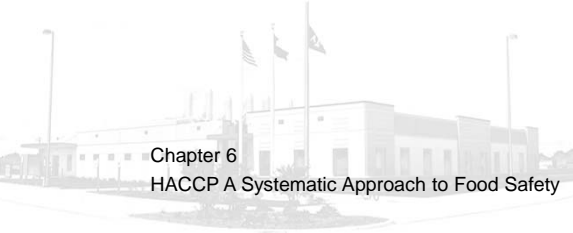



Physical Hazards and Controls



Chapter 6
HACCP A Systematic Approach to Food Safety

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Food Safety vs Aesthetics

Potential physical hazards are foreign objects or extraneous matter capable of causing injury such as glass, metal, and rocks.

Aesthetic contaminants such as insect fragments, hair and sand typically do not cause injury to consumers.

Compliance Policy Guide (CPG) Section 555.425 "Foods-Adulteration Involving Hard or Sharp Foreign Objects" ready-to-eat is adulterated if it contains a hard or sharp foreign object that measures 7mm to 25 mm in length.

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Types of Hazards

3 Types of Hazards: **B**iological, **C**hemical and **P**hysical

Physical hazard is defined as a foreign object that is capable of harming a consumer

Chemical hazard is defined as a toxic substance or compound that will render a product unsafe for consumption.

Biological hazard may include parasitic agents and microbiological agents that results in food borne disease.

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Physical Hazards

Ways in which the hazard is introduced into the facility.

- Contaminated raw ingredients
- Poorly designed or maintained facilities and equipment
- Improper Employee practices
- Faulty production procedures

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Physical Hazards

Food borne outbreaks caused by physical hazards usually involve relatively few consumers.

Typically result in personal injuries such as a broken tooth, lacerations or choking, or other usually non-life-threatening problem.

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Types of Physical Hazards

- Metal
 - Ferrous vs non-ferrous
- Bone
- Stones
- Wood
- Plastic

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Minimizing Physical Hazards at Raw Material Receiving

- ❑ Material specifications
- ❑ Letter of guarantee
- ❑ Vendor inspection and certification
- ❑ Product inspection

Minimizing Physical Hazards Processes/Procedures

- ❑ Identify inappropriate practices and operational areas during hazard analysis.

Equipment Used to Detect or Remove Foreign Materials

- ❑ Magnets/metal detectors
- ❑ Screens/sifters
- ❑ Aspirators

Potential Physical Hazards and Controls

Potential Hazard

- ❑ Glass from light fixture
- ❑ Metal fragments from equipment
- ❑ Wood from pallets

Control

- ❑ Shatter-proof bulb, shields
- ❑ Inspection, preventive maintenance, metal detector, magnet
- ❑ Eliminate from processing area

Minimizing Potential Physical Hazards in the Facility

Attention to cGMPs will insure that the facility is not a source of physical hazards.

- Properly protected light fixtures
- Appropriately designed equipment
- Adequate maintenance and inspection programs

Summary

- ❑ Physical hazards exist in every facility and can be present in the incoming ingredients.
- ❑ HACCP Teams must ask themselves
 - What is the likelihood of the hazard?
 - Do we already have something in place to control that hazard?



END

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