



## ***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.

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

### **Thawing PHF/TCS Food:**

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

### **Receiving Food:**

- a. 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.
- b. 41°F The maximum temperature of food held in a refrigeration unit.

## ***Other Temperatures***

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

## **Washing/cleaning vs sanitizing**

- a. Washing/cleaning is the process of removing food or other types of contamination on utensils and other equipment used to prepare or serve food.
- b. Rinsing is the process of removing the residuals of chemical cleaners from plates, utensils and other equipment used to prepare or serve food.
- c. 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**

- a. 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.
- b. 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.**

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

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