



# Position Paper Packaging and Food Safety



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# Guideline for Packaging and Food Safety

## Changing market demands

Today's lifestyles are vastly different from those of the past. The fast pace of modern lifestyles, the increase in single-person households and gender equal rights, have lead to changes in food preparation and consumption habits. A positive outcome of this has been rapid advances in food technology, processing and packaging techniques to help ensure the safety of the food supply as well as making food more convenient to prepare and consume. In spite of these advances, contamination of the food supply by natural occurrence, accidental introduction of contaminants, or malpractice, does occur.

Ultimately, the quality and safety of food will be secured by the efforts of everyone involved in the complex chain of agriculture production, processing, packaging, transport, food production, and consumption.

## The role of packaging

Packaging is an essential medium for preserving food quality, minimising food wastage and reducing preservatives used in food. The packaging serves the important function of containing the food, protecting against chemical and physical damage whilst providing information essential to consumers and marketers.

Whether it's a can, bottle, jar, bag or carton, packaging helps to protect food from contamination such as micro-organisms, pests and other contaminants. Packaging also helps to protect the form, shape and texture of the food inside, preventing the loss of flavours and odours and will often extend the products shelf life. Packaging also assists in regulating the water or moisture content of the food to keep it as fresh as possible. The choice of packaging material should not affect the nutritional quality of a product.

Packaging also provides an important medium whereby manufacturers can provide information on product features, nutritional contents and ingredient information.

Packaging is a system for preserving the safety and quality of food products throughout the whole distribution chain to consumer by:

- Maximising shelf life.
- Carrying important information on the label relating to preparation, safety and nutrition.
- Providing evidence that the package is intact and the product has not been tampered with.
- Identifying the date and the location of manufacture for inventory control and identification of potential hazards.

## Food contact materials

The packaging materials chosen to protect and transport food must comply with existing regulation, such as the Materials and Articles in Contact with Food Regulations (EU Regulation 1935/2004) and equivalent FDA requirements in the USA. Material specific requirements must also be taken into

consideration, especially for plastics: 2002/72/EU and its 5 amendments and FDA CFR 21 specify the exact amounts and types of additives that can be used to manufacture the plastics, each one having been tested and approved for food use. Additives used in materials for food contact are placed onto positive lists, in these and other regulations. In order to ensure that any migration from the necessary additives used in the manufacture of plastic are kept within tightly regulated limits, migration requirements for the finished plastic packaging must also be met. The supplier of packaging materials and packaging must deliver appropriate compliance documentation, such as Safety Data Sheets and Food Contact Statements.

Various quality and hygiene systems, for example, ISO EN 15593, ISO 22000 and the BRC/IOP Global Standard for Packaging and Packaging Materials have been developed to help ensure the safe and hygienic manufacture of packaging that comes into contact with food. These Standards are being adopted worldwide by packaging manufacturers to help improve their manufacturing facilities and ensure the best quality and hygienically manufactured packaging is available.

## Product labelling and traceability

Pre-packaged foodstuffs must comply with compulsory harmonised standards on labelling and advertising. The details that must appear on packaging include the name under which the product is sold, a list of ingredients and quantities, potential allergens (products which may cause allergies), the minimum durability date and conditions for storage. In many countries, nutritional information is also required. To ensure the safety of the domestic and global food supply, government regulations and brand protection demands from customers are on the rise. To address these growing requirements, food processors up and down the supply chain have introduced traceability systems.

For example, in Europe traceability of food packaging is currently assured by the Materials and Articles in Contact with Food Regulation (EC1935/2004) and imposed by the regulation of Good Manufacturing Practise (EC 2023/2006). This assures the packaging user that if a problem should occur they can trace it back to source and rectify the problem.

These requirements must also be implemented into the packaging manufacturer's quality systems or certified separately by means of ISO 22000, EN 15593, the BRC/IOP Global Standard for Packaging and Packaging Materials or equivalent standards.

## Packaging Development

As new packaging materials, many manufactured from sustainable crops, are developed by the packaging industry, they are developed with the final consumer in mind, to be fit for purpose, cost effective and safe. New materials based on starch, sugars and plant fibre will become more available and generally carbon neutral and using less energy to manufacture. The reuse and recycling of food packaging is important to the packaging industry and new techniques for collecting, cleaning and reusing food packaging back to new food packaging is now taking place.

## Overall Sustainability

All of these factors, relate to sustainability, addressing security, safety, and health, for the whole of the consumer market. By producing products that are packaged meeting legislative and consumer demands, society can expect packaging to be:

- Beneficial throughout its life cycle
- Designed to meet market criteria for performance and cost
- Manufactured using clean production technologies and best practices
- Made from materials suitable in all probable end-of-life scenarios
- Physically designed to optimize materials and energy usage
- Effectively recovered mechanically, biologically or as energy

March 30, 2009