# The Role and Application of Food Safety Risk Analysis in Food Quality Management

## Bao Kangjun

South China Agricultural University, Guangzhou, Guangdong, China, 510640

**Abstract:** Food safety has always been the focus of people's attention, and the effective development of food safety risk analysis in food quality management can provide a good technical guarantee for the development of food safety. Based on this, this paper mainly explains the significance, existing problems, and the strategies of food safety risk analysis in food quality management, and its main purpose is to provide a theoretical basis for the enhancement of the level of food quality management work in China by analyzing the relevant content, so as to ensure that the level of food quality management in China can be effectively enhanced.

Keywords: food quality management; risk analysis; risk assessment

### 1. Introduction

At present, the actual situation of food safety risk analysis in the process of food quality management of China is not ideal, and it is not paid enough attention by many enterprises, resulting in a lot of problems when the relevant work is carried out. In this regard, the relevant departments to enhance the level of food quality management must strengthen the degree of attention to food safety risk analysis. Only by doing a good job of food safety risk analysis can we ensure that food quality management level in China can be effectively improved. This paper mainly analyzes and explores the great significance of food quality management of food safety risk analysis work from several aspects, and I hope to be able to provide relevant workers with certain reference.

### 2. Overview of food safety risk analysis

Food safety risk analysis refers to a scientific method used in evaluating food safety, which is to effectively control food safety and ensure people's life health and property safety by investigating and analyzing food safety-related factors. When analyzing food safety risks, it mainly includes risk factor analysis and hazard identification. When analyzing food safety risks, it is mainly through the investigation and analysis of various safety factors in food, so as to effectively solve various problems in food quality management. Therefore, it is necessary to pay more attention to risk factors in practical work.

### 2.1. Risk factor analysis

Risk factor analysis mainly refers to the investigation and analysis of risk factors that may occur in food production, processing, transportation and other links when conducting food safety risk analysis. In practice, the analysis of risk factors mainly includes food raw materials, food additives, food containers and packaging materials, production equipment and environmental pollution. In practice, due to the diversity of food safety risk factors, many factors need to be fully taken into account when investigating and analyzing these risk factors. However, from the actual situation, due to the existence of many risk factors, it should also be noted that these risk factors have a certain complexity when investigating and analyzing them. Moreover, in practice, due to the influence of many factors, it will also lead to some problems. At the same time, it should be noted that it will also lead to certain problems in food safety management due to the influence of technical level, human resources, social environment and other factors in actual work. When analyzing the problems arising from food quality management, it mainly refers to a relevant problem arising from the investigation and analysis of some potential safety hazards that may occur in the process of food production. Therefore, various influencing factors need to be fully considered when investigating and analyzing these problems, and

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effective measures can be taken to solve them<sup>[1]</sup>.

## 2.2. Hazard identification

In practice, it should be noted that because the methods used in hazard identification are relatively complex and are applied in many contents, they need to be continuously optimized and improved. In this process, hazard identification can be divided into two aspects, namely, chemical hazard identification and biological hazard identification. In practice, it is necessary to analyze and investigate these two types of hazard factors in combination with the actual situation. In the specific analysis, it should be noted that because the content of each link needs to be investigated and analyzed according to the actual situation when conducting food safety risk analysis, it is necessary to continuously optimize and improve the content of each link in practical work. At the same time, it should also be noted that because there are many risk factors affecting food safety in actual work, it is necessary to analyze and investigate the content of each link according to the specific situation.

### 3. The role of food safety risk analysis in food quality management

In recent years, China's social economy has continued to develop, and people's living standards are also constantly improving. In the context of the continuous improvement of people's requirements for quality of life, food quality management has become the focus of social attention. If we want to fundamentally improve the level of food quality management, we must start with food safety risk analysis. First of all, it can effectively prevent and control food safety issues; secondly, it can provide an important basis for food safety supervision and management; finally, it can provide effective reference for the improvement of China's food safety-related laws and regulations in the future. The realization of these three functions is also the main means to promote the effective development of food quality management in China. This paper analyzes and discusses the role and application of food safety risk analysis in food quality management, and I hope to provide a certain reference for the development of food quality management in China.

## 3.1. Effective prevention and control of food safety issues

At present, the level of social and economic development in China is constantly improving, and people's quality of life is gradually improving. More and more people have begun to pay attention to food quality, and food safety is the main factor affecting people's health at present. It can be seen that the effective development of food safety risk analysis can provide good technical support for the improvement of food quality management from the current situation of food quality management in China. Food safety risk analysis in food quality management can effectively prevent and control food safety problems, which are mainly manifested in the following points: First, it can effectively prevent and control the emergence of food safety problems. In recent years, there have been many food safety incidents in China, which have not only pose a serious threat to people's health, but also have a serious impact on China's food industry. In order to achieve effective prevention and control of these events, it is necessary to give full play to the positive role of food safety risk analysis. Through food safety risk analysis, we can carry out a comprehensive and systematic analysis of the causes of these incidents, and formulate corresponding solutions on this basis, so as to achieve effective prevention and control of food quality problems. Second, it can provide effective reference for food quality management. Through comprehensive analysis and research on food quality risk analysis, it can provide an effective reference for China's food quality management in the future. Especially in the context of the continuous improvement of relevant laws and regulations in China, it can also provide an important reference for it through the analysis of food safety risks<sup>[2]</sup>.

## 3.2. Providing an important basis for food safety supervision and management

In the process of carrying out the specific work, in order to ensure the quality of its work, it is necessary to effectively formulate the relevant basis, and the content on which the food safety risk analysis is based includes *the Regulations for the Implementation of the Food Safety Law* and other laws and regulations, thus providing important basis for food safety supervision and management. In addition, the content of food safety risk analysis also includes food production enterprises, food business units and catering service units, thus providing an important basis for the realization of food safety supervision of these units. In a word, through the effective formulation of the content in the

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process of food safety risk analysis, it can provide an effective basis for the supervision of food quality and safety, thus laying a good foundation for the effective development of food quality management.

# 3.3. Providing effective reference for the improvement of China's food safety-related laws and regulations in the future

In the construction of relevant laws and regulations on food safety in China, in order to realize the effective development of food quality management, the relevant national departments should not only give full play to their positive role in food quality management, but also give full play to their active role in the improvement of food safety-related laws and regulations. The realization of this positive role also needs to give full play to the important role of food safety risk analysis, so as to provide an effective reference for the improvement of relevant laws and regulations on food quality management in China in the future. In order to effectively assess the risks in the process of food production, it is necessary to have a detailed understanding of the possible safety risks in the process of food production, and on this basis, a comprehensive analysis should be carried on the possible risks, and scientific, reasonable and effective solutions on this basis should be formulated. Then, from the perspective of providing reference for the improvement of laws and regulations, it is mainly to give full play to the positive role of food safety risk analysis in the improvement of laws and regulations. In order to realize the effective implementation of the improvement of laws and regulations, it is necessary to conduct a comprehensive analysis of the evaluation results of food safety risk analysis. In this process, the evaluation results of food safety risk analysis have become an important reference for the improvement of laws and regulations. Therefore, in the process of continuous development of food quality management in China, it is necessary to give full play to the positive role of food safety risk analysis in the improvement of laws and regulations in order to achieve the smooth improvement of food safety-related laws and regulations. Only in this way can we effectively promote the continuous improvement of China's food quality management [3].

#### 4. Measures to improve the level of food quality management

#### 4.1. Comprehensively strengthening food quality management

We should pay attention to food production and processing. Food production and processing is a key link in food quality management. Therefore, it is necessary to pay attention to its effective application in actual food quality management. In order to further strengthen the actual effect of food quality management, it is necessary to continuously improve and innovate relevant systems, so as to better apply food safety risk analysis. At the same time, a scientific and reasonable management system should be formulated in combination with the development status and requirements of relevant industries. Then, it is necessary to strengthen the update and maintenance of relevant facilities and equipment in the food processing process. Because different food processing processes have different requirements for facilities and equipment, it is necessary to strengthen the renewal and maintenance of facilities and equipment in actual food quality management, and further improve the professional quality of relevant staff through effective management of facilities and equipment. Finally, it is necessary to strengthen the cultivation of the comprehensive quality of staff. In actual work, we should pay attention to cultivating the comprehensive quality of relevant staff in food quality management, so as to provide a reliable guarantee for improving the level of food quality management in China. And then it is necessary to strengthen the construction of relevant standard systems. In order to effectively apply the relevant standard system in actual food quality management, it needs to be considered from the formulation and improvement of relevant standards.

Attention should be paid to the improvement and formulation of relevant laws and regulations and normative documents such as *The Product Quality Law*. And the research and summary of the development status of relevant industries and new technologies and processes should be paid attention to. At the same time, we should also continuously improve the construction of current relevant standard system in China according to the actual situation, so that a guarantee is provided for the improvement of China's economic level <sup>[4]</sup>.

#### 4.2. Improving the relevant laws, regulations and standard system

As far as China's food quality management work is concerned, the relevant laws, regulations and standard systems are not perfect, which has caused certain obstacles to the development of food safety

risk analysis. In practice, we should first have an in-depth understanding of the current relevant laws, regulations and standard systems in China, and then on this basis, we should pay more attention to the analysis of food safety risks in food quality management, and formulate and improve the corresponding laws, regulations and standard systems according to the actual situation in China at this stage. In addition, on this basis, the specific process of food safety risk analysis in food quality management should also be comprehensively optimized and improved. For example, before the production and processing of food, we should have a comprehensive understanding of its production environment and products, and solve the safety hazards in the production environment in a timely manner, so as to ensure product quality and provide a reliable guarantee for consumers. In addition, when carrying out food safety risk analysis in food quality management, we should also strengthen the formulation and improvement of relevant standards, and strictly implement the provisions of relevant standards on this basis <sup>[5]</sup>.

### 4.3. Improving the level of food safety risk analysis of relevant departments

In food quality management, we should comprehensively pay more attention to food safety risk analysis and strengthen the application effect of food safety risk analysis from all aspects. On this basis, we should also strengthen the training of relevant personnel from all aspects and provide them with a better working platform by continuously improving their comprehensive quality and professional skills, so as to effectively promote the smooth development of food safety risk analysis in food quality management. Then, it is necessary to strengthen the supervision of relevant departments. On this basis, we should also comprehensively strengthen the supervision of relevant departments and provide a reliable guarantee for the improvement of China's economic level through strict supervision and management in specific work.

In the context of the new era, in order to better improve the level of food safety risk analysis in China's food quality management, each department must constantly improve its own management level and management quality, and effectively apply it to food quality management. At the same time, it should also be strengthened and improved from many aspects, so as to provide a reliable guarantee for the improvement of China's economic level <sup>[6]</sup>.

## 5. Conclusion

At present, with the continuous improvement of China's economic level, food safety has also become the focus of people's attention. Therefore, in order to effectively protect the health of consumers and improve China's economic level and people's quality of life, it is necessary to strengthen the effective application of food safety risk analysis in food quality management. For regulators, in order to realize the effective application of food safety risk analysis in regulatory authorities, it is necessary to improve the professional level of regulators, and at the same time, regular training and education of regulators should be conducted. For production enterprises, in order to realize the effective application of food safety risk analysis in production enterprises, it is necessary to strengthen food safety risk monitoring, build a sound food safety risk assessment system, and improve the comprehensive ability of risk managers.

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