Food poisoning and how to prevent it

Don’t let your food turn nasty!

Food poisoning is a serious health problem. It can cause severe illness and even death. Food poisoning is frequently caused by bacteria from food that has been poorly handled, stored or cooked.

Symptoms of food poisoning can include nausea, stomach cramps, diarrhoea, fever, and headaches. Symptoms can occur within 30 minutes of eating, or a number of hours or days later. They can be mild or severe.

Some bacteria can also cause other symptoms. Listeria bacteria may cause miscarriage or other serious illness in susceptible people.

Certain people are more at risk from food poisoning. This includes young children, pregnant women, the elderly, and people with other illnesses.

During food preparation

Hands and equipment (such as knives and cutting boards) can be contaminated with bacteria from raw food. It is important to wash hands and tools properly to reduce the likelihood of food becoming contaminated with bacteria.

During storage

Bacteria from raw food can contaminate ready-to-eat or cooked foods if they are stored in such a way that they come into contact with each other. This includes contact between raw food juices and cooked or ready to eat foods.

The food poisoning chain

There must be a chain of events for food poisoning to occur:
• there must be bacteria on the food
• the bacteria must have the right conditions to grow - that is warmth (between 5°C and 60°C), moisture and food
• the bacteria must have time to grow and multiply.

By preventing each of these, the food poisoning chain will be broken and food poisoning prevented.

High-risk food

Bacteria grow and multiply on some types of food more easily than on others. The types of foods which bacteria prefer include:
• meat
• poultry
• dairy products
• eggs
• smallgoods
• seafood
• cooked rice
• cooked pasta
• prepared salads, coleslaws, and pasta salads
• prepared fruit salads.
Temperature

Bacteria grow quickly in high-risk foods when kept at temperatures between 5°C and 60°C. This is called the Temperature Danger Zone.

If high-risk food is contaminated with food poisoning bacteria and then left in the Temperature Danger Zone for more than 4 hours, it may cause food poisoning. It is very important not to keep high-risk food in the Temperature Danger Zone any longer than is absolutely necessary.

Cooking food to over 75°C kills most of the bacteria. Make sure food is thoroughly cooked, and that the centre of the cooked food has reached 75°C.

Water

Bacteria need moisture to grow. If there is no moisture present, the growth of bacteria may slow down or stop. That is why drying is an effective way to preserve food. However, as soon as moisture is added to dried foods, the risk of bacterial growth in the foods increases.

Some common food poisoning bacteria

<table>
<thead>
<tr>
<th>Bacteria type</th>
<th>Foods that present the highest risk</th>
<th>Food poisoning symptoms</th>
<th>Symptoms occur</th>
<th>Special problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmonella</td>
<td>Under-cooked meat, poultry, eggs and egg products</td>
<td>Nausea, stomach cramps, diarrhoea, fever and headache</td>
<td>Six hours to 3 days after eating contaminated food Symptoms can last 3–5 days</td>
<td>These bacteria produce toxins in food The toxin is not destroyed during cooking, so correct storage of food before and after cooking is essential</td>
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<tr>
<td>Staphylococcus aureus</td>
<td>Under-cooked meat and poultry dishes, egg products, mayonnaise-based salads, cream or custard-filled desserts</td>
<td>Acute vomiting, nausea; occasionally diarrhoea and cramps</td>
<td>One to 8 hours after eating the contaminated food Symptoms may last about 24 hours</td>
<td>The toxin is not destroyed during cooking, so correct storage of food before and after cooking is essential</td>
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<tr>
<td>Campylobacter</td>
<td>Raw meat, raw poultry, raw/un-pasteurised milk Household pets and flies may be carriers of the bacteria</td>
<td>Diarrhoea, abdominal pain, nausea, headache and/or vomiting</td>
<td>Usually 2–5 days after eating contaminated food Symptoms may last 7–10 days. 25% of cases may experience a relapse</td>
<td>The bacteria are killed when food is fully cooked and handled correctly by food handlers</td>
</tr>
</tbody>
</table>
Some ways of preventing food poisoning

☑ Good personal hygiene, such as thoroughly washing and drying hands when handling food.
☑ Avoid cross-contamination, such as keeping raw foods and ready-to-eat foods separate, and using separate, clean utensils, containers and equipment.
☑ Cook foods thoroughly; make sure foods such as meats and poultry are cooked until their core temperature reaches 75°C.
☑ Avoid the Temperature Danger Zone; keep chilled foods cold at 5°C or colder, and hot food hot at 60°C or hotter.
☑ Avoid spoiled foods, foods past their use-by dates, or food in damaged containers or packaging.
☑ When in doubt, throw it out.

Training

Everyone handling food at home or working in a food premises is encouraged to be trained in safe food handling. Dofoodsafely, a free online learning program, is a good place to start – go to http://dofoodsafely.health.vic.gov.au.

More information

A range of resources on safe food handling is available on the Department of Health Food Safety website. Go to www.health.vic.gov.au/foodsafety or phone 1300 364 352.

Local councils can also provide advice about safe food handling.

Food Standards Australia New Zealand has a range of resources on food handling standards on its website at www.foodstandards.gov.au

If you are selling food

If you are working in a food business, or with a community group raising funds through food events, the national Food Standards Code applies.

You must also follow the requirements that apply to certain classes of food premises, that is:

Class 1 and 2
- Follow the business food safety program
- Follow the advice given by the food safety supervisor, unless your premises is exempt.

Class 3
- Complete the required basic records about your food handling practices and keep them onsite.

Your council will advise you about the class of your food premises.