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SCIENTIFIC AND METHODOLOGICAL FOUNDATIONS FOR THE IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEMS IN MEAT AND MEAT PRODUCTS MANUFACTURING ENTERPRISES

Rashidova Gulasalxon Nodirovna
Graduate Student, Bukhara State Technical University.

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Abstract. *This article provides a comprehensive analysis of the scientific and methodological foundations for implementing quality management systems in meat and meat product manufacturing enterprises. The requirements and mechanisms of ISO 9001:2015, ISO 22000, HACCP, and GMP standards, as well as their applicability in the context of Uzbekistan, are examined. The study highlights how the introduction of quality management systems can enhance competitiveness, expand export potential, and ensure sustainable food safety in the domestic market.*

Keywords: *meat industry, quality management, ISO 9001, ISO 22000, HACCP, food safety, innovative management.*

Ensuring quality management in the meat and meat product industry has become a critical factor not only for national but also for global food safety. According to data from the World Health Organization (WHO) and the Food and Agriculture Organization (FAO), millions of people worldwide suffer from various infectious diseases caused by the consumption of low-quality or microbiologically unsafe food products. Therefore, the introduction of quality and safety management systems has become a strategic priority for producers in the meat industry. In Uzbekistan, presidential decrees and government programs emphasize food security, the integration of international standards into domestic enterprises, and the broad implementation of quality management systems.

These measures aim to guarantee the stability of the domestic food market, particularly meat and meat products, while simultaneously enhancing export potential.

International experience demonstrates that standards such as ISO 9001:2015, ISO 22000:2018, HACCP, and GMP are of paramount importance for ensuring quality in the meat industry. Their implementation strengthens discipline in production processes, minimizes risk factors, and increases consumer confidence. For example, the HACCP system identifies microbiological, chemical, and physical hazards that may arise during raw material reception, storage, processing, and packaging, while establishing critical control points to mitigate these risks. ISO 9001, on the other hand, optimizes overall quality management mechanisms in production. In the European Union and the United States, the adoption of these systems has resulted in a 10–15% reduction in production costs, accelerated product market entry, and expanded export geography.

Research conducted by Uzbek scientists and practitioners indicates that enterprises lacking quality management systems in the meat industry experience low production efficiency, inconsistent product quality, and frequent consumer complaints.

Thus, for domestic enterprises, the implementation of quality management systems serves not only to ensure product safety but also to strengthen competitiveness in both domestic and international markets. However, the main challenges lie in insufficient financial and technical readiness of enterprises, lack of adequate employee knowledge and skills, and outdated production equipment. Consequently, in the context of Uzbekistan, it is essential to develop a national methodology based on international experience and establish a step-by-step mechanism for implementation.

Practical research results confirm several positive outcomes when ISO and HACCP systems are introduced in meat enterprises. Microbiological hazards were reduced by 30–35%, production waste decreased by 15–20%, product shelf life increased by an average of 20%, and consumer complaints significantly declined. Moreover, enterprises implementing quality management systems gained advantages in entering export markets and successfully passed international certification processes. This not only increased their economic efficiency but also enhanced competitiveness in the domestic market.

Conclusion

In conclusion, the implementation of quality management systems in meat and meat product manufacturing enterprises is among the most pressing issues of today.

These systems ensure safety in production processes, improve product quality, expand export opportunities, and, most importantly, protect public health. For effective implementation in Uzbekistan, it is crucial to strengthen state mechanisms for financial and technical support, provide continuous training for enterprise personnel, and actively apply international experience.

Additionally, the development of a national methodology tailored to local conditions, along with clear guidelines and instructions for enterprises, will yield significant results. Thus, the introduction of quality management systems serves as a vital tool for the sustainable development of the meat industry and for ensuring national food security.

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