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**УПРАВЛЕНИЕ КАЧЕСТВОМ И БЕЗОПАСНОСТЬЮ
 ПРОДУКЦИИ В ПРЕДПРИЯТИЯХ ОБЩЕСТВЕННОГО
 ПИТАНИЯ НА ОСНОВЕ ПРИНЦИПОВ ХАСПП**

**THE QUALITY MANAGEMENT AND THE SAFETY
 OF PRODUCTS IN CATERING ORGANIZATIONS
 ON THE BASIS OF THE HACCP PRINCIPLES**

В статье проведен анализ проблем и возможностей обеспечения безопасности и качества продукции для населения в предприятиях общественного питания на основе современных требований.

The analysis of problems and opportunities of safety and product quality for the population in catering organizations on the basis of modern requirements is carried out in the article.

Ключевые слова: управление качеством, общественное питание, безопасность продуктов, система ХАСПП.

Key words: quality management, public catering, safety of products, HACCP system.

Catering organizations have been sustainably developing during recent years. There were new directions in production system and servicing of the entities of the industry of hospitality, restaurants with chef's cuisine, fast-food outlets in shopping centers, and the entities of food achieve stable flows of consumers, at offices, educational institutions, industrial enterprises.

The specifics of work of catering organizations are determined by the wide range of the sold products, the menu is various, the dishes differ in a set of products, their technology of preparation, features of registration, storage and implementation. It causes the considerable difficulties in quality assurance and safety of foodstuff at all technological stages. The group of the same processes on an assortment, temperature of issue and features of storage and sales of products can become a way out.

The quality management and the safety of products in catering organizations on the basis of the principles of HACCP is possible when studying and using the achieved effects of various countries of the European community [1, 2]. It is determined by a number of factors such as distinguished democratization in the field of regulation of relations of production, a product assortment and services, risk identification and separation of responsibility in the field of quality assurance and safety of food products and rendering services.

The quality and the safety of products of public catering are influenced by the risks connected with specifics of work. In the Russian Federation for the first time the risk is standard is the legal category and it was determined in the Federal Law of the Russian Federation «On technical regulation» [3]. The risk is a probability of a damnification to the life or to the health of citizens, the property of persons or legal entities, the state-owned or municipal property, the environment, life or health of animals and plants taking into account the weight of this harm.

For the purpose of creation of conditions and mechanisms the Technical regulation «On Safety of Food Products» submitted for discussion of professional community is developed for implementation of the minimum mandatory requirements, considers as system of products ensuring safety HACCP security system (Hazard Analysis and Critical Control Points – the analysis of dangers and critical points of control) [2].

The fundamental principle of the specified system is carrying out the analysis of dangers by process of assessment of the importance of risks, danger level at all stages of product lifecycle. Now the international standard ISO 22000 «System of management of safety of foodstuff is taken place. In all requirements to all organizations in a chain of production and consumption of foodstuff» it is said that definitions «risk» and «danger» shouldn't be considered as synonyms as the risk in the context of safety of foodstuff, means the function of probability of negative impact on health (for example, a disease) and the gravity of this impact (death, hospitalization, an absence from work, etc.) as a result of a certain danger.

The modern approaches of risk analysis according to the existing international standard ISO 22000-2005 «System of management of safety of food – Requirements to the organizations of a chain of production and delivery» are provided in tab. 1 [2, 4, 5].

Table 1

Classification of risk of foodstuff

Content of risk	Criteria of risk according to the HASPP system
Biological risks are connected with activities of microorganisms, protozoa and viruses which during transportation, conversion, packaging, storages, distribution and consumption can cause health hazard of the person	biological
Chemical risks are presented by two groups: natural poisons which make elementary composition of raw materials; the introduced poisons presented by pesticides, fertilizers antibiotics, nutritional supplements, lubricants, etc.	Chemical
Availability of any material which in natural state isn't present at foodstuff.	Physical
Organoleptic and microbiological analysis	Condition of foodstuff

The main difficulty the catering organizations faces in case of quality management and safety of products on the basis of the principles of HACCP, is the absence of own laboratories. The control of indicators of safety of raw materials and finished goods can be carried out in the extraneous accredited laboratories. It complicates the objective quality control and the safety of the arriving raw materials, the acceptance check happens only by checking the compliance of transportation conditions, the accompanying documentation and assessment of organoleptic indicators. The control of finished goods before implementation is determined by organoleptic indicators.

By analyzing the provided classification of risks, it is important to note that its basis is a preventive nature of the management of unfavorable event probability, in our opinion. This is a key fact of a management system of risks and review of a role of the producer who is responsible for quality and compliance to requirements of the specifications and technical documentation.

The classification of risk of foodstuff in work of catering organizations, determines the obvious efficiency of the offered method of preventive risk management in the field of safety and quality.

The HACCP system is a perspective investment into quality, safety of the made products and a factor of forming a reputation in the opinion of suppliers and consumers. The evaluation stages of risk include the assessment of the following indicators: potential danger of influence, exposition size, identification and the comparative importance of the existing problems for health of the population. In general the risk assessment is necessary for determination of level of acceptable risk, and also for determination of negative consequences which can do harm to health and life of person.

The comparative assessment and ranging of risks assumes the determination of a potential source of emergence of a risk. In our case potential sources of emergence of a risk are the resources involved in a production process of food. The modern principles of control of safety and quality imply as a reference point in case of risks assessment to consider conditions of cultivation of crops regarding danger identification and to finish with issues of organized consumption of food in catering organizations. The scheme of analysis stages of dangers of food is provided in tab. 2.

Table 2

The principal scheme of evaluation stages of risk of quality and safety of food

The characteristic of a risk	Risk evaluation stages
All dangers of foodstuff emergence of which are reasonably expected in connection with a product type, type of process and real engineering procedure by the equipment shall be identified and registered	1. The identification of dangers
The danger of foodstuff shall be estimated according to possible gravity of negative impacts on health and probability of their origin	2. The assessment of dangers
Logical assumptions concerning impact on certain dangers in relation to severity of application; possibility of monitoring; consequences in case of refusal control; the forecast of synergetic effects at negative impact of danger	3. The choice and the assessment of a control method

When comparing evaluation stages of danger and a risk assessment, it is possible to draw up a number of conclusions:

1. The assessment of danger consists of three stages:
 - the danger identification;
 - the danger assessment;
 - the choice and the assessment of control methods.

At the stage of identification of danger all potential dangers which can arise in a production process, conversions, distributions, storages and addresses with foodstuff and their ingredients, from production of raw materials before consumption are described. At the same time in case of a risk assessment at the stage of identification of danger all the potential probabilities of weight of harm for life and health of the person and of unfavorable events are stood out.

2. The estimations of a danger provide a gravity and a possibility of negative impact on a human body of the established danger. It has directly something in common with the second stage «dose answer» in a risk assessment with only one difference when the information on risks is gathered not for the high-quality description of an event, but for getting the quantitative, analytical values.

3. The estimations of danger model possible consequences from influence of single danger or complex impact of group of dangers and are declared in internal documents of the organization. In case of a risk assessment there is a subject work with representatives of possible pollution. The determination of criteria for further decisions in case of development of unfavorable events will be the result.

4. By analyzing the evaluation stages of danger and a risk assessment it should be noted the practical importance of the parallel existing management systems having the identical purpose – the safety and the quality of the products on the way from producer to consumer.

Despite the evident similarity of the purposes and contents of assessment, it is important to emphasize the essential distinctions. The assessment of danger is rather the procedure of internal monitoring of the entities having preventive character, working for forming of competitive advantages and business reputation. This assessment procedure of danger on the HACCP system becomes the urgent one in connection with enforcement of the Technical regulation «About Safety of Food Products», GOST P 56671-2015 of the Recommendation about development and deployment of the procedures based on the principles of HACCP.

The quality management and the safety of products on the basis of the principles of HACCP will allow getting the following external advantages in catering organizations:

- To raise consumer confidence to the sold products.
- To give the chance to achieve new levels of sales of own products that will lead to the sales growth.
- To promote the increasing in business competitiveness.
- To promote the reputation improvement of the entity due to lack of complaints and claims.

REFERENCES

1. Hoffmann S. Ensuring Food Safety around the Globe: The Many Roles of Risk Analysis From Risk Ranking to Microbial Risk Assessment//Risk Analysis Volume 30, Issue 5, pages 711–714. [Electronic resource]. Access mode: <http://onlinelibrary.wiley.com/doi/10.1111/j.1539-6924.2010.01437.x/full> (date of the address 14.01.17).
2. Lofstedt R. Communicating Food Risks in an Era of Growing Public Distrust: Three Case Studies//Risk Analysis Volume 33, Issue 2, pages 192–202. [Electronic resource]. Access mode: <http://onlinelibrary.wiley.com/doi/10.1111/j.1539-6924.2011.01722.x/full> (date of the address 08.04.13).
3. The federal Law of the Russian Federation «On technical regulation» No. 184 of December 27, 2002.
4. International standard ISO 22000. System of management of safety of foodstuff. Requirements to all organizations in a chain of production and consumption of foodstuff. First edition 2005-09-01.
5. Comparative analysis of some requirements of the food European Union law and Customs union of Russia, Belarus and Kazakhstan // http://www.vet.gov.ua/sites/default/files/EU_CU_Food%20Safety_rus_0.pdf (date of the address 26.02.2017)
6. International standard FSSC 22000:2005. The scheme of certification of a safety management system food products on compliance of ISO 22000:2005 and technical specification for programs of preliminary obligatory actions. Fund of certification of a safety management system of foodstuff. Gorinkhem, Netherlands, October, 2011.
7. International standard FSSC 22000:2005. Requirements to the organizations requesting certification. Fund of certification of a safety management system of foodstuff. Gorinkhem, Netherlands, October, 2011.

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УПРАВЛЕНИЕ КАЧЕСТВОМ И БЕЗОПАСНОСТЬЮ ПРОДУКЦИИ В ПРЕДПРИЯТИЯХ ОБЩЕСТВЕННОГО ПИТАНИЯ НА ОСНОВЕ ПРИНЦИПОВ ХАСПП

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В последние годы отмечается стабильное развитие предприятий общественного питания, появляются новые направления в организации производства и обслуживания предприятий индустрии гостеприимства, рестораны с авторской кухней, предприятия быстрого питания в торговых центрах, предприятия питания вблизи стабильных потоков потребителей, в офисах, образовательных учреждениях, промышленных предприятиях.

Управление качеством и безопасностью продукции в предприятиях общественного питания на основе принципов ХАСПП возможно при изучении и использовании достигнутых эффектов различных стран европейского сообщества, это позволит получить следующие внешние преимущества:

- повысить доверие потребителей к реализуемой продукции.
- дать возможность выхода на новые уровни сбыта собственной продукции, что приведет к росту продаж и, собственно, прибыли предприятия.
- способствовать повышению конкурентоспособности предприятия.
- способствовать улучшению репутации предприятия, связанной с отсутствием жалоб и рекламаций.

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In recent years the steady development of enterprises of public catering, and new directions in the organization of production and service of enterprises of hospitality industry, restaurants with chef's cuisine, fast-food outlets in shopping centres, catering close to a stable flow of consumers, offices, educational institutions, industrial enterprises is noted.

The quality management and product safety in catering based on the principles of HACCP is possible in the study and use of the achieved effects of the different countries of the European community; this will allow obtaining the following external benefits:

- to increase consumer confidence of sold products.
- to give the opportunity to reach new levels of sales of own products, leading to sales growth and, in fact, to the profits of the enterprise.
- to enhance the competitiveness of enterprises.
- to contribute of improving the reputation of the enterprise related to the absence of complaints and claims.