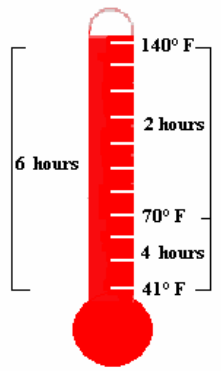
Cooling Potentially Hazardous Foods

South Dakota Office of Health Protection

Food Code Fact Sheet #5

Improper cooling of potentially hazardous foods is a major cause of foodborne illness. Disease causing bacteria grow best in the "temperature danger zone" of 41° F to 140° F. When potentially hazardous foods are improperly cooled, it provides an ideal environment for bacteria to multiply.

Potentially hazardous foods must be cooled from 140° F to 70° F within two hours. An additional four hours is allowed to completely cool the food product to 41° F. The faster foods pass through the "temperature danger zone" as they are cooled the better.



When potentially hazardous foods such as tuna salad or potato salad are assembled from ingredients stored at room temperature, the cooling requirement is cool to 41° F in four hours.

Remember the cooling clock starts when the product temperature drops below 140° F.

Cooling Tips

- Never allow food to set on the countertop (room temperature) to cool.
- Refrigerate or chill the food in an ice bath immediately upon removal from the heat source.
- Use the right type of storage container to chill foods:
  - Divide foods into smaller portions and put into shallow containers.
  - Metal containers chill foods fastest.
  - Glass and plastic containers take longer to cool foods.
- Allow for air circulation because loosely covered or uncovered foods chill faster. Rapidly chill the food, and then cover tightly.
- Where possible, substitute ice for water in a recipe. Add the ice at the end of the cooking process to cool the product rapidly.
- Set containers of food in ice baths and stir frequently.
- Use blast chillers when possible.
- Utilize frozen (Rapid-Kool) water filled stirring paddle.