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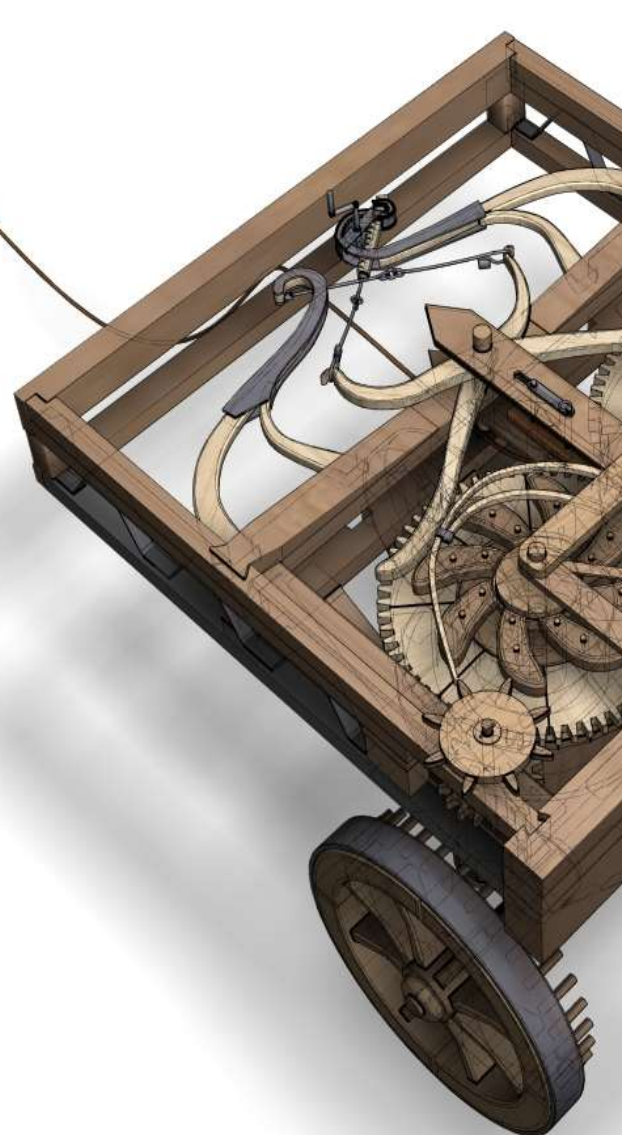
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Food Safety Control as a Guarantee of Consumer Protection: Institutional Component

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Abstract:

A serious challenge for modern society is the problem of ensuring food safety, which has reached the international scale. Despite the global scale of the food safety problem, its solution seems possible through the effective operation of relevant national institutions in the first place. The research objective was to determine the contribution of food safety control to consumer protection by the example of Ukraine and the experience of some foreign countries. The article covers the following issues: the current state of food security in Ukraine and some foreign countries; weaknesses and strengths of the national food control system and discussion of possible ways to improve; the most important regulatory decisions in the field of food safety and consumer protection; reforming the national food control system and developing general recommendations for the formation of an effective national food control system. The object of research is the institutional component of food safety control.

Keywords: consumer protection policy; food safety control; food security; regulatory decisions; legal regulation; institutional component; Ukraine; foreign experience.

JEL Classification: Q18; D18; H41; K32; L52.

Introduction

Entering the European market, where consumers from all over the world can contact and negotiate goods and services with different sellers or suppliers from different countries (Araujo and Nardi 2020), is an important task for many countries today.

The only way to open European markets is to comply with international and European standards and protocols (Hrytsenko and Hrytsenko 2019). At the same time, international standards are becoming increasingly

stringent (Faour-Klingbeil and Todd 2019). EU standards require strict adherence to food safety and quality requirements (Solomon *et al.* 2019).

Given the importance of quality and safety management, different governments have developed a number of rules and regulations for assessing food quality (Bhalani *et al.* 2019). Regulation is designed to ensure a high level of protection of human life and consumer interests in food (Berezovska 2017). Consumer protection rules must ensure that products meet quality and safety standards (Svantesson and Clarke 2010). After all, quality standards really improve consumer welfare (Tulu 2020). At the same time, the best consumer interest is a necessary prerequisite for better functioning markets (Kováts 2013).

Food manufacturers are required to implement and test processes that reduce the risk of known hazards (Gomez & Marks 2020). Protecting food security is an important component of ensuring human rights, national interests and the rule of law. However, despite the existence of numerous international and national regulations in this area, issues directly related to food safety are becoming increasingly important (Tyrpenou 2017). The last few decades have posed enormous challenges to many countries in the area of food security (Luning *et al.* 2008), which is an integral part of the national security of every country.

Foodborne illnesses are global public health problem, and are estimated to affect approximately 600 million people every year (Faour-Klingbeil and Todd 2019). Global food safety incidents are often reported, their number is increasing (Soon *et al.* 2020; European Commission 2020). The growing use of modern technologies in production is also a threat, which results in adding components of inorganic origin to food (Dergachova *et al.* 2020). All these crisis phenomena in the food sector are characterized by a high level of risk, which determines the importance of preventive measures (Ostrowska-Dankiewicz 2019).

Problems of food safety and quality are increasingly damaging both the personal non-property rights of consumers (their right to life and health), and the economy of the country of origin of the violations in general. Therefore, it is now essential for each individual state to initiate steps to ensure the interests of consumers through the adoption of appropriate legislation (Nabi and Nabi 2020).

The issue of providing consumers with quality and safe products is especially acute in the context of promoting online commerce in connection with COVID-2019. Online sales are the fastest growing type of sales (Björling 2019). Convenience, lower prices, aggressive discounts, more choice are benefits that consumers enjoy when shopping online (Praveen 2017). Purchasing decisions depend on such criteria as availability, price or an offer of a particular product, not just quality (Kádeková 2020). Millions of Europeans use online platforms with almost blind trust (Veltri *et al.* 2020). Due to the ease of transactions, the number of e-consumers is growing rapidly. In 2018, an estimated 1.8 billion people worldwide bought goods online, and further growth is expected (Gulzar 2020). However, online trading has not only advantages but also risks. The rapid development of e-commerce creates potential risks that affect consumer rights in general (Chin and Yusoff 2016). After all, online stores sometimes create problems associated with the risk of consumers receiving low-quality and even dangerous products (Kapoor 2017).

In addition, a new threat is the likelihood of COVID-2019 spread through food in case of non-compliance with sanitary rules. After all, although there is no evidence that COVID-19 affects food safety (Shahidi 2020), all foods can potentially be contaminated by contact with contaminated equipment, surfaces or the environment (FAO 2020). Coronavirus can enter food or its packaging through an infected person who sneezes or coughs directly at them (Rizou *et al.* 2020).

Unfortunately, consumers are not able to fully protect their rights. Therefore, it is quite logical and reasonably necessary to have institutional and legislative mechanisms to ensure and protect the rights of consumers in their entirety (Yuan *et al.* 2020).

A key element in protecting consumers from unsafe food is national food control systems (Alomirah *et al.* 2010). However, consumers have a relatively low level of satisfaction with the work of various government agencies responsible for food safety (Hadjigeorgiou *et al.* 2014).

Serious food crises have forced the EU and EU Member States, as well as non-EU countries but EU trading partners, to revise their national food safety systems (NFSS). Today, many countries have already implemented various reforms (Halkina 2017) in an effort to increase the operational efficiency of EU food control mechanisms (Neeliah and Goburdhun 2007).

However, national food control systems still suffer from certain constraints, such as outdated laws, duplication of work, lack of resources, and poor organization, which make the system inefficient (Neeliah and Goburdhun 2007).

At the same time, in many developing countries, insufficient attention is paid to the development of an effective food safety control system (Luning *et al.* 2008), effective measures of state regulation of the food market (Fomina and Mirzoieva 2018). Ukraine is one of those countries.

Let us note that state regulation of the food market is one of the most difficult tasks of public administration in the world. The organization of effective and efficient control of food safety is one of the functions of public administration, which affects the health and proper protection of consumers (Churylova and Malus 2017).

The regime of implementation and observance of rules and standards in the field of food safety involves both preventive and criminal nature. But the emphasis should be on prevention, that is reforming the relevant services (Minor 2012). However, before deciding on the necessary improvement of the national system, it is necessary to analyze the current state of its main elements and review positive foreign experience in this area.

The research objective was to determine the contribution of food safety control to consumer protection by the example of Ukraine and the experience of some foreign countries.

The research objective is to determine the contribution of food safety control to consumer protection by the example of Ukraine and the experience of some foreign countries, as well as the weaknesses and strengths of national food safety control systems in different countries, and to form models of the national food safety control system based on the data obtained.

1. Literature Review

The problem of food safety is the subject of many studies of Ukrainian and foreign scholars. Foreign scholars (Wang *et al.* 2020), guided by statistics of foodborne illnesses around the world, emphasize that foodborne illnesses remain a serious problem in most countries.

The research of Stehnei *et al.* (2018) confirms that the problems of food security remain unresolved and become more acute. Similar conclusions can be drawn from a study conducted by Vojir *et al.* (2012), who found that the number of cases of food adulteration increased very rapidly in the second half of the 19th century.

Soon *et al.* (2020) also discuss the growing food safety concerns that pose a threat to public health and the economic costs of countries and businesses. At the same time, they focus on a more detailed study of specific incidents of food security violations. In particular, these scholars examine in more detail: the “rapeseed oil” fraud, which was intended for industrial use (1981), affected about 20,000 people and killed between 370 and 835 people in Spain; dioxin in Belgium, which led to huge economic losses (1999); melamine-adulterated milk in China has resulted in more than 50,000 sick children and about six deaths (2008); methanol poisoning as a result of the sale of illegal alcoholic beverages led to approximately 59 victims in the Czech Republic and Poland (2012-2014).

Neeliah and Goburdhun (2007), studying the global nature of this problem, emphasizes that low-quality food can have fatal and financial consequences in both developing and developed countries. Therefore, food hazards are prompting governments to intervene in the food chain by establishing national control systems. They are required in both developed and developing countries. However, national food safety systems remain imperfect today.

The study by Chen *et al.* (2015) found that governments, in response to growing food safety concerns, introduced a large number of food safety management rules: regulations, guidelines, standards and specifications.

As for the works which initiated the solution of this problem, the ways to solve the problem of food safety control are considered in many works.

According to Malczyńska-Biały (2020), there are two levels of consumer safety in the European Union. First, the creation of appropriate legal norms aimed at protecting consumers from products that are harmful to their lives and health. Second, the development of standardization and control institutions, providing consumer information on potential risks.

Poncibò (2012) finds that in many countries, consumer organizations work to influence authorities that adopt laws and enforcement agencies. However, this may not be the only response to today's threats. On the one hand, they need to interact either with a national standards body or with regional or international consumer organizations for standards. On the other hand, they need to inform the people who will be dealing with the standards.

According to Scholes (2012), legal intervention in providing consumers with the opportunity to make the optimal choice is important. It is about introducing information commitments to reduce the information volumes by selecting the more important one.

Usenko *et al.* (2019) focus on the fact that an adequate level of quality can be ensured not only by controlling the final product, but also by monitoring throughout the production chain.

In turn, Kotelevych (2019) notes that to eliminate the risk of consumer hazards, it is necessary to improve the control system of raw materials used for the manufacture of products in terms of safety indicators at all stages of production.

Faour-Klingbeil and Todd (2019) demonstrated the importance of communicating with food chain stakeholders, providing them with advice on food safety and emerging risks. Communication activities range from providing scientifically sound and accurate information to consumers to training services provided to food producers and processors, training of healthcare specialists, key local government officials responsible for food control and supervision.

The proposed approach to the introduction of negative publicity deserves attention: 89% of respondents agreed that the threat of negative advertising related to consumer rights violations is as important a punishment as any financial penalty. However, there are significant risks of unfair use of negative publicity, and it is crucial that the regulatory regime takes them into account.

Ukrainian scholars Humeniuk and Kiiko (2019) also made a valuable contribution to the development of the topic by having analysed the state control over food safety and quality in the United States. The scholars found the positive experience of one of the oldest and most reliable consumer protection services, the U.S. Food and Drug Administration (FDA). The FDA's activities are regulated by the Federal Food, Drug and Cosmetics Act, and provide for the verification of food samples for hazardous substances, as well as checking the accuracy of the information contained on the labels. In case of violations, the FDA offers the manufacturer to eliminate the defect or withdraw (recall) substandard products from the market, which is the fastest and most effective way to protect consumer rights. Products withdrawal in the United States is called "recall campaigns". The FDA has powerful legal levers that allow it to prosecute the sale of substandard products, seize and destroy manufactured products, and prosecute manufacturers themselves.

The US experience is also the subject of research by foreign scholars. According to Deshpande *et al.* (2020), on the basis of inspections and data collected in this way in the United States, warning letters are issued to those who do not comply with the regulations, and the licenses of those who do not comply with their instructions are revoked. This disciplines manufacturers and sets the limit of quality that must be achieved.

The experience of Hungary illustrated by Barta (2020) is also noteworthy. The researcher finds that in Hungary, the consumer protection authority may oblige to pay compensation to the user, as well as to comply with legal requirements and regulations. His responsibilities include consumer education and training.

As we can see, the analysis of selected literature sources gives grounds to conclude that the problem of ensuring the quality and safety of food is the subject of numerous studies. However, it should be noted that scholars have mostly studied the general state of food security in individual countries. Only some of the works examined the weaknesses of the national food control system in a particular country and ways to improve it. Scholars did not pay attention to the development of general recommendations for the formation of an effective model of the national food control system.

The review shows that as of today, the doctrine does not include comprehensive research on national food safety control systems that consider all relevant aspects of this topic. However, the considered data of existing research can be a good reference point and background for our research.

2. Aims

Taking into account the results of research in Ukraine and other countries, the work is aimed at assessing the contribution of food safety control to consumer protection by the example of Ukraine and the experience of some foreign countries, identifying weaknesses and strengths of national food safety control systems in different countries, formulating the concept of an effective model of the national food safety control system.

3. Data Source and Research Methodology

The study uses the method of analysis and synthesis. The main provisions in the field of food safety were reviewed and discussed based on scientific sources, data from official websites of state authorities, statistical reports and legal regulations.

The chronological scope of the study covers 2010-2020.

Statistics were obtained from the report of the State Service of Ukraine for Food Safety and Consumer Protection (2020) in terms of the criterion of types of and the RASFF server portal (European Commission n.d.) in terms of the criterion of the notifying country, which confirmed the global nature of the problem, as well as in

terms of the period, that allowed drawing conclusions about the ineffectiveness of existing national food safety control systems.

Subsequently, this database was processed in Microsoft Excel 2019 (Microsoft Corp., Redmond, USA) to create descriptive statistics, and translated into summary charts.

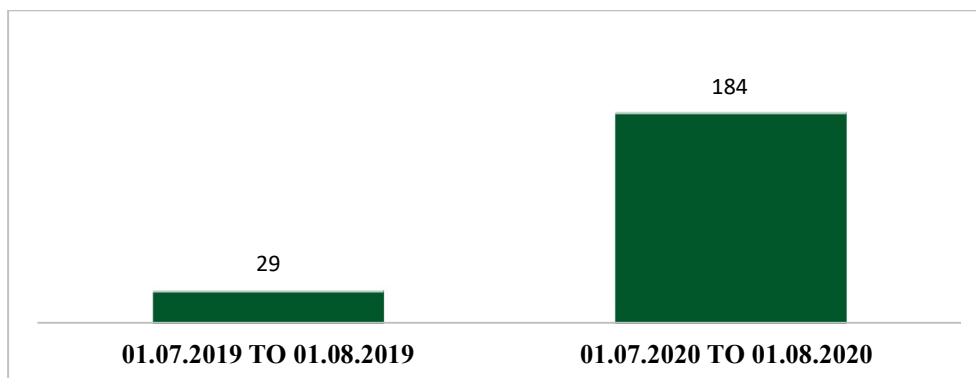
Based on the data obtained from critical analysis, conclusions were drawn on the need to reform the national food safety and quality system, and general recommendations in this area were provided.

4. Results

A review of literature and statistics has shown the scale of the problem of ensuring the safety and quality of food in modern conditions. As a result of searching for notifications on the RASFF portal (European Commission n.d.) by the criterion of the notifying country, we found notices from such countries as Great Britain, Germany, France, Denmark, Switzerland, Poland, Bulgaria, Slovenia, Lithuania, Cyprus, Belgium, Austria, Finland, Croatia, Hungary, Italy, Spain, the Netherlands, Sweden, Malta, the Czech Republic, Luxembourg, Ireland. Violations of the rules by the indicated countries were also revealed.

Statistics also show an increase in the number of violations. So, in particular, the search of notifications on the RASFF portal (European Commission n.d.) for the period from 01.07.2019 to 01.08.2019 showed only 29 notifications of violations, and in the period from 01.07.2020 to 01.08.2020 — 184 notifications of violations (Figure 1).

Figure 1. The dynamics of growth in the number of violations in the world Unit of measurement

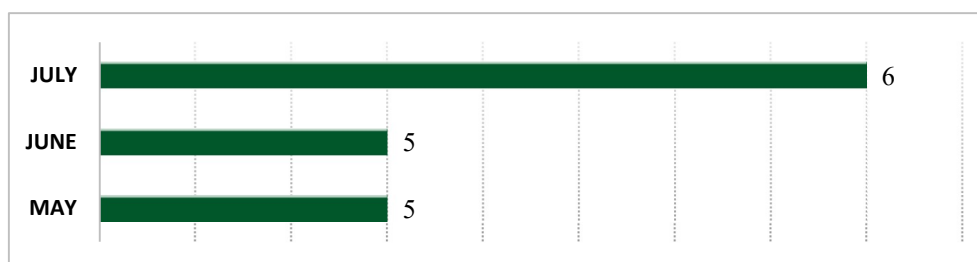


Notes: 1 is equal to one violation notification. Vertical: number of violation notifications. Horizontal: comparison periods. Source: Gov.ua (2020)

The illustrated data show the lack of efficiency of national food safety and quality systems in different countries and give grounds to argue about the need to find ways to further improve and reform them.

In addition, if we analyse the data on Ukraine, we can trace the dynamics of the growth of cases of food safety rules violations in Ukraine. Only during 3 months of 2020, 16 violations were recorded (Figure 2):

Figure 2. The dynamics of growth in the number of violations committed by Ukraine in the field of food exports

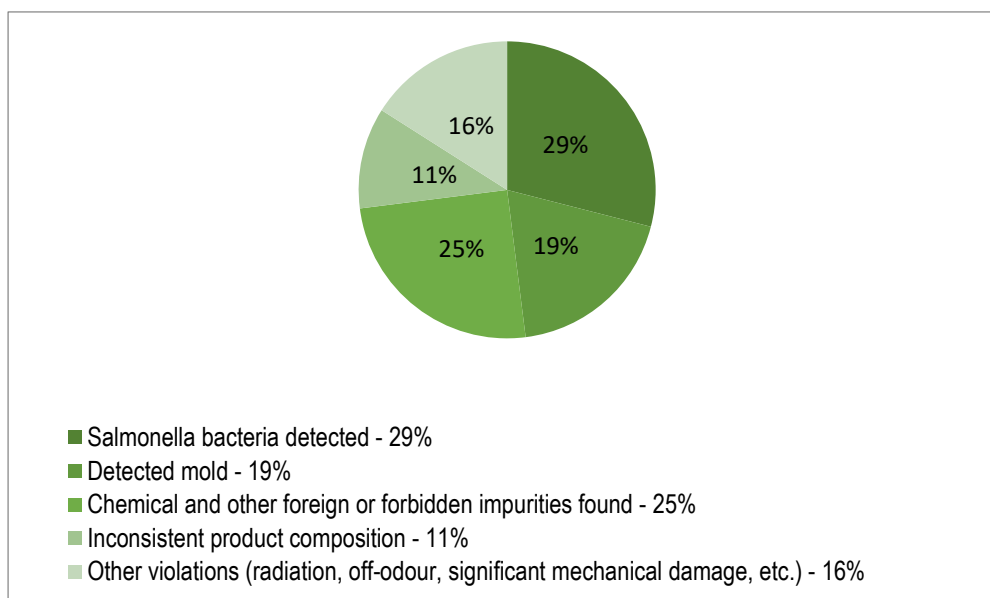


Notes: Unit of measurement: 1 is equal to one violation. Vertical: months taken for comparison. Horizontal: number of violations. Source: Gov.ua (2020)

These data indicate a rapid increase in the number of violations committed by Ukraine in the field of food exports, which may negatively affect future food and trade relations with other countries and the economy of Ukraine accordingly.

As for the specific types of violations recorded by RASFF in the field of food exports from Ukraine to the EU, several types were identified (Figure 3):

Figure 3. Types of violations recorded by RASFF in the field of food exports from Ukraine to the EU



Source: European Commission (n.d.)

The illustrated data indicate that the national food safety and quality system in Ukraine requires improvement, first of all, in preventing such violations as getting of bacterial pathogens, mold, prohibited impurities, radiation into food; in consistent product composition.

5. Discussion

The results of this study show an increase in the number of violations of Ukraine's food safety and quality regulations, as evidenced by the statistics shown in Figures 1 and 2. In our opinion, this situation compromise further active participation in international food markets.

The production of low-quality products and the lack of a clear response to the stringent requirements set by importing countries lead to low competitiveness of domestic food products. The State Food and Consumer Service of Ukraine cannot provide sufficient quality and safety control with the available regulatory means. This requires a revision of the organizational and functional framework of state policy in the field of food quality and safety (Semich 2020).

Let us note that the organizational and legislative foundations of the system of state control in Ukraine did not undergo significant changes until 2015 (despite the adoption of almost a dozen laws), remaining focused on the principles of the socialist economy. This system was formed on a departmental basis, almost without defining a unified state policy in this area and its consistent coordinated implementation. Each department adjusted a regulatory framework that covered a certain segment of the food chain to themselves. The main criteria for evaluating the activities of control services have always been the number of inspections and the number of fines imposed after them. However, this procedure did not help to protect the health and interests of consumers. In addition, the former food safety control system did not meet European and international standards, WTO requirements and Ukraine's commitments to implement the provisions of the Association Agreement. Therefore, in order to implement the provisions of the EU-Ukraine Association Agreement, the Law of Ukraine "On Food Safety and Quality" was adopted on September 20, 2015, which completely changed the paradigm of Ukrainian food safety legislation (Verkhovna Rada of Ukraine 2015). This Law introduces the principle of risk-oriented control, when each market operator is assessed separately using a certain formula. The provisions of the Law, which stipulate that food producers, regardless of the stage of the food chain in which they operate, are fully responsible for the quality of food produced and supplied to the consumer market are also important (it was the responsibility of the state before). With its entry into force, the mandatory application of the HACCP (Hazard Analysis and Critical Control Points) system at all stages of production and circulation with a significant transition period has been introduced, as the introduction of this system requires time and certain resources. A single controlling body for all food products has been established— the State Service of Ukraine on Food Safety and Consumer Protection (Churylova and Malus 2017).

However, the dynamics of growth in the number of violations suggests that the national food security systems around the world need further reform.

One of the main problems facing most developing countries, and some of developed countries, is the level of training of food inspectors. The food quality control units of the countries that have recognized this employ graduates who have been trained in food technology, food hygiene, legal norms and procedures, environmental protection, epidemiology, infectious diseases, and medicine (Neeliah and Goburdhun 2007). In particular, the introduction of mandatory training for inspectors on food technology, food hygiene, legal norms and procedures, environmental protection, epidemiology, infectious diseases, radiation control is especially relevant for Ukraine based on the 3 types of violations recorded by RASFF in the field of food exports from Ukraine to the EU.

RASFF, the Food and Feed Safety Alerts (RASFF), is the primary tool for providing a flow of information to respond quickly to health risks in the food chain (RASFF). RASFF allows efficient exchange of information between its members. To ensure urgency, messages are sent, received and responded to collectively and effectively. RASFF has prevented many foods safety risks before they could cause harm (Gov.ua 2020). Ukraine should actively monitor RASFF data and take the necessary measures.

The European vector of the country's development and the strategy of economic partnership with the EU set certain tasks for the state. The signing of the Association Agreement with the EU has had an important impact on changes in Ukrainian legislation on the harmonization of laws and regulations (Kozak *et al.* 2019).

Commitments to implement the provisions of the EU-Ukraine Association Agreement provide for the improvement of the food safety control system in Ukraine. In particular, improvement on the "field to table" principle by bringing the legislation, institutional infrastructure and system of state control of Ukraine in line with EU regulatory and administrative policies and practices (Churylova and Malus 2017).

As part of the implementation of Chapter 4 of the Association Agreement, a Comprehensive Strategy for the Implementation of Legislation in the Field of Sanitary and Phytosanitary Measures (hereinafter referred to as "the SPM") has been approved (Annex V to the Association Agreement). According to the document, Ukraine must adapt more than 250 EU acts by the end of 2021. As of the beginning of 2020, 51% of EU acts in the field of SPM are already adapted. It is expected that the implementation will contribute to: the introduction of an effective and balanced system of state control of food safety in accordance with EU requirements and international standards; improving the general safety of food and feed, ensuring the protection of life and health of humans, animals and plants; strengthening the protection of consumer interests, including by providing consumers with appropriate food information; creating transparent conditions for doing business, increasing the competitiveness of Ukrainian producers; expanding access to the EU market and entering new international markets (Mission of Ukraine to the European Union 2020).

However, in our opinion, such results can be achieved only with comprehensive measures: harmonization of legislation, taking into account the positive foreign experience and gaps of the national system of state control over food safety.

As for the success of the implementation of the Association Agreement, it should be preceded by a significant reform of the national system of state control over food safety. After all, standards can be effective only when they are accompanied by an effective control system. Therefore, this requires comprehensive legislation, inspection, food monitoring and food supervision. It is necessary to staff a food control system by competent employees and provide good laboratory services (Luning *et al.* 2008).

It is most expedient for Ukraine to adhere to the idea of creating a single supervisory body. One of the most effective models is the Danish food safety system, which is based on a risk-oriented approach with a centralized control system (Halkina 2017).

In general, the experience of EU countries is necessary to improve the system of state control over food safety. After all, the European food safety control system is recognized as one of the best in the world. Consumer life and health are considered the highest value here, and therefore the European consumer is the most protected (Churylova and Malus 2017). However, it should be noted that, according to statistics, the system of state control over food safety of EU member states cannot be considered ideal either.

Some countries copy the food laws of other countries with all the weaknesses or even omissions of important pieces of legislation, which leads to implementation problems. It is difficult to note the only successful model that could be duplicated in other countries (Neeliah and Goburdhun 2007). In our opinion, this dilemma can be solved by formulating general recommendations for the establishment of a national food safety control system.

In particular, first, only highly qualified personnel should be involved in food safety control activities. Ideally, food inspectors should be graduates of academies of science and technology, with further training in the field on national food laws and regulations. They should be trained in food technology, food hygiene, legal norms, standards and procedures in the areas of food safety, environmental protection, epidemiology, and infectious diseases (Alomirah *et al.* 2010).

Proper training of food industry inspectors is a prerequisite for an effective food quality control system. As current food systems are quite complex, the food industry inspector must be trained in food science and technology to understand industrial processes, identify potential safety and quality issues, and have the skills and experience to inspect premises, collect food samples and conduct general assessments. There is a constant need for training and retraining of inspection staff. Refresher courses are able to constantly update the knowledge of inspectors and prepare them to cope with the ever-changing requirements of their activities (Neeliah and Goburdhun 2007).

Second, the exchange of experience with foreign colleagues, cooperation with regional or international consumer organizations on standards is also important. For example, public food safety authorities in Europe and some other countries have developed forms of cooperation with private compliance systems (Verbruggen and Havinga 2015).

Third, laboratory services need constant improvement. This can be achieved through intensive staff training and the use of advanced laboratory technologies. In order to provide laboratories with highly qualified professionals, it is necessary that they study abroad in reputable universities to a high level of competence, exchange experience. Laboratories should also be well equipped and funded (Delisle and Trujillo 2010). In particular, the data in Figure 3 show that it is necessary for Ukraine to improve laboratory services in the field of detection of infectious agents, prohibited impurities, radiation.

Food control authorities should provide specific training for food inspectors and laboratory analysts as a matter of priority. These measures are an important means of building food control expertise and skills in all stakeholders, and thus serve as an essential preventive measure. At the same time, it is necessary to train separately inspectors who control the domestic market and control exports and imports.

Fourth, the control powers of national food safety authorities should cover all stages from the procurement of raw materials to the storage of finished products and their reaching the consumer. That is, the activities of the national food safety system must be based on the “field to table” principle. After all, as scholars rightly noted, an adequate level of quality can be ensured not only by controlling the final product, but also by monitoring the entire production chain (Usenko *et al.* 2019). Moreover, the basis for ensuring food safety is the system of monitoring of sanitary hazardous pathogens and residual amounts of toxic substances (Kotelevych 2019).

The powers of national authorities should also include the possibility of actively implementing recall campaigns. This is a series of measures to inform consumers who have purchased a low-quality product about the return of all products of this batch to the manufacturer. Such notifications should be posted on the official websites of food safety authorities. Finding such information should be as simple and accessible as possible. In addition, it is advisable to introduce newsletters, for example, as they do now to notify the COVID-19 news.

Besides, national authorities should have the power and means to dispose such products if necessary. The national control system should also be provided at the legislative level with strong legal levers that will allow the courts to prohibit the sale of substandard products, seize and destroy products if the types of violations shown in Figure 3 are detected, and bring the producers to justice.

Fifth, the national food safety authority should carry out communication activities, ranging from providing scientifically sound and accurate information to consumers to training services for food producers and processors, training of health workers, key local government officials responsible for food control and supervision activities.

Communication with food chain stakeholders, advice on food safety and emerging risks is important. Nutrition inspectors need to be trained by food business owners and operators to help them develop their own control methods (Alomirah *et al.* 2010).

Food safety authorities should also be tasked with educating consumers on food safety. After all, knowledge is key to solving the main problems of consumers. Lack of product information manifested either in complete ignorance of product information, or in the absence of sufficient information necessary to properly assess the pros and cons of the product (Nabi and Nabi 2020).

Sixth, research has shown that consumers cannot rationally process the volume of information that most European consumer legislations now require. In particular, a psychological study found that seven pieces of information is the maximum number that the average person can rationally process. As a rule, information overload leads to the fact that less information is actually taken into account. In addition, information selected or researched by the consumer will not necessarily allow making the right choice. This suggests the need for appropriate legal intervention aimed at providing consumers with sufficient information to make the right choice (Svantesson and Clarke 2010). Therefore, it would be appropriate to legally define a clear list of criteria, which

must be specified in the description, and provide food safety control authorities with powers to verify compliance with these provisions.

Seven, it is necessary to introduce the concept of “negative publicity”. However, given the non-exclusive risk of negative publicity being used by unfair competitors, this aspect needs to be clearly regulated.

Conclusion

Based on the above data, we can conclude that national food safety control systems are not effective enough. Therefore, it is time to introduce a new model that will contain all the positive practices from different countries and consider all the gaps.

The obtained results can be integrated into international practice. Because these recommendations may be valuable not only for Ukraine but also for other countries with a low-level food safety.

At the same time, we must note that it is impossible to develop a universal model that would have equal success in different countries. However, we have developed general recommendations for modeling a national food safety control system.

Data are presented that can be used as a reference for future work in this area, as well as legislative initiatives to improve national food safety control systems. It is expected that the proposed changes to the legislation will ensure an effective food safety oversight system.

Finally, it should be noted that the issue of food safety control and consumer protection in this area requires further research to identify possible ways to improve cooperation of the national food safety control system with relevant international entities, and the concept of building effective food safety control systems.

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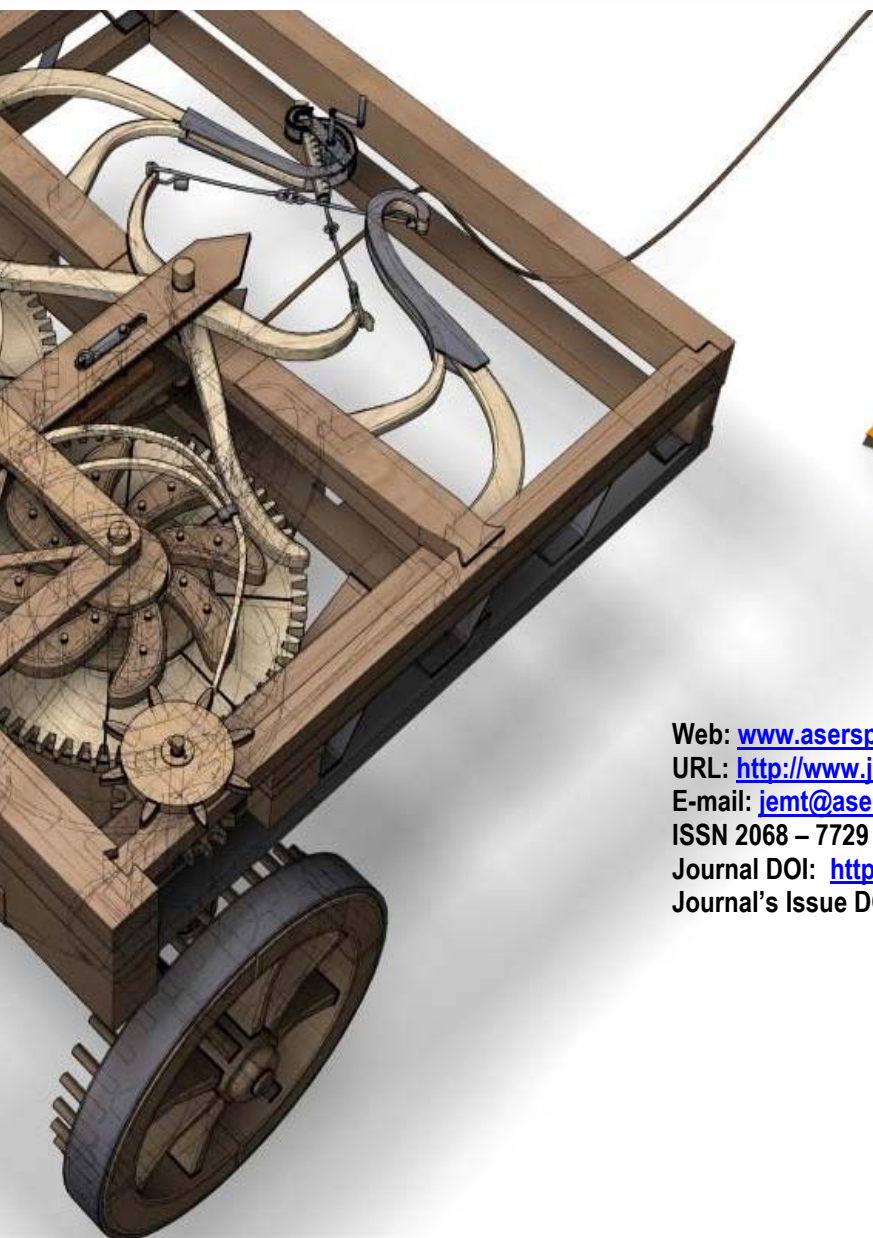
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