

# Preventing Food Poisoning at Home

## What is food poisoning?

Food poisoning is illness resulting from consumption of contaminated food or water. Food can be contaminated by bacteria, viruses, parasites or fungi, or by toxins produced by them. Food poisoning is one of the most common illnesses in Australia, with an estimated 4-7 million cases of foodborne illness each year.

## General principles

Many different organisms can cause food poisoning. Most are particular types of bacteria and more than 95% of reported cases of bacterial food poisoning are caused by just two species, *Campylobacter* and *Salmonella* (see links to separate fact sheets below). Dangerous bacteria can survive on many foods.

Sources of food poisoning include:

- > unpasteurised milk
- > improperly handled eggs, especially cracked or soiled eggs
- > undercooked meats, including beef, pork and especially chicken
- > stored cooked rice, gravies and sauces (including home made mayonnaise)
- > fresh fruit and vegetables.

Contaminated food may not look, smell or taste any different from food that is safe.

The risk of food poisoning is significantly reduced if food is correctly handled and cooked, and eaten immediately or stored properly.

Food poisoning can be caused by:

- > preparing food without washing hands properly beforehand
- > someone who is sick preparing food for others to eat
- > eating food that is not cooked thoroughly

- > allowing food to be at a temperature for more than four hours that allows bacteria to grow well. Keep food cold enough (fridge or freezer) or hot enough (steaming hot) to guard against bacterial growth. However, the bacteria *Listeria* will grow in refrigerators. *Listeria* is an important cause of illness in the elderly, immunocompromised persons and pregnant women and can cause death and miscarriages (see link to separate fact sheets below)
- > cross contamination from raw meat in the kitchen. Raw meat is the most important source of dangerous bacteria. This is especially so with raw poultry which is nearly always contaminated with *Campylobacter* and *Salmonella*. Proper cooking kills these bacteria but they can be easily transferred to foods that won't be further cooked (e.g. salads) by hands or utensils such as chopping boards or knives. Avoid hand contact with raw meat but if this isn't practical, wash hands thoroughly afterwards. Thorough cleaning of chopping boards and knives with detergent and warm water is required after each use. Best practice is to have a separate chopping board for raw meat and to clean the board and utensils in a dishwasher
- > drinking contaminated water.

## Personal hygiene practices

Always wash your hands before preparing or eating food. Remember also to wash your hands after:

- > using the toilet for any reason. A variety of surfaces in the toilet may have traces of faeces on them
- > changing nappies
- > handling raw meat
- > using a handkerchief or tissue, coughing or sneezing
- > smoking
- > touching animals
- > handling garbage
- > gardening.

# Preventing Food Poisoning at Home (cont.)

## Do not:

- > sneeze or cough over food
- > prepare food for others if suffering from throat, skin or bowel infections
- > smoke in areas where food is prepared
- > use a dirty tea towel for drying dishes – it is better to let them air dry on a draining board.

## Do:

- > protect cuts and sores with a clean dressing and waterproof cover or disposable gloves
- > prevent hair from falling into food – tie it away from the face
- > ensure that children wash their hands before eating or assisting with food preparation
- > clean inside your cupboards and fridge regularly – crumbs in cupboards can attract pests and dirty fridges can harbour bacteria.

## Pests

Pests such as flies, cockroaches and mice carry disease. Keep food safe by:

- > keeping flies out of the kitchen, storage and dining areas
- > using fly spray thoughtfully – cover all food before you spray and until you can no longer smell the spray
- > keeping food scraps stored in garbage bins with close fitting lids – this prevents pests eating the scraps and breeding
- > storing chemicals used to control pests in areas away from those used to store, prepare or eat food.

## Pets

Do not allow animals into kitchens – in particular, do not feed them in the kitchen. Do not wash pet food bowls in the kitchen sink.

## Shopping

The inside of a car provides the ideal environment and temperature for bacteria to multiply, so food should be in the car for as short a time as possible.

Get refrigerated and frozen foods at the end of the shopping trip and keep them cold.

Keep hot foods separate from cold foods.

Check date markings on food packages, for example, use by or best before dates.

Never buy or use:

- > badly dented cans
- > leaking cartons, cans, bottles or containers
- > food packaged in torn or ripped packaging or packaging that has been tampered with
- > food packages or cans that are swollen
- > cracked or soiled eggs
- > ready-to-eat food that has been in contact with raw meat, chicken or their juices. Take note of how ready-to-eat foods are presented as you shop
- > products in vacuum packs if the packaging has become loose.

## Storing food

Remember to:

- > store eggs in the fridge. This improves quality and minimises any safety risk
- > immediately freeze products that you do not intend to use before the use by date. Freezing greatly extends the use by date.
- > check the temperature of your refrigerator using a fridge thermometer. It should be 5°C or less.

Cooked food can be allowed to cool to reasonably warm (about 45°C) before it is put into the fridge; it is not essential to let it completely cool. Food will cool faster in smaller containers, and metal containers lose heat faster than plastic ones.

Store raw meats near the bottom of the fridge to ensure that juices do not drip onto other foods. Alternatively, put meat onto a covered tray or container within the fridge.

# Preventing Food Poisoning at Home (cont.)

Keep raw foods on separate plates from ready-to-eat foods such as cooked foods and salads. Bacteria still grow in foods that have been kept refrigerated – they just take longer to grow.

## Handling and preparing food

Safe food handling and preparation practices include:

- > washing hands well in soapy water for at least 10 to 15 seconds before preparing food, before eating and after touching raw meats
- > asking other people to prepare food if you are not feeling well
- > never placing cooked foods on dishes that have contained raw products such as meat, poultry and fish, unless the plates have been thoroughly washed first
- > never using a sauce on cooked food if it has been previously used to marinate raw meat or seafood, unless the marinade has been cooked first or will be cooked. For example, do not spoon the uncooked juices or marinade over the cooked food and serve. The uncooked marinade will probably contain harmful bacteria.

All fruit and vegetables should be thoroughly washed if they are to be eaten raw.

Sprouts and herbs should be rinsed before serving.

Never keep perishable food outside of a fridge for longer than four hours.

Never refrigerate perishable foods that have been at room temperature for more than two hours. This includes preparation and serving time. For more information visit: <http://www.health.sa.gov.au/pehs/Food/2hour-4hour-rule.pdf>

## Thawing frozen foods

Thaw meat and other foods in the bottom of the fridge whenever possible. Food can be thawed in a microwave oven, at room temperature (for example, on a bench) or in water, provided the food is cooked immediately after it has thawed.

Take great care if you cook meat when it is only partially thawed. Make sure that it is cooked right through.

## Cooking and reheating

The surface of meat is usually the part that is contaminated with bacteria. Problems arise especially when contamination from the outside is moved to the inside, such as when meat is minced or sliced or a skewer is pushed through the meat. Then the meat must be thoroughly cooked right through. Therefore mince, sausages, hamburger patties, rolled roasts, kebabs, yiros, shashliks and other such foods should be cooked right through. Thorough cooking means that there is no pink meat and the juices run clear when the meat is skewered, cut or pressed.

If you have access to a meat thermometer, you can use it to check the internal temperatures. In the case of hamburgers and poultry, make sure they are cooked throughout. Aim for around 75°C in the centre of the meat item.

Microwaves are a quick and convenient way to cook foods, but they tend to heat foods rather unevenly, leaving cold spots. So, when microwaving foods, always rotate and stir the food during cooking for more even cooking. Also, wait until the required standing time is over before you check that cooking is complete, because foods continue to cook even when the microwave is turned off.

When reheating foods, heat to steaming hot. This will kill any bacteria which may have grown on the food in the fridge.

# Preventing Food Poisoning at Home (cont.)

## Eating outdoors

(picnics, barbecues, camping, school lunches)

Warm summer weather is perfect for bacteria to grow.

Keep all food cold, unless it has just been cooked and will be eaten hot straight away. Don't pack food if it has just been cooked and will be eaten cool. Let it get cold in the fridge first.

Do the maximum amount of food preparation at home, particularly if hand washing facilities are inadequate at the place where the food will be eaten.

When camping, it is best to pack dried, canned and UHT foods rather than fresh foods.

When packing children's lunches, either pack a frozen ice block drink in the lunch box to keep food cold (summer and winter) or choose foods that will not 'go off'. That is, do not pack foods that would normally be kept in the fridge, such as milk, soft cheese, meats or eggs, even in sandwiches. Fillings for sandwiches that are fairly safe under warmer conditions are often those fillings that can sit on a shelf without needing refrigeration, such as honey, yeast extracts and peanut butter products. In some schools where there are children with severe allergies to nuts and nut products, parents may be asked not to include these products in their children's school lunches.

## Eating out

(restaurants and take-aways)

Cold foods should be cold to the touch and should be displayed on ice or in a fridge.

Poultry, mince, sausages, hamburger patties, rolled roasts, kebabs, yiros, shashliks and other such foods should be cooked right through. If they are not, send them back.

Eat hot foods while they are still hot. Be careful about handling leftovers, including foods taken home in a 'doggy bag'. They should be put in the refrigerator as soon as possible.

If you are not happy with the safe handling of the food at a restaurant or take-away, contact your Environmental Health Officer at your local council and discuss your concerns.

- > *Campylobacter* Infection
- > *Salmonella* Gastroenteritis
- > Listeriosis

### Useful websites

- > **Food Safety**  
<http://www.health.sa.gov.au/pehs/food-index.htm>
- > **Wash, Wipe, Cover**  
<http://www.health.sa.gov.au/infectioncontrol/>