



INFORMATIONAL BULLETIN NO. 07-01

DISTRICT ENVIRONMENTAL SERVICES DIVISION

RAPID COOLING TECHNIQUES

Improper temperature control of potentially hazardous foods is responsible for causing the majority of foodborne illnesses. Rapid cooling of potentially hazardous foods can have a significant effect on controlling temperature, and most importantly, the prevention of these illnesses.

State law requires the following time frames when cooling foods:

- Foods must cool from 135°F (or above) down to 70°F in two (2) hours
- Foods must cool from 70°F down to 41°F (or below) in four (4) hours

Using the following simple methods will help you easily meet the cooling time requirements:

- Separate the food into shallow, metal pans, no deeper than 4 inches. The smaller batches of food will cool faster. Aluminum pans chill food the fastest, followed by stainless steel. Glass and plastic are not recommended because they are poor conductors of heat.



- Add ice as an ingredient. Ice can be substituted for water in a recipe and added at the end of the cooking process.
- Place the food containers into ice baths. Stirring the food rapidly/frequently will increase cooling. For an ice bath to work, the ice level needs to be at the top of the food level of the container, on all sides.



- Loosely cover food containers that are placed into the refrigerator, so that heat and steam are able to escape the food surface.
- Arrange food containers in a refrigerator to allow for the best possible air flow around the containers.
- Use cooling equipment, such as specially designed, hollow, stirring utensils that can be filled with water and frozen.

An accurate, calibrated probe thermometer is necessary to monitor and evaluate the cooling methods that you choose. This and a time/temperature log sheet will also assist you in explaining your cooling techniques to the health inspector during an inspection. For your convenience, a blank log sheet is located on the back of this bulletin.

* Document Available in an alternate format upon request.



COUNTY OF RIVERSIDE • COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

* Use this form to help you monitor your rapid cooling techniques. Make as many copies as you might need.

- Two (2) hours for foods to cool from 135°F (or above) down to 70°F
- Four (4) hours for foods to cool from 70°F down to 41°F (or below)

Date:

Food Product:		Cooling Method:	
1) Time:	Temp:	6) Time:	Temp:
2) Time:	Temp:	7) Time:	Temp:
3) Time:	Temp:	8) Time:	Temp:
4) Time:	Temp:	9) Time:	Temp:
5) Time:	Temp:	10) Time:	Temp:

Date:

Food Product:		Cooling Method:	
1) Time:	Temp:	6) Time:	Temp:
2) Time:	Temp:	7) Time:	Temp:
3) Time:	Temp:	8) Time:	Temp:
4) Time:	Temp:	9) Time:	Temp:
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5) Time:	Temp:	10) Time:	Temp: