

FOOD SECURITY CONTROL SYSTEM IN POLAND

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Abstract. *Food security and food safety are a key element of each country's food policy, having a direct impact on public health. To ensure that products available on the market are completely safe, cooperation of all participants in the supply chain is essential. Shaping the quality and safety of food requires precise control, which enables the creation and introduction of food quality and safety management systems. This means focusing on the problems of ensuring appropriate conditions for the production of food of the expected quality and safety for the consumer. The paper presents how the food safety control system functions in Poland and a detailed analysis of official control of food production and trade is made.*

Keywords: food security, food safety control, food contamination.

INTRODUCTION

Technological development in the 20th and 21st centuries has brought many innovations to the food industry, but food safety issues are still relevant. Foodborne infections and poisoning not only affect human health, but also trust in food products and entire brands (Klikocka et al 2022). Therefore, in order to meet consumer demands, the food industry must focus on ensuring the highest quality and safety of products. In the context of food safety, various quality management systems, such as HACCP (Hazard Analysis and Critical Control Points), are crucial, as they allow for the identification and control of hazards in the food production process. The implementation of such systems requires involvement at every stage of production - from raw materials to distribution - which allows for monitoring and eliminating potential health hazards. In addition to quality management systems, appropriate training for employees is also important, which increases their awareness of hazards and safety procedures.

Modern technologies, such as process automation, product batch tracking or the use of data analysis, can support these activities, enabling faster identification of problems and taking corrective actions. Finally, communication with consumers is key. Offering transparent information about ingredients, production methods and product certification can help increase customer trust and satisfaction. In the information age, where customers are more aware and demanding, transparency is becoming an important element in building relationships with consumers. To ensure food safety in the modern food industry, a comprehensive approach is necessary, combining technology, quality management systems, employee education and effective communication with customers. All this aims not only to meet consumer expectations, but above all to protect their health and life (Kardas et al 2024).

One of the foundations of the proper functioning of society is to ensure food security in all its dimensions, especially the economic dimension (Kilar et al., 2024; Kilar et al., 2023; Bezpatochnyi, 2023).

Food safety is a situation in which the risk of negative impact of food on the health and life of consumers is eliminated or limited to a generally acceptable level. It is a set of conditions and actions that must be met at all stages of the food production process and food circulation, thus ensuring the health of consumers (Kowalska et al., 2006).

Food safety is a key element of each country's food policy, having a direct impact on public health. To ensure that products available on the market are completely safe, cooperation between all participants in the supply chain is essential, which is included in the idea of "from farm to fork". Effectively ensuring food safety requires a well-organized system that not only effectively enforces legal regulations against food sector companies, but also engages in promotional and educational activities aimed at both consumers and producers. Within this system, regular inspections, monitoring of food quality and availability of information on the origin of products are important. Educating consumers about healthy eating and safe food storage is equally important so that they can make informed decisions about purchases. Cooperation between government institutions, non-governmental organizations, scientists and the private sector is crucial to creating an integrated approach that not only prevents health threats, but also promotes sustainable development and innovation in food production (Kilar et al., 2024; Gajda et al., 2020).

MATERIALS AND METHODS

The paper presents the food safety system in force in Poland. The official control and safety of food production and trade were characterized, with particular emphasis on the competences of individual control bodies in this area. The paper used data from the control documentation of the Supreme Audit Office, and also analyzed the legal regulations regulating the issue of food safety in the European Union countries and in Poland. The methodological basis of the study is general economic principles and methods of a systematic approach to studying the problem of efficient organization of the food safety control system in Poland. The methods of analysis and synthesis were used, which allowed to characterize the most important elements of the food safety control system and determine the directions of its development.

RESULTS

Characteristics of The Food Safety Control System in Poland

Ensuring food safety involves guaranteeing the consumer that after its consumption there will be no adverse side effects, resulting from poisoning, for example. When we add aspects related to, among others, supervision over proper documentation, monitoring, management responsibility or audits to ensuring food safety, then we are dealing with food safety management (Walaszczyk, 2016).

Food law, as an important area of regulation, aims to ensure that food and feed are produced, processed and distributed in accordance with rigorous quality and safety standards. EU and national regulations define rules that oblige producers, processors and distributors to comply with hygiene standards, quality of raw materials, labelling and consumer protection. Control bodies play a key role in monitoring compliance with these standards. Regular controls, audits and inspections allow for the identification of potential threats and ensuring that products entering the market are safe for consumers. In the event of detection of irregularities, these authorities have the right to take action, which may include imposing penalties, withdrawing products from the market, and informing the public about the risks. For

producers and processors, compliance with food law not only minimizes legal risk, but also builds consumer confidence. In an era of growing health awareness in society, food quality and safety are becoming key criteria for consumers' product selection (Godela et al., 2016).

It is also worth noting that food law is a dynamic field that evolves in response to new challenges such as climate change, technological development, and market globalization. Therefore, continuous updating of regulations and education of all participants in the food supply chain are essential to ensure high standards of quality and safety (Britchenko, 2024).

The development of food quality and safety requires precise control, which enables the creation and introduction of food quality and safety management systems. This means focusing on the problems of ensuring appropriate conditions for the production of food of the expected quality and safety for the consumer. Food quality and safety management systems concern food control in the "from farm to fork" concept, which guarantees products that are unchanged in terms of health requirements. (Godela et al., 2016)

In Poland, the food sector is strictly regulated, which aims to ensure high standards of quality and food safety. The obligations of entrepreneurs in this industry include not only compliance with legal standards, but also the implementation of modern quality management systems, such as HACCP (Hazard Analysis and Critical Control Points), ISO 22000 or BRC (British Retail Consortium) (Maruszczyńska & Miśniakiewicz, 2018).

These systems help identify and eliminate potential food safety hazards at every stage of production – from raw materials, through the technological process, to distribution. Thanks to them, entrepreneurs can monitor the quality of their products, which translates into increased consumer confidence and improved market competitiveness. Additionally, in the context of growing consumer awareness of healthy eating and ecological aspects of food production, companies often implement ecological or local quality certification systems. An example of this is BIO certificates, which confirm that products have been produced in accordance with the principles of organic farming. Nowadays, food quality and safety are crucial not only for consumer health, but also for the image of companies and their success on the domestic and international market. Therefore, entrepreneurs must constantly raise their standards and adapt to changing customer expectations and legal regulations. (Popis, 2013).

The official food control system in Poland is based on the principles established in EU law. Currently, these issues are regulated in detail by Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law and the rules on animal health and welfare, plant health and plant protection products. This regulation specifies the scope of public control over the production, processing and distribution of food and establishes general principles for its conduct.

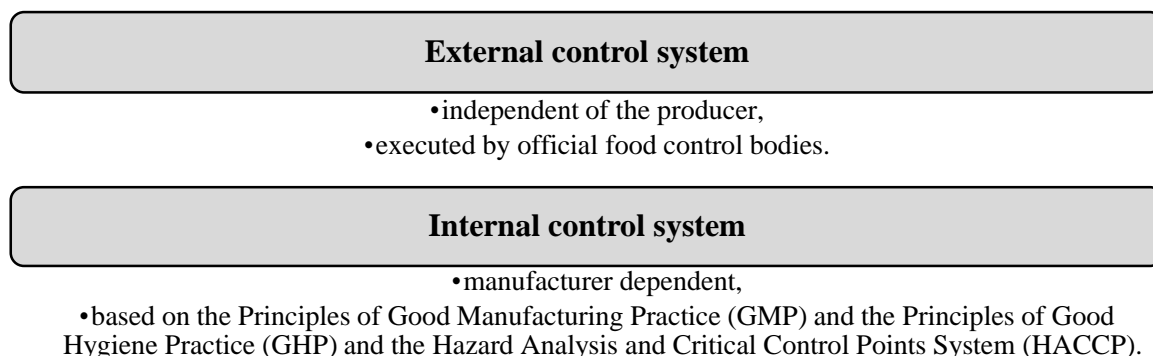


Diagram 1. Food control system in Poland

Source: Own study based on: Food safety control system in Poland - current status and desired directions of changes. Supreme Audit Office 2021

According to the Food and Nutrition Safety Act (2006), food producers are obliged to apply internal control measures:

- Good Manufacturing Practice (GMP), which in relation to food production means the actions that must be taken and the conditions that must be met so that food production takes place in a way that ensures food safety, in accordance with its intended use. In relation to the production of materials and products intended for contact with food - good manufacturing practice means those aspects of quality assurance that ensure uniform production of materials and products and their control in order to ensure compliance with the regulations applicable to them and the quality standards that are appropriate for the intended use of these products, preventing human health from being endangered or causing unacceptable changes in the composition of food, or deterioration of its organoleptic properties.

- Good Hygiene Practices (GHP), i.e. the actions that must be taken and the hygiene conditions that must be met at all stages of production or trade to ensure food safety.

- Hazard Analysis and Critical Control Points (HACCP) system, i.e. a procedure aimed at ensuring food safety by identifying and estimating the scale of hazards from the point of view of food health requirements and the risk of hazards occurring during all stages of food production and circulation. This system is also aimed at determining methods for eliminating or reducing hazards and establishing corrective actions.

The essence of the HACCP system operating in a given establishment is that all data and documentation concerning any activities related to food must be monitored, recorded and updated on an ongoing basis. Entrepreneurs are obliged to present, at the request of official food control bodies, evidence confirming the development of appropriate procedures based on the principles of the HACCP system and their implementation in a given establishment. In Polish administrative law, control is understood primarily as an examination of the compliance of the existing state with the postulated state, determining the scope and causes of discrepancies and providing the result of this determination. In the case of the scope of competences of a public administration body covering, in addition to activities verifying the possibility of interference in the activity of the controlled entity using measures of an authoritative nature, we are dealing with supervision. Therefore, the concept of official control within the meaning of EU Regulation 2017/625 is equivalent to the concept of supervision in Polish administrative law (Position on the revision of the existing food safety control system in Poland, 2021)

The external control of food production in the European Union aims to ensure food safety and protect public health. By introducing Regulations EC 178/2002 and EC 882/2004, the EU has established a legal framework that requires Member States to carry out regular, independent and impartial official controls. Regulation EC 178/2002 concerns general principles and requirements in the field of food safety, while Regulation EC 882/2004 focuses on control procedures (Burkowska et al., 2021). These requirements cover all stages of the supply chain - from production, through processing, to distribution. A key aspect is that controls should be carried out without prior notice, which increases their effectiveness and reliability. Member States are obliged to designate appropriate authorities responsible for control and to ensure cooperation between the various institutions involved in this process. In Poland, appropriate regulations have been introduced in the Act on Food and Nutrition Safety, which shows the commitment to complying with EU standards. Thanks to these regulations, it is possible to monitor and ensure high quality and safety of food on the market, which is important for both consumers and producers who can be sure that their products meet the applicable standards. (Poczta-Wajda & Sapa, 2021).

The subject scope of official control in food law includes primarily supervision of food safety (identified with the health quality of food) and its commercial quality. Official food control, in addition to the control function, covers the entire scope of activities of an authoritative nature, aimed at eliminating irregularities identified during the control and refers to all activities related to the production and trade of food, covering not only food, but also feed, products and materials intended for contact with food, as well as the process of production and trade in food itself and internal control systems conducted by entrepreneurs. Among EU countries, the dominant solution in the field of food safety is to establish at the national level one body responsible for food safety or several institutions, of which one has a dominant position. Such an organized system has been implemented in 23 of 28 member states (82.1%). Institutional changes in the above-described scope have not been implemented in five countries, including Poland. (National food safety systems in the European Union: A comparative survey", 2013)

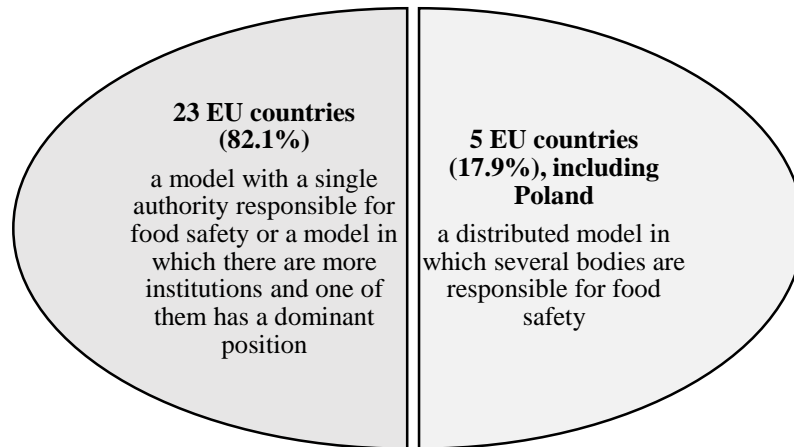


Diagram 2. Food safety systems in EU countries

Source: Own study

The Polish food safety model is a distributed model. The division of competences in the scope of monitoring and control of compliance with food law requirements by entities operating on the food market at all stages of production, processing and distribution between five specialized inspections is based on several mutually overlapping areas. It can be carried out according to the following criteria:

- health quality (food safety) and commercial quality - on the one hand, such a division characterizes IJHARS and IH as responsible in the area of commercial quality, on the other hand, IW and PIS as competent in the area of health quality - food safety (i.e. protection of health and life of consumers);
- origin of food - the Sanitary Inspectorate controls the safety of food of non-animal origin at the production stage and all products on store shelves, while the Veterinary Inspectorate is responsible for food of animal origin at the production stage and in wholesale trade;
- product turnover stage - this criterion is used in the division of competences between IJHARS and IH. IJHARS controls the commercial quality of food at the producer and in wholesale trade, while IH takes care of the commercial quality of food in retail trade.

EU Member States, in accordance with Article 4(1) of Regulation No. 882/2004, are required to designate bodies competent for official food controls at the national level. In Poland, these bodies are the four inspections subject to control (Chief Sanitary Inspectorate, Chief Veterinary Inspectorate, Chief Inspectorate of Trade Quality of Agricultural and Food Products, Trade Inspection) and the bodies of the State Plant Health and Seed Inspection. In Poland, competences in the field of food safety have been divided between several institutions without specifying a leading institution. In addition, these institutions are subordinate to three supreme bodies. This model of food safety supervision stands out on a European scale.



Diagram 3. Polish model of food safety system

Source: Own work

The following institutions operate within the structure of the official food control system (Wojciechowski, 2014):

- State Sanitary Inspection (PIS) – the competences of this Inspection result from the Act on the State Sanitary Inspection and the Act on Food Safety and Nutrition. This Inspection was established to carry out tasks related to public health, and tasks related to official food control are only one of many aspects of its operation. In accordance with art. 4 sec. 1 points 3, 3a, 4 of the Act on the State Sanitary Inspection, the tasks of the Inspection in the field of current sanitary supervision include control of compliance with regulations specifying hygiene and health requirements. The tasks of the PIS also include control of the quality of water intended for human consumption (art. 4 sec. 1 point 1 of the Act on the State Sanitary Inspection). The Sanitary Inspection controls the safety of food of non-animal origin at the production stage and all food products on store shelves. The scope of activities of the State Sanitary Inspectorate includes primarily monitoring compliance with the regulations specifying hygiene and health requirements relating to the microbiological quality of water intended for human consumption, the conditions of production, transport, storage and sale of food and the conditions of mass catering, supervision over the health quality of food and the health conditions of production of materials and trade in materials and products intended for contact with food.

- Trade Inspection (IH) – until 30 June 2020, the tasks of this Inspection included the control of products in trade or intended for introduction into such trade, also regarding labelling and adulteration, and the control of services (Article 3, paragraph 1, point 2 of the Act on Trade Inspection). Since 1 July 2020, these tasks have been taken over by IJHARS.

- Inspection of the Commercial Quality of Agricultural and Food Products (IJHARS) – pursuant to the provisions of art. 17 section 1 point 1 letter a of the Act on the Inspection of the Commercial Quality of Agricultural and Food Products, the tasks of this Inspection include supervision over the commercial quality of agricultural and food products, and in particular control of the commercial quality of agricultural and food products in production and trade, including those exported abroad (until July 1, 2020, IJHARS controlled the commercial quality of food at the producer and in wholesale trade).

- Veterinary Inspection (IW) – the tasks, organization and mode of operation of this Inspection are specified in the Act on Veterinary Inspection. According to art. 3 sec. 1, the Veterinary Inspection carries out, in order to ensure the protection of public health, tasks in the field of animal health protection and the safety of animal products and food containing both non-animal foodstuffs and animal products found in agricultural retail trade. The Veterinary Inspection supervises veterinary requirements in the production of animal products, placing them on the market and direct sale. It also controls the introduction of animals and animal by-products to the market, production, trade and use of animal feed. It also watches over compliance with veterinary requirements on farms keeping farm animals and over the monitoring of prohibited substances, chemical and biological residues, medicinal products and radioactive contamination in animals, in animal products, in water intended for animal drinking and animal feed. The Veterinary Inspection also deals with combating infectious animal diseases. It prevents their occurrence and detects and eliminates the outbreaks of these diseases (including zoonoses or biological pathogens causing these diseases). It monitors animal infections and examines slaughter animals and animal products. It carries out veterinary border control, veterinary control in trade and export of animals and products within the meaning of the regulations on veterinary control in trade.

- State Plant Protection and Seed Inspection (PIORIN) – pursuant to art. 2 points 2 and 5 of the Act on the State Plant Protection and Seed Inspection, this Inspection supervises the prevention of threats related to the production of plant protection products, trade in these products and the use of these products within the scope specified in the Act of 8 March 2013 on plant protection products and tasks related to monitoring the use of these products.

All of the above-mentioned inspections have a multi-level structure, comprising central level units and local branches, with the central bodies being subordinate to ministers managing the relevant government administration departments. The Minister responsible for health supervises the State Sanitary Inspection, while the Minister responsible for agriculture supervises the Veterinary Inspection, the State Plant Protection and Seed Inspection and the Agricultural and Food Quality Inspection. The Trade Inspection is subordinate to the Prime Minister. The local structure of individual inspections is not

uniform, both in terms of the number of organizational levels and the organizational structure. Local inspection bodies belong to the combined administration. The Agricultural and Food Quality Inspection and the State Plant Protection and Seed Inspection have a two-level structure – a central body and provincial bodies, while the Veterinary Inspection and the State Sanitary Inspection have a three-level structure – a central body, provincial and district bodies.

Additionally, the bodies of the National Revenue Administration (Customs and Revenue Service) subordinate to the Minister of Finance are involved in the implementation of the country's customs policy concerning the import and export of goods, including food. The Environmental Protection Inspection also operates in the food safety system, assessing the state of the environment, which directly affects the health of animals and plants. The official food control system is supplemented by institutions conducting food safety risk assessments. These are the State Veterinary Institute and the National Institute of Public Health – National Institute of Hygiene. These institutions conduct research on food safety, within their competences and on behalf of the ministers supervising them.

Early Warning System for Food Safety (RASFF)

As part of the implementation of food safety policy, an important tool is the Rapid Alert System for Food and Feed (RASFF), implemented within the EU, which serves to rapidly exchange information on hazards detected in food between official food control authorities in Europe. A Member State in which a health hazard has been detected is obliged to notify the other members of this network of the product in question and what actions have been taken to eliminate the risk. These actions include: stopping the distribution of the product, withdrawing the product from consumers and stopping the product at the border. Thanks to such rapid exchange of information, all members of the RASFF system can check on an ongoing basis whether a given problem concerns them and whether urgent actions are needed. Authorities in countries where a given hazard occurs are obliged to take the necessary emergency measures, such as informing the public, withdrawing specific products from the market or carrying out on-site inspections. (Muss & Lesiów, 2018).

The obligation to communicate relevant information to the RASFF, which may be relevant for the relevant authorities responsible for food and feed controls in the European Union, results from European Union law, and in particular from Article 50(3) of Regulation (EC) No 178/2002, and is the same for each member of the RASFF network. The implementing measures for the rapid alert system for food and feed, ensuring the smooth functioning of that system, were laid down in Commission Regulation (EU) No 16/2011⁵⁴ and, from 14 December 2019, in Commission Implementing Regulation (EU) 2019/1715 of 30 September 2019 laying down rules for the operation of the information management system for official controls and its system components,⁵⁵ which repealed Regulation (EU) 16/2011. In accordance with Article 3(1) and (2) of Regulation (EU) No 16/2011, and subsequently Article 17(1) of Regulation (EU) No 178/2002, 1 and 2 of EU Regulation 2019/1715, network members send alert notifications to the Commission contact point without undue delay and in any case within 48 hours of receiving information about the alert. The RASFF system operates 24 hours a day. The Commission contact point checks alert notifications and forwards them to the contact points of the alert and cooperation network within 24 hours of receiving them. In accordance with the instructions developed in the Chief Sanitary Inspectorate and the Chief Veterinary Inspectorate, information about the alert should be forwarded to the next level within the RASFF network within 48 hours (Muss & Lesiów, 2018).

CONCLUSION

Food security is indeed a key element of the broader concept of national security. In crisis situations, such as natural disasters or armed conflicts, the stability of the food system becomes even more important. Countries must be able to not only ensure access to food for their populations, but also protect their natural resources and agricultural production. Food safety regulations cover many aspects. These include ensuring appropriate standards of quality and safety of food products, control of supply chains, and support for local agricultural producers. In crisis situations, states can introduce interventions such as subsidies, price controls, or aid programs for the poorest to ensure that food is available to all citizens. Additionally, in the

context of globalization and international trade, food security also relates to issues of trade policy and international cooperation. Joint actions to monitor and respond to threats such as plant and animal diseases can significantly affect the stability of the food system in different countries. (Wiśniewska & Wyrwa, 2022).

Security is a complex and multifaceted topic that requires analysis from various perspectives, both national and international. Its perception as a global public good emphasizes that security is not only a matter for individual states, but concerns the entire international community. In the context of the definition of security, it can be seen that its essence lies in a state that eliminates threats or minimizes their impact. The concept of surpassing defense potential over threats indicates the need to constantly strengthen defense capabilities, which is a dynamic process. It is worth paying attention to the evolution of threats, which in today's world often have no clear boundaries between what is internal and what is external. As globalization progresses, many problems, such as terrorism, cybersecurity or climate change, are becoming transnational phenomena that require cooperation and integrated actions at the international level. Therefore, security should be treated not only as a goal to be achieved, but also as a continuous process that requires flexibility, adaptation and cooperation of various actors - states, international organizations and societies. Joint responsibility for global security is becoming a key element in the face of contemporary challenges (Płaczek, 2015).

The Polish food safety model is a distributed model. The division of competences in the scope of monitoring and control of compliance with food law requirements by entities operating on the food market at all stages of production, processing and distribution between five specialized inspections is based on several mutually overlapping areas.

In accordance with Article 4, paragraph 1 of Regulation No. 882/2004 EU, all Member States are obliged to designate bodies competent for official food controls at the national level. In Poland, these bodies are four inspections subject to control (Chief Sanitary Inspectorate, Chief Veterinary Inspectorate, Chief Inspectorate of Trade Quality of Agricultural and Food Products, Trade Inspection) and the bodies of the State Plant Health and Seed Inspection. In Poland, competences in the scope of food safety have been divided between several institutions without specifying a leading institution. In addition, these institutions are subordinate to three supreme bodies. This model of food safety supervision stands out on a European scale.

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