1. Personal Hygiene and Handwashing
   - Foodborne illnesses are often caused by food service workers contaminating their hands and then touching food or food contact surfaces
   - Wash hands properly, frequently, and at appropriate times
   - Wash your hands:
     - When you enter the kitchen
     - After using the restroom
     - After sneezing/coughing, or after touching any part of your body (face, hair, etc.)
     - After handling any raw animal products (eggs, meat, etc.)
     - After performing any non-food preparation activity (changing diapers, taking out the trash, using the phone, eating, etc.)
     - Before touching any food, utensil, or food-contact surface
     - Before using or when changing gloves
     - At least every 4 hours
   - Wash hands using the following method:
     - Wet hands and forearms with warm, running water and apply soap
     - Scrub lathered hands and forearms, under fingernails, and between fingers for at least 10-15 seconds
     - Rinse thoroughly under warm, running water
     - Dry hands and forearms thoroughly with either a single-use paper towel or an air dryer
     - Use a paper towel to turn off the water and to open the door when exiting the restroom
   - Handwashing signs must be posted at each handwashing facility and toilet room
   - Wear single-use gloves if artificial nails, fingernail polish, or bandages are worn
   - Wear suitable and effective hair restraints while in the kitchen
2. Cleaning and Sanitizing
   - Dirty or contaminated utensils and equipment can transfer contamination to food causing foodborne illness
   - To prevent this, utensils, food preparation equipment, and contact surfaces should be washed, rinsed, and sanitized at least once every 4 hours
   - This can be done:
     - In a 3-compartment sink
     - In a mechanical dish machine
     - In a clean-in-place procedure for large pieces of equipment
   - A test kit or other device (such as those pictured below) that accurately measures the concentration of the solution shall be available and used when chemicals are used for sanitization
   - Follow the manufacturer’s instructions regarding the use of chemicals for cleaning and sanitizing food contact surfaces and equipment

![Test kit for sanitization](image)

3. Storage
   - Keep all storage areas clean
   - Store all food and supplies at least 6 inches off the floor
   - Keep food in original containers or labeled containers approved for food storage. Label all food with the name and delivery date
   - Check products for damage or spoilage, and discard any that show signs of damage or spoilage
   - Dry storage areas should be maintained at 50°F-70°F
Separate
1. Cross-contamination can occur:
   - When foods come into contact with raw animal products or their juices
   - When foods come into contact with contaminated equipment, hands, or non-food sources such as garbage
2. You can prevent cross-contamination by:
   - Following good personal hygiene and handwashing
   - Separating raw animal foods from foods that are ready to be eaten during receiving, storage, and preparation
   - Ensuring that foods which are ready to be eaten are not prepared with raw animal products on the same cutting board, using the same knife or utensils, or without washing hands.
   - Storing foods that are ready to be eaten above raw animal products in the refrigerator.
   - Maintaining a fresh bucket of cleaning solution and a fresh bucket of sanitizing solution in the work area so that cleaning and sanitizing can be done easily. Use test strips to ensure the concentration of the sanitizing solution is at the appropriate level.
   - Storing chemicals in a separate area away from food, preferably in a locked room or cabinet.

Cook
1. Using Food Thermometers
   - Check food temperatures with clean, sanitized, and calibrated thermometers
   - Clean and sanitize thermometers before and after each use. Wash the stem of the thermometer and sanitize by dipping the stem into sanitizing solution or wiping with a sanitizing wipe. Allow to air dry
   - Measure the internal temperature of food by inserting the thermometer into the thickest part of the food, being sure to cover the sensor. Wait for the indicator to stabilize and read temperature
   - Take at least two internal temperatures from each batch of food
   - Record time and food temperatures on a production record or on a separate cooking and reheating log
   - Calibrate thermometers at least weekly or if they are dropped. Each time thermometers are calibrated, the process should be documented on a log
2. Cooking Temperatures
   - Cook all foods to the proper temperatures
   - Foods listed below must be cooked to the internal cooking temperatures identified in the chart below and allow meat to rest for 3 minutes:

<table>
<thead>
<tr>
<th>Food</th>
<th>Minimum Internal Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roasts (Beef, Pork and Ham)</td>
<td>145°F</td>
</tr>
<tr>
<td>Steak and chop (Beef, Pork, and Lamb)</td>
<td>145°F</td>
</tr>
<tr>
<td>Fish</td>
<td>145°F</td>
</tr>
<tr>
<td>Eggs mixtures</td>
<td>160°F</td>
</tr>
<tr>
<td>Ground beef or pork</td>
<td>160°F</td>
</tr>
<tr>
<td>Poultry – whole, parts, or ground</td>
<td>165°F</td>
</tr>
<tr>
<td>Leftovers</td>
<td>165°F</td>
</tr>
<tr>
<td>Foods cooked in microwave</td>
<td>165°F</td>
</tr>
<tr>
<td>Sauces, gravy, soups</td>
<td>165°F</td>
</tr>
</tbody>
</table>
Chill

1. Temperature Danger Zone
   - The FDA Food Code has identified the temperature danger zone as 41°F to 135°F. This means that cold foods must be kept at 41°F or below and hot foods must be kept at 135°F or above. It is important to limit the amount of time that foods served cold or hot are in the range of 41°F to 135°F
   - Discard food held in the temperature danger zone for more than 4 hours
   - Refrigerated storage areas should be maintained at 41°F or below
   - Frozen storage areas should be maintained at 0°F to -10°F

2. Preparing Cold Food
   - Pre-chill ingredients for cold foods, such as sandwiches, salads, and cut fruits, to 41°F or below before combining with other ingredients.
   - Prepare food in small batches so that ingredients are not at room temperature more than 30 minutes before cooking, serving, or returning to the refrigerator.

3. Thaw Frozen Foods:
   - In the refrigerator at a temperature at or below 41°F
   - By submerging under clean, drinkable, cold running water
   - In a microwave (and use immediately)
   - As part of the cooking process (frozen patties, nuggets, pizza, lasagna, chili, soup)

4. Chilling Foods:
   - When cooling hot foods for later use, they must be cooled rapidly
   - Divide food into small batches and chill in shallow containers

Please note:
Infants and children must not be allowed in food preparation areas.
Any employee with a communicable disease, a respiratory illness, an acute gastrointestinal illness (diarrhea and/or vomiting), or open wound shall be excluded from working in any area of food service.
**Calibrating Your Thermometer:**

The following guidance provides information on calibrating a bi-metal pocket-type thermometer to ensure accurate temperature readings.

1. Fill a large glass with finely crushed ice and water and stir.
2. Hold the top (head) of the thermometer in one hand.
3. With the other hand, insert the stem into the loop of the pocket clip, located on the white sheath (outer covering), and slide the sheath up the thermometer stem until it is touching the back of the thermometer head.
4. Immerse the thermometer stem a minimum of 2 inches into the mixture and hold in place for 30 seconds (be sure not to touch the sides or bottom of the glass with the stem).
5. Maintain the stem position and turn the sheath so that the pocket clip catches and turns the hex adjusting nut which moves the thermometer pointer (turning the nut clockwise adjusts the pointer higher; counterclockwise adjusts it lower).
6. Turn the lug so the pointer reads 32°F.
7. Calibrate the thermometer at least monthly to ensure accurate temperature readings.

*Note:* The pointer should read 32°F when the stem is put into water and crushed ice.

**Sanitizing Your Thermometer:**

Proper sanitation of thermometers is imperative to avoiding cross-contamination and keeping food safe for young children. Below are steps to clean and sanitize bi-metal pocket thermometers.

- Wash the thermometer by hand in hot soapy water; do not immerse it in water.
- After washing and rinsing the thermometer, sanitize it by hand using an alcohol based sanitizing wipe.
- Thermometers should be washed, rinsed, and sanitized on a daily basis. The sheath should also be washed, rinsed, and sanitized regularly to ensure cleanliness.
- Use an alcohol based sanitizing wipe between measuring the temperatures of different foods to clean the thermometer stem and avoid cross-contamination of foods.
- Store the thermometer in the sheath to keep the stem clean and maintain safety as some thermometer probes can be sharp.