Important Temperatures for Food Safety

Cooking Temperatures

✓ The **most** important procedure for ensuring that pathogens are reduced to safe levels is cooking potentially hazardous/Time Temperature Control for Safety (TCS) food to their recommended minimum internal temperatures.

✓ Cook food to the proper minimum internal temperature for 15 seconds. 15 sec. is the “kill time” to help ensure harmful pathogens are killed.

1. **165°F for 15 seconds to be safe to eat**
   a. Poultry (chicken, duck, turkey and goose), must reach a temperature of 165°F for 15 sec.
   b. Stuffed food like filled pasta.
   c. Microwave oven – When cooking or reheating food using a microwave follow these steps: Cover food, rotate or stir halfway through cooking, heat to internal temperature of 165°F and allow standing covered for 2 minutes after cooking.
   d. Reheating - Previously cooked food must reach to at least 165°F for at least 15 sec. in less than 2 hours.

2. **155°F for 15 seconds to be safe to eat**
   a. Foods that are ground, chopped or minced must reach a temperature 155°F for 15 sec. For example ground beef (hamburger patties), veal, and ground pork (sausage). Also chopped or minced fish.
   b. Raw shell eggs - Preparing raw shell eggs that will be held and NOT served immediately such as eggs being held on a buffet.

3. **145°F for 15 seconds to be safe to eat**
   a. Whole cuts of beef, pork or fish must reach a temperature of 145°F for 15 sec. Also prime rib and pork chops.
   b. Raw shell eggs cooked for **immediate service**.

4. **135°F to be safe to eat**
   a. Hot food should be held at 135°F or above.
   b. **41°F-135°F is the Temperature Danger Zone**. To prevent harmful pathogens/bacteria from growing to unsafe levels, keep foods at 41°F or below or 135°F or above.
   Keep cold foods cold and hot foods hot.
   c. The temperature for cooked vegetables and fruit must reach 135°F to be safe to eat.
   d. The minimum temperature required by the Health Department to maintain food on a steam is 135°F.
**Temperatures for Cooling, Thawing and Receiving**

**Cooling process**: Two-step process for cooling previously cooked food like chili.

- Food is cooled from 135°F to 70°F within **TWO** hours.
- 70°F to 41°F in an additional **FOUR** hours for a total cooling time of **SIX** hours.

**Thawing PHF/TCS Food**:

- 41°F Thaw food under refrigeration at 41°F or lower is the safest method to thaw frozen food.
- 70°F Thaw food submerged in running potable water at a temperature of 70°F or lower.

**Receiving Food**:

- 41°F Receiving - The temperature for receiving PHF/TCS food with several *exceptions.*
  *45°F The exceptions for receiving PHF/TCS food at 45°F are milk, shellfish and shell eggs.
- 41°F The maximum temperature of food held in a refrigeration unit.

**Other Temperatures**

- 32°F The temperature that water freezes. Ice-point method for calibration.
- 98.6°F The usual body temperature of a human being.
- 212°F The temperature that water boils. Boiling point for calibration.
- 100°F The temperature of water for handwashing should reach at least 100°F.

**Washing/cleaning vs sanitizing**

- **Washing/cleaning** is the process of removing food or other types of contamination on utensils and other equipment used to prepare or serve food.
- **Rinsing** is the process of removing the residuals of chemical cleaners from plates, utensils and other equipment used to prepare or serve food.
- **Sanitize** is the process of eliminating 99.9999% of bacteria and other types of microbes from plates, utensils and other equipment used to prepare or serve food.

**Dishwashing machine**

- 180°F High temperature machines rely on hot water (not chemicals) to clean and sanitize. High temperature machines (conveyor machines) final sanitizing rinse temp. must be at least 180°F.
- 120°F Chemical sanitizing machines - The temperature the water in a dishwashing machine must reach 120°F when sanitizing with a chemical sanitizer.

**3-Compartment sink** – 2 methods to sanitize in a 3 compartment sink are heat and chemicals.

- 171°F **Heat** – When using hot water to sanitize the water temperature must reach at least 171°F.
- 75°F **Chemical** - The temperature water needs to reach using chemicals to sanitize using (not hot water).
- 110°F The temperature required for the **first** compartment sink. The water must also be clean and soapy.

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Thornhill Training offers in-person ServSafe manager and food handler certifications. Online certifications include TABC, food handler, TX food manager and much more.