Chapter 17 - Food Poisoning Symptoms

Food Poisoning Symptoms

Chapter contents

A) Staphylococcal food poisoning

B) E. coli food poisoning

C) Botulism

D) Other bacterial and viral causes

E) Chemical food poisoning

F) Prevention

G) Treatment of food poisoning

Food can appear beautiful, be tasty, and be very nutritious, but it can also make one very ill if it happens to be poisonous. Food may contain microorganisms that, when eaten, make one very sick. It may contain toxins or poisons produced by those microorganisms, or it can contain chemicals from the environment, i.e., pesticides, additives, etc.
In addition, food is often the carrier of many other diseases; tuberculosis, typhoid fever, hepatitis and trichinosis are just a few examples. Both plant and animal products may carry disease. And though there are many benefits of a plant based diet, one is not exempt from the need to use caution when preparing and eating plant foods.

A) Staphylococcal food poisoning

Staphylococcus is a bacterium that is present in the environment. It is the bacterium that is often present in skin infections, boils, blisters, etc. When food is contaminated with the bacterium, a toxin is produced that causes severe nausea, vomiting, and diarrhea beginning within a few hours of eating the contaminated food. Cramping may be severe, and occasionally there are headache and systemic symptoms. Recovery is usually complete within 12–24 hours and death is rare.

Milk, eggs, custards, processed meats, etc. are the most likely sources, but other food left to sit in a warm environment may also become dangerous.

B) E. coli

Escherichia coli infection is most often carried in beef and other meats, and can cause massive outbreaks when involving a “lot” of meat in processing factories. Some strains of E. coli produce a potent toxin that causes severe digestive symptoms, sometimes including bleeding into the bowel, as well as generalized symptoms. Deaths are common in severe outbreaks.

C) Botulism

Botulism is caused by the bacterium, clostridium botulinum. It produces a toxin that causes nausea, vomiting, diarrhea, and cramping abdominal pain, usually beginning 18–36 hours after eating the contaminated food. Paralysis begins in the muscles of the eyes, face, throat, and diaphragm and progresses downward. Death, when it occurs, is usually due to respiratory
paralysis.

The toxin is easily destroyed by cooking, but the spores survive cooking. They may become active and produce toxin in cans after canning or in the refrigerator when food is being saved. The spores are present in the environment and may survive in honey. When eaten, these spores may produce enough toxin to paralyze infants, causing poor sucking, drooling, weak cry, etc., and death if unrecognized and treated. Though rare, it is for this reason that most authorities advise against giving honey to babies under one year of age.

D) Other bacterial and viral causes

There are numerous other microorganisms that cause food poisoning with the typical symptoms described above. Some may be life-threatening.

E) Chemical food poisoning

Mushrooms, many plants, and many sea foods contain potent toxins that may cause the typical gastrointestinal symptoms, i.e., nausea, vomiting, diarrhea, and cramps, but they may effect other organ systems as well. Symptoms may sometimes be fatal.

F) Prevention of food poisoning

From the above discussions, it is obvious that one would be wise to exercise caution in purchasing, preparing, and preserving one’s food. Careful washing of all produce in clean, uncontaminated water is important. Thorough cooking of all animal food products is mandatory.

Cleanliness of the work table and cutting board is important to prevent spread of infection from raw animal food products to fresh or cooked food.
Since warm foods are a good culture medium for infections, they should not be left out in warm areas for long periods of time.

Food can even grow bacteria, fungi, and other toxin producing organisms in the refrigerator, as such, one must be careful even with refrigerated food, discarding any food that looks, smells, or tastes “bad.”

Wild mushrooms and plants are safe to eat so long as one knows how to recognize the poisonous varieties. Only those wild mushrooms known to be safe should be eaten.

Fortunately, most wild plants that taste OK are safe to eat. It is still wise to know the common poisonous ones.

G) Treatment of food poisoning

Foods containing toxins should be eliminated as rapidly as possible by vomiting or purging (Some authorities debate this!) (Section II, chapter 3).

Maintaining hydration and salt balance in the body is important, and may require intravenous fluids if symptoms are severe (Section VII, chapter 4).

Charcoal should be used liberally for all cases of food poisoning (Section VII, chapter 8).

If the patient is unconscious, paralyzed, or unable to swallow, charcoal may be administered through the nose to stomach (nasogastric) tube (Section VIII, chapter 14).

Charcoal, when used generously, may be beneficial for treating most all poisoning caused by poisonous mushrooms and plants. This should not give one license to pick and use wild
1. Indications for professional help

Specific medications are available for mushroom, and some other, and may be administered by professional health care givers.

The Poison Control Center (1-800-222-1222 in U.S. only) should be called for help in identifying specific poisonous plants; etc., or for obtaining specific directions when treating poisoning.

Paralysis may require respiratory assistance.

Any patient who fails to improve rapidly deserves professional help.