

# Chapter 1

## Food Quality and Safety Regulation Systems at a Glance

**Dixit V. Bhalani**

*Central Salt and Marine Chemicals Research Institute, India*

**Arvind Kumar Singh Chandel**

*Central Salt and Marine Chemicals Research Institute, India*

**Poonam Singh Thakur**

*Rashtrasant Tukadoji Maharaj Nagpur University, India*

### ABSTRACT

*The quality and safety of all food products are the essential parameter for both ends manufactures and end consumers. This parameter of the food products we cannot overlook or liberalize in any situation. More than two-thirds of diseases are spread through the contaminated or spoiled food source. Looking at the importance of quality and safety management issue, the various governments made a series of rules and regulations for the assessment of food products. This chapter explains the role of various assessment agencies and their rights and workflows.*

### INTRODUCTION

With the correct ventures and assets, agribusiness can give satisfactory, moderate, protected and nutritious nourishment to everybody, all over the place, each day. However, notwithstanding critical advance, the world keeps on bearing a triple weight of lack of healthy sustenance. As indicated by 2016 information, around 800 million individuals around the world one of every four individuals in Sub-Saharan Africa and one out of six individuals in South Asia - still did not expend their base dietary vitality needs. Less advance has been accomplished in handling different types of ailing health. More than 2 billion individuals do not have the micronutrients required for development, improvement and malady anticipation. More than 2 billion individuals experience the ill effects of the antagonistic wellbeing impacts of being overweight or fat. Tainted sustenance is likewise a broad issue, affecting the wellbeing of 1 out of 10

DOI: 10.4018/978-1-7998-5354-1.ch001

individuals internationally every year and contrarily influencing the livelihoods of agriculturists, nourishment organizations and exchange. Hunger and nourishment borne ailments force huge present and future human, financial, social and monetary expenses on nations. Lessening these expenses requires multi-sectoral approaches: There is extraordinary potential for powerful mediations through horticulture and the sustenance framework generally speaking.

Regardless of the enormous endeavours paid by the nourishment security experts, masters and industry, sustenance wellbeing still stays basic and frequently is coming into spotlights pulling in media's consideration with flare-ups that can bring a pile of different negative outcomes. Such real occasions like BSE in 2000, dioxin or PCB (polychlorinated biphenyls) emergency in 1999 and others doubted the viability of the sustenance quality confirmation frameworks and nourishment security administration connected and exhibited that new device is expected to supplement the genuine frameworks set up. While assessing the negative outcomes one need to consider the restorative expenses brought about, the practical misfortunes that can gravely shake nearby little enterprises, and minimum yet not last consumers' trust. The worldview food security is that in spite of the fact that nourishment is more secure, consumers' demeanour is commanded by elevated amounts of vulnerability. In this changing atmosphere, we are that as it may, require perceiving the exertion EU experts make to re-establish consumers' trust and authorize new directions and better impart nourishment wellbeing related issues. An imperative highlight of sustenance industry is that makers, to adapt to showcase needs and lawful prerequisites, need to fulfil both wellbeing and quality criteria for their items. Having various choices as various quality as well as administration frameworks, nourishment makers ought to choose the most proper one for its particular movement and should build up, archive and execute powerful frameworks for overseeing quality also, security (van der Speigel et al., 2003).

Among the accessible Quality Assurance (QA) frameworks there are within reach today frameworks, for example, GMPs (Good Manufacturing Practices), GHPs (Good Cleanliness Practices), GAPs (Good Agricultural Practices) or other essential frameworks and HACCP (Hazard Analysis. Basic Control Points) (van der Speigel et al., 2003; Rotaru et al., 2015). This chapter also covers the following point mainly:

- Recommended international code of practice - general principles of food hygiene.
- Good Manufacturing Practices (GMPs)
- Good Hygiene Practices GHPs
- The hazard analysis and critical control point (HACCP) System.
- International Organization for Standardization

## **RECOMMENDED INTERNATIONAL CODE OF PRACTICE: GENERAL PRINCIPLES OF FOOD HYGIENE**

### **Codes of Practice**

Codes of practice are a group of guidelines, or one can be described as process specifications. These guidelines and specifications are generally helpful in providing constructive advice to manufacturers who have the same production facilities and manufacturing similar kind of products. These guidelines involve endorsements for the operational method, the design of construction facility, plant cleaning procedures, personal hygiene, quality and type of equipment, standard packaging procedures, and the

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/food-quality-and-safety-regulation-systems-at-a-glance/268130](http://www.igi-global.com/chapter/food-quality-and-safety-regulation-systems-at-a-glance/268130)

## Related Content

---

### Importance of Pest and Pathogen Control System With Special Emphasis on Coriander Crop on the Indian Subcontinent

Sunita Rao and Gajra Garg (2020). *Ethnopharmacological Investigation of Indian Spices* (pp. 242-252).  
[www.irma-international.org/chapter/importance-of-pest-and-pathogen-control-system-with-special-emphasis-on-coriander-crop-on-the-indian-subcontinent/252462](http://www.irma-international.org/chapter/importance-of-pest-and-pathogen-control-system-with-special-emphasis-on-coriander-crop-on-the-indian-subcontinent/252462)

### Effect of Non-Ionic Hydrophilic and Hydrophobic Surfactants on the Properties on the Stearate Oleogels: A Comparative Study

Uvanesh K., Suraj K. Nayak, Sai Sateesh Sagiri, Indranil Banerjee, Sirsendu Sekhar Ray and Kunal Pal (2018). *Nutraceuticals and Innovative Food Products for Healthy Living and Preventive Care* (pp. 260-279).  
[www.irma-international.org/chapter/effect-of-non-ionic-hydrophilic-and-hydrophobic-surfactants-on-the-properties-on-the-stearate-oleogels/191461](http://www.irma-international.org/chapter/effect-of-non-ionic-hydrophilic-and-hydrophobic-surfactants-on-the-properties-on-the-stearate-oleogels/191461)

### Non-Thermal Food Preservation Methods in the Meat Industry

Basak Gokce Col, Sergen Tuggum and Seydi Ykm (2021). *Research Anthology on Food Waste Reduction and Alternative Diets for Food and Nutrition Security* (pp. 147-162).  
[www.irma-international.org/chapter/non-thermal-food-preservation-methods-in-the-meat-industry/268136](http://www.irma-international.org/chapter/non-thermal-food-preservation-methods-in-the-meat-industry/268136)

### World War II

(2023). *Dark Gastronomy in Times of Tribulation* (pp. 179-217).  
[www.irma-international.org/chapter/world-war-ii/323096](http://www.irma-international.org/chapter/world-war-ii/323096)

### Camel Meat Production, Structure, and Quality

Isam Tawfik Kadim, Msafiri Mbaga, Ghada Ahmed Ibrahim and Ikhlas Ahmed Nour (2020). *Handbook of Research on Health and Environmental Benefits of Camel Products* (pp. 263-284).  
[www.irma-international.org/chapter/camel-meat-production-structure-and-quality/244743](http://www.irma-international.org/chapter/camel-meat-production-structure-and-quality/244743)