



# How to Avoid Food Poisoning

Four Parts: [Preparing Food Properly](#) [Storing Food Correctly](#) [Eating Safely](#) [Understanding Food Poisoning](#)

Food poisoning is unpleasant at best and deadly at its worst. Start with Step 1 below for some important information on how you can reduce your chances of contracting food poisoning (both in a restaurant and at home) along with tips on how to prepare food safely.

Part  
1

## Preparing Food Properly

- 1 Shop with care.** Food safety begins at the grocery store, so make sure to shop wisely:
  - Check the use-by dates on all products and use your judgement to decide if foods have been stored at the correct temperatures.
  - Pack **meat** and poultry products into separate bags and do not let the raw flesh touch any other food products as you shop or bring them home.
- 2 Maintain the cold chain.** Keep cold and frozen foods as cold as possible, especially when transferring from the store to your home:
  - Wrap the goods in newspaper or buy a small cooler bag to transport your cold and frozen foods home.
  - When possible, leave grabbing cold products to the end of your shopping.
  - Store all foods properly and quickly when you get back home.
- 3 Always wash your hands before and after preparing foods.** Wash your hands thoroughly with hot water and antibacterial soap before and after preparing food, especially after handling raw meat.
  - Keep dish cloths and hand **towels** regularly cleaned to prevent bacteria from accumulating on the fabric.
  - *Always* wash your hands after handling pets (especially reptiles, turtles and birds) and after using the bathroom or handling pet litter.
- 4 Keep your kitchen clean.** It's very important to keep your kitchen counters and other food preparation areas clean, especially when preparing high-risk food items like meat, poultry and eggs.
  - It's not necessary to use a disinfectant, a mild solution of hot water and **soap** will sufficiently clean your counters, cutting boards and utensils.
  - Also make sure to rinse down sinks after washing raw meat products -- you don't want bacteria being transferred to any clean dishes.
- 5 Use separate chopping boards for preparing raw **meat/poultry and vegetables**.** Keep these boards separate to avoid any possibility of cross-contamination of bacteria from meat to other food products.
  - If you cannot keep separate chopping boards, make sure to disinfect a multi-purpose chopping board thoroughly after each use (see bleach recipe in "Tips").
  - Plastic chopping boards are recommended over wooden chopping boards, as the wooden ones are harder to clean.
- 6 Defrost carefully.** You should never defrost food (especially meat and poultry) at room temperature just to speed up the process.
  - Food should always be thawed in the refrigerator, as thawing at room temperature allows the surface of the food to warm up too quickly, promoting bacteria growth.

- Alternatively, you can defrost foods using the "defrost" or "50 percent power" setting on your microwave. You can also safely defrost food by holding them under cold running water.<sup>[1]</sup>
- Once foods have been completely thawed, they should be used promptly -- they should never be refrozen without being cooked first.

**7 Cook foods thoroughly.** This is especially important for red meat, poultry and eggs, which are considered high-risk foods.

- **Cooking** these foods all the way through will destroy harmful germs. Consult a **cookbook** for the correct cooking times (taking the weight of the food and the temperature of your oven into account).
- Use a meat thermometer if you have any doubts about how long to cook something -- this can take a lot of the uncertainty out of cooking meats. Chicken and turkey are cooked when they reach a temperature of 165°F, steaks are cooked at 145°F and hamburgers are cooked at 160°F.<sup>[2]</sup>

**8 Keep hot foods hot and cold foods cold.** Bacteria multiply fastest between 40°F and 140°F, so it's important to keep foods either above or below these temperatures.

- You should make sure your fridge is set at a temperature of 4°C/ 40°F or less and that cooked food reaches a temperature of at least 165°F

**9 Reheat leftovers thoroughly before serving.** Leftovers that have been reheated poorly can still contain active food pathogens. Moreover, if leftovers have gone bad, no amount of reheating will make them safe.

- Do not keep leftovers for too long. Any signs of discoloration, sliminess, growth of mold etc. are signals to discard or compost the leftovers.
- Never reheat leftovers more than once and never refreeze food without changing its state! (i.e. you can safely freeze raw food, defrost the raw food, cook the food, refreeze the cooked food and defrost/reheat the cooked food. However, if any of the reheated cooked food is left over, throw it away or there is a very high chance of getting sick!

## Part 2 Storing Food Correctly

**1 Store foods according to their needs.** The type of storage is dependent on the type of food.

- Dry foods such as pasta, rice, lentils, beans, canned foods and cereals can all be kept in a cool, dry place such as a pantry or cupboards.
- Other foods can be trickier and care should be taken to store them in the appropriate manner:

**2 Freeze or refrigerate as necessary.** Place frozen items in the freezer within 2 hours of removing them from the freezer (though ideally this should be done sooner—put them away as soon as you get home).

- Meat, poultry, eggs, fish, pre-prepared meals, dairy products and leftovers should always be refrigerated.
- Many foods should be kept refrigerated or in a cool, dark place, such as a cellar or pantry, once opened. Read labels for storage details and instructions. If in any doubt, always err on the side of providing a cooler environment.

**3 Never store food in an open container.** Food -- particularly raw meats and leftovers should never be stored in open container.

- Tightly cover all foods with cling wrap or tin foil, place in a container with an airtight lid, or store in a sealable plastic bag.
- Never store food in opened tin cans, as this forms a breeding ground for bacteria. Transfer things like tomato paste and sweetcorn to a plastic container instead.

**4 Pay attention to use-by dates.** All foods, regardless of their storage status, should be eaten quickly and within

their use-by dates.

- Even spices and dried herbs lose their beneficial properties and flavors if kept too long and many items can become harmful if stored beyond their use-by date.
- Never eat foods from dented or bulging tins or from packaging with a broken seal, even if the food is within its use-by date.<sup>[3]</sup>

**5 Keep foods separated.** At all times, keep raw **meat**, raw **eggs** and poultry away from cooked food, fresh **fruits**, and **vegetables**.

- Store raw meat covered, on the bottom shelf of your refrigerator. This will prevent it from touching or dripping onto other foods.<sup>[4]</sup>

**6 Protect your food from insects and animals.** Food can easily become contaminated if it is easily accessible to pets and pests.

- Proper food storage -- keeping food in sealed containers in a closed fridge, freezer or cupboard -- will help to keep insects and animals away.
- However, food is more susceptible to contamination by four-legged beasts during preparation and serving. Don't leave food unattended during the preparation process and keep completed dishes covered with lids or cling wrap until they are ready to be served.

**7 Be extra careful during warmer weather.** Food contamination from **bacteria** occurs much faster in warmer weather.

- If you are eating outdoors, ensure that everyone eats the food quickly and that leftovers are brought back inside within an hour to be stored in the cool again.

### Part 3 Eating Safely

**1 Always wash your hands before eating.** Wash with hot water and antibacterial soap and dry thoroughly using a clean hand towel.

**2 Avoid milk and fruit juices that are unpasteurized.** Pasteurized foods have been through a process that kills germs.

- If **milk** and fruit juices are pasteurized, it will usually say so on the label. You should also avoid food products made with unpasteurized milk, such as certain cheeses.
- However, commercial juices and juice concentrates that are sold at room temperature and have an extended shelf life are pasteurized, even if the label doesn't say so.

**3 Eat foods soon after they have been cooked.** This will help to ensure that harmful germs haven't had the time to grow.

- Follow the "2-2-4" rule when it comes to leftovers -- don't leave food out for more than two hours after cooking, refrigerate food in containers no deeper than two inches and throw away leftovers that are more than four days old.

**4 Rinse and scrub raw foods.** Foods that are not cooked before they are eaten, such as fresh **fruits** and **vegetables**, should be rinsed in water and even scrubbed or peeled where necessary.

- You should even wash raw produce if you plan on peeling it afterwards, as contaminants from the skin can be transferred to the flesh during peeling.
- However, you shouldn't wash pre-washed bags of lettuce and other greens, as the extra washing risks introducing new contaminants to the already-clean produce.<sup>[2]</sup>

**5 Be very careful with raw fish and meat.** Sushi, steak tartare etc. are delicacies that can delight if properly prepared. However, the highest level of hygiene must be ensured for these items. Only eat these items at reputable places!

- Avoid sushi, raw clams and similar foods that are sitting in a buffet table if you don't know how long they have been without proper refrigeration. If you make them at home, use the best and freshest ingredients, follow all hygienic practices outlined here and eat immediately upon creation.
- *Note that fresh doesn't necessarily mean "straight from the animal," as deep frozen sushi fish is substantially safer than fresh-killed fish, since the deep freezing kills parasite spores.*
- Raw flesh foods are extremely difficult to prepare properly and safely, so if in doubt, don't make them yourself. **Never** keep raw flesh foods as leftovers.

**6 Avoid raw eggs.** Raw eggs are one of the most common culprits behind food poisoning outbreaks.

- This is due to the relatively high frequency of salmonella bacteria developing in raw eggs.
- Avoid using raw eggs in healthy smoothies or shakes to increase their protein content -- use an egg substitute or protein powder instead.
- Beware of eating foods that contain raw eggs, such as uncooked cookie dough or cake batter -- even a small nibble could make you sick.<sup>[2]</sup>

**7 Don't eat raw shellfish.** Eating raw shellfish is an extraordinary risk, although raw clams and oysters are considered a delicacy. There are several risk factors particular to shellfish that make it much more dangerous than raw fish:

- Red tide and other naturally occurring microbial outbreaks can contaminate shellfish, which build up toxins in their flesh. Risk of hepatitis is high and alcoholics and persons with liver damage are particularly at risk.
- If you do eat raw shellfish, make sure they are alive when you purchase them. This means that mussels, clams and oysters will have closed shells, or the shells close when tapped. If the shell is open, throw it away.

**8 Pay extra attention to other signals when eating out.** Every year, people become sick after eating at restaurants, delis and diners that fail to maintain basic food safety and hygiene standards. Therefore it's important to be vigilant about food safety even (or especially) when eating out.

- **Check the premises.** The hygiene standard should be fairly self-evident. Always take a look at the bathrooms before dining -- if they're dirty, it's a reasonable assumption that the kitchen is too.
- **Be careful with buffet-style food.** Check to see that hot food is being kept hot and not just lukewarm. Rice can be a source of food contamination if it has been left out for too long. Salads are also a possible problem if they are not fresh.
- **Be careful with some salad dressings.** Mayonnaise, Hollandaise, Bearnaise and other sauces which contain raw egg, as well as meringue.
- **Send back undercooked foods.** If you are served an undercooked meat or egg dish, don't feel bad about sending it back to the kitchen and requesting it be cooked further -- also remember to ask for a fresh plate.

**9 Don't eat it if you have any doubts.** Trust your senses! If it looks unusual, smells bad, or otherwise worries you, leave it.

- Even if you have followed all of the precautions outlined above, if the food doesn't taste right or makes you nauseous, stop eating and (politely) get it out of your mouth.
- It's better to be safe than sorry!

## Part 4 Understanding Food Poisoning

**1 Understand what causes food poisoning.** Food poisoning is caused by ingesting food or drink that has been contaminated with either:

- Chemicals such as insecticides or food toxins including fungi (e.g. poisonous mushrooms).
- Or gastrointestinal infections of bacteria, viruses or parasites.

- Most people refer to food poisoning as covering any of those possible sources.<sup>[5]</sup>

**2 Understand the risk of food growing and environmental factors.** Environmental factors and the food growing process can both play a role in the transfer of potential food-contaminating bacteria.

- The use of **chemicals**, **fertilizers**, **manures** etc. all have the potential to contaminate food as it is being grown. Never hold an expectation that an item is washed before it leaves the farm.
- Bacteria, parasites etc. travel happily in the wind, float in the **water**, hitch lifts with dust and reside snugly in the soil. They are a part of nature's web of life and will always be a possible source of contamination if not dealt with appropriately as part of a consistent and dedicated approach to food hygiene.

**3 Understand the risk of food processing.** Whether in a large factory or in your own **kitchen**, food processing can be a major source of contamination.

- Areas used for processing need to be kept scrupulously clean or cross-contamination can easily occur, especially with meat products.
- Natural bacteria residing in the intestines of animals are a major source of cross-contamination when mishandled).

**4 Understand the risk of food storage.** Incorrectly stored food can be the culprit behind transferring contaminants from one food to another.

- This is a very tricky area because often people don't think that certain foods could be a source of contamination and are unaware that cross-contamination has occurred.
- For instance, if an uncooked **chicken** thigh was left resting next to a bunch of **grapes**, this could be a possible cause of contamination and food poisoning.

**5 Understand the risk of food preparation.** A great deal of food contamination occurs during the preparation stage.

- A sick person can pass on germs, from **'flu** to gastroenteritis.
- A chopping board used for **meat** that is not washed and then used for vegetables is another source of possible contamination.
- Unwashed hands, dirty kitchen spaces, **insects** and **rodents** in the kitchen etc. are all possible sources of food contamination.

**6 Recognize the symptoms of food poisoning.** If you've every experienced food poisoning, you'll know how unpleasant it is.

- The symptoms may vary slightly depending on the severity of the poisoning, but most people will experience some combination of the following: nausea and vomiting, Watery diarrhea (potentially with bleeding), abdominal pain and cramps, fever.
- The symptoms may start as soon as several hours after eating the contaminated food, or as late as several weeks afterwards. Food poisoning generally lasts between one and ten days.
- See your doctor if you can't keep liquids down or become dehydrated, see blood in your vomit, experience diarrhea for more than three days, experience extreme abdominal pain, or have an oral temperature higher than 101.5 F.<sup>[6]</sup>

**7 Be extra careful if you are in a high-risk group.** People in certain high-risk groups, such as pregnant women, very young children, people with weakened immune systems and the elderly should be extra careful to avoid food poisoning.

- The results of food poisoning can be a lot more severe for people in these groups and it can even cause fetal abnormalities in pregnant women.
- People in these groups should take extra precautions, such as avoiding soft cheeses (like feta, brie and Camembert), avoiding or thoroughly reheating deli meats, and being extra vigilant about reheating foods until they are steaming hot.<sup>[7]</sup>

## Tips

- Know the possible symptoms that indicate food poisoning:
  - Stomach cramps or pain
  - Nausea
  - Vomiting
  - Diarrhea
  - Increased temperature, fever
  - Headaches, throat aches
  - General flu-like symptoms
  - Sudden tiredness, loss of energy and/or a desire to sleep
- **Bleach recipe for chopping boards:** Mix 1 teaspoon (5 ml) bleach per 34 fl oz (1 liter) of water. Wash the board in hot, soapy water first and then disinfect the board in the bleach solution.
- It can help to mark your chopping boards "Meat Only", "Veggies Only", "Bread Only" etc. It is not just for the benefit of the regular cook(s) but for anyone else who happens to want to help out in the kitchen.
- If you do consume unpasteurized products, ensure that they come from a reputable source, are properly stored and are consumed very quickly. For instance, if you milk your own cow, maintain very high hygiene standards during the entire milking process, from the method used for feeding and lodging the cow to the method used for milking, as well as sterilization of milking equipment and milk containers.
- Many restaurants have a minimal temperature for cooking meat and poultry. For example, in the US, beef, pork, veal or lamb must have a minimum temperature of 145°F; turkey and chicken at 165°F; fish at 145°F and eggs at 165°F. In the UK, hot food is cooked to 72°C and above.

## Warnings

- Just because an item is marked "organic" or "naturally grown" doesn't mean you should place it into your mouth without a home-wash first. These labels don't mean "clean"! They are just a method of growing or a marketing message and you must still wash and scrub the items as per normal.
- At the company picnic, always avoid the mayo-based salads that have not been refrigerated (i.e. potato salad, egg salad, pasta salad).
- While clean salads are an excellent source of vitamins and fiber, salad bars are one of the most common sources of food poisoning. Packing your own carefully-washed salad is a safer alternative.
- You can get severely sick from food poisoning. Seek medical assistance immediately if you suspect that you have food poisoning.
- Contrary to popular belief, wooden cutting boards are not more harmful than plastic boards. While the wood may hold bacteria in the little cracks, research has shown that bacteria does not multiply in wood, and are, in fact, more prone to dying out than in plastic.<sup>[8]</sup> Whatever type of board that you use, remember to keep it clean.

## Sources and Citations

- Food Safety - US government site on food safety tips.
- Wikipedia - background information on food poisoning.

1. <http://www.mayoclinic.org/diseases-conditions/food-poisoning/basics/prevention/con-20031705>

Show more... (7)

### Made Recently

Did you try these steps?  
Upload a picture for other readers to see.