

# COOLING METHODS

## RAPID COOLING MEANS SAFE FOOD



**Time and temperature control for safety food shall be cooled within 2 hours from 135°F to 70°F, and within a total of 6 hours from 135°F to 41°F or less.**

### Factors that Speed the Cooling of Foods

- 1. CONTAINER TYPE & SIZE**
  - ✓ Move food to shallow metal pans. Glass and plastic are insulators so food cools more slowly.
- 2. VOLUME**
  - ✓ Reduce large quantities into smaller amounts. Small batches in shallow metal pans cool the fastest.
- 3. STIRRING**
  - ✓ Speed cooling by stirring. Stir foods every 15 minutes to 30 minutes.
- 4. AIR CIRCULATION**
  - ✓ To cool food fast, chill it partially uncovered then cover once the food is 41°F. Stacked pans block air circulation and hold heat. Use wire racks and spread pans of food out. Be sure not to block the refrigeration unit fans.
- 5. ADDING ICE OR WATER**
  - ✓ Add ice or cool water as an ingredient to food to cool it faster.
  - ✓ Put food container in an ice-water bath.
  - ✓ Use chill wands to cool the food quickly.

### Monitor the Speed of Cooling

- ✓ Monitor cooling temperatures with a thermometer. It is recommended to document the process by using a Cooling Log.

### Corrective Action

- ✓ If you fail to meet any of the time/temperature parameters for cooling, the food must be thrown away.
- ✓ During the first cooling stage (135°F to 70°F), if you know your product will not cool in 2 hours but it hasn't passed the 2 hour time limit, you may reheat it to 165°F one time and attempt the cooling process again. Add ice or cool water as an ingredient.

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## FOOD COOLING LOG

- Cooked TCS food must be cooled from 135°F to 41°F or below within 6 hours. The decrease in temperature from 135°F to 70°F must occur within 2 hours.
- If the temperature is more than 70°F in 2 hours, food may be reheated once to 165°F and cooling can start over.
- Total cooling time cannot exceed 6 hours or food must be discarded.

DATE	FOOD	START TIME/TEMP	TEMP AT 1 HR	TEMP AT 2 HRS	135°F TO 70°F IN 2 HRS?	TEMP AT 3 HRS	TEMP AT 4 HRS	TEMP AT 5 HRS	TEMP AT 6 HRS	135°F TO 41°F IN 6 HRS?	CORRECTIVE ACTION	INITIALS
Example: 1/1/2020	Beef stew	10 AM 135°F	100°F	69°F	Yes, continue If No, Reheat	60°F	50°F	45°F	39°F	Yes If No, dispose of food	NO	ZZ