





Cooling of Potentially Hazardous Food

There are times when your business may have food that you cook in advance, cool down and then serve later.

What are potentially hazardous foods (PHFs)?

These are foods that must be kept under temperature control to minimise the growth of any pathogenic micro-organisms that may be present or to prevent the formation of toxins in the food.

Examples of PHFs are:

- Meat
- Cooked rice, pasta, potatoes
- Soups and gravies
- Casseroles, lasagnes, and curries
- Milk, cream, egg, and custard products
- Processed/cut fruit and vegetables

What is the problem?

Food poisoning bacteria that survive the cooking process, such as spore-forming bacteria, or those that were introduced after cooking will start to multiply. Once a PHF is in the danger zone (between 5°C to 60°C), bacteria can rapidly multiply.

The less time that cooked PHF remains in the danger zone during the cooling process, the less opportunity there will be for pathogenic bacteria to grow.

How can I prevent food poisoning bacteria from multiplying?

Cool the food down as quickly as possible!

The Food Safety Standards 3.2.2 (Clause 7) requires PHF to cool down from:

- 60°C to 21°C in a maximum of 2 hours; and
- 21°C to 5°C in a further maximum of 4 hours.

Use a cleaned and sanitised probe thermometer to monitor the cooling process.

It is <u>important</u> that both time and temperature requirements are met. Refer to the diagram.

What are some ways I can quickly cool the food down?

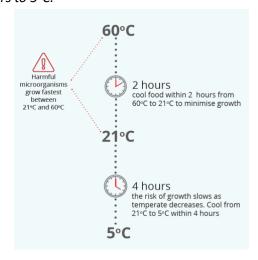
- Portion food in small containers before cooling.
 e.g. slice meats, cut large portions of poultry,
 divide food into service sizes.
- Store food in shallow-filled containers
- Place containers in the fridge/cool room/freezer as soon as food stops steaming
- Stir food regularly
- Use metal containers
- Ensure cool air can circulate around the food do not stack the containers too tightly

Notes:

Wash and dry your hands before handling food!

- Remember that food that have been previously cooked and cooled down, MUST be reheated rapidly to 60°C for hot holding.
- Use only clean sanitised containers and utensils to handle and store food.
- Use your digital probe thermometer to check the core temperature in the middle of the food.

Remember to throw away PHF if the cooling time from 60°C to 21°C exceeds two hours, or exceeds four hours to 5°C .



Cooling Record Sheet

PHFs must be cooled down from:

- 60°C to 21°C in a maximum of 2 hours; and
- 21°C to 5°C in a further maximum of 4 hours.

Use your digital probe thermometer to check the core temperature in the middle of the food. See example below.

If you need more information, refer to the previous page or talk to one of Council's Environmental Health Officers on 8408 1111.

Date	Food	START cooling time (when food is approx 60°C)	After 2 hours		After further 4 hours		Complied?	Neter
			Time	Temp	Time	Temp	(Yes / No)	Notes
1/1/19	Pasta sauce	10:00 am	12:00 pm	19°C	4:00 pm	3℃	Yes	Placed in shallow containers at 10:15 am in the fridge
2/1/19	Pasta sauce	10:00 am	12:00 pm	30°C	4:00 pm	8°C	No	Placed large pot in the fridge Did not comply, thrown away

Date	Food	START cooling time (when food is approx 60°C)	After 2 hours		After further 4 hours		Complied?	Nata
			Time	Temp	Time	Temp	(Yes / No)	Notes