

# pathogenic e.coli

## what is pathogenic escherichia coli?

Healthy animals and people carry large numbers of E. coli in their intestines and some strains can cause disease in people.

There are four recognised classes of pathogenic E. coli that cause gastroenteritis in humans. Among these are the *enteropathogenic* (EPEC) and *enterohaemorrhagic* (EHEC) strains.

## what are the symptoms?

EHEC is highly infectious for infants, where the infective dose has been as low as 10 cells in some food-borne outbreaks. The dose is slightly higher for adults.

EHEC starts as a severe bloody diarrhoea and may lead to serious conditions that can damage the central nervous system, result in kidney failure and even death.

In infants and young children, EPEC can cause watery diarrhoea, often with fever and vomiting, while in adults severe diarrhoea is frequent.

## where are they found?

The presence of E.coli is a good indication of faecal contamination of food. This is of particular concern if food, such as milk, is consumed raw. It is of lesser concern when milk is heat treated to produce cheese and dairy products.

Common foods implicated in E.coli outbreaks include raw beef, chicken, vegetables and dairy products, although food exposed to faecal contamination is at risk.

Foods grown or harvested in the presence of manure, or with water contaminated with E. coli, will likely become contaminated. Countries with poor sanitation have the most frequent outbreaks of pathogenic E. coli.

## how can the risk of infection be minimised?

The bacteria can spread from person to animal to person through diarrheal stools and improper hygiene and handling.

The following food safety tips will help you avoid spreading harmful E.coli in the kitchen:

- E coli is a type of bacteria which can grow between 5°C and 60°C, this is commonly referred to as the temperature danger zone. Keep cold food in the fridge until you are ready to cook or serve; serve hot food steaming hot.
- Cook food thoroughly. Cook poultry, minced meats, and sausages until well done, right through to the centre. No pink should be left visible.
- Separate raw and cooked food and don't use the same utensils, especially cutting boards, for both.
- Wash your hands in hot soapy water and dry thoroughly before preparing food, and after touching raw meat and chicken.
- Keep utensils and kitchen clean.

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## more information

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