

Food Safety

Food safety and good food hygiene are important in the home as well as in restaurants and other food outlets.

Why?

Illnesses that are caused by 'something I ate' are all too common. Micro-organisms including bacteria, viruses and moulds found in food can cause food poisoning, leading to well-known symptoms, such as stomach pains, diarrhoea and vomiting.

Anyone can get food poisoning but some groups of people, including babies, children and older people, are more at risk of suffering serious symptoms such as gastroenteritis (inflammation of the gut) or septicaemia (blood poisoning). Pregnant women also need to be particularly careful not to get food poisoning.

Contaminated foods will usually look, smell and taste normal, so following a few simple guidelines can help prevent food poisoning affecting you and your family.

Clean hands and utensils

Before handling food, make sure that your hands are clean. Cleaning your hands doesn't mean just passing them under the tap – give them a proper wash with soap. Also, be sure to wash them again after you handle raw meat

If possible, remove any rings, watches and bracelets before you handle food. Bacteria can become trapped under the jewellery and then be transferred to your food.

Before you start to prepare any food, make sure that the area you are working in and the utensils you are using are clean. Clean worktops thoroughly and wash utensils with washing-up liquid and hot water, or use a dishwasher if you have one. Make sure you clean up any spilt food straight away.

Change all tea towels, dishcloths and other cleaning materials regularly as these can harbour bacteria, especially if they remain damp.

Storage of food

Most packaged foods will have storage guidelines on their labels. These guidelines for where and how to store the food are designed to ensure that bacteria are not allowed to multiply in the foodstuff.

Tips on food storage

- Keep your fridge between 0 and 5°C and your freezer at less than -18°C – these temperatures will prevent bacteria from multiplying.
- Store fresh and frozen food in the fridge or freezer as soon as possible after buying it; this is particularly important in hot weather.
- Keep raw meat and seafood separate from other foods.
- Store raw meat in an airtight container at the bottom of the fridge to prevent juices or blood dripping onto other food.

- Defrost frozen foods in the fridge: place them on a plate or in a container as they defrost, so they don't drip on to, or contaminate, other foods.
- Don't store opened tins of food in the fridge – transfer the contents to a suitable airtight container instead.
- To keep cooked leftovers, allow them to cool to room temperature (ideally for 90 minutes) before storing them in the fridge; use up any leftovers within two days.
- Throw away any food that has passed its 'use by' date.

The 'best before' and 'use by' dates will differ when food loses quality in some way after 'best before' but is still safe to eat until 'use by'. Don't use any foods that have passed their 'use by' date, even if you think they look fine, as they may not be safe to eat. The only exception to this guideline is eggs, which contain Salmonella bacteria that may multiply after the 'best before' date. Although you can eat eggs a day or two after their 'best before' date (provided you cook them thoroughly), it's safer to throw eggs away once this date has passed.

Preparation of food

Keep anything that should be refrigerated out of the fridge for as short a time as possible, particularly if the room is very warm.

It is advisable to wash fruit and vegetables under cold running water before eating them. Peeling or cooking fruit and vegetables can also remove any bacteria that may be on the surface.

Always use different chopping boards and utensils to prepare raw meat, including poultry, fish or shellfish. Meat and fish contain harmful bacteria that can spread to anything they touch, so it's important to keep these away from other foods. The bacteria are destroyed during cooking, but it's important not to let them come into contact with any food that isn't going to be cooked before eating. You can buy colour-coded chopping boards (e.g. red for raw meat and green for fruit and vegetables), which can help to prevent confusion.

Cooking

If you cook food at a temperature of 70°C (160°F) or above, cooking will kill off any bacteria. If food isn't cooked at a high enough temperature, bacteria can survive and may cause food poisoning.

Certain meats and meat products always need to be cooked thoroughly before eating: poultry, pork, offal (including liver), burgers, sausages, rolled joints of meat, kebabs.

Tips for cooking food

- Follow the recipe or packet instructions for cooking time and temperature, and make sure the oven is pre-heated properly.
- Food should be piping hot - this means you should be able to see steam coming out before you serve it; you can use a food thermometer to check that food is cooked to the right temperature.
- Take special care to cook meat all the way through; only steak or lamb and rare beef joints should be pink in the middle; use a clean skewer to pierce the meat - if it is cooked properly, the juices will run clear; if you're cooking meat rare, make sure that it is properly sealed (browned) on the outside to kill any bacteria on the meat's surface.
- Always reheat pre-cooked food thoroughly and only reheat it once.

- When cooking food in the microwave, stir it well from time to time to ensure that it is evenly cooked all the way through.

Common culprits

Depending upon your lifestyle and eating habits, some foods and methods of cooking may be more likely to cause food poisoning problems than others.

As described above, guard against the bacteria found naturally eggs and poultry by cooking thoroughly. Similar considerations apply for pork, which should never be eaten pink, to ensure that bacteria and parasites are destroyed. Sausages and burgers, whose pork content and methods of manufacture make them high risk, must be cooked right through – particular care should be taken with barbeques to ensure that these foods are cooked for a sufficient time (rather than just charred on the outside).

In addition to meat and fish, which are generally recognised to be higher risk, one of the most common sources of food poisoning is rice. Freshly boiled or steamed rice will have been heated beyond 70°C during cooking and will therefore be safe however rice that has been kept warm for an extended period or stored incorrectly provides an 'ideal' environment for bacteria to multiply. Reheating rice carries a very high risk of boosting the bacteria, rather than killing them.

Cook-chill meals must be heated as described on the packaging, i.e. until they are piping hot right through. If using a microwave, stir the food mid-way through the heating time, because the centre of a dish takes much longer to reach the desired temperature than does the outer part.

Slow cookers, by their very nature, take a long time to get up to the high temperatures needed to kill bacteria and few have accurate temperature indicators on their controls. Although it would be wise to check the temperature after 4 hours, to ensure that it has reached 70°C, the action of lifting the lid briefly will cause the temperature to fall and the slow cooker will take 20 minutes to return to its thermostat temperature. Never add frozen ingredients to a slow cooker (thaw them completely beforehand).

Key principles for food safety

The important points to remember in order to ensure that the food you prepare and cook is safe to eat can be summarised, courtesy of the World Health Organisation, as follows:

1. Prevent contamination of food with pathogens (bacteria, viruses or moulds that cause disease) spreading from people, pets, and pests.
2. Separate raw and cooked foods to prevent contaminating the cooked foods.
3. Cook foods for the appropriate length of time and at the appropriate temperature to kill pathogens.
4. Store food at the proper temperature.

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