

# Hamburger Disease (E. coli O157:H7)

## What is hamburger disease?

Hamburger disease is a well recognized type of “food poisoning” or “foodborne disease”, caused by a strain of E. coli (E. CO-lie) bacteria, called O157:H7.

## What are the symptoms?

This infection can cause diarrhea (may be bloody), nausea, stomach cramps, fever and vomiting. Symptoms often begin 3 to 4 days after ingesting the bacteria. The illness often lasts between five and ten days. In some people, especially young children, the infection can cause a serious condition called Hemolytic Uremic Syndrome (HUS) in which red blood cells are destroyed and could in turn, lead to kidney failure. HUS may also result in long term kidney damage. People infected by this bacteria will pass it in their feces while they are sick.

## How do I know if I have this illness?

If you have the above symptoms, you should see your family doctor, who can arrange to have your stool sample tested. If you think food may have made you sick, call your local Government Services centre.

## How does it spread?

The bacteria that cause this illness can be found mainly in cattle. People can get sick by consuming food or water that may have come into contact with bacteria, like:

- Animal feces contaminated food or water.
- Undercooked meat.
- Raw (non-pasteurized) milk and other dairy products.
- Foods that have come into contact with dirty surfaces (unwashed cutting boards).
- Unwashed fruits and vegetables, eaten raw.
- Touching pets and farm animals, or changing the diapers of infants infected with the bacteria, without proper hand washing.

## How is it treated?

Most people who become sick with hamburger disease will get better on their own in about ten days. People with diarrhea and vomiting must drink plenty of fluids to prevent dehydration. Antibiotics do not, in most cases, have any benefit towards treating this illness.

## How can I keep from getting this illness?

Wash your hands with soap and water

- before handling foods and eating.
- after handling raw meat, poultry and eggs.
- Handling pets, changing diapers and using the toilet.
- Handle raw meats carefully and store raw meats below ready-to-eat foods in your fridge.
- Wash cutting boards and counters right away after they touch raw poultry, meat, and eggs. Use a disinfectant!
- Avoid raw (non-pasteurized) milk and dairy products.
- Chill foods promptly to 4° C (40° F) or less, to prevent the growth of bacteria.



### How soon can I return to work after being sick?

Usually, you can return to work as soon as you feel well, but certain jobs are more likely to allow the spread of bacteria from workers to clients. For this reason, food handlers, health care workers, and child care providers must stay off work until they are cleared by the Medical Officer of Health.

### Most foodborne illness can be avoided by following these simple food safety tips:

#### CLEAN:

Wash your hands frequently with soap and water.

- Before handling food or eating.
- After handling raw meats, using the toilet, touching pets/animals and changing diapers.

Wash counters, utensils, cutting boards, and other surfaces after they come into contact with raw meat.

#### COOK

- Cook all meats, poultry, and eggs to a proper internal temperature, as listed in the table.
- Keep all hot foods at 60 °C (140 °F) or more, to prevent the growth of bacteria.
- Use a kitchen thermometer to check cooking and storage temperatures.

#### CHILL

- Chill all leftovers promptly to keep them out of room temperature.
- Refrigerate all perishable foods at 4 °C (40 °F) or less, to prevent the growth of bacteria.
- Thaw frozen foods in a refrigerator, cold water, or a microwave oven, not at room temperature.

#### SEPARATE

- Use separate cutting boards for raw meats, and raw fruits and vegetables.
- Store raw meats on lower refrigerator shelves, to prevent contamination caused by dripping.

Action	Temperature required
Refrigeration	4 °C (40 °F) or less
Freezing	Minus 18 °C (0 °F) or less
<b>Cooking</b>	
Food Mixtures containing Poultry, Eggs, Meat, Fish or other potentially hazardous foods	Internal Temperature of 74 °C (165 °F) for at least 10 minutes
Pork, Lamb, Veal, Beef (whole cuts)	Internal temperature of 70 °C (158 °F)
Rare Roast Beef	Internal temperature of 63 °C (145 °F) for 3 minutes
Poultry	Internal temperature of 85 °C (185 °F) for 15 seconds
Stuffing in Poultry	74 °C (165 °F)
Ground Meat	71 °C (160 °F)
Eggs	63 °C (145 °F) for 15 seconds
Fish	71 °C (160 °F)
Reheating	74 °C (165 °F)
Holding Hot Foods	60 °C (140 °F)
Cooling	60 °C (140 °F) to 20 °C (68 °F) within 2 hours 20 °C (68 °F) to 4 °C (40 °F) within 4 hours



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