





Microbiological risks

Find out about the main microorganisms that can contaminate your food, and in what foods they can be found, so you can eat safely.

Diet plays an important part in everyone's health, but even more so for pregnant women. Food can contain microorganisms that, if ingested, can cause serious diseases in both the mother and the foetus. However, by adopting some correct behaviours, it is possible to reduce the risk of contracting these diseases.









Toxoplasma

Listeria monocytogenes

Salmonella

Campylobacter







Escherichia coli

Hepatitis A Virus

Norovirus

MICROBIOLOGICAL RISKS

MICROORGANISM	WHAT IS IT?	BE CAREFUL OF THESE FOODS
Toxoplasma	Toxoplasma gondii is a parasitic protozoa that can affect animals and humans. Toxoplasmosis in pregnant women can cause miscarriage, malformation or serious brain damage in the foetus.	 Raw or badly washed fruit and vegetables. Raw or undercooked meat. Smoked meat and sausage products or cured meat products with a shorter maturation period.
Listeria monocytogenes	Listeria monocytogenes is a widespread bacteria that can cause listeriosis, a disease that is rare but that can have serious consequences. In pregnant women, it can have serious consequences for the foetus, causing congenital listeriosis, premature birth, miscarriage or foetal death.	 Raw or undercooked meat. Fresh sausage products, or those with a short maturation period. Dishes with cold, ready-to-eat meat. Mayonnaise, meat salad and sandwiches. Raw vegetables, fresh mushrooms, lettuce and bags of salad. Raw or unpasteurised milk and cheese made from this, butter. Smoked fishery products, salmon and trout. Cooked, ready-to-eat food, stored at an incorrect temperature for a long period.
Salmonella	Salmonella is a bacteria that can be found in the intestines of humans and animals, and can spread to the environment through faecal contamination. During pregnancy, the infection could affect the development of the foetus. In more severe cases, this can lead to miscarriage or to premature birth.	 Raw or undercooked egg and derived products (mayonnaise, desserts such as tiramisu). Raw or unpasteurised milk, and cheese made from this. Raw or undercooked meat (chicken and turkey). Sausage products that are fresh (sausages) and matured (salami made of pig products). Seafood.
Campylobacter	Campylobacter is a widespread bacteria that can be found almost everywhere in nature. It can cause campylobacteriosis. In pregnant women, this can lead to delayed development of the foetus and premature birth.	 Non-potable water. Poultry if eaten raw or undercooked. Raw or unpasteurised milk. Raw or undercooked seafood.
Escherichia coli	This is a microorganism that can be found in the gastrointestinal tract of humans and animals, and can spread to the environment through faecal contamination. During pregnancy, it can cause intestinal haemorrhage, haemolytic uremic syndrome, thrombocytopenia and haemolytic anaemia. There may also be a risk of foetal death and miscarriage.	 Raw or unpasteurised milk, and cheese made from this. Raw or undercooked meat, in particular minced beef. Fresh fruit and vegetables (salad vegetables, shoots, spinach).
Hepatitis A Virus	Hepatitis A is a disease of the liver caused by the HAV virus (Hepatitis A Virus). It often begins with no symptoms.	 Non-potable water. Seafood or fishery products if eaten raw or undercooked. Raw or badly washed fruit and vegetables. Cold, ready-to-eat food (sandwiches or pre-prepared food from the delicatessen).
Norovirus	Norovirus is a very resistant and highly infectious virus. Its symptoms are nausea, vomiting, watery diarrhoea, abdominal cramps and sometimes fever.	 Non-potable water. Seafood or fishery products if eaten raw or undercooked. Raw or badly washed fruit and vegetables.







Risky foods

Pathogenic microorganisms can be found in all of these foods. Discover the risks that these present so that you can eat safely.

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RISKY FOODS

FOOD	WHAT RISK IS THERE?	ADVICE TO AVOID RISK
Water	If water is contaminated or non-potable, it can carry bacteria, parasites and viruses.	 Only consume potable water: drink bottled or tap water, avoid water from artesian wells or other uncontrolled sources. Pay attention to where the water comes from that is used to make ice for drinks or that comes into contact with food, the water that is used for washing or preparing food, and even the water that is used for washing kitchen utensils.
Fruit and vegetables	If eaten raw and not well washed, fruit and vegetables can pose a risk of Toxoplasma, Norovirus, Hepatitis A virus and <i>Listeria monocytogenes</i> . In particular, products from the family garden could carry Toxoplasma.	 Wash fruit and vegetables carefully under running water. To be extra careful, it is recommended that you use appropriate chlorine-based disinfectant products for food. When eating out, it is better to avoid eating raw fruit and vegetables if you are not sure that they have been washed properly.
Meat and meat products	Fresh meat, eaten raw or undercooked, and sausages and cured meat products with a shorter maturation period may present a risk of Toxoplasma, <i>Listeria monocytogenes</i> , Salmonella, Campylobacter and <i>E.coli</i> . In particular, poultry can very easily carry Salmonella and Campylobacter, while beef can carry <i>E. coli</i> .	 It is not advisable to consume raw or undercooked meat, or sausage products and cured meat products with a shorter maturation period. It is better to avoid cold cuts on buffets (e.g. ham, mortadella, turkey slices) because of the risk of cross contamination; industrially manufactured, pre-packed packages are better. Be careful of cross contamination of preserved meat products, do not eat without thoroughly and uniformly heating first.
Eggs	Raw or undercooked eggs (fried, soft-boiled) or preparations that contain raw or undercooked egg (homemade mayonnaise, sauces and cream, certain desserts such as tiramisù) can pose a risk of Salmonella.	 It is not recommended to consume raw or undercooked egg and derived products. Products that contain raw or undercooked egg are dangerous even after freezing. Be careful of cross contamination of cooked eggs with raw products of animal origin, or raw egg with food that is ready to eat, utensils and work surfaces.
Milk and cheese	Raw or unpasteurised milk can present a risk, mainly due to Campylobacter, Salmonella and E. coli. Soft cheeses with a short ageing process made with unpasteurised milk (e.g. brie or camembert) or blue-veined cheeses (e.g. Gorgonzola) can present a risk of <i>Listeria monocytogenes</i> .	 It is not recommended to consume raw or unpasteurised milk, cheeses with a short ageing process made with unpasteurised milk, or blue-veined cheeses. Mature cheeses, pasteurised milk and yoghurt are safe to eat. Avoid artisan or homemade ice cream. It is also better to avoid flavours with fruit, as this may not have been washed properly.
Fish and seafood	Fresh fish and any seafood that is eaten raw or undercooked could present a risk of Norovirus, Hepatitis A virus, <i>Listeria monocytogenes</i> , Campylobacter, Salmonella and <i>E. Coli.</i> Smoked fish can present a risk of Listeria.	 Always eat fish or seafood that has been well cooked. If the fresh fish has not already been gutted by the fishmonger, this should be done as soon as you return home. Do not keep cooked fish for a long period; it should be eaten within a short time and should be thoroughly and uniformly heated beforehand. Eating smoked fish is not recommended







How to reduce the risks

Discover the measures and good practices that you should adopt to reduce the risk of contracting diseases transmitted by food. To protect both you and your baby.

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Food to avoid

Buying and washing Preparation and cooking



Storage



Contamination

HOW TO REDUCE THE RISKS

FOOD TO AVOID

- Raw, badly washed vegetables, or vegetables that you are not sure have been washed properly
- Raw or undercooked meat
- Fresh sausage products that have not been matured, particularly homemade products
- Raw, undercooked or smoked fish
- Raw or undercooked seafood

BUYING AND WASHING

- Always use potable water for drinking, preparing ice, washing and preparing foods or for washing kitchen utensils.
- Do not buy heavily soiled or refrigerated eggs.
- Carefully wash **fruit and vegetables** before eating, cutting or cooking them; use running potable water or chlorine-based detergents (bicarbonate is not effective).
- Do not wash **poultry** (chicken, turkey) before cooking.

STORAGE

- Do not keep cooked fish for a long period of time, and eat fresh fish within a short time of buying.
- Do not keep refrigerated products past their expiry date.
- Eat **precooked** or ready-to-eat products within a short period.
- Before eating stored leftovers, reheat them at a high temperature.
- In your refrigerator, keep raw products (especially eggs, meat and fish) well separated from each other, and particularly from vegetables and ready-to-eat food.
- Keep **eggs on the middle shelf of the fridge** (4-5°C), well separated from other foods and only remove from the fridge shortly before use.
- **Do not wash eggs** before putting them in the refrigerator: the water could aid the transfer of harmful bacteria to the inside of the egg. They may be cleaned with a damp cloth before use.
- Keep your refrigerator tidy and regularly clean the internal walls and shelves with warm water and liquid soap.
- Keep the temperature of the refrigerator around 4°C and the freezer below -17°C.

- Raw or undercooked egg (fried, soft boiled)
- Sauces, creams or dishes made with raw or undercooked egg (homemade mayonnaise, certain desserts such as tiramisu)
- Raw or unpasteurised milk, if not boiled first
- Soft cheeses with a short ageing process made with raw or unpasteurised milk (e.g. brie, camembert) or blue-veined cheeses (e.g. gorgonzola)

PREPARATION AND COOKING

- **Eggs, seafood products** (in particular bivalve molluscs) and meat (in particular poultry and minced beef) should be carefully and fully cooked.
- **Do not use a microwave oven** to cook food: this does not guarantee that the food will be uniformly cooked.
- **Do not break eggs** on the edges of the containers that you will use to prepare them, use a different container; after breaking, remove the eggshells from the kitchen.
- Raw vegetables, sausage products and cured meat products may only be used as pizza toppings if cooked together with the pizza.

BE CAREFUL OF CONTAMINATION

- Be aware of **cross contamination**, meaning contamination between raw products and ready-to-eat foods, or between dirty surfaces and utensils and ready-to-eat foods.
- Carefully wash kitchen surfaces and utensils that have come into contact with raw meat and unwashed fruit and vegetables with detergent.
- Always wash your hands with soap before eating and after having touched raw meat, eggshells, unwashed fruit and vegetables, or the ground.
- Remove **insects** such as flies and beetles from the house, protect food against contact with these as they may carry harmful bacteria.
- Always use rubber gloves whenever you might come into contact with materials that could
 potentially have been contaminated by cat faeces (gardening, horticulture, cleaning the
 cat's litter box etc.).
- Take good care of your personal hygiene, wash your hands after using the bathroom, changing a nappy, touching or stroking your pet, and always before preparing food or eating.