

Food Safety Fact Sheet

Two-Stage Cooling

Cooked potentially hazardous foods need to move quickly through the temperature danger zone to limit growth of micro-organisms that can lead to foodborne illness.

A two-stage cooling process is required if the one-stage cooling process is not used. The steps are:

- 1. From 135°F to 41°F within 6 hours; and
- 2. From 135°F to 70°F within the first 2 hours.

The one-stage cooling process must be used to cool foods prepared using ingredients normally stored at room temperature, like tuna salad, to 41°F within 4 hours.

Many foods require active cooling methods to cool quickly enough. Possible methods include*:

- Placing food in shallow pans
- Separating food into smaller or thinner portions (2 inch depth for thick foods/4 inch depth for thin liquids)
- Cutting large pieces of meat into pieces no larger than 4 inches or 4 pounds
- Stirring the food as it cools
- Using an ice paddle or other equipment to stir the food
- Adding ice directly to the product as an ingredient
- Using rapid chill refrigeration equipment
- Placing food in metal containers that encourage quick cooling
- Placing food in an ice-bath

* Reminder: Food should not be left out on the counter to cool under any circumstances.



Kansas Department of Agriculture | 1320 Research Park Drive | Manhattan, KS 66502 | (785) 564-6767 | agriculture.ks.gov