



Facility Name: \_\_\_\_\_

Department: \_\_\_\_\_

Policy No: \_\_\_\_\_

## STANDARD OPERATING PROCEDURE

### Cooling Food

**Policy:** When cooked food will not be served right away (or is left over and can be saved), it must be cooled as quickly as possible to prevent microbial growth. Temperatures will be taken during the cooling process to make sure that time and temperature standards are met to ensure the safety of food served to customers.

**Procedure:** There are two acceptable methods of cooling food outlined below. Employees involved in the cooling process of food must observe the following procedures:

One-stage (four hour) method:

1. Cool hot cooked food from 135°F to 41°F within four hours using an appropriate procedure.
2. Take temperatures of product after four hours to make sure that food temperature is below 41°F.
3. Record temperatures on **Cooling Log**.
4. Reheat food to above 165°F if food has not cooled to 41°F in four hours.

Two-stage method (\*recommended by the FDA Food Code)

1. Cool hot cooked food from 135°F to 70°F or lower within two hours, and then cool down to 41°F or lower within an additional four hours, for a total cooling time of six hours, using an appropriate procedure.
2. Take temperatures at the two and six hour intervals to make sure that the appropriate temperatures were reached.
3. Reheat food to above 165°F if food has not cooled to 41°F in four hours.

*\* NOTE: The reason that the two-stage method allows six hours to cool is that in the first two hours of cooling the food is passed through part of the temperature danger zone where the growth of microorganisms is most likely to occur.*

Factors that affect how quickly foods will cool down:

1. Size of the food item being cooled – the thickness of the food or distance to its center plays the biggest part in how fast a food cools.
2. Density of the food – the denser the food, the slower it will cool. For example, chili will take longer than chicken noodle soup.
3. Container in which a food is stored – stainless steel transfers heat from foods faster than plastic. Initially loosely wrap food items.
4. Size of container – Shallow pans with product depth less than two inches allow the heat from food to disperse faster than deep pans.

Food may not move through the temperature danger zone fast enough if the food is still hot when placed in the cooler or freezer or kept in bulk. The hot food may also raise the temperature of the surrounding food items, placing them in the temperature danger zone (41°F - 135°F).

## Cooling Food, continued

Listed below are a few methods that can be used to cool foods more quickly. The methods can be used alone or in combination.

### Methods for cooling foods:

1. Reduce the quantity of the food being cooled. Cut large food items into smaller pieces or divide large containers of food into smaller containers.
2. Use blast chillers or tumble chillers to cool food before placing it into refrigerated storage.
3. Use ice-water baths. Divide cooked food into shallow pans or smaller pots then place them in ice water and stir food items frequently.
4. Add ice or water as an ingredient. This works for foods that contain water as an ingredient, such as a soup or stew. The recipe can initially be prepared with less water than is required. Cold water or ice can then be added after cooking to cool the product and to provide the remaining water required in the recipe.
5. Stir food to cool faster and more evenly. Ice paddles (plastic paddles that are filled with water and frozen) and chill sticks can be used to stir food through the cooling process. Stirring food with these cold paddles chills food quickly as this acts as internal ice baths.

The restaurant manager will:

1. Review **Cooling Log** daily to ensure the temperatures and corrective actions are being met.
2. Follow up as necessary.
3. File temperature logs with HACCP records.