

SNS COLLEGE OF TECHNOLOGY

Coimbatore-35 An Autonomous Institution

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DEPARTMENT OF FOOD TECHNOLOGY

19FTT305-FRUIT AND VEGETABLE TECHNOLOGY

UNIT 3- MINIMAL PROCESSING AND CANNING



Indian Food Regulation and Quality assurance

In India, food regulation and quality assurance are managed by a set of government bodies, legislation, and standards to ensure the safety, hygiene, and quality of food products. This is a critical area, as it impacts public health, food security, and the country's agricultural economy.

Key Bodies and Frameworks Involved in Food Regulation and Quality Assurance:

- **1. Food Safety and Standards Authority of India (FSSAI)**:
 - 1. The **FSSAI** is the primary government authority that oversees food regulation and quality in India. It is responsible for establishing food safety standards, conducting inspections, and ensuring compliance with regulations.
 - 2. The FSSAI was established under the Food Safety and Standards Act, 2006.
 - 3. It aims to ensure that food products are safe, nutritious, and of high quality.
 - 4.FSSAI has defined standards for different food categories such as dairy, beverages, grains, packaged food, and more. The authority also has the power to set limits on contaminants and preservatives.
 - 5. It runs various food safety programs, consumer awareness campaigns, and certification programs like Food Safety Management Systems.





2.Food Safety and Standards Act (FSS Act), 2006:

- •This legislation is the cornerstone of India's food regulatory framework. •It consolidates various acts and orders that were previously in place for food regulation, such as the Prevention of Food Adulteration Act, 1954 and the Food Products Standards and Food Additives, **1955**.
- •The FSS Act provides guidelines on food safety, labeling, packaging, food recall, and penalties for noncompliance.

3.Food Quality Assurance Programs:

- •Quality assurance in India is implemented through the establishment of standards and regulations around manufacturing practices and product inspection. Some of the important quality control methods include:
 - •ISO 9001: Focuses on general quality management.
 - •ISO 22000: Specifically related to food safety management.
 - •HACCP (Hazard Analysis Critical Control Point): A preventive approach to food safety.
- •These quality systems are typically implemented by food manufacturers and businesses in the food supply chain to ensure food safety and quality consistency.





4.Indian Standards (IS) and BIS (Bureau of Indian Standards):

•The Bureau of Indian Standards (BIS) is the national body responsible for formulating food standards in India.

•BIS ensures that food products meet certain criteria for safety, quality, and purity. •Many food items are governed by the Indian Standards (IS) which sets standards for raw materials, food processing, storage, and packaging.

•BIS also conducts certification programs such as the **ISI mark** (Indian Standards Institute), which indicates that a product meets national standards.

5 Food Labeling Regulations:

•Food labeling is regulated by the FSSAI and covers aspects such as ingredient lists, nutrition labeling, shelf-life, packaging, and more.

•Specific regulations exist for **nutritional labeling**, especially for packaged foods. •Labels must include ingredient information, nutritional value, manufacturer information, expiry date, and batch number, among other requirements.



5 Inspection and Compliance:

- •Regular inspections are conducted by the FSSAI and state food safety authorities to monitor compliance with food safety and quality standards.
- •Non-compliance with FSSAI standards may lead to penalties, suspension of licenses, or product recalls.

7 **Import and Export Regulations**:

• Directorate General of Foreign Trade (DGFT) and FSSAI work in tandem for food import regulations, ensuring that imported food products adhere to Indian safety and quality standards. •For exports, food businesses must ensure that their products comply with the safety and quality standards of the destination country, often involving certification from FSSAI and other agencies.

8 Food Adulteration and Contaminants:

•India has strict regulations to prevent food adulteration, which is a major public health concern. •The **Prevention of Food Adulteration Act (PFA)**, though replaced by the FSS Act, set the tone for regulation and enforcement against food adulteration and contamination. •FSSAI tests for common adulterants, such as harmful chemicals, pesticides, and heavy metals, in food products.





9 Recent Developments in Food Regulation:

1. The FSSAI has also focused on health and wellness initiatives like fortification of food (e.g., fortifying salt with iodine, or rice with iron). 2. In recent years, there has been a significant push for **clean label products** (minimal processing and fewer artificial ingredients) as consumer preference for natural food increases.

Challenges:

1.Compliance and Enforcement: Due to India's vast and diverse food market, ensuring consistent compliance with food safety standards across all regions can be challenging. **2.Consumer Awareness**: While the regulatory framework exists, many consumers still lack awareness of food safety standards and adulteration.

3.Informal Sector: A large portion of food production in India comes from the informal sector, which may not always adhere to FSSAI standards, making it difficult to regulate and assure food quality effectively.







