

WORKSHOP 2 : FOOD POISONING

Mission : make a report about the main types of food infection

Doc 1

<https://www.diet.com/g/food-contamination>

Food contamination can be microbial or environmental, with the former being more common. Environmental contaminants that can enter the food supply chain include pesticides, heavy metals, and other chemical agents. Many opportunities exist for food to become contaminated as it is produced and distributed. To start with, bacteria are present in the animals raised for food. Meat and poultry can become contaminated during slaughter through cross-contamination from intestinal fecal matter. Similarly, fresh fruits and vegetables can be contaminated if they are washed using water contaminated with animal manure or human sewage. During food processing, contamination is also possible from infected food handlers. Lastly, poor hygiene in the home is also a factor.

Doc 2

<https://www.nhs.uk/conditions/food-poisoning/treatment/>

Overview

Food poisoning is an illness caused by eating contaminated food. It's not usually serious and most people get better within a few days without treatment.

In most cases of food poisoning, the food is contaminated by bacteria, such as [salmonella](#) or Escherichia coli (E. coli), or a virus, such as the [norovirus](#).

Signs and symptoms

The symptoms of food poisoning usually begin within one to two days after eating contaminated food, although they may start at any point between a few hours and several weeks later.

The main symptoms include:

feeling sick (nausea)

[vomiting](#)

[diarrhoea](#), which may contain blood or mucus

stomach cramps and [abdominal \(tummy\) pain](#)

a lack of energy and weakness

loss of appetite

a high temperature (fever)

aching muscles

chills

In most cases, these symptoms will pass in a few days and you will make a full recovery.

Causes

Food can become contaminated at any stage during its production, processing or cooking.

For example, it can become contaminated by:

not cooking food thoroughly (particularly meat)

not correctly storing food that needs to be chilled at below 5C

keeping cooked food unrefrigerated for a long period

eating food that has been touched by someone who is ill or has been in contact with someone with [diarrhoea](#) and [vomiting](#)

cross-contamination (where harmful bacteria are spread between food, surfaces and equipment)

Cross-contamination can occur, for example, if you prepare raw chicken on a chopping board and don't wash the board before preparing food that won't be cooked (such as salad), as the harmful bacteria can be spread from the chopping board to the salad.

It can also occur if raw meat is stored above ready-to-eat meals and juices from the meat drip on to the food below.

See [preventing food poisoning](#) for information about reducing these risks.

Types of infection

Food contamination is usually caused by bacteria, but it can also sometimes be caused by viruses or parasites. Some of the main sources of contamination are described below.

Campylobacter

In the UK, campylobacter bacteria are the most common cause of food poisoning. The bacteria are usually found on raw or undercooked meat (particularly poultry), unpasteurised milk and untreated water.

The incubation period (the time between eating contaminated food and the start of symptoms) for food poisoning caused by campylobacter is usually between two and five days. The symptoms usually last less than a week.

Salmonella

Salmonella bacteria are often found in raw or undercooked meat, raw eggs, milk, and other dairy products.

The incubation period is usually between 12 and 72 hours. The symptoms usually last around four to seven days.

Read more about [salmonella infections](#).

Listeria

Listeria bacteria may be found in a range of chilled, "ready-to-eat" foods, including pre-packed sandwiches, cooked sliced meats and pâté, and soft cheeses (such as Brie or Camembert).

All of these foods should be eaten by their "use-by" dates. This is particularly important for pregnant women, because a listeria infection (known as listeriosis) in pregnancy can cause pregnancy and birth complications, and can result in [miscarriage](#).

The incubation period can vary considerably, from a few days to several weeks. The symptoms will usually pass within three days.

Read more about [listeriosis](#).

Escherichia coli (E. coli)

Escherichia coli, often known as E. coli, are bacteria found in the digestive systems of many animals, including humans. Most strains are harmless but some can cause serious illness.

Most cases of E. coli food poisoning occur after eating undercooked beef (particularly mince, burgers and meatballs) or drinking unpasteurised milk.

The incubation period for food poisoning caused by E. coli is typically one to eight days. The symptoms usually last for a few days or weeks.

Shigella

Shigella bacteria can contaminate any food that has been washed in contaminated water.

Symptoms typically develop within seven days of eating contaminated food and last for up to a week.

An infection caused by Shigella bacteria is known as bacillary dysentery or shigellosis. See the topic on [dysentery](#) for more information about it.

Viruses

The virus that most commonly causes diarrhoea and vomiting is the [norovirus](#). It's easily spread from person to person, through contaminated food or water. Raw shellfish, particularly oysters, can also be a source of infection.

The incubation period typically lasts 24-48 hours and the symptoms usually pass in a couple of days.

In young children, the rotavirus is a common cause of infection from contaminated food. The symptoms usually develop within a week and pass in around five to seven days.

Parasites

In the UK, food poisoning caused by parasites is rare. It's much more common in the developing world.

Parasitic infections that can be spread in contaminated food include:

giardiasis – an infection caused by a parasite called *Giardia intestinalis*

cryptosporidiosis – an infection caused by a parasite called *Cryptosporidium*

amebiasis – a type of **dysentery** caused by a single-cell parasite (ameoba) called *Entamoeba histolytica* (this is very rare in the UK)

The symptoms of food poisoning caused by a parasite usually develop within 10 days of eating contaminated food, although sometimes it may be weeks before you feel unwell.

If left untreated, the symptoms can last a long time – sometimes several weeks or even a few months.