Dilemma and Response Path in the Process of Food Safety Supervision under the Perspective of Public Management

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Abstract: In today's society, food safety and public health have become important issues in our lives that cannot be ignored. With the development of the economy and the improvement of people's living standards, the food industry has also seen rapid development, but at the same time, it has also revealed some serious problems, the most prominent of which is the problem of food safety and public health regulation. Food safety is not only a public health issue, but also a social issue. It is not only related to the health and life safety of every individual, but also to the economic development and social stability of the country. Therefore, it is necessary to pay great attention to the problem of food safety and take effective measures to strengthen food safety supervision. Taking food safety supervision as the research object, this paper discusses the dilemmas and formative factors in the process of food safety supervision from the perspective of public management, and puts forward ideas to deal with them from the aspects of management system, legal regulation, and food source, aiming at providing reference suggestions to improve the quality of food safety in China.

1. Introduction

With the continuous improvement of living standards, people have higher requirements for food quality and safety. At present, China's food quality and safety management still has imperfections in system, supervision, technology and risk warning, which leads to more problems in food quality. At present, China's food quality and safety problems are mainly reflected in the contamination of food, pesticide residues, veterinary drug residues and food additive abuse. In the process of producing and processing food, food production enterprises do not fully implement quality and safety management measures for the food they produce and process, and fail to play a supervisory role, so that the quality of food is not effectively controlled.

With the progress and development of science and technology, some unscrupulous food production enterprises in order to reduce production costs, profiteering, in the production and processing of food to add toxic, harmful non-food raw materials, making the production of food...
quality and safety problems, so that the health of consumers can not be guaranteed\textsuperscript{[1]}. Therefore, China's food quality and safety management needs to be further strengthened and improved.

2. Analysis of the current situation of food safety and health management in China

As far as food safety is concerned, since the current Food Safety Law, Product Quality Law and other relevant laws and regulations have not yet supervised and managed food safety and public health at source, the current food market supervision system has not yet been fully rationalised, there is no scientific and efficient public health management system, and there are insufficient food inspection units and staffing; thirdly, food production and public hygiene management mainly relies on the state regulatory authorities, and it is difficult to rally the forces of social co-operation.

As far as public hygiene is concerned, firstly, the Government lacks professional public hygiene personnel to meet the ever-increasing public hygiene needs; secondly, there are poor communication channels between members of the public and enterprises; and lastly, the current regulatory bodies lack supervision of food products on the market. According to the major accidents in the last few years, most of the enterprises do not comply with the regulations and most of the customers are vulnerable groups. From these cases, we can see that the current laws and systems are not perfect enough. At the regulatory level, on the one hand, Chinese regulators lack professionalism and enforcement capabilities, and there is poor communication and co-ordination among the various regulatory bodies\textsuperscript{[2]}.

Currently, China has enacted a series of laws and policies to regulate market order and protect consumer rights and interests, but the laws and regulations on food safety and health related laws and regulations are still fragmented and lack systematicity, relevance and operability. The lack of a comprehensive standardisation system has made it difficult to make product disclosures in the market. Currently, many local norms in China are formulated and implemented by administrative organs, lacking uniformity and guidance, and most standards lag behind in comparison with social development and have limited implementation effects.

In addition, there is currently no effective product quality management system for Chinese enterprises due to the low cost of violating the law, while the Chinese government has some problems managing the production and operations of small and medium-sized enterprises (SMEs)\textsuperscript{[3]}, and there is insufficient law enforcement in the marketplace, resulting in constant violations.

3. Major factors affecting public food safety in China

3.1 Traditional Factors

Public food safety management is a very complex system that can involve many aspects. The traditional factors affecting food safety problems are biological, physical and chemical factors. In animal and plant rearing and cultivation, food production and processing, and food distribution and sales, if any of them are affected by the above factors, it will lead to food safety problems.

With the population also increasing and environmental pollution becoming more serious, it is inevitable that heavy metals are present in the soil, which has a serious impact on the growth of plants\textsuperscript{[4]}. For example, heavy metals such as gon, cadmium and lead will pollute water resources, which will then affect the irrigation of arable land, resulting in primary food safety not being guaranteed.

In addition, excessive heavy metals in water resources will affect the biological resources in river water or sea water, especially the growth of fish, some fish in heavy metal-excessive waters have been deformed, and if human beings accidentally eat this kind of fish, it will have the same effect on human health.
3.2 Non-traditional factors

People's concepts and ideas are constantly changing, the level of science and technology is also improving, so the food processing process will be applied to some new processes, new resources, new technologies, which will make the food safety affected, these influences can be summarised as non-traditional factors. These factors can be summarised as non-traditional factors, which can be seen in biology, toxicology and nutrition, and which have more or less impact on food safety.

Nowadays, one of the more widely used technologies in food processing is genetic modification. Introducing exogenous genes and then improving the shape of a certain organism and repairing the organism's genes, through which an organism containing exogenous genes is obtained, is called a gene function body, and can also be called a genetically modified organism. There are genetically modified plants, as well as genetically modified animals and microorganisms. For some time, food products that have undergone this treatment have been favoured by people\(^5\). However, with regard to the safety of genetically modified foods, some researchers believe that genetic modification can trigger contamination and that this contamination can lead to the development of organismal allergy syndromes, which can have toxic side effects on the organism. There are also some whether GM can cause damage to the human immune system and so on, these are worth exploring in depth.

3.3 Other Factors

Food safety supervision and management is of great significance to ensure food safety. At present, China's supervision and management of food safety is relatively weak, which has laid hidden dangers for food safety and gradually increased the safety risk. For example, some unscrupulous traders, in order to reduce production costs, use inferior materials and food additives to process food, which greatly increases the risk of food safety. For example, the recently reported "zombie meat", that is, overdue frozen meat, the use of such meat production and processing of food, may lead to consumption of diarrhoea; meat fat oxidation products will accelerate the aging of the human body; reduce the human body's immunity, the probability of cancer will also increase.

In addition, although the current level of development of the food industry has been relatively high, there are still some producers with a low level of technology. For example, some small food processing workshops, their production and processing conditions are relatively backward, hygienic conditions do not meet the standards. There are moulds, bacteria, viruses, parasites, etc. in the processing process, which poses a great safety hazard to food\(^6\).

4. Difficulties in food safety supervision under the perspective of public management

4.1 Inadequate supervision and management system

China's food industry is a large group, food safety supervision and management work can not rely only on departments, organisations, media. At present, China's food safety supervision and management work in the supervision and management of relatively few subjects, many areas are still departments, organisations, media supervision and management is the main, no increase in other supervision and management of the main body, resulting in food safety supervision and management of the quality and effectiveness of the unsatisfactory, unable to better provide protection for the quality of supervision.

At the same time, China's food production enterprises are more, all over the country in various regions, however, most of the food production enterprises are not aware of their own risks\(^7\), and have not established a perfect risk warning system. For example, the supply chain of dairy products mainly includes raw material preservation, product processing, storage and transport, market supply
and quality traceability, etc., and most of the dairy production enterprises in China have not established a perfect risk warning system for food quality and safety management according to the risk factors of each link of the dairy production supply chain.

4.2 Relevant laws and regulations need to be optimised

Although the supervision and management of food safety in China is increasing and has achieved significant results, there are still problems with the laws and regulations that need to be optimised in the supervision and management of food safety in China. The Chinese government has enacted and implemented the Food Safety Law of the People's Republic of China to regulate food safety.

The regulations, policies and standards of food quality and safety management require less disclosure of food quality and safety management information, which results in the lack of openness and transparency of food quality and safety information; the organisational structure of food quality and safety management lacks relative independence and requires multi-departmental collaboration, which results in unclear responsibilities and poor connectivity.

4.3 Failure of consumers to play a role

In China's food safety supervision and management, the role of consumer supervision and management can largely improve the effect of food safety supervision. However, in the process of actual supervision and management, the relevant departments need to reflect their own leading role, but also need the majority of consumers to play their own role, actively participate in the joint supervision and management of food safety, and escort the supervision and management of food safety.

In the current food safety supervision and management, there is a situation in which consumers fail to play a supervisory role, especially in the actual food consumption, some consumers consider their own interests, usually choose to buy some low-priced goods, resulting in the quality of goods can not be effectively guaranteed. In the event of quality problems, consumers are afraid to report the problem to the relevant government and media departments out of fear, which is a common phenomenon in social development, making many unscrupulous traders ignore the law and do whatever they want.

5. Response Path of Food Safety Supervision under the Perspective of Public Management

5.1 Constructing a perfect food quality and safety management system

In order to further improve China's food safety management system, the Chinese government should implement the food safety management system from a legal perspective. For example, food quality and safety supervision and law enforcement departments should actively apply the Food Safety Law and other food quality and safety related laws and regulations to the actual law enforcement, so as to ensure that the law enforcement departments comply with the law. At present, China has issued laws and regulations on food quality and safety management, in the specific implementation process, the law enforcement departments should be based on the law enforcement authority, law enforcement content and the actual situation of the department of food quality and safety management of the provisions of the law to be refined[^8], and then make food quality and safety management work more in line with the needs of the new era.
5.2 Improve the Regulatory System of Food Quality and Safety Management

In view of the loopholes in China's food quality and safety management and supervision model, the relevant departments should further refine the functions of the departments and clarify the responsible subjects of management according to the relevant laws and regulations of China's food quality and safety management. At the same time, a law enforcement platform for sharing information resources among relevant departments should be established to realise the sharing of law enforcement information, to further ensure the linkage, constraints and rationality of law enforcement among various departments, and to make up for the gaps and loopholes in the supervision and management of food quality and safety.

At the same time, Chinese food production enterprises and food quality and safety regulatory authorities need to further strengthen their emergency response capabilities to crisis issues. Food production enterprises should scientifically build quality monitoring points and supervision networks according to the process of food production and processing and the nature of products, make good records of each production and processing link, and regularly summarise and analyse the information of monitoring and recording, gradually improve the risk warning mechanism of food quality and safety, and enhance the risk warning capacity. Food quality and safety regulatory authorities should be based on the actual situation of food production enterprises to develop a scientific food quality and safety assessment mechanism, so that food quality and safety management of consumer rights and interests for effective protection.

5.3 Food production enterprises to improve food production technology

For the production technology problems of food production enterprises, enterprise managers should be solved from two aspects. In the selection of food raw materials, business managers should develop a strict selection process of raw materials, refine the selection of raw materials, strengthen the quality supervision of raw materials to ensure that the quality of raw materials to meet the safety standards of food production. In the food production process, food companies should introduce advanced science and technology, not only to use different food production processes, such as sterilisation technology, but also need to detect and trace the drug residues in food, so as to ensure the quality and safety of food.

At the same time, in order to further promote the development of food safety supervision and management work, should also implement the relevant concepts and requirements of public management, the need to strengthen consumer awareness of food safety, enhance consumer rights and safety awareness, so that consumers in the source to control the quality of food, and no longer because of cheaper to buy some of the problematic and safety hazards of the product. Consumers can play a direct supervisory role and advantage in safety supervision and management, and are an important bridge of interaction and communication between government departments and food vendors.

Therefore, all regions and government departments should do a good job in food safety publicity, which can be carried out through platforms such as television, WeChat, Weibo and Jitterbug, etc. Through publicity, we can strengthen consumers' awareness of food safety and further enhance the impact of publicity on food safety and quality management.

6. Conclusion

At present, although China attaches great importance to the management of food quality and safety, but in the implementation of specific work lack of relevance and wholeness, can not be clear from the actual situation of food quality and safety management system and norms, and can not do
with the actual production situation of food production enterprises. Therefore, with regard to food safety and public health management, it is necessary to approach the issue from multiple perspectives, and to improve food safety, it is necessary to take a variety of measures, ultimately in order to protect the rights and interests of consumers.

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