Study on Food and Nutrition Services Quality Management Program

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ABSTRACT

There are a range of Quality Assurance (QA) programmers available to the food industry, such as GMP (Good Manufacturing Practices), HACCP (Hazard Analysis. Essential Control Points), ISO (Standardization International Organization) standards. For food quality and safety assurance, these systems and their combinations are recommended. Agri-food production involves a particular approach in order to meet the desired level of quality. It is important to know to what degree the systems relate to the overall product quality and to balance the methods used to achieve the goals of quality and safety.

Keywords – *Food, Quality, Safety Management Systems.*

INTRODUCTION

Food safety remains crucial amid the tremendous efforts made by food safety agencies, experts and industry, and frequently comes to the attention of the media with outbreaks that can carry a stack of numerous negative consequences. Significant events such as the 2000 BSE, the 1999 dioxin or PCB crisis and others have questioned the efficacy of food quality assurance and food safety management systems and have shown that new tools are required to supplement the current systems. The medical costs incurred the economic losses that can badly shake local small businesses and, least but not least, the confidence of customers must be taken into account when determining the negative effects. The safety paradigm is that, while food is safer, high levels of uncertainty control the attitude of consumers. In this changing environment, however, we need to accept the EU authorities' efforts to regain public confidence and implement new legislation and better communicate concerns related to food safety. An significant feature of the food industry is that manufacturers have to follow both safety and quality standards for their goods in order to cope with consumer demands and legal requirements. With multiple options in the form of different quality and/or management systems, food producers should choose the most suitable choice for their particular activities and develop, record and implement successful quality and safety management systems (van der Speigel et. al., 2003).

Today, systems such as GMPs (Good Manufacturing Practices), GHPs (Good Hygiene Practices), GAPs (Good Agricultural Practices) or other prerequisite systems and HACCP (Hazard Analysis. Vital Control Points) (van der Speigel et al., 2003) are available among the available Quality Assurance (QA) systems. Food quality and safety management systems: a brief analysis of the person and integrated

Individual quality and/or safety management systems for food industry - A quality management system (QMS) can be defined as a collection of organised activities to guide and monitor an organisation in order to continuously improve the efficiency and effectiveness of its performance. Food quality is a complicated term which can only be measured in relation to food safety. Food must comply with: legislative requirements; technical criteria; hygiene requirements; transport and handling requirements; trade conditions and meet its intended usage in order to be considered safe for consumption. The relationship between quality and safety is complicated and while safety should not be treated as a fully independent element of quality, the awareness of the complexity of both concepts led to the need to independently handle them. In fact, the rationale behind the distinction between food safety and quality was the need to put the principle of safety first and, above all, the other aspects of quality. The outcome can be categorized into quality assurance systems (QA) that provide the specifications (GMPs, GHPs, GAPs) and HACCP; ISO or TQM quality management systems (QMS); and integrated systems (IS) such as ISO 22000.

The systems can be classified according to the extent of activities they cover, in:

- Basic safety systems: prerequisites (GAPs, GMPs, GLPs, etc.);
- advanced safety systems such as HACCP;
- integrated food safety management – ISO 22000;
- basic quality management systems - ISO 9001;
- Advanced quality management systems - ISO 9004.

Below is a section of the quality assurance processes and prerequisite programmes implemented by the sector. Practices of successful manufacturing - GMP. The minimum sanitary and processing requirements for food companies are GMPs, as specified by the Food and Drug Administration in 21 CFR section 110. The fundamental goal of GMP is to take the steps required to ensure compliance with all basic quality and safety criteria, such as:

Elimination, prevention, minimization of all product failures in the broadest sense;

Consistently yields safe, ensuring certain quality uniformity.

Specific environmental and operating requirements that are appropriate for the development of healthy, wholesome food The General Principles of Food Hygiene of the Codex Alimentarius define the basic conditions and practises that are required for foodstuffs intended for international trade. In addition to the specifications laid down in legislation, industry also adopts policies and processes that are unique to their activities. GMP guidelines are not prescriptive

guidelines for how goods should be made. They are a set of general principles that during development must be followed. When a business develops its quality programme and production process, there can be several ways in which it can satisfy GMP requirements. It is the duty of the organization to decide the quality process that is most reliable and successful. Examination of Threats. Essential points of control-HACCP.

HACCP is a preventive, proactive and systemic approach to food safety that relies on all established associated health threats in the food chain to be detected and monitored. The seven-principled structure was designed to monitor biological, chemical and physical hazards resulting from the processing of raw materials through the production, delivery and consumption of the finished product. According to Codex Alimentations (Alinorm 97/13A, Appendix III), food protection is mainly ensured by source monitoring, product design and process control and the implementation of good hygienic practices throughout the packaging (including labeling), processing, handling, delivery, storage, selling, preparation and use of goods, in accordance with the application of the HACCP method. The development of healthy food products demands that a stable base of prerequisite programmers be established on the HACCP framework.

While pre-requisite programmers may have an effect on food safety, they are also concerned with ensuring that food is nutritious and ready for consumption. HACCP proposals are smaller in nature and are limited to ensuring that food is safe to eat (FDA, 1997). In the year 2000, when three standards (9001, 9002, and 9003) were merged into one, named 9001, the ISO 9000 set of standards had a significant redesign. Procedures for design and development are only necessary if a company is in fact involved in the creation and development of new products. By simply bringing the idea of process management front and centre, ISO 9001 allowed a drastic shift in thinking. Instead of focusing only on inspection of the finished product, process management relates to the control and optimization of the tasks and activities of an organization. In order to incorporate quality into the business structure and to avoid turning over the quality functions to junior managers, this standard often required the participation of upper management. Another purpose of the standard is to increase productivity by using statistical instruments to determine the efficacy of tasks and activities by process output assessment. Expectations of continuous process improvement and customer satisfaction monitoring are clearly set out in the concepts of standards.

ISO 9004 goes beyond ISO 9001 and offers advice on how to continuously develop the quality management system of your company. Not only one's clients, but also: employees; owners; suppliers; society in general will benefit from this. ISO 22000:2005 is a standard for food safety management built based on the ISO 9001 methodology. The standard was created primarily to control the protection of food. ISO 22000:2005 describes criteria that allow an organization to:

- To plan, implement, operate, maintain and update a food safety management system aimed at providing products that, according to their intended use, are safe for the consumer;

- To demonstrate compliance with food safety requirements;

- To evaluate and assess customer requirements and demonstrate conformity with those mutually agreed customer requirements that relate to food safety, in order to enhance customer satisfaction;
- To effectively communicate food safety issues to their suppliers, customers and relevant interested parties in the food chain;
- To ensure that the organization is consistent with the declaration of food safety policy;
- To demonstrate such conformity to relevant interested parties;
- To seek certification or registration of its food safety management system by an external organization, or make a self-assessment or self-declaration of conformity to ISO 22000:2005.

Absolute Quality Management-TQM is an integrative management philosophy for the continuous improvement of product and process quality TQM works on the assumption that everyone involved in the manufacturing or services provided by a company is responsible for the quality of goods and processes Integrated Food Industry Approaches - Agri-food production requires particular approaches to achieve the desired level of quality. To what extent the systems contribute to the overall quality, it is necessary to know.

The successful integration of the individual systems listed above will enhance the organization's efficiency. Efstratiadis and Arvanitoyannis (2000) noted that HACCP not only helps to provide healthy food items as part of the quality system, but also ensures a smoother and more successful implementation of the entire quality system. It is important to distinguish between assurance and management terminology. The term assurance refers to a product itself and includes both safety assurance mechanisms (GMP, GHP and HACCP) and Quality Assurance Control Points (QACP), the latter of which refers to quality assurance rather than safety assurance. Maintenance and/or incorporation of the all the other quality characteristics of the food (nutritional, sensory and convenience values) in quality assurance systems is not requested by regulation, albeit desirable by customers.

On the other hand, in terms of product quality (including safety), the term management refers to the overall structure of a business and includes quality management systems -QMS (ISO-9000, ISO-14000, etc.) as well as TQM. ISO 22000, ISO 9000, ISO14000 and/or ISO 18000 are voluntarily introduced systems known as quality assurance and management systems. By improving processes and procedures, ISO 9001 can play an important role within TQM, but it is a small part of TQM's activities. Thus, with an improvement in the level of understanding of the relationship between all quality and safety systems, QMS efficiency will be dramatically improved (Figure 1). In order to enhance the performance of these systems, food manufacturers should combine or incorporate systems to ensure that all the safety aspects of food and the requisite quality characteristics are protected. HACCP standards, for example, are frequently paired with ISO 9001 in order to achieve the technical and management challenges of food safety and quality. ISO 9001 can also be useful for applying HACCP.

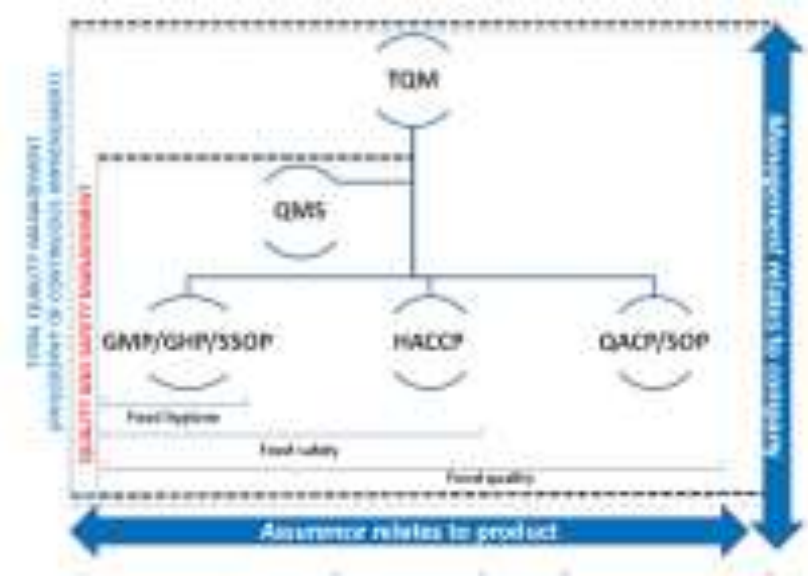

Figure 1. Relationship between the quality systems in food industry

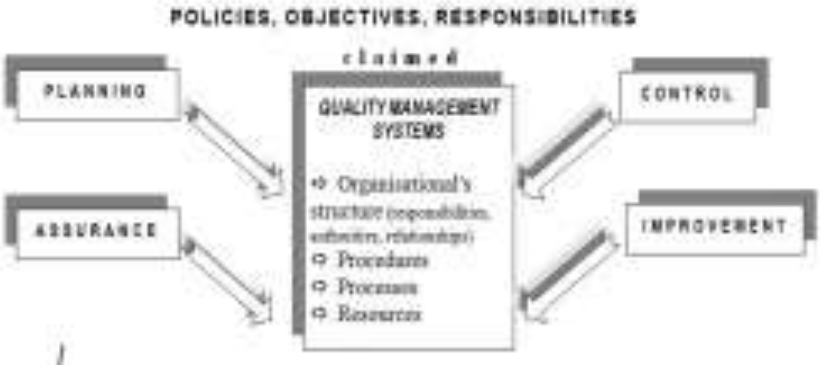

Figure 2. Implementing QMS (Teodoru, 1993)

In addition, food producers are required by law to apply the principles of HACCP, while other programmers are implemented on a voluntary basis in the food industry. An integrated model of the basic requirements for the food sector is presented in Table 1. This can be accomplished by implementing a formal and hierarchical framework, regulating operations, methods, procedures and resources according to the standards that form the basis for quality and hygiene systems, including the HACCP, ISO 9001 and 14000 series, because assurance of healthy production and safe food products are mandatory requirements for the food industry (Early, 1995). An alternative to food organizations that do not follow ISO 9001 and want an efficient food safety management system is offered by the standard ISO 22000:2005.

CONCLUSIONS

Effective implementation of programmers for food quality and safety management is a must today. In this paper, along with the identification and review of the factors that may affect the implementation process, a brief analysis of the individual and integrated/advanced food quality

and safety management systems was carried out. The integrated system's effectiveness is dependent on the relationship between internal, external and systemic factors. In addition to these variables, the food industry must balance quality assurance and safety management systems, choose the right ones based on its resources and requirements, and incorporate appropriate tools to continually assess and evaluate the performance of individual or advanced/integrated management systems.

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