

***TOXOPLASMOSIS  
&  
LISTERIA***

***HOW IT MAY IMPACT ON YOUR PREGNANCY***



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# Listeria and Toxoplasmosis

## **Toxoplasmosis**

*You may have never heard of it, make sure your unborn baby doesn't!*

### **What is it?**

Toxoplasmosis is an infection caused by the parasite *Toxoplasmosis gondii*. It is not a worm or larva, and cannot be seen by the naked eye. It is a microscopic single cell organism which can be found in meat, cat faeces and the soil where cats defaecate.

It can affect almost all animals and humans. Most animals are infected by toxoplasmosis at some time in their life. Once infected the animal never rids itself entirely of toxoplasmosis, although the parasite usually remains dormant for the natural life of the animal.

### **What are its effects?**

Toxoplasmosis is not dangerous to a normal healthy adult or child. Most people aren't aware that they have an infection at all as they might only have flu like symptoms or no symptoms at all. It is however very important to your developing baby if infection is acquired in pregnancy. Early in pregnancy the parasite is less likely to cross the placenta, however if it does do so the effects are more serious as opposed to later in the pregnancy where it is more likely to cross the placenta but the effects on the foetus are small. On average about 40% of babies of affected mothers are infected themselves. Of these 10% are likely to be severely affected. Miscarriage or the delivery of a stillbirth child may result. Other problems that may occur are Hydrocephalus (excess fluid on the brain), brain lesions which may cause mental retardation or epilepsy and retinochoroiditis (damage to the back of the eye) which causes partial sight loss or occasional blindness.

### **How common is it?**

By the age of 30, 30% of people will have already had the infection probably without realising it. Once you have had the illness you are immune for life. Therefore if you have had the illness prior to pregnancy your baby is not at risk. The chances of therefore acquiring toxoplasmosis in pregnancy is probably less than 1 in a 1000.

### **How is Toxoplasmosis caught?**

1. eating raw meat or undercooked meat
2. unpasteurised goats milk or goats milk products
3. unwashed, uncooked fruit and vegetables
4. dirty cat litter
5. the soil contaminated with cat faeces

## Listeria and Toxoplasmosis

### **The following precautions should be considered!**

- 1) Only eat meat which has been thoroughly cooked right through ie. Brown with no trace of blood or pinkness
- 2) Wash your hands and all cooking utensils and surfaces thoroughly after preparing raw meat. Even be paranoid enough to use a different cutting board for vegetables if it had already been used for meat preparation.
- 3) Wash fruit and vegetable thoroughly to remove all traces of soil.
- 4) Avoid unpasteurised goats milk and products
- 5) Wear rubber gloves when handling dirty cats litter. Clear out faeces daily. Always wash hands and gloves thoroughly afterwards. If possible delegate someone else to do it!
- 6) Always wear gloves when gardening. Wash hand thoroughly afterwards.
- 7) Cover children's sand pits to prevent cats from using them as litter boxes.



# Listeria and Toxoplasmosis

## **LISTERIOSIS**

### **What is listeriosis?**

Listeriosis, or listeria infection, is an illness that may result from eating food contaminated with bacteria known as **Listeria monocytogenes**.

### **Who is at risk?**

Most people eat foods every day which contain very small amounts of listeria without apparent adverse effects. Good hygienic food practices in the home and commercial food premises can minimise the risk from this bacteria.

The infection may cause few or no symptoms in healthy people, including pregnant women, but can cause serious illness to your unborn child. You need only avoid high-risk foods during your pregnancy to significantly reduce the risk to your unborn child.

The risk of transmission from an infected pregnant woman to her unborn child is high. Infection of the foetus usually occurs about three days after you become infected and may lead to miscarriage, stillbirth, premature birth or a very ill newborn.

The death rate in foetuses and newborn babies affected by listeria has ranged from 30 to 50 per cent.

Other people at risk include the elderly and those whose immune system has been weakened by disease or drug treatment, for example diabetics, cancer and transplant patients, and people who are HIV positive. People with a history of alcohol abuse are also at risk.

The risk of infection is greatest when foods are not adequately heat-treated or are stored for long periods in a refrigerator.

# Listeria and Toxoplasmosis

## **How common is listeriosis?**

*Listeriosis is a relatively uncommon disease. However, it has a relatively high mortality rate, especially among infected fetuses and newborn babies.*

*It is likely that many cases are not detected, as listeria does not usually cause typical food poisoning symptoms. The symptoms may take up to 90 days to appear, making it difficult to link it to a particular food.*

*Since the disease was made notifiable in Victoria in 1990, the number of cases notified has ranged from 13 to 24 a year with approximately 45 per cent involving pregnant women.*

*In 1990 an outbreak affecting pregnant women was reported in Western Australia, six unborn and newborn children died. Liver pate was thought to be responsible.*

## **What are the symptoms?**

*Healthy people, including pregnant women, may show few or no symptoms. In others, symptoms vary from minor complaints such as fever, headache, aches and pains, vomiting and diarrhoea to more serious forms of the illness such as meningitis (brain infection) and septicaemia (blood poisoning).*

*If you are pregnant and develop a flu-like illness with a fever, or if you have other reasons to suspect you may have a listeria infection, you should see your doctor as soon as possible.*

## **Can listeriosis be treated?**

*Listeriosis can be successfully treated with antibiotics if treatment is commenced early.*

## **Where is listeria found?**

*Listeria is widespread in nature and is commonly found in soil, vegetation and sewage. It has also been found in raw meat, raw vegetables and unpasteurised milk. Some exposure to this bacteria is unavoidable.*

## **How can you avoid listeria infections during pregnancy?**

## **Listeria and Toxoplasmosis**

*You can minimise the risk from this bacteria by avoiding certain high-risk foods while you are pregnant and pay careful attention to the preparation and handling of food at home.*

*You should eat freshly cooked or freshly prepared food only. It is important not to eat food where there is any doubt about its preparation and storage.*

*You should not eat foods which carry a high risk of listeria growth. These generally fall within the category of chilled ready-to-eat food including:*

- pate,*
- smoked seafood,*
- soft cheeses (such as brie, camembert and ricotta),*
- cooked diced chicken (as used in chicken sandwiches),*
- cold meat products (cold roast or boiled meat and processed meat),*
- pre-pared or stored salads,*
- raw seafood (such as oysters and sashimi).*

*You should check the 'use by' or 'best before' date on packaged food and not eat food that is close to, or has exceeded, that date. Listeria is readily destroyed by conventional cooking, and freshly cooked food is safe to eat. If you buy ready-prepared foods make sure they are piping hot. Microwave cooking is adequate but make sure the food is cooked right through and appropriate standing times are observed. As listeria can also cause miscarriage in domestic and farm animals you should avoid contact with aborted animal foetuses and the parent animal.*

### **Will refrigeration keep foods safe from listeria?**

*No. Listeria is one of the few food contamination bacteria that will grow in refrigerated foods. This is why chilled ready-to-eat foods and foods that have exceeded 'use by' or 'best before' dates are of particular concern. Do not eat foods that have been prepared and then stored in a refrigerator for more than 12 hours.*

### **What foods are safe?**

*All freshly cooked foods, hard cheeses, fresh pasteurised milk and milk products, UHT milk, yoghurt, fresh washed vegetables and fruit, and all canned foods are considered safe for pregnant women.*

# Listeria and Toxoplasmosis

## DIETARY ADVICE

## COMMENT

**CANNED MEATS AND FISH** SAFE. Store in refrigerator after opening and use within 12 hours.

**CHEESE SPREADS AND PROCESSED CHEESE** SAFE so long as packaging is intact and within the use-by-date. After opening store in refrigerator and consume within 12 hours.

**COLD MEATS** Commercial varieties may not be safe - AVOID them.  
Home-cooked roast or boiled meats: use cold leftovers within 12 hours of cooking. Unused portion can be frozen, and later thawed (in the refrigerator) to be used immediately.

**COOKED LIVER** SAFE

**COOLING** Allow covered hot foods to cool slightly then place in refrigerator in a sealed container.

**EATING OUT** Food served in restaurants should be SAFE if freshly cooked and thoroughly heated. Choose the hot alternatives at a smorgasbord. AVOID pre-prepared salads.

**FREEZING AND THAWING** Consume within 12 hours of thawing in the refrigerator; heat thoroughly. NEVER thaw foods at room temperature.

**HARD YELLOW CHEESES** SAFE

**HOME-COOKED CHICKEN** SAFE if thoroughly cooked. Once cooked, chicken not used immediately should be stored in a refrigerator and used within 12 hours.

**HOMEMADE PATE** SAFE if used within 12 hours of preparation. Unused portion should be frozen, thawed (in the refrigerator) and used immediately.

**HOMEMADE SALADS** SAFE-make sure vegetables are thoroughly washed. Once made, store in refrigerator and use within 12 hours.

**HOT TAKEAWAY CHICKEN** SAFE if kept hot. Do not reheat leftovers.

**RAW SEAFOOD** AVOID raw seafood or products containing raw seafood, such as oysters, sashimi and sushi.

**SALAD DRESSINGS** Bottled dressings are SAFE. But AVOID sauces and mayonnaise that have been standing in open containers in shops and restaurants for long periods of time.

**SMOKED SEAFOOD** AVOID chilled or frozen smoked seafood.

# Listeria and Toxoplasmosis

## Good food hygiene

*You can reduce the risk of listeriosis and other food-borne illnesses by taking appropriate precautions.*

- Keep uncooked meats covered and separate from cooked food and ready-to-eat food.*
- Always store raw meat and poultry below other foods in your refrigerator to prevent it dripping onto cooked and ready-to-eat food.*
- Wash hands, knives and cutting boards after handling uncooked foods (especially raw meat, raw poultry, shell eggs and soil covered vegetables and salad stuffs) to avoid cross contamination of cooked and ready to eat foods.*
- Thoroughly wash raw vegetables before eating.*
- Thoroughly cook all food of animal origin, including eggs.*
- Keep hot foods hot (above 60 degrees Celsius) and cold foods cold (at or below 5 degrees Celsius).*
- Strictly observe 'use by' or 'best by' dates on refrigerated foods.*
- Keep the refrigerator clean and ensure the temperature is maintained below 5 degrees Celsius.*
- Thoroughly reheat food till piping hot.*
- Avoid raw (unpasteurised) milk or food made from raw milk.*
- Pets: no matter how clean and healthy your pet is do not put your hands to your mouth after stroking it and make sure you wash your hands before eating and preparing food. Keep them out of the kitchen and particularly off surfaces on which you prepare food, prepare pet food separately and wash their bowls separately. Use gloves to handle any litter.*

**Don't become over-anxious about the possibility of catching the diseases in this booklet. They are very rare, and it is unlikely that you or your unborn baby will be affected. Nevertheless, it is sensible to take the simple precautions outlined to reduce the risk to yourself and your baby.**