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FOOD MANAGEMENT AND CERTIFICATES

Abstract

This article contains information necessary for proper management of nutrition based on appropriate certification and determinants of food safety. This article discusses selected procedures related to the process. The basics of operation are customs setting on the main activities

Keywords: certificates, food, management, food.

Introduction

Quality and technological documentation constitute a set of documents containing information and instructions

necessary to carry out the technological process of the produced product. The producer is obliged to keep the documentation regarding individual products and the batch of products manufactured.

Food safety is one of the most important elements present in the entire food-related structure not only in Poland, but also around the world.

1. Selected certificates

Proper management of food safety is one of the key criteria affecting the quality of services provided and the degree of customer satisfaction. IFS144 and BRC certificates are the guards of quality systems, they allow for the unification and improvement of safe food production processes. The implementation of the certificate helps to ensure the proper conduct of the production process, it is a guarantee of compliance with Polish and international requirements of food legislation. They are voluntary on the European Union market, their implementation is not regulated.

BRC created a British organization of merchants in 1998. It was the first system assessing food suppliers to British retail chains. It was created for the objective, uniform evaluation of food production, also in terms of compliance with the applicable legislation, because internal audits carried out by

entrepreneurs, or external ones by authorized companies, did not give a reliable picture of the results of the inspection. At the beginning, BRC only operated in Great Britain, where it quickly became the leading standard. With the development of the market, its popularity grew and it was also used in other countries. Currently, the BRC standard is known and widely used practically all over the world, it is often a pass to establish trade cooperation with international supermarket chains or hypermarkets.

The BRC standard brings together the integrated provisions included in the HACCP, GMP, GHP and ISO 9000 standards, defines the requirements for safety and the highest product quality as well as repeatability of the final product quality.

The system consists of four standards: BRC Food, which includes requirements related to the food safety management system, BRC / IoP Packaging and Packaging Materials, for food packaging manufacturers, and more, BRC Consumer Products addressed to producers of industrial and non-food products and BRC Storage & Distribution for logistics operators, distribution, warehousing, packaging and wholesale.

Obtaining the BRC certificate proves the fulfillment of standards in such a scope as the product safety management system, management commitment, process and product

supervision, HACCP system, technical and sanitary condition of the plant, and personnel requirements [8].

The IFS standard was developed in 2002 by the Federation of German Retailers, in cooperation with the French Federation of Trade and Distribution. The aim was to eliminate food industry audits by retailers. Mainly it concerned producers producing food under their own brand for retail chains. Over time, IFS has become a widely recognized, popular and often necessary standard in cooperation with large retail chains. It is most often required by German retail chains such as Lidl and Real as well as French, such as Auchan and Carrefour.

It consists of the following standards: IFS Food for producers and suppliers of self-branded food products, IFS Logistic containing requirements related to the loading and unloading of goods, storage and transport, IFS Broker, which is aimed at commercial intermediaries, importers and brokers.

IFS certification covers six pillars of operation of the plant, such as the management of the quality system and food safety, resource management, measurement, analysis and improvement, and food defense (food defense). The implementation of the IFS standard is tantamount to having a well-functioning HACCP system by the establishment, a transparent functioning of the supply chain,

ranging from raw material to finished product and development of the analysis of potential threats and ways to prevent them. Having a certificate indicates that the company has trained managers and employees in the field of food safety. The standard ensures that the product complies with applicable standards and regulations [9].

Certification for obtaining the BRC and IFS standards is carried out by renowned international companies which, after successfully conducting an audit verifying the implemented requirements, issue a certificate for a period of six or twelve months. Despite the fact that both standards have many common features, they are not mutually recognized, hence some plants must have both certificates, which entails conducting audits confirming compliance of both standards¹⁴⁶. Differences that arise between IFS and BRC apply to different markets of operations, another way of assessing the audits carried out. IFS for the result gives the percentage of fulfilled requirements, while the result of the BRC audit depends on the number and category of non-compliances found. There is also a different time to carry out corrective actions against non-compliances identified during the audit, in the case of IFS is designated for the next audit, while in BRC, within 28 days from the date of completion of the audit.

According to the 2013 report prepared by the International Trade Center, it is estimated that the number of enterprises certified for compliance with the IFS food standard is over 11,000, and BRC over 185,800. IFS audits are conducted in 96, and BRC in over 150 countries¹⁴⁹. The possession of BRC and IFS certificates is a welcome showcase for the plant confirming the provision of the highest level of food safety and quality. Thanks to the implemented standards, it benefits a lot, has unlimited access to international markets, and is also largely or completely exempt from client audits from retail chains [10].

2. Quality and technological documentation

Specifies the place where documents are stored and how to proceed in the event that the appropriate services demonstrate evidence of compliance of the product with the requirements.

The basic documentation of the establishment is the HACCP Book, a set of procedures and instructions and a company code of good practice. Supplementary records consist of technical and technological documentation regarding cleaning and disinfection as well as workplace instructions. An important element of the documentation is the process description and the technological scheme, which presents

information on the raw materials used, processes and activities during the production of a specific product, storage and distribution conditions. The description of the process includes the entire production cycle, from the components needed for production, materials and technological parameters such as time, temperature. In contrast, the product description is a different characterization of a product or group of products containing key information from the point of view of food safety. These are the composition of raw materials and added additives, occurring allergens, the production process used, physicochemical properties, storage conditions, shelf life, preparation method and type of packaging.

Threat analysis is another collection of documents belonging to the HACCP system, which has been described above under "HACCP system". Briefly speaking, it is an indication and description of chemical, physical and biological hazards along with an estimation of the risk of their occurrence and determination of control measures. In addition to diagnosing possible risks and ways to prevent them, procedures should be developed and implemented that, in addition to fulfilling the above tasks, will eliminate incidental incidents that could endanger food safety. The key procedures related to quality issues include, among other things, the procedure for dealing with a non-compliant product, accepting and handling

raw materials, maintaining and calibrating machinery and equipment, washing and disinfecting, removing waste and handling complaints. The procedures should contain the guidelines necessary to conduct the processes, i.e. define the purpose, main activities, area of application, responsibility and entitlements, the manner of keeping records, as well as related documents and attachments.

The instructions serve to clarify the procedures. These are specific information about how to proceed when performing specific work. The instructions should include the place and time of a specific activity or process, clarification of duties and entitlements, a list of devices and equipment necessary to carry out the process, a detailed description of the activities performed, as well as control activities and corrective actions and the manner of keeping records. Each instruction should have a form specimen in which to save results from specific activities. They are proof of the implementation of the set tasks.

Documents should be understandable and transparent and have a uniform character, it is a common heading for all procedures and instructions and the layout. Each document should have a title with a symbol, the name and logo of the establishment, the version number, the date of issue and

validity and the name and signature of the person who develops, verifies and approves the document.

Documentation related to the implementation of good manufacturing and hygiene practices is proof that the plant implements all the most important activities to ensure food safety. Therefore, it is important that employees employed in production, at their work stations, have copies of procedures, instructions and other necessary documents [11].

3. Supervision of the production process as well as machines and devices

Production is a set of correlative work processes with the conscious and purposeful activity of people transforming work items into products and services. The concept of production is identified with the production process that occurs in the branches of economic activity satisfying human needs. The area where the production is carried out is a plant, a company also called as a production system. The production system is called a specially designed material, energy and information system for the production of specific products and services serving the needs of consumers. Simply put, the production system is a set of specific activities carried out to process raw materials into finished products. It consists of production processes defined as the total of activities

necessary to produce a given product. The processes differ among each other due to the diversity of the manufactured products. Properly selected supervised processes allow to produce products with high health, sensory and nutritional quality.

Sanitary requirements and production hygiene were already included in the legislation in the interwar period. They mainly concerned raw materials and food of animal origin. The presidential decree from 1928 on the control over food products and consumer goods was the basis for issuing various legal provisions defining sanitary and hygienic requirements in production and trade. A lot of space is devoted to these issues by the Act of 1970 on health conditions of food and nutrition and the Act on the same title from 2001 and its later amendments from 2003 and 2005. They specify requirements regarding production conditions and ensuring proper health quality of food products. The health security of food is supervised by appropriate units of official food control as an external control. On the other hand, the internal control is taken by the manufacturer based on the Good Hygienic Practices and Good Manufacturing Practices mentioned above. Supervision of the production process consists in controlling and conducting tests confirming the product's compliance with the requirements. Requirements are included in the product

specification, where its properties and parameters are specified. The manufacturer defines the stages of the production process, the scope, frequency and methods of tests carried out during production, defines the persons responsible for conducting inspections and tests, provides appropriate instructions and procedures at workplaces and provides equipment for carrying out measurements and tests. Control activities should be documented, and in case of non-compliance, corrective action should be taken immediately. After removing the defect, the control must be repeated to confirm that the incompatibility has been eliminated.

Machines and devices used in the production process are a determinant of hygiene prevailing in the production plant and food safety. Very often, there are infections and food contaminations caused by poor sanitary and hygienic condition of machines and devices, their improper operation or poorly effective cleaning and disinfection process. It is important to locate machines and devices that will allow you to operate in accordance with the intended use and ensure the proper level of hygiene and order. Machines, devices and other necessary containers and utensils for food contact should be made of corrosion-resistant chromium-nickel sheet or of non-toxic materials that do not react in contact with food and do not cause organoleptic changes. They should be designed in a way

that ensures effective cleaning and disinfection. Every machine and device must be serviced according to a set schedule and subject to periodic calibration control. These are necessary steps to ensure their proper technical condition.

Conclusion

Effective and safe pest control in food production plants should be included in the quality assurance system. The plant must keep documentation confirming the proper protection of the plant against pests. The protection consists in the use of preventive methods and the removal of pests through disinfection and deratization treatments. The inspection should be preventive and cover the entire site¹⁶⁰. Devices that monitor pests are bait stations, insecticide lamps, deratization feeders, insect detectors, traps and pheromone traps that allow you to quickly detect and eliminate the threat. The insecticide treatment can be carried out after the production stops and the rooms are properly prepared. Just as important as destroying insects is to fight rodents in production facilities. Rodents cause significant losses in stored food, contaminate with droppings, damage packaging, transfer microbes, and cause other damage associated with the destruction of installations and other components.

An important threat to food safety are physical impurities that can enter the product unintentionally or deliberately. These are so-called foreign bodies getting together with raw materials such as sand, stones, sticks, foreign bodies from raw materials, for example stones, bones, bones, packaging, machinery and equipment, metal, glass, plastic, as well as being negligent employees - hair, decorations, jewelry, buttons and other items¹⁶¹. They also happen intentionally by employees as part of sabotage.

Physical contaminants are the most common cause of complaints often combined with reports of injuries or illness after consumption of the advertised product. The presence of any foreign body in food that may cause a threat to life or health or injury must be considered as a serious threat to food safety.

The source of the threat of food contamination with foreign bodies is improperly developed and controlled production processes, personnel not complying with the principles of Good Hygienic Practice and contaminated raw materials used for production. Preventing the occurrence of physical hazards consists in ensuring proper hygiene of production processes based on compliance by employees with the principles of Good Hygienic Practice, elimination of the use of wood and glass in production and storage rooms,

proper technical condition of equipment and production machines. It is also important to set appropriate specifications for raw materials and packaging, as well as to implement a system for detecting and eliminating hazards, such as metal detectors, sieves, filters, magnets and vision systems as well as x-ray inspection.

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