTRUCTURED PRODUCTS BASED ON FISH RAW MATERIALS (Hrynchenko N. H., Smetanska I. M., Hrynchenko O. O., Pyvovarov P. P., Pertsevoi F. V.)
1. Technological and economic aspects of production of products
based on fish raw materials
2. Definition of an innovative strategy for RFP development, modeling of RFP technology and composition
3. Justification of the parameters for obtaining ionotropic gels
with the necessary indicators based on minced meat systems
4. Development of the basic technological scheme
of RFP production
SECTION 3. IMPROVEMENT OF THE TECHNOLOGY OF FONDANT SWEETS MADE ON THE BASIS
OF A COMBINATION OF LACTOSE AND FRUCTOSE
(Dorozhynska O. S., Kokhan O. O., Chernysheva A. V.)
1. Study of the influence of lactose and fructose on the change
of technological parameters of the production of fondant sweets
2. Quality indicators of developed fondant sweets based on a combination of lactose and fructose
on a comomation of factose and fractose/0

SECTION 4. TECHNOLOGY AND QUALITY RESEARCH
OF SEMI-FINISHED PRODUCTS FOR WHIPPED DESSERTS
BASED ON UF RETENTATE OF SOUR CHEESE WHEY
(Zolotukhina I. V., Deinychenko H. V.)86
1. Development of a technological scheme of the production of
a semi-finished product for whipped desserts based on sour cheese whey 87
2. Study of the nutritional value of semi-finished products
based on UFRSCW89
3. Study of microbiological indicators of the SFPWD
based on UFRSCW94
SECTION 5. INNOVATIVE TECHNOLOGIES OF FLOUR
CONFECTIONERY PRODUCTS FROM FLOUR MIXTURES
(Kravchenko M. F., Romanovska O. L.)99
1. Scientific substantiation and development of semi-finished biscuit
dough technology based on flour mixtures100
2. Technology and quality of biscuits of increased nutritional value107
SECTION 6. TECHNOLOGY OF BISCUITS AND CUPCAKES
OF HIGH NUTRITIONAL AND BIOLOGICAL VALUE
(Medvedieva A. O., Antoniuk I. Yu.)117
1. The problem's prerequisites emergence and the problem's
formulation
2. The results of the researcher124
SECTION 7. INNOVATIVE TECHNOLOGIES OF BUTTER
BAKERY PRODUCTS (Palamarek K. V., Romanovska O. L.)
1. Theoretical information on the technology of bakery products
with increased nutritional value
2. Chemical composition and nutritional value
of hydrobiont powders
3. Pretzel technology of increased nutritional value
SECTION 8. THE TECHNOLOGY OF MINCED SEMI-FINISHED
PRODUCTS FOR CULINARY FLOUR PRODUCTS USING PLANT
RAW MATERIALS (Perepelytsia M. P., Honchar Yu. M.)
1. The appearance of prerequisites of the problem and formulation
of the problem

of minced products
(Prybylskyi V. L., Dulka O. S., Fedosov O. L.)
1. Prerequisites for the need to disinfect bottled water
2. Characteristics of water quality indicators
3. Analysis of existing methods of decontamination
of bottled water
SECTION 10. APPLICATION OF DERIVATIVE PRODUCTS
OF PROCESSING WILD BERRIES FOR ENRICHMENT
OF PRESSED SUGAR (Samilyk M. M. Korniienko D. A.)
1. Analysis of modern literary data and formulation of the problem 208
2. The purpose and objectives of the research
3. Materials and methods
4. Results of a study of the feasibility of using derivatives
of wild berry processing products for sugar enrichment
5. Discussion of the results of the study of the influence of derivatives
of wild berries processing on the quality of sugar
SECTION 11. THEORETICAL AND PRACTICAL ASPECTS
OF PRODUCTION OF LOW-LACTOSE FERMENTED
MILK DRINKS (Serenko A. A.)
1. Analysis of the domestic market of lactose-free and low-lactose
dairy products
2. The use of secondary dairy raw materials in the technology
of low-lactose fermented milk drinks
3. Technology of low-lactose milk mixtures for the production
of fermented milk drinks
SECTION 12. TECHNOLOGICAL AND PRACTICAL ASPECTS
OF THE PRODUCTION OF GLUTEN-FREE SOURDOUGH
BREAD (Fedorova D. V., Slashcheva A. V., Lanska V. D.)
1. Theoretical aspects of production gluten-free bakery products 249
2. Modern trends in improving the technology of gluten-free
bakery products

3. Prospects for the use of leavens in the production	
of gluten-free bread	262
4. Study of the quality indicators of gluten-free bread on native	
and cultured sourdoughs	267
SECTION 13. SCIENTIFIC FUNDAMENTALS	
OF RESOURCE-SAVING TECHNOLOGIES	
	200
OF JELLY PRODUCTION (Foshchan A. L.)	290
1. Molecular modeling of the processes of structure formation	201
in aqueous solutions of collagen and agarose	291
2. Empirical modeling of functional and technological properties	
of structure-forming agents of various origin	304
3. Technologies of jelly products with low content of structural	
raw materials	318
SECTION 14. ANALYSIS OF TECHNOLOGIES FOR HOT SAUC	ES
AS THE BASIS FOR THE DEVELOPMENT OF AN INNOVATIV	E
IDEA OF NEW PRODUCTS (Ianushkevich O. I.)	329
1. Direct development of technologies for hot sauces	
2. Purpose, subjects and methods of research	
3. Development of an innovative concept of hot thermostable	
sauces	334
FOOD INGREDIENTS: FOCUS ON FUNCTIONALITY	2.42
AND NATURALNESS	
SECTION 15. THE DEVELOPMENT OF NEW MEAT PRODUCT	S
FOR THE ELDERLY (Abzhanova Sh. A., Zhaksylykova G. N.,	
Nadirova S. A.)	343
1. Materials and methods	345
2. Results	347
3. Discussion	350
SECTION 16. QUALITY EVALUATION OF THE OYSTER	
PLEUROTUS MUSHROOM FRUITING BODIES	
OF DIFFERENT RIPENESS (Bandura I. I., Priss O. P.)	260
1. Qualitative characteristics of <i>Pleurotus</i> mushrooms	
	501
2. Biological value and prospects production of oyster mushrooms	264
in Ukraine	364

3. Screening of <i>Pleurotus</i> mushroom strains by morphometric	
characteristics	. 367
4. Sensory analysis of studied <i>Pleurotus</i> mushroom strains	. 369
5. Nutritional and biological value of studied <i>Pleurotus</i>	
mushrooms strains	. 373
SECTION 17. SPICY AND AROMATIC RAW MATERIALS	
IN THE TECHNOLOGY OF HEALTHY DESSERTS AND DRINKS	S
(Vitriak O. P., Tkachenko L. V.)	
1. Characteristics of spicy and aromatic plants used in desserts	
and drinks	. 381
2. Innovative technologies of desserts and drinks using spicy	
and aromatic raw materials	. 387
SECTION 18. DEVELOPMENT OF BUTTER BISCUITSBASED	
ON LACTITOL AND THEIR ENRICHMENT	
WITH PHYSIOLOGICAL AND FUNCTIONAL INGREDIENTS	
(Dorokhovych V. V.)	396
1. Prerequisites for the development of flour confectionery products	. 370
with reduced glycemic, caloric content and improved nutrient	
composition	397
2. Determination of the possibility of using lactitol and isomaltitol	. 571
in the technology of butter biscuits	405
3. Development of butter biscuits based on lactitol with the use	05
of physiological and functional ingredients	413
SECTION 19. TECHNOLOGY AND QUALITY OF SAND	
CONFECTIONERY PRODUCTS WITH MEAL (Kravchenko M. F.,	
Piddubnyi V. A., Mykhailyk V. S.)	. 427
1. Justification of the composition of model dough compositions	420
for flour pastry shortbread products	. 428
2. Technology of flour pastry shortbread using the composition	125
of meal	. 435

SECTION 20. GASTROPODA MOLLUSCA: THE OVERVIEW	
OF MEAT AND NON-MEAT PRODUCTS, PRODUCTION	
AND PROCESSING TECHNOLOGIES AND THEIR PRACTICAL	
APPLICATIONS (Prymenko V. H., Golovko M. P., Golovko T. M.,	
Gryshchenko-Moroz Yu. M.)	442
1. Analysis of achievements of foreign scientists in heliceculture	443
2. Review of Ukrainian achievements in heliculture	456
SECTION 21. POWDERS FROM DERIVATIVES OF WILD PLAN	т
FRUIT PROCESSING (Samilyk M. M., Demydova Ye. V.)	
Background and problem statement	
Analysis of existing methods of solving the problem	1 / 2
and formulation of the task for optimal solution	479
	, ,
SECTION 22. TECHNOLOGICAL ASPECTS OF USING FLOUR	
FROM EXTRUDED SUNFLOWER SEED KERNELS IN THE	
PRODUCTION OF RYE-WHEAT BREAD (Tsykhanovska I. V.,	10.1
Evlash V. V., Lazarieva T. A.)	
1. Properties of the semi-finished product "Mass for molding"	49/
2. Determination of the chemical composition and physical	
and chemical parameters of the semi-finished product	504
"Mass for molding"	504
3. Development of technology of rye-wheat dough using	<i>5</i> 1 2
the semi-finished product "Mass for forming"	312
FOOD SAFETY AND METHODS OF DETERMINING	
FOOD ADULTERATION	524
SECTION 23. ENSURING COMPLIANCE OF DRINKING WATER	R
QUALITY WITH REGULATORY REQUIREMENTS	
(Yegeubayeva S. S., Bugubayeva G. O., Dzhakupova I. B.)	525
1. Water consumers and their water requirements	526
2. Sources of water supply and their characteristics	527
3. Basic methods to improve the quality of natural waters	528
4. Prospects for the development of the State Municipal Enterprise	
"Holding Almaty Su"	532
5. Water quality analysis	
6. Determination of daily water consumption	
7. Water disinfection	535

SECTION 24. ANTIOXIDANT AND ANTIMICROBIAL	
ACTIVITY OF GRAIN AS A COMPONENT OF FOOD SAFETY	
(Kotyk A. M., Katerynych O. O., Ionov I. A.)	. 538
1. The emergence of prerequisites for the problem of antioxidant	
and antimicrobial activity of grain	. 539
2. Methods of determining the antioxidant and antimicrobial activity	
of grain	. 540
3. Results of own research	. 541
GOOD NUTRITION AND SUSTAINABLE DIETS	
IN FOOD CHAINS	. 550
SECTION 25. PROVISION OF FOOD PRODUCTS	
WITH PROTEIN INGREDIENTS (Koretska I. L.,	
Rybachenko M. S., Kravchuk N. M.)	551
1. Emergence of prerequisites and formulation of the problem	
2. Prospects for the use of the protein-containing component	. 552
of raw materials for the production of sauces	554
3. Analysis of modern methods of using lentil flour	
4. Prospects for the use of lentil flour in sauce production	
technology	559
5. Determination of physiological indicators of sauces	
SECTION 26. DEVELOPMENT OF THE TECHNOLOGY	
OF FUNCTIONAL MEAT PRODUCTS WITH	
A HEALTH-IMPROVING EFFECT USING PLANT RAW	
MATERIALS AND ALGAE THAT ARE NOT TRADITIONAL	
FOR UKRAINE (Peshuk L. V., Prykhodko, D. Yu.)	. 568
1. Statement of the problem and formulation of ways to solve it	
SECTION 27. EFFECT OF XANTHAN ON THE DOUGH	
STRUCTURE AND ON THE QUALITY OF BREAD FROM	
SPROUTED WHEAT GRAIN (Samokhvalova O. V., Oliinyk S. G.,	
Stepankova G. V.)	. 595
1. Modern approaches for grain bread quality improvement	
2. Experience of using xanthan for improving the quality	
of bakery products	. 601

3. The influence of xanthan on the formation of dough structure	
and on the quality indicators of bread made from sprouted	
wheat grain	608
ENGINEERING SUPPORT OF FOOD INDUSTRY	
TECHNOLOGIES	625
SECTION 28. WHEAT GRAIN FLATTENING ON THE ROLLER	
DEVICE (Borankulova A. S.)	.626
The basis for the development of the topic	
2. Achievement results	
SECTION 29. TECHNOLOGY OF INDUSTRIAL HEMP SEEDS	
SHELLING FOR SMALL BUSISNESS (Petrachenko D. O.,	
Mokher Yu. V., Koropchenko S. P.)	645
Modern market of food hemp products	
2. Hemp seeds as an object of processing	
3. Development of the equipment for seeds shelling	
4. Technological chains of hemp seed processing for small	
and medium-sized businesses	661
SECTION 30. ENERGY-EFFICIENT AND RESOURCE-SAVING	
COLD STORAGE TECHNOLOGIES IN REFRIGERATION	
SYSTEMS (Petrenko O. V., Semeniuk D. P., Smilyk M. M.)	672
1. Emergence of the prerequisites of the problem and formulation	
of the problem	672
2. Analysis of existing methods of solving the problem	
and formulating the task for optimal development of technology	673
SECTION 31. PRODUCTION OF SWEETS USING "TARY"	
MILLET OATMEAL (Soltybaeva B. E.)	696
1. The basis for the development of the topic	
2 Achievement results	699