# STANDARD OPERATING PROCEDURE (SOP) FOR

# COOLING POTENTIALLY HAZARDOUS FOODS

(Sample SOP)

PURPOSE: To prevent foodborne illness by ensuring that all potentially hazardous foods are cooled properly.

SCOPE: This procedure applies to foodservice employees who prepare or cook food.

KEY WORDS:Cross-Contamination, Temperature, Cooling

1. CROSS-CONTAMINATION means the passing of bacteria, microorganisms, or other harmful substances indirectly from one surface to another through improper or unsanitary EQUIPMENT, procedures, or products.
2. TEMPERATURE means the amount of heat or cold measured on a thermometer. This SOP measures temperature in degrees Fahrenheit (°F).
3. COOLING means decreasing the temperature of the food product.

# INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP. Refer to the Using and Calibrating Thermometers SOP.
2. Modify menus, production schedules, and staff work hours to allow for implementation of proper cooling procedures.
3. Prepare and cool food in small batches when practical.
4. Chill food rapidly using an appropriate cooling method:

* Place food in shallow containers no more than 4 inches deep and uncovered on the top shelf in the back of the walk-in cooler. Dense product, such as refried beans, may require a more shallow product depth.
* Separate food into smaller or thinner portions.
* Use a quick-chill unit such as a blast chiller.
* Stir the food in a container placed in an ice water bath. Make sure the level of ice water is at least as high as the product.
* Use containers that facilitate heat transfer (avoid using plastic containers).
* Add ice as an ingredient.
* Pre-chill ingredients and containers used for making bulk items such as salads.
* Other approved methods.

1. Chill cooked, hot food from:

* 135 ºF to 70 ºF within 2 hours. Take corrective action immediately if food is not chilled from 135 ºF to 70 ºF within 2 hours.
* 70 ºF to 41 ºF or below within 4 hours. (The total cooling process from 135 ºF to 41 ºF may not exceed 6 hours.) Take corrective action immediately if food is not chilled from 135 ºF to 41 ºF within the 6 hour cooling process.

1. Chill potentially hazardous foods that will be cooked before being served and prepared with ambient temperature ingredients from 70 ºF to 41 ºF or below within 4 hours. Take corrective action immediately if ready-to-eat food is not chilled from 70 ºF to 41 ºF within 4 hours.
2. Potentially hazardous foods that are ready to eat must be prepared from chilled ingredients.

# MONITORING:

1. Use a clean, sanitized, and calibrated probe thermometer to measure the internal temperature of the food during the cooling process.
2. Document the final cook temperature of the product then monitor temperatures of products every hour throughout the cooling process (time limits for cooling does not start until food reaches 135°F) by inserting a probe thermometer into the center of the food and at various locations in the product.

# CORRECTIVE ACTION:

1. Retrain any foodservice employee found not following the procedures in this SOP.
2. Reheat cooked, hot food to 165 ºF for 15 seconds and start the cooling process again using a different cooling method when the food is:
   * Above 70 ºF and 2 hours or less into the cooling process; and
   * Above 41 ºF and 6 hours or less into the cooling process.
3. Discard cooked, hot food immediately when the food is:
   * Above 70 ºF and more than 2 hours into the cooling process; or
   * Above 41 ºF and more than 6 hours into the cooling process.
4. Use a different cooling method for prepared potentially hazardous foods when the food is above 41 ºF and less than 4 hours into the cooling process.
5. Discard prepared potentially hazardous foods when the food is above 41 ºF and more than 4 hours into the cooling process.

# VERIFICATION AND RECORD KEEPING:

Foodservice employees will record temperatures and corrective actions taken on the Cooling Temperature Log. Foodservice employees will record if there are no foods cooled on any working day by indicating “No Foods Cooled” on the Cooling Temperature Log. The foodservice manager will verify that foodservice employees are cooling food properly by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating the temperature log each working day. The Cooling Temperature Logs are to be kept on file for a minimum of 6 months.

**DATE IMPLEMENTED: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ BY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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