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Тези доповідей подано в авторській редакції. Відповідальність за зміст, достовірність даних та академічну добросовісність несуть автори.

У збірнику матеріалів всеукраїнської науково-практичної конференції здобувачів вищої освіти висвітлено результати теоретико-експериментальних досліджень з актуальних проблем ветеринарної науки та суміжних напрямів. Організаційним комітетом було прийнято 146 тез доповідей з 7 закладів вищої освіти підпорядкованих Міністерству освіти і науки України, серед яких Державний біотехнологічний університет, Національний університет біоресурсів і природокористування, Полтавський державний аграрний університет, Дніпровський державний аграрно-економічний університет, Білоцерківський національний аграрний університет, Сумський національний аграрний університет, Ніжинський державний університет імені Миколи Гоголя. Здобувачами під керівництвом провідних вчених України були представлені доповіді в рамках роботи п'яти секцій – ветеринарна репродуктологія, фармакологія, токсикологія та ендокринологія; внутрішня патологія та хірургічні хвороби тварин; інфекційні та інвазійні хвороби тварин; біохімія, морфологія та фізіологія тварин; ветеринарна гігієна, санітарія і експертиза.

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COMPARATIVE ANALYSIS OF STATE VETERINARY CONTROL SYSTEMS IN UKRAINE AND EU COUNTRIES

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In the modern world, ensuring food safety is an important component of the national security of each country. Veterinary control includes a system of measures aimed at ensuring animal health, protecting human health from zoonotic diseases, as well as regulating the circulation of products of animal origin (Prylipko et al., 2025). Veterinary control in the countries of the European Union is carried out at a high level, which guarantees the safety of food products for consumers. At the same time, in Ukraine, the veterinary control system is at the stage of reform, in particular, in the context of adaptation to European standards (Velichko & Sorokin, 2021).

The purpose of the study is to conduct a comparative analysis of state veterinary control systems in Ukraine and the countries of the European Union, focusing, in particular, on the legal, organizational and technical aspects of these systems, to identify key problems, determine the prospects for their solution in the context of Ukraine's integration into the European legal framework and ensuring proper food safety.

The object of the study is the system of state veterinary control in Ukraine and the countries of the European Union, in particular, legal, organizational and technological aspects, interaction between various state bodies responsible for food safety control and animal health.

The system of state veterinary control in Ukraine is based on legislative acts, in particular, the Laws of Ukraine «On Veterinary Medicine», «On Basic Principles and Requirements for the Safety and Quality of Food Products», other regulatory legal acts regulating sanitary and epidemiological safety and animal health. An important stage is also the reform of the veterinary service within the framework of the Association Agreement with the EU, which provides for the gradual integration of Ukrainian legislation with European standards in the field of veterinary medicine.

The control system involves monitoring the health of animals, conducting clinical examinations, and analyzing and certifying products of animal origin. Among the main state bodies that carry out control in Ukraine is the State Service for Food Safety and Consumer Protection.

In the EU, the veterinary control system is regulated by European legislation, in particular, by EU Regulations 882/2004 (on official controls) and 853/2004 (on the hygiene of food of animal origin). In the EU, animal health control is carried out through national veterinary services, which have clearly defined responsibilities and functions (European Commission, 2004).

The European veterinary control system includes a number of measures: scheduled inspections of farms, control of the movement of animals and animal products across borders, interaction with international organizations (WTO, UN, WHO). EU countries actively use modern technologies for control, in particular, monitoring the health of animals and checking the safety of food products through laboratory tests (European Food Safety Authority (EFSA), 2019).

The main differences between the veterinary control systems in Ukraine and the EU are, in particular:

1. Legal and organizational aspects: in Ukraine, the control system is at the stage of adaptation to European standards, while in EU countries, control is more integrated and standardized at the level of all members of the European Community.

2. Personnel issues: in the EU, the veterinary control system has highly qualified personnel, as emphasized by the European Food Safety Authority (EFSA). In Ukraine, there is a shortage of competent highly qualified specialists in the field of veterinary medicine, which complicates the implementation of modern state control requirements.

3. Financing and logistical base: EU countries have better financing and access to modern equipment for veterinary and sanitary control, which is lacking in Ukraine.

Adaptation of the national system of state control to European standards is an important direction for the development of veterinary medicine in Ukraine. Urgent problems that need to be addressed include insufficient funding and somewhat outdated material and technical base; inconsistency of individual regulatory legal acts; some problems with training and advanced training of veterinary medicine specialists (Vetrov, 2022).

As for development prospects, measures are needed and are currently being implemented in Ukraine to: strengthen food safety control; integrate into the European veterinary space by improving the system of national accredited state veterinary medicine laboratories and infrastructure.

Thus, a comparative analysis of the state veterinary control system in Ukraine and the EU countries shows that the state control system in the European Union countries is more structured, independent and effective and is based on the principles of transparency, accountability and professional audit of public finances.

In Ukraine, the state control system is at the stage of reform and is gradually approaching European standards. To achieve the EU level, Ukraine needs to continue implementing a number of reforms in the legislative and organizational spheres.

Further integration of Ukraine into the European legal framework will allow to increase the efficiency of state veterinary and sanitary control, ensure high standards of food safety and reduce the risks of zoonotic animal diseases. Borrowing and adapting best practices from EU countries will contribute to increasing the efficiency of the state veterinary and sanitary control system in Ukraine.

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AUTHENTICITY IN THE NEW VERSION OF THE BRC FOOD STANDARD: IMPLEMENTATION IN UKRAINE

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The globalization of the food market and the expansion of international supply chains require clear mechanisms for controlling the safety, quality and origin of food products (Prylipko et al., 2025). One of the leading international standards in the field of food safety is the BRCGS – Global Standard for Food Safety (formerly the BRC Food Safety Standard), which is recognized in more than 100 countries around the world and is a mandatory requirement for cooperation with many global retailers and trade chains (BRCGS, 2023).

The new, ninth edition of the BRCGS standard significantly expands the requirements for a food safety culture and introduces the concept of food product authenticity, previously formulated as integrity (Quality Austria Polska, 2022). This change emphasizes the relevance of identifying the

origin, ingredients and confirming compliance with the declared characteristics of food products. The application of the BRCGS food standard is mandatory for all audits after February 1, 2023.

The purpose of the study is to analyze the features of implementing the principle of authenticity in the new version of the BRCGS Global Standard for Food Safety and to identify the prospects and challenges of its application in Ukraine.

The object of the study is the food safety and quality management system in accordance with the requirements of the BRCGS standard (Issue 9) in the conditions of Ukrainian food industry enterprises.

Research methods. The regulatory requirements of the BRCGS standard are analyzed, and a systematic approach to assessing the possibility of implementing authenticity requirements in Ukraine is generaliz.

Authenticity in the BRC food standard refers not only to the safety of a food product in the classical sense (i.e. the absence of hazardous impurities), but also to confirmation that it corresponds to its description: ingredients, origin, production technology etc. (Global Standard: Food Safety (Issue 9). BRCGS, 2023).

In the new edition of the standard (Issue 9), this aspect is included in the requirements for the quality and safety management system, in particular in terms of the verification of suppliers, raw materials and control of subcontracted processes. This means that enterprises must not only ensure the safety of food products, but also confirm their compliance with consumer expectations and marketing claims regarding labeling, geographical origin or organic status, which is part of the modern understanding of authenticity (BRCGS partnership with the Food Authenticity Network to drive global food safety standards, 2025).

The integration of the concept of authenticity into the standard is driven by global challenges: the increase in food fraud and product adulteration; increased consumer attention to transparency of origin and ethical aspects of production; and the need for retailers to guarantee that suppliers not only comply with sanitary and hygienic requirements, but also meet their own marketing claims for a particular food product (Özen et al., 2024).

The BRCGS partnership with the Food Authenticity Network is aimed specifically at increasing the food industry's ability to detect and prevent fraud, which reinforces the importance of authenticity as a key element of a food safety standard (Tzachor, 2024).

The introduction of a new version of the standard means not only increasing the level of safety, but also developing systems for confirming the authenticity of food products: building reliable supply chains; implementing control over the origin of components; improving internal audit systems, documentation and information tracking. These measures contribute to increasing the trust of both local and international consumers in Ukrainian products and can become a competitive advantage in global markets (BRCGS, 2025).

In Ukraine, where food producers are increasingly exporting and seeking to meet global requirements, the implementation of the BRCGS standard is an important step towards integration into global markets. The main challenges in implementing the requirements of the new version of BRC in Ukraine include: insufficient awareness of enterprises with international authenticity requirements; the need to implement new IT systems for tracking and documenting information; the need to train personnel to perform internal control and audit.

At the same time, the successful implementation of the BRCGS standard, including authenticity requirements, will contribute to the integration of Ukrainian enterprises into global supply chains, increasing product competitiveness, and increasing exports (BRCGS, 2025).

The BRCGS standard has already been implemented in the food industry in Ukraine, and some Ukrainian enterprises have valid certificates of compliance with this international standard (Bureau Veritas. (n.d.). Ukrainian companies that have already received certification according to international standards, including BRCGS, or have undergone audits of this system include, for example, PE «LUKAS Manufacturing and Trading Company» (Poltava region), which received a certificate of compliance with BRCGS Food Safety Issue 9 for the production of bakery and confectionery products. Chumak JSC has a certificate of compliance with the BRC Global Standard

for Food Safety (Issue 8) for its products (sauces, ketchups, tomato pastes, mayonnaises, etc.), which indicates the application of the requirements of the standard in practice.

Several Ukrainian meat processing enterprises have previously received BRC Global Standard certification, including PrJSC «Ukrainian Bacon», «Myronivska Ptahofabrika», MPZ «Legko» and others. The Ukrainian enterprise ALTE FOODS successfully passed the BRCGS audit in 2022 to confirm compliance with international safety and quality standards. There are also companies on the market that are working on the implementation and certification of BRCGS or offer consulting services on the implementation of this standard for Ukrainian manufacturers.

This means that in Ukraine they are no longer just talking about BRCGS, but actually receiving international certificates that open access to world markets and are evidence of product compliance with strict requirements for safety, quality and, in the new version of the standard, authenticity. These examples demonstrate that despite the difficulties of implementation and the requirements of international schemes, some Ukrainian companies are already certified or have been audited according to the BRCGS standard, thereby confirming their readiness and ability to meet the strict requirements for safety, quality, compliance, as well as authenticity requirements enshrined in the new version of the standard (Issue 9). This indicates that the products comply with the strict requirements for safety, quality and market standards.

Confirmation of the implementation of the BRCGS standard in Ukraine can be done through the official BRCGS Directory register, which contains up-to-date data on certified enterprises. As of recent years, some Ukrainian manufacturers have valid certificates of compliance with the Global Standard for Food Safety (Issue 8 and Issue 9), which indicates the practical implementation of the requirements of the standard, including provisions on the authenticity of food products.

Conclusions. Authenticity in the new version of the BRCGS standard has become an important element that goes beyond traditional safety and quality, and the introduction of these requirements in Ukraine is a logical step towards integration into international markets and increasing consumer confidence, which opens up prospects for Ukrainian enterprises to expand exports under the conditions of strategic changes in food safety and quality management systems.

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HARMONIZATION OF VETERINARY AND SANITARY CONTROL OF UKRAINIAN AGRICULTURAL ENTERPRISES ACCORDING TO THE REQUIREMENTS OF THE EUROPEAN UNION: TECHNOLOGICAL ASPECT

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In the context of Ukraine's European integration, the issue of ensuring the safety and quality of food products is gaining particular importance (Vakulenko, 2023). The country's agricultural enterprises are faced with the need to adapt their production and control processes to the requirements of the European Union (EU), which involves the harmonization of veterinary and sanitary control (Prylipko et al., 2025). Compliance with EU technological standards not only increases the competitiveness of products, but also reduces the risks of food hazards and ensures consumer confidence (Kyryliuk & Hubka, 2023).

An important aspect is the implementation of modern production technologies and control systems at all stages – from raising farm animals to processing and storage of animal products. Harmonization involves the adaptation of Ukrainian norms and procedures to EU Directives and Regulations, in particular Regulation (EU) 2017/625 and requirements for HACCP systems and comprehensive veterinary control. The practical application of harmonized technological solutions contributes to the competitiveness of Ukrainian products on the international market and strengthens consumer confidence (Tankosić et al., 2022).

The purpose of the research is to study the technological aspect of harmonizing veterinary and sanitary control of agricultural enterprises in Ukraine in accordance with EU requirements and to identify practical measures to increase the efficiency of control and product safety.

To assess the harmonization of veterinary and sanitary control, it is necessary to conduct: an analysis of the regulatory framework to compare national laws and regulations with EU regulations (in particular, Regulation (EU) 2017/625, Regulation (EU) 2019/627); a technological audit of a specific production with an assessment of the implementation of the *HACCP* system and appropriate veterinary and sanitary procedures; a systematic study of the chain from farm to fork to identify critical control points in the production process; a comparative analysis to identify discrepancies between national and European requirements for veterinary and sanitary control; development of proposals for the formation of recommendations for optimizing the technological process and control system in accordance with EU standards (Regulation (EU) 2017/625, 2017), (Commission Delegated Regulation (EU) 2019/624, 2019).

Harmonization of veterinary and sanitary control is a key factor in the integration of the Ukrainian agricultural sector into the European market. The implementation of HACCP systems, modern processing and product control technologies ensures increased safety and quality of food products.

Harmonization of veterinary and sanitary control involves the comprehensive implementation of EU standards at all stages of production, namely:

- raising and keeping animals (compliance with feeding standards, sanitation of premises, disease prevention; implementation of electronic accounting and animal identification systems);
- collection and primary processing of animal products (control of temperature regime, hygiene of technological equipment and working personnel, implementation of the *HACCP* system to identify potential hazards and risks);
- processing and packaging (monitoring key technological parameters, ensuring the absence of cross-contamination of raw materials and finished products, maintaining documentation in accordance with EU standards);
- storage and transportation of products (proper storage conditions, expiration date control, compliance with sanitary standards during transportation of livestock products).

In Ukraine, the main regulatory legal acts regulating veterinary and sanitary control of agricultural enterprises are the Laws of Ukraine «On Veterinary Medicine» (as amended on 04.10.2025), «On Basic Principles and Requirements for the Safety and Quality of Food Products» as amended on 07.11.2025), a number of subordinate legislation establishing requirements for the circulation of products of animal origin, state control and liability for identified violations. These regulatory documents determine the mandatory nature of both state control and control over compliance with sanitary standards on farms and meat processing facilities (Conter et al., 2025).

European legislation on veterinary and sanitary control of agricultural enterprises is based on Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official measures performed to ensure the application of food and feed law, animal health and welfare rules, plant health and plant protection products and Commission Implementing Regulation (EU) 2019/627 of 15 March 2019 laying down specific rules for the performance of official controls on meat production (Tankosić et al., 2022).

Regulation (EU) 2017/625 establishes uniform practical measures for official controls on products of animal origin intended for human consumption, establishes clear requirements for the planning, performance and documentation of official controls, including a risk-based approach, unified assessment criteria, electronic data exchange and monitoring of the implementation of measures, details controls on farms and on animal movements, defines requirements for ante-mortem/post-mortem inspection, the frequency of milk and meat inspections, as well as measures to be taken in the event of non-compliance.

Regulation 2019/627 sets out specific standards for animal health checks, pathogen testing methods and record-keeping of products of animal origin to ensure traceability and harmonization of controls across EU countries.

Comparative analysis shows that Ukrainian laws try to replicate the principles of European regulations, but have a number of differences. In particular, Ukraine less systematically applies a risk-based approach, there are no standardized methods for electronic monitoring of official controls and centralized reporting. In addition, detailed regulation of the process of inspection of farms and movement of animals in national legislation is often of a recommendatory nature, in contrast to the mandatory requirements of EU regulations.

The implementation of harmonized procedures increases the efficiency of veterinary and sanitary control, reduces the risk of food safety hazards, and ensures that products comply with international safety and quality standards. The main areas of improvement are automation of animal accounting, control of critical production points, and compliance with EU regulations at all stages of the farm-to-consumer chain.

Conclusion. The Ukrainian regulatory framework is largely adapted to European standards, but full harmonization requires improving the mechanisms of official control, implementing electronic monitoring systems, clearer regulation of on-farm inspections, and implementing a risk-based approach. The integration of these elements will ensure effective compliance with EU requirements and increase the safety of animal products in Ukrainian agricultural enterprises.

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DIAGNOSIS AND TREATMENT OF HYPOTHYREOSIS IN DOG (CASE REPORT)

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Hypothyroidism in dogs is a common endocrine disease caused by insufficient production of thyroid hormones, which significantly slows down metabolism and reduces the quality of life (Elgalfy et al., 2015). It has congenital or acquired origin and can be primary or secondary. The Primary form characterizes insufficient production of thyroid hormone. The secondary form is caused by an inadequate TSH production from the pituitary (Costa et al., 2016). Primary canine hypothyroidism, an endocrine disorder that causes imbalances in the hypothalamus-pituitary-thyroid axis, is a common cause of endocrine dermatoses, which frequently presents with dry brittle hair (Alves et al., 2021). Hypothyreosis has a variety of symptoms (obesity, lethargy, alopecia) and the need for lifelong treatment (Mooney, 2011). Measurement of free T4 by analogue immunoassay (fT4a) is popular but its ability to differentiate hypothyroidism from non-thyroidal illness (NTI) is unclear (Bennaim et al, 2022).

The aim of the research was to diagnose hypothyroidism in dogs and to demonstrate the effectiveness of a treatment scheme with thyroxine and omega 3 acid.

Clinical examination of the Chucky, a five-year-old Labrador Retriever revealed weight gain despite a stable appetite, reduced energy levels, dry skin, and significant hair loss. The owner also noted increased sensitivity to cold, ear infections, and a general decline in activity over the past few months. He was being fed a consistent diet of commercial dry food along with occasional boiled eggs. Body temperature was 101.1°F, heart beat was 88 bpm, quantity of respiratory movements were breath per minute. The dog was overweight, we noticed dry seborrhea and mild hair loss. Mild bradycardia was observed.