

Cooling Food in the Correct Amount of Time

2 Stage Cooling Process

Pathogens grow well in the temperature danger zone. However, they grow much faster at temperatures between 125°F and 70°F (52°C and 21°C). Food must pass through this temperature range quickly to reduce the growth of pathogens

1. First, cool food from 135°F to 70°F (57°C and 21°C) within **TWO** hours.
2. Then cool food from 70°F to 41°F (21°C to 5°C) or lower in the next **FOUR** hours.
 - If food has not been cooled to 70°F (21°C) within two hours, it must be reheated & then cooled again.

Factors that affect cooling:

- Thickness or density of the food.
 - The denser the food, the more slowly it will cool.
- Size of the food.
 - Large food items cool more slowly than smaller items. To let food cool faster, you should reduce its size.
- Storage Container.
 - Stainless steel transfers heat away from food faster than plastic.
 - Shallow pans let the heat from food disperse faster than deep pans.

Methods for cooling:

- NEVER cool large amounts of hot food in a cooler. Most coolers are not designed to cool large amounts of hot food quickly.
- Blast Chiller.
 - Blast cold air across food at high speeds to remove heat.
- Ice-water bath.
 - After dividing food into smaller containers, place them in a clean prep sink or large pot filled with ice water.
- Ice Paddle.
 - A plastic paddle that can be filled with ice or water then frozen. Use paddle to stir hot food to cool quickly.
- Ice or Cold Water as Ingredient.
 - When cooling soups or stews, add less water than the recipe requires. When finished cooking, add the water as ice or cold water to cool the food.

When Storing Food for Further Cooling:

- Loosely cover food containers before storing them.
- Food can be left uncovered if protected from contamination.
 - Storing uncovered containers above other food, especially raw seafood, meat, and poultry, will help prevent cross-contamination.