



# Bacteria grow in the temperature danger zone

Bacteria are all around us, including those that can cause food poisoning. Food poisoning bacteria grow best at temperatures between 5°C and 60°C. This is called the Temperature Danger Zone. Keeping potentially hazardous foods cold (below 5°C) or hot (above 60°C) stops the bacteria from growing.

## Temperature control

The food safety standards specify that potentially hazardous foods must be stored, displayed and transported at safe temperatures and, where possible, prepared at safe temperatures.

Safe temperatures are 5°C or colder, or 60°C or hotter. Potentially hazardous food needs to be kept at these temperatures to prevent food-poisoning bacteria, which may be present in the food, from multiplying to dangerous levels. These bacteria can grow at temperatures between 5°C and 60°C, which is known as the temperature danger zone. The fastest rate of growth is at around 37°C, the temperature of the human body.

## What foods are potentially hazardous?

Foods normally considered to be potentially hazardous are:

- raw meats (including meat patties), cooked meats and food containing meat, such as casseroles, curries, lasagne and meat pies
- dairy products and foods containing dairy products, such as milk, cream, custard and dairy-based desserts
- seafood (excluding live seafood) and food containing seafood, such as seafood salad
- processed fruits and vegetables, such as prepared salads and ready-to-eat fruit packs
- cooked rice and pasta
- processed foods containing eggs, beans, nuts or other protein-rich food, such as quiche and soya bean products
- foods that contain any of the above foods, such as sandwiches, rice salads and pasta salads.
- Foods that contain raw eggs, such as raw egg butter, mayonnaise, aioli and hollandaise sauce.



## Keeping food cold

When you are preparing food, make sure that you have enough refrigerator space to store the food. It is important to remember that refrigerators do not work properly when they are overloaded or when food is packed tightly, because the cold air cannot circulate.

## Cooling foods

If potentially hazardous foods have to be cooled, their temperature must be reduced as quickly as possible. The temperature must fall from 60°C to 21°C in less than two hours and be reduced to 5°C or colder in the next four hours. It is difficult to cool food within these times unless you put food into shallow containers.

## Keeping food hot

If you are keeping food hot on cooktops, in ovens or in Bain Marie units, the equipment needs to be set high enough to ensure that the food remains hot (60°C or hotter).

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