

Importance of Food Inspection Technology in Safeguarding Food Safety

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ABSTRACT. Food safety is related to people's health, so this issue attracts the attention of the public. In order to safeguard food safety, a variety of food inspection technologies are used to detect whether the content of various substances in food conforms to the relevant provisions. Although this technology safeguards food safety, promotes the sustainable development of the food industry, and protects the legitimate rights and interests of consumers, due to certain limitations of the technology, there are some problems in the detection, and some potential dangers can't be identified. Therefore, China should strengthen the research and development of relevant technologies, introduce advanced food inspection technology, build a perfect operation mechanism, standardize the relevant standards of food inspection, and improve the comprehensive quality of inspection personnel, so as to ensure the full play of the effectiveness of food inspection technology.

KEYWORDS: Food inspection technology, Food safety, Importance

1. Introduction

In recent years, there are many food safety problems in China's food industry, such as microbial pollution, chemical pollution and so on. These substances have caused a huge threat to people's health, but also threatened the stability of society. In view of this situation, it is particularly important to strengthen food inspection. Advanced food detection technology should be adopted. According to the quality indicators of food safety, researchers can judge whether various substances in food exceed the standard, so as to safeguard food safety, eliminate the threat factors, ensure the health of people and the healthy and stable development of enterprises.

2. Importance of Food Inspection Technology in Safeguarding Food Safety

2.1 Safeguard Food Safety

Some food additives are inevitably used in food production. As for food additives, edible food additives and their dosage are stipulated in the Food Safety Law, and relevant provisions are also made for pesticide residues, biological toxins, heavy metals and other pollutants in food related products. In order to make huge profits, some enterprises use some illegal additives in the production process, such as adding melamine in milk powder. These additives cause great harm to human body and seriously threaten people's life and health. The food inspection technology is to sample and inspect the food after the completion of production, clarify the content of food additives, and determine whether there are additives that do not meet the requirements, so as to determine whether the food meets the food standards, crack down on illegal behaviors in food production, and safeguard food safety.

2.2 Promote the Healthy and Stable Development of Enterprises

The application of food inspection technology in the food industry can provide important technical means for food quality control, evaluation, management and trade, strengthen the inspection of food and do a good job in food quality control. At the same time, this technology can ring the alarm bell of safety in production of enterprises and avoid illegal behaviors of enterprises. In terms of product evaluation, food inspection institutions use precision instruments to test data more accurately, which provides an important basis for product evaluation. Enterprises adjust the production formula according to this evaluation content, so as to make it more in line with the production standards and food taste, create enterprise proprietary brands, obtain more economic benefits, and achieve sustainable development in the new

era.

2.3 Maintain Order of the Industry and Rights and Interests of Consumers

Most of the existing food inspection institutions in China belong to public institutions. While carrying out food inspection work, they also have certain supervision functions. According to the samples tested, they issue detailed test reports, and some problems will be reflected to the relevant departments. The relevant departments will carry out investigation work to timely curb the illegal activities of enterprises and prevent some unqualified products from entering the market, maintaining the order of the industry and protecting the rights and interests of consumers.

3. Limitations of Food Inspection Technology

3.1 Inspection Methods

There are many problems in the relevant inspection methods of food inspection technology. First of all, the application of some inspection methods is lack of relevant theoretical knowledge, which can't stand scientific demonstration. This defect leads to the inspection results may be error in the actual application, and some substances may not be detected. In the same project, using different inspection methods, the inspection results are quite different. Second, the related standards of inspection methods are not unified, causing problems in the inspection. Third, there is a lag in equipment. Some institutions use imported advanced equipment, while some institutions use domestic equipment. Different equipment leads to differences in inspection results. The accuracy of domestic inspection instruments is lower than that of imported instruments, so the error in the inspection is also large. In addition, China has a variety of additives, some of which can't be detected by domestic instruments.

3.2 Food Standards

With the development of the times, science and technology, the relevant standards of food inspection are constantly updated, but some of them are still lagging behind. Among the current standards, most of the effective standards are the standards of the last century. Nowadays, with the increase of additives and the updating of production technology and inspection technology, the standards are out of touch with them. Many foods adopt the same standard, and the same food uses multiple standards, which leads to the evaluation of a food needs to look through a lot of data to find the corresponding indicators. In addition, there are some foods without standards. In this case, enterprises will formulate a standard according to their own experience. However, this standard does not meet the requirements in most cases, which affects the quality and efficiency of food inspection.

3.3 Failure to Identify Potential Hazards

In the process of food production and processing, there are some human factors and environmental pollution factors. These factors lead to a certain proportion of potential risks in food, such as unreasonable artificial additives, environmental pollution elements and so on. Some current food inspection technologies can't detect the contents of food carefully, and can't identify the potential risks.

4. Effective Strategies to Break through the Limitations of Food Inspection Technology

4.1 Build a Perfect Food Inspection Operation Mechanism

To break through the limitations of food detection technology, we should first build a perfect food inspection operation mechanism, promote food inspection institutions to develop in the direction of modernization, introduce advanced supporting inspection systems, improve inspection accuracy, and do a good job in related management. To provide effective guarantee for the quality of food, we should give full play to the supervision function of food inspection institutions. The government should also recognize the important position of food inspection institutions, increase construction efforts, build market platforms for inspection institutions, attract private enterprises to invest, and provide more special funds for the construction of food inspection institutions, so as to realize the continuous updating of technical equipment, improve the scientific and technological content of inspection technology, reduce inspection errors, and realize the sustainable development of food inspection institutions.

4.2 Improve Equipment Performance and Introduce Advanced Technology

Food inspection equipment in different regions has certain differences, which leads to great differences in inspection results. In order to improve the quality of food inspection, it is necessary to unify the instruments and equipment of different regions and different inspection departments, and provide food inspection instruments with complete functions to meet the needs of food inspection and ensure the accuracy of the results. In terms of inspection technology, we should pay attention to the introduction of advanced technology and reasonable application of biotechnology, so as to ensure the accuracy and sensitivity of food inspection. In addition, it is also necessary to improve the self-inspection ability of enterprises. During the process of food production and processing, enterprises should use inspection technology to check whether there are excessive substances in food according to their own needs and relevant equipment and inspection technology, so as to find out the food with quality problems in time and adopt targeted solutions, so as to ensure the economic benefits of enterprises.

4.3 Improve Food Safety and Quality Supervision Standards

The food safety and quality supervision standards should be improved and the production and processing of food need to be standardized. Enterprises need to strictly implement the provisions and put an end to some illegal acts. The relevant regulatory departments also need to implement the supervision and management system, do a good job in the supervision and management of all aspects of production and processing, and find out the problems in time. At the same time, the standards for food inspection should be clarified, and the food without standards also needs to be updated in time to ensure that enterprises have rules to follow. Meanwhile, it is also conducive to the efficient implementation of food inspection technology. Food inspection institutions carry out food evaluation according to the standards and test results, which provides an important basis for the production and management of enterprises.

4.4 Improve the Comprehensive Quality of Inspection Personnel

Food inspection institutions should pay attention to strengthen the professional skills training of inspection personnel, guide them to master the specific operation of advanced technology and equipment, so as to ensure the efficiency of inspection technology and reduce the influencing factors in the process of inspection as far as possible, improve the accuracy of the inspection results, give full play to the inspection and supervision functions of food inspection institutions, safeguard food safety and maintain the order of the industry.

5. Conclusion

In a word, the quality and safety of food is related to the safety and health of the masses of people. Using food inspection technology to do a good job in food inspection can effectively detect the substances that exceed the standard or do not meet the requirements, ring the alarm bell of safe production in enterprises, and safeguard the quality and safety of food. Although at present, there are still many problems in China's food inspection technology, which affect the quality and efficiency of food inspection, with the continuous development of technology, the unceasing attention of the society and the public, it is bound to promote the continuous improvement of food inspection technology, introduce advanced inspection instruments, increase the research and development of technology, unify the food inspection standards and update them in time, give full play to the supervision responsibilities of food inspection institutions to ensure the standardized operation of food production industry.

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