**Summary**

- Food poisoning bacteria can multiply very quickly, particularly in certain conditions.
- Pregnant women, young children, the elderly and those with an illness are more at risk of food poisoning.
- Take care when preparing, storing or serving food, especially potentially high-risk foods.
- See your doctor as soon as possible if you experience symptoms of food poisoning.

Food poisoning is caused by eating contaminated food and affects a large number of Australians every year. Food can be contaminated when it is handled, stored or prepared incorrectly. Some foods carry a higher risk of causing food poisoning, and some people are more at risk of getting food poisoning than others.

**Food poisoning and bacteria**

Food poisoning occurs when sufficient numbers of particular types of bacteria, or their toxins, are present in the food you eat. These bacteria are called pathogens.

**High-risk foods**

Food contamination is not just limited to foods you may consider risky, such as chicken or fish. Prepared fruits, vegetables and salads can also be potentially dangerous. Contaminated food will usually look, smell and taste normal. Food poisoning bacteria can grow and multiply on some types of food more easily than others.

Potentially high-risk foods include:

- raw and cooked meat, including poultry such as chicken and turkey, and foods containing these, such as casseroles, curries and lasagne
- dairy products, such as custard and dairy-based desserts like custard tarts and cheesecake
- eggs and egg products, such as quiche
- smallgoods such as hams and salamis
- seafood, such as seafood salad, patties, fish balls, stews containing seafood and fish stock
- cooked rice and pasta
- prepared salads like coleslaws, pasta salads and rice salads
- prepared fruit salads
- ready-to-eat foods, including sandwiches, rolls, and pizza that contain any of the foods above.

**High-risk groups for food poisoning**

Some people are more at risk of getting food poisoning than others. Take special care when buying, storing and preparing food for these people.

Vulnerable groups include:

- pregnant women
- the elderly
- young children
- people with chronic illness.

**Causes of food poisoning**

Pathogens such as Salmonella, Campylobacter and E. coli may be found in our food-producing animals. Care in processing, transport, storage, preparing and serving of food is necessary to reduce the risk of contamination.
Food poisoning bacteria can multiply very quickly, particularly in certain conditions. The factors that affect bacterial growth include:

- **Time** – in ideal conditions, one bacterium can multiply to more than two million in seven hours.
- **Temperature** – food poisoning bacteria grow best in the temperature range between 5 °C and 60 °C. This is referred to as the ‘temperature danger zone’. This means that we need to keep perishable food either very cold or very hot, in order to avoid food poisoning.
- **Nutrients** – most foods contain enough nutrients for bacteria to grow. This is especially the case with potentially high-risk foods such as dairy and egg products, meat and poultry and seafood.
- **Water** – bacteria need water for their growth. Without water, growth may slow down or stop. That is why dried foods do not spoil.
- **pH** – is the measure of acidity or alkalinity and is also important for controlling bacterial growth. Low pH (acid conditions) generally stops bacterial growth, but where the pH of food is neutral, as is the case for many foods, most bacteria grow quite well.

**Symptoms of food poisoning**
The symptoms of food poisoning may vary depending on the type of bacteria causing the illness. Symptoms can range from mild to very severe. They can occur almost immediately after eating, or a number of hours later, and they can last from 24 hours to five days.

When you get sick, you usually experience one or more of:

- nausea
- stomach cramps
- diarrhoea
- vomiting
- fever
- headaches.

Some food-borne pathogens cause other symptoms. For instance, pathogenic *Listeria* bacteria may cause miscarriage or meningitis in susceptible people. Food poisoning can also lead to other long-term illnesses and symptoms.

**If you think you have food poisoning**
If you experience some of these symptoms and think you have food poisoning, see your doctor as soon as possible. It’s also a good idea to report your illness to your local council or the Department of Health, so that the causes can be investigated. This is particularly important if you think the illness is related to eating out at a restaurant or café, or to food purchased from a shop or take-away outlet.

**How to prevent food poisoning**
There are some simple rules you can follow to minimise the risk of food poisoning. You should take steps to:

- prevent food from being contaminated
- prevent the bacteria in the food from growing and multiplying.

**Buying food**
When you buy food:

- Try to keep potentially high-risk foods outside the ‘temperature danger zone’ and buy hot and cold foods at the end of your shopping trip.
- Keep hot foods and cold foods separate.
- Avoid food past its use-by date and always check labels.
- Avoid food in swollen, dented, leaking or damaged cans, containers or other packaging.
- Don’t buy frozen or chilled foods that have been left out of the freezer, and only buy hot foods that are steaming hot.
• Check that serving staff use separate tongs when handling separate food types, such as meats and vegetables.
• Check that serving staff wear gloves when they handle the food, but not when they are cleaning surfaces or taking money.
• Make sure that eggs in cartons identify the supplier, and never buy cracked or dirty eggs.
• Take your shopping home quickly and store it immediately.

Preparing food to avoid food poisoning
When you prepare food:
• Wash your hands in warm, soapy water before preparing food.
• Don’t use the same cutting board for raw food that will be used for cooked (meat) and foods that are served raw (such as salads). This reduces the chances of cross contamination of food.
• Note that most food should be cooked to a temperature of at least 75 °C.
• Check the cooking temperature with a thermometer. If you don’t have one, make sure you cook poultry until the meat is white, particularly near the bone. Cook hamburgers, mince, rolled roasts and sausages right through until their juices run clear. Cook white fish until it flakes easily with a fork.

Storing food to avoid food poisoning
When you store food:
• Separate raw food from cooked food, and store raw food at the bottom of the fridge to avoid juices dripping onto and contaminating other food.
• Check your fridge temperature is below 5 °C and your freezer temperature is below -15 °C.
• Allow cooked foods to cool to room temperature (about 21 °C) before storing in the refrigerator. (This should not take more than two hours – cooling will be quicker if you put the hot food into a number of smaller containers rather than leaving it in one large one.) This prevents the refrigerator temperature from rising and reduces the risk of bacterial growth in all food stored in the fridge.
• Cover all food with lids, tin foil or plastic wrap.
• Don’t store food in opened tin cans.

Where to get help
• Your doctor
• NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
• Your local council health department
• Food Safety Hotline Tel. 1300 364 352

Things to remember
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