

During pregnancy, hormonal changes affect a woman's immune system which can make them more susceptible to foodborne illness. Some foodborne illness can adversely affect the developing baby. Listeria and Salmonella are two types of bacteria which are of particular concern during pregnancy.



Listeria

Listeria is a bacteria that is found naturally in the environment, such as soil, where it can be transferred onto food. These bacteria survive in cold, moist locations, and can be hard to eliminate. Listeria can contaminate and grow on certain high-risk foods due to the way they are processed.

Listeria infection (Listeriosis) can present with no symptoms, or very general flu like symptoms (listed below). It can take 30 days or longer for the symptoms to occur.

Symptoms include:

- fever
- chills
- muscle aches
- nausea
- diarrhoea (less common).

Although Listeriosis is rare, pregnant women are 13 times more likely to get listeriosis than a non-pregnant healthy adult. Listeria infection can lead to miscarriage, premature labour or stillbirth.

Foods that are at higher risk of listeria bacteria contamination include:

- foods that have been prepared well in advance and are to be eaten without further cooking (for example pre-prepared salads, sandwiches)
- foods processed by slicing, chopping or shredding after cooking (e.g. processed and ready to eat meats)
- foods that have a refrigerated shelf life of greater than 5-7 days
- foods that are kept in refrigeration storage for long periods, thereby allowing the bacteria to thrive and multiply.



Higher risk foods to avoid	Safer alternatives
Cold cooked chicken Cold processed meats including ham Raw seafood including cold smoked salmon and oysters	Freshly cooked meat, chicken and seafood that is steaming hot Home cooked cold meats that are eaten within one day
Soft and semi-soft cheeses such as brie, camembert, ricotta, blue and feta	Hard cheeses Processed cheese, cheese spreads, plain cream cheese, plain cottage cheese
Unpasteurised milk and dairy products	Pasteurised dairy products
Pre-prepared or pre-packed cold salads	Freshly washed and prepared fruit, vegetables and salads
Pate that is refrigerated at the point of purchase	Pate, meat or fish paste packaged in cans or pouches that do not require refrigeration at the point of purchase (shelf stable)
Soft serve ice-cream	Tub ice-cream

Ways to reduce risk of listeria infection

- Wash all fruit and vegetables thoroughly before preparation.
- Eat freshly cooked or freshly prepared food as much as possible and consume within a day of preparation.
- Refrigerate leftovers within 2 hours and use them within 24 hours.
- Keep your fridge below 5°C.
- Reheat foods thoroughly, until steaming hot.
- If eating out, choose hot foods only.
- Avoid refrigerated foods that are past their 'use by' or 'best before' date.



Salmonella

Salmonella is a bacteria that is found in the gut of pets, livestock, wild animals and people. Salmonella illness (salmonellosis) is a type of gastroenteritis (see symptoms below). While all people are at risk of salmonella illness, serious illness is more likely to occur in the elderly, very young children, and those with weakened immune systems, including pregnant women. In rare but serious cases, salmonellosis can lead to miscarriage.

Symptoms of Salmonella illness include:

- nausea
- cramps
- vomiting
- diarrhea
- fever
- headaches.

Symptoms can occur within 12-26 hours of infection (after consuming contaminated food) and usually last for 4-7 days, sometimes longer.

Common sources of food that can be contaminated with Salmonella include undercooked eggs, chicken and meat; unpasteurised milk and some raw fruits and vegetables that have been in contact with soil contaminated with salmonella.



Tips to prevent Salmonella illness

- Cook meat thoroughly. This will kill off bacteria and make the food safe to eat.
- Wash raw fruits and vegetables to remove any soil and bacteria.
- Avoid using dirty or cracked eggs.
- Avoid soft or runny eggs (including in unbaked products such as cookie dough). Cook eggs until the yolk begins to thicken.
- Wash hands thoroughly before and after preparing meals.
- Ensure utensils are clean prior to use.
- Avoid cross contamination of kitchen equipment; use separate cutting boards for raw versus cooked foods, and vegetables versus meat.
- Maintain food within the correct temperature zones. Hot food hot (greater than 60°C), cold food cold (less than 5°C).
- Avoid eating all kinds of raw or lightly cooked sprouts as bacteria can get into cracks in the tiny shells and multiply. Cooked (to steaming hot) sprouts are ok to eat as the bacteria will have been destroyed.