



chapter 8

Food Safety Management Systems

Food Safety Management Systems

Food safety management system:

- Group of practices and procedures intended to prevent foodborne illness
- Actively controls risks and hazards throughout the flow of food

Food Safety Programs

These are the foundation of a food safety management system:



Personal hygiene program



Food safety training program



Supplier selection and specification program



Quality control and assurance program

Food Safety Programs

These are the foundation of a food safety management system:



Cleaning and sanitation program



Standard operating procedures (SOPs)



Facility design and equipment maintenance program



Pest control program

Active Managerial Control

Focuses on controlling the five most common risk factors for foodborne illness:

1. Purchasing food from unsafe sources
2. Failing to cook food adequately
3. Holding food at incorrect temperatures
4. Using contaminated equipment
5. Practicing poor personal hygiene

Active Managerial Control

There are many ways to achieve active managerial control in the operation:

- Training programs
- Manager supervision
- Incorporation of standard operating procedures (SOPs)
- HACCP

These are critical to the success of active managerial control:

- Monitoring critical activities in the operation
- Taking the necessary corrective action when required
- Verifying that the actions taken control the risks factors

Active Managerial Control

The FDA provides recommendations for controlling the common risk factors for foodborne illness:

- Demonstration of knowledge
- Staff health controls
- Controlling hands as a vehicle of contamination
- Time and temperature parameters for controlling pathogens
- Consumer advisories



The HACCP approach:

- HACCP is based on identifying significant biological, chemical, or physical hazards at specific points within a product's flow through an operation
- Once identified, hazards can be prevented, eliminated, or reduced to safe levels

To be effective, a HACCP system must be based on a written plan:

- It must be specific to each facility's menu, customers, equipment, processes, and operations
- A plan that works for one operation may not work for another

The 7 HACCP Principles

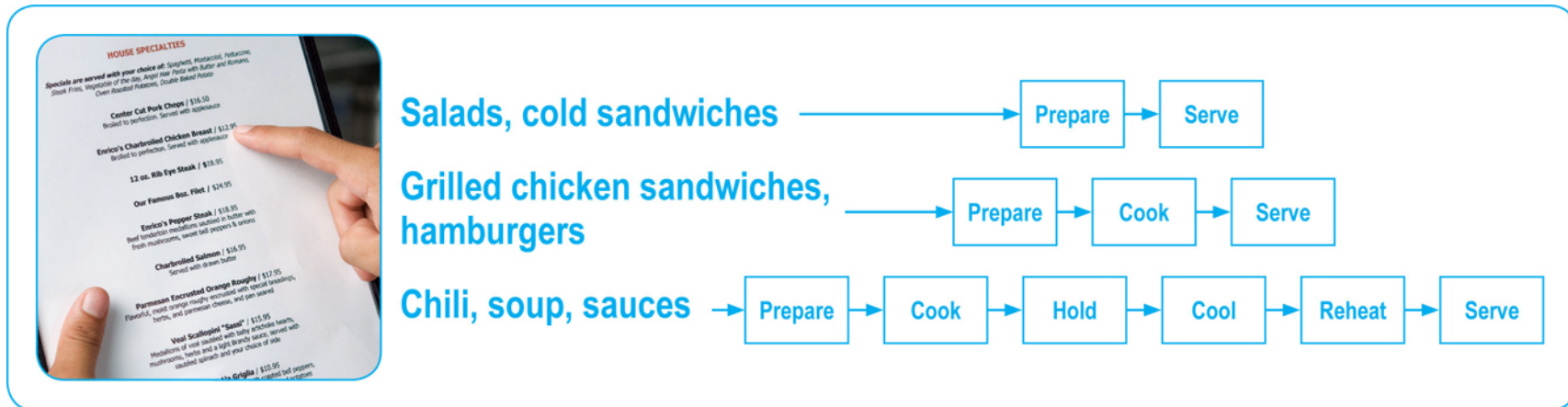
The seven HACCP principles:

1. Conduct a hazard analysis
2. Determine critical control points (CCPs)
3. Establish critical limits
4. Establish monitoring procedures
5. Identify corrective actions
6. Verify that the system works
7. Establish procedures for record keeping and documentation

The 7 HACCP Principles

Principle 1: Conduct a hazard analysis

- Identify potential hazards in the food served by looking at how it is processed
- Identify TCS food items and determine where hazards are likely to occur for each one; look for biological, chemical, and physical contaminants



The 7 HACCP Principles

Principle 2: Determine critical control points (CCPs)

- Find points in the process where identified hazards can be prevented, eliminated, or reduced to safe levels—these are the CCPs
- Depending on the process, there may be more than one CCP



The 7 HACCP Principles

Principle 3: Establish critical limits

- For each CCP, establish minimum or maximum limits
- These limits must be met to
 - Prevent or eliminate the hazard
 - Reduce it to a safe level



The 7 HACCP Principles

Principle 4: Establish monitoring procedures

- Determine the best way to check critical limits
 - Make sure they are consistently met
- Identify who will monitor them and how often



The 7 HACCP Principles

Principle 5: Identify corrective actions

- Identify steps that must be taken when a critical limit is not met
- Determine these steps in advance



The 7 HACCP Principles

Principle 6: Verify that the system works

- Determine if the plan is working as intended
- Evaluate the plan on a regular basis using
 - Monitoring charts
 - Records
 - Hazard analysis
- Determine if your plan prevents, reduces, or eliminates identified hazards



The 7 HACCP Principles

Principle 7: Establish procedures for record keeping and documentation

Keep records for these actions:

- Monitoring activities
- Corrective actions
- Validating equipment (checking for good working condition)
- Working with suppliers (invoices, specifications, etc.)



These specialized processing methods require a variance and may require a HACCP plan:

- Smoking food as a method to preserve it (but not to enhance flavor)
- Using food additives or components such as vinegar to preserve or alter food so it no longer requires time and temperature control for safety
- Curing food
- Custom-processing animals

These specialized processing methods require a variance and may require a HACCP plan:

- Packaging food using ROP methods including
 - MAP
 - Vacuum-packed
 - *Sous vide*
- Treating (e.g. pasteurizing) juice on-site and packaging it for later sale
- Sprouting seeds or beans