

***Recognize the Relationship Between HACCP and Food Safety .***

- Explain the relationship between HACCP and food safety.
- Discuss the benefits of implementing a HACCP system which include motivating and selling the industry on HACCP, and reviewing case studies.
- Discuss HACCP and basic food safety principles.
- Review what students will learn from the course.

***Review Good Manufacturing Practices .***

- Define and develop SOPs and GMPs.
  - Discuss the importance of SOPs and GMPs.
  - Describe how SOPs and GMPs are necessary before developing a HACCP plan.
- Identify and Control Hazards.
- Identify food items that are produced and, if left uncontrolled, can injure consumers.
  - Define a hazard(s).
  - Name the three hazard categories (biological, chemical, physical) as defined by the National Advisory Committee on Microbiological Criteria for Food (NACMCF).
  - Determine the significant hazards as described in Principle 1 of the NACMCF guidelines.
  - Explain control measures that prevent, reduce, or minimize hazards.

***Prevent and Discard the Principle of HACCP***

***Develop a Flowchart of the Process and Product .***

- Conduct a hazard analysis; prepare a list of steps in the process where significant hazards occur, and describe the preventive measures.
- Describe product and intended use.
- Identify potential hazards at points where they enter the process/food or can be enhanced during the process.
- Evaluate the severity and risk of hazards.
- Document rationale for hazard selection.
- Differentiate significant from non-significant hazards.
- Identify Critical Control Points (CCPs) in the process.
- Define control point and critical control point.
- Identify CCPs by using the decision tree.

***Establish Critical Limits for Preventive Measures Associated with each Critical Control Point .***

- Define and determine critical limits and operational limits.
- Set critical limits that are relevant to product safety.
- Document the rationale for critical limit selection.
- Measure and document critical limits.
- Explain how critical limits are used to measure compliance within a HACCP plan.

***Establish Critical Control Point Monitoring Equipment and Procedures for Monitoring the Level of Monitoring Operations and Main Activities .***

- Recognize the importance of monitoring.
- Identify factors to be monitored.
- Identify where measurements will be taken.
- Explain how monitoring is to be conducted.
- Determine the frequency for taking measurements.
- Identify who is responsible for monitoring
- Describe monitoring procedures, sampling plans and methodology.
- Clarify the difference between monitoring and verification.

***Establish Corrective Action to be Taken when Monitoring Indicates the Existence of a Deviation from an Established Critical Limit .***

- Develop corrective actions.
- Identify responsible authority for determining corrective action.
- Describe corrective actions in SOP documentation that are consistent with monitoring activities.
- Document corrective actions.

***Establish Effective Record Keeping Procedures to Document the HACCP .***

- Discuss the importance of record keeping for determining the effectiveness of the HACCP system and for documenting appropriate efforts to produce safe food.
- Identify what information should be included in records.
- Develop records for documenting HACCP activities.
- Develop simple, plant friendly records with clear instructions to be accessible at line worker level.

***Recognize the Importance of Reviewing Records before Control of Product is Lost .***

- Recognize the importance of verification to support and assure the long term viability of HACCP in an organization.
- Discuss different activities that can be conducted as part of verification.
- Reinforce the importance of record review before the control of a product is lost.
- Implement a HACCP plan review at regular intervals or when significant changes in equipment, ingredients, or operating procedures occur.

### *Implement a HACCP Plan.*

- Describe the commitment from upper management necessary for food safety to succeed.
- Determine the key factors for successful HACCP implementation.
- Discuss the steps for developing and implementing HACCP in the production plant.
- Develop implementation steps using GMPs as a foundation for HACCP.
- Convey realistic expectations of time and commitment needed to be successful.

### *Main aim of the HACCP Plan.*

- Establish a staff training program
- Recognize the factors that significantly impact employee job performance.
- Assess staff training needs using task analysis/SOPs.
- Develop written behavioral objectives for SOPs that impact employees specific work responsibilities.
- Integrate HACCP plans into specific employee work responsibilities.
- Evaluate a variety of techniques and methods for delivering training to a diverse work force.
- Evaluate the effectiveness of training programs by using objective and performance measurements.

### *Enable HACCP plan maintenance and measurement procedure.*

- Recognize that HACCP systems are dynamic and subject to change/updating.
- Identify change factors that significantly impact HACCP plans and require review of the system.
- Recognize support systems and measures for HACCP plans (management food safety objectives).
- Evaluate the appropriateness of different measurement tools that are operation/process specific for HACCP systems.

### *Recognize the role of the establishment in the implementation of HACCP.*

- Recognize that the establishment is responsible for producing a safe product and writing a HACCP plan.
- Identify what assistance is available from FSIS.
- State the regulatory requirements (if the Pathogen Reduction/HACCP Proposal is adopted) for:
  - Sanitation SOPs.
  - Antimicrobial carcass treatments.
  - Time/temperature.
  - Microbiological testing as a verification tool.

### *Discuss the role of FSIS in the implementation of HACCP.*

### *State enforcement of noncompliance.*

### *Establish HACCP plan.*

### *Quality Assurance and Control*

# Train-the-Trainer HACCP Course

Sponsored by the

SJTU - Bor S. Luh Food Safety Research Center



Grocery Manufacturers Association



and the  
International HACCP Alliance

