



Food Safety & HACCP

Food Manufacturing

Topics to Cover

- 1. What is Food Safety**
- 2. What is HACCP**
- 3. How to Implement HACCP**

Agenda

- 1.0 What is Food Safety
 - 1.1 Types of Food Hazards
- 2.0 What is HACCP
 - 2.1 Who Needs to Know HACCP
 - 2.2 Benefits of HACCP
 - 2.3 Elements of a HACCP Program
 - 2.4 HACCP Framework - Checklist
- 3.0 How to Implement HACCP
 - 3.1 Monitoring of HACCP

1.0 What is Food Safety

- The conditions and practices when handling, preparing and storing food to prevent foodborne illness or an injury
- A guarantee to customers that the food provided will not cause any food hazards
- Food regulations to ensure any food item for consumption will not cause an illness or injury to customers. It's the law!

1.1 Types of Food Hazards

1. Microbiological

- Salmonella, Listeria, E.Coli O:157

2. Physical

- Wood, Glass, Hard Plastic, Metal

3. Chemical

- Undeclared Allergens, Pesticides, Sanitation Chemicals

4. Radiation (a new food safety risk)

- Radioactive isotope contamination – caesium, iodine

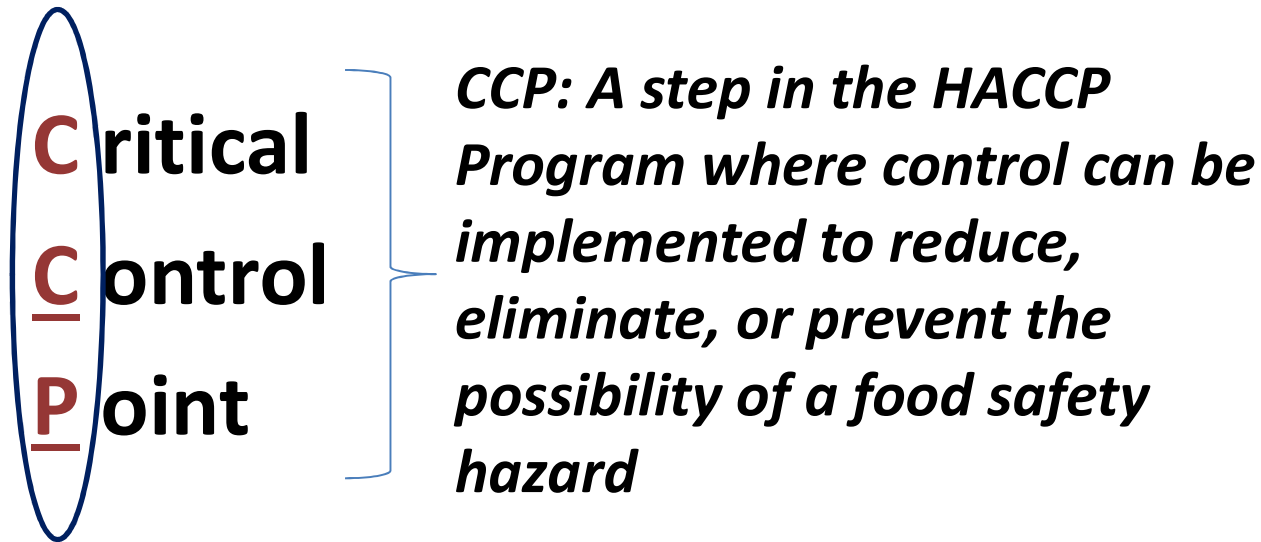
2.0 What is HACCP



Hazard
Analysis
Critical
Control
Point

2.0 What is HACCP

- CCP



Examples: pH monitoring to reduce microbiological growth; Metal Detection to identify foreign metal; Temperature monitoring to ensure a pathogen kill step

2.0 What is HACCP Cont'd

HACCP is a **food safety plan** with documented procedures and processes to help eliminate, prevent or reduce food safety hazards that can cause your customers to become ill or injured

2.1 Who Needs to Know HACCP

Any employee working in food manufacturing

Includes (but not limited to):

Receiver, Shipper, Warehouse Handler, Transportation,
Sanitation, Line Worker, Supervisors, Management, QA,
R&D

2.2 Benefits of HACCP?

1. A blueprint for food safety risk assessment
2. Provides a framework to identify, prioritize and control potential food hazards
3. It applies principles and prerequisite programs as the foundation to utilize
4. Reduces food risks and therefore protects public health

2.3 Elements of HACCP Program

- A HACCP Plan generally includes the following:
 - Prerequisite Program (PrP).
 - Programs to assist in controlling food safety hazards to the product in the work environment and operational practices.
 - There are PrP requirements from receiving to product shipping steps
 - HACCP Plans
 - Documents designed in supporting the risk assessment of a processing facility. There are many steps in developing s HACCP Plan
 - Validation Documents
 - Evidence to show an effective critical limit of a CCP or control limit
 - Supporting data to show effectiveness of the monitoring procedures
 - HACCP System Maintenance and Reassessment Procedures
 - Updating the program when affected by process or equipment changes
 - Revalidating the critical limits or control limits
 - Maintaining the program when a new product or a recall issue

2.4 HACCP Framework – FG Checklist

☐ Preprerequisite Programs

- ✓ Premises
- ✓ Transportation & Storage
- ✓ Equipment
- ✓ Personnel
- ✓ Sanitation & Pest Control
- ✓ Recall
- ✓ Documentation

☐ Documentation

- ✓ Management support
- ✓ Validation of processes
- ✓ Reassessment of the plan

☐ HACCP Plan Details

- ✓ Risk assessments for ingredients, products and people flow
- ✓ Process flows
- ✓ Process controls
- ✓ Critical Control Points (cook temperature or metal detection)

3.0 How to Implement HACCP

- Establish a cross functional HACCP Team
 - QA, Sanitation, Manufacturing, Maintenance, Line Personnel
- Identify a HACCP Coordinator with leadership skills
- Obtain management support
 - Commitment for resources
 - Support in starting the food safety culture
- Communicate food safety and HACCP through employee education and training
- Map the process to identify hazards at each step

3.0 How to Implement HACCP

- Conduct the risk assessment for ingredients, people flow, packaging flow, product and each process step
- Identify how risk is mitigated for each step and implement PrPs to reduce risks
- Identify CCPs or Critical limits.
- Create procedures to manage monitoring steps and deviations (how to handle CCP failures)
- Develop a record retention process for above steps

3.1 Monitoring of HACCP & Food Safety Program

- Trained employees are selected to verify the monitoring records at set frequencies
- Food Safety Team conducts internal audits to verify the effectiveness of the HACCP program and to identify opportunities for improvement
- A 3rd party auditing firm reviews the effectiveness of the overall HACCP Program
- Assess the food safety culture and continuously improve

Question #1

Q: What is HACCP

- a. A food safety program
- b. Hazard Analysis Critical Control Point
- c. Both (a) and (b)
- d. Hazard Analysis Critical Control Practice

Question #2

Q: Benefits of HACCP

- a. A blueprint for food safety risk assessment
- b. A framework to identify and control food hazards
- c. Contains prerequisite programs to control risks
- d. All of the above

Question #3

Q: Examples of a CCP

- a. Monitoring pH
- b. Monitoring Cooking Temperature
- c. Both (a) and (b)
- d. Monitoring GMPs

Question #4

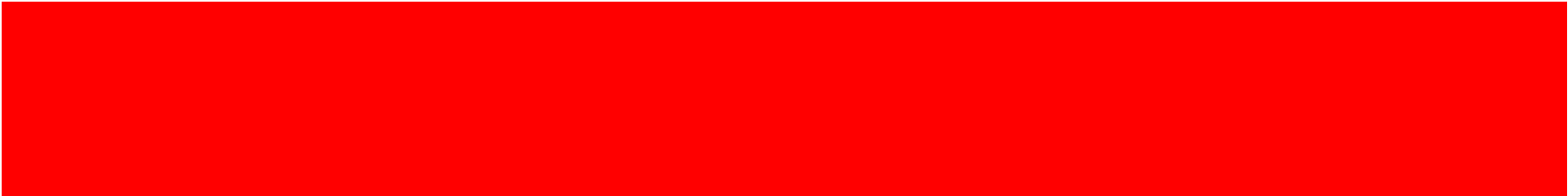
Q: Why is Food Safety Important

- a. To protect the consumer
- b. The law requires a food safety program
- c. To protect our product brand
- d. All of the above

Question #5

Q: Your role in HACCP is to support and help develop a food safety culture for your organization.

- a. True
- b. False



FoodGrads