



# Hazards Causing Human Food Poisoning

## Shaltout FA\*

Food Control Department, Faculty of Veterinary Medicine, Benha University, Egypt

\*Corresponding author: Fahim A Shaltout, Food Control Department, Faculty of Veterinary Medicine, Benha University, Egypt, Email: fahim.shaltout@fvtm.bu.edu.eg

### Review Article

Volume 9 Issue 1

Received Date: February 28, 2024

Published Date: March 18, 2024

DOI: 10.23880/fsnt-16000336

## Abstract

For confirming suitability of food products for human consumption it should be evaluated for hazards causing human food poisoning as microbial, fungal and parasitic contamination. Consumption of infected food products containing hazards causing human food poisoning could affect human health and lead to spread of pathogens. A hazard causing human food poisoning as Salmonella spp. is pathogenic to human when consumed via contaminated food. Human food poisoning, also called foodborne illness, is an infection or irritation of the digestive tract that spreads through food or drinks. Hazards causing human food poisoning as viruses, bacteria, and parasites. Harmful chemicals may also cause food poisoning. Food poisoning is most often acute, meaning it happens suddenly and lasts a short time. Most cases of food poisoning last less than a week, and most people get better on their own without treatment. In some cases, human food poisoning can last longer or lead to dangerous complications.

**Keywords:** Human Food Poisoning; Hazard; Viruses; Bacteria; Parasites

## The More Susceptible People to be Affected with Hazards Causing Human Food Poisoning

Although anyone can get food poisoning, some people are more susceptible to get food poisoning than others, including infants and children, pregnant women and their fetuses, older adults and people with weak immune systems. People in these groups are also more likely to have severe clinical pictures or complications of food poisoning. Food safety is especially important for people in these groups. Food safety for people who are more likely to get food poisoning and have complications [1-7].

## Complications of Hazards Causing Human Food Poisoning

In some cases, human food poisoning can lead to dehydration, hemolytic uremic syndrome, or other

complications. However, dangerous complications of hazards causing food poisoning are uncommon. In most cases, human food poisoning lasts only a short time, and most people recover without developing complications [8-13].

## Dehydration Due to Hazards Causing Human Food Poisoning

Dehydration is the most common complication of hazards causing human food poisoning. When human food poisoning causes vomiting or diarrhea, the body loses fluids and electrolytes [8,14-19]. If the body doesn't replace those fluids and electrolytes, the body may become dehydrated. When the body is dehydrated, the body doesn't have enough fluid and electrolytes to work properly [20-24]. Dehydration is especially dangerous in children, older adults, and people with weakened immune systems. If the body is dehydrated, see a right away to prevent dangerous health problems.

Without treatment, dehydration can lead to problems such as organ damage, shock, coma, or even death [25-31].

### Hemolytic Uremic Syndrome Due to Hazards Causing Human Food Poisoning

Hemolytic uremic syndrome is a kidney condition that happens when red blood cells are destroyed and block the kidneys' filtering system. If the kidneys stop working, the body has acute kidney injury the sudden and temporary loss of kidney function. The most common cause of HUS is infection with a strain of *Escherichia coli* (*E. coli*) bacterium called *E. coli* O157:H7, although other bacteria and viruses may also be hazards causing human food poisoning cause this condition. Hemolytic uremic syndrome is most common in children less than five years age [32-39]. In some cases, hazards causing human food poisoning may lead to dangerous health problems such as health problems during pregnancy and pregnancy complications. Some types of human food poisoning during pregnancy can cause complications, such as dehydration, for the pregnant woman or can affect the fetus. For example, human food poisoning by the bacterium *Listeria* can cause miscarriage or stillbirth [40-46]. Hazards causing human food poisoning as bacteria or viruses, most commonly *Campylobacter jejuni*. Irritable bowel syndrome, which may occur after human food poisoning caused by various bacteria, viruses, or parasites. problems breathing due to botulism a rare type of human food poisoning caused by *Clostridium botulinum* and sometimes by *Clostridium butyricum* or *Clostridium baratii* and some forms of fish and shellfish poisoning, which affect the nervous system and may paralyze the muscles that control breathing. Reactive arthritis, which may occur after human food poisoning by certain bacteria, viruses, and parasites, including *Campylobacter jejuni* and *Salmonella* [47-53].

### Clinical Pictures of Hazards Causing Human Food Poisoning

If the body has food poisoning, chances are it won't go undetected. Clinical pictures can vary depending on the source of the infection. Common cases of human food poisoning will typically include a few of the following clinical pictures abdominal cramps, diarrhea, nausea, vomiting, loss of appetite, mild fever, weakness and headache [54-60]. clinical pictures of potentially life threatening human food poisoning include diarrhea that lasts for more than 3 days, a fever over 38.9°C, difficulty seeing or speaking, clinical pictures of severe dehydration, which may include dry mouth, passing little to no urine, and difficulty keeping fluids down, bloody urine, If the body experience any of these clinical pictures medical treatment immediately [61-67].

### Duration of Hazards Causing Human Food Poisoning

The length of time it takes for clinical pictures to appear depends on the source of the infection, but it can range from as little as half an hour, to as long as two months [19,68-73].

### Hazards Causing Human Food Poisoning

Most hazards causing human food poisoning can be traced to one of three major causes' bacteria, parasites, or viruses. These pathogens can be found on almost all of the food humans eat. However, heat from cooking usually kills pathogens on food before it reaches our plate. Foods eaten raw are common sources of human food poisoning because they don't go through the cooking process [74-80]. Occasionally, food will come in contact with the hazards causing human food poisoning in fecal matter or vomit. This is most likely to occur when an ill person prepares food and doesn't wash their hands and personal hygiene before cooking. Meat, fish, and poultry products are frequently contaminated. Drinking water may also be contaminated with hazards causing human food poisoning [19,46,81-84]. Hazards causing food poisoning as bacteria are by far the most common cause of human food poisoning. Bacterial causes of human food poisoning include *E. coli*, in particular Shiga toxin-producing *E. coli* (STEC), *Listeria monocytogenes*, *Salmonella*, *Campylobacter*, *Clostridium botulinum*, *Staphylococcus aureus*, *Shigella* and *Vibrio vulnificus* When thinking of dangerous bacteria, names such as *E. coli* and *Salmonella* come to mind for good reason. *Salmonella* is the biggest bacterial cause of human food poisoning. Estimated cases of human food poisoning, including hospitalizations, can be traced to salmonella infection. *Campylobacter* and *C. botulinum* are two lesser-known and potentially lethal bacteria that can reach the food [85-91]. Hazards causing human food poisoning as parasites isn't as common as human food poisoning caused by bacteria, but parasites that spread through human food are still very dangerous. They include *Toxoplasma gondii*, *Giardia lamblia*, various tapeworms, such as *Taenia saginata* (beef tapeworm), *Taenia solium* (pork tapeworm), *Diphyllobothrium latum* (fish tapeworm), *Cryptosporidium*, *Ascaris lumbricoides*, a type of roundworm, flukes (flatworms), such as *Opisthorchiidae* (liver fluke) and *Paragonimus* (lung fluke), pinworms, or *Enterobiasis* and *Trichinella* [82,92-96]. Hazards causing human food poisoning as toxoplasmosis are a leading cause of death attributed to human food poisoning. A hazard causing human food poisoning as *Toxoplasma gondii* is also found in cat litter boxes. Hazards causing human food poisoning as Parasites can live in the digestive tract and could not be detected for several years. Peoples affected with weakened immune systems and pregnant women's are at risk of more dangerous side effects if certain hazards causing human food

poisoning as parasites take up residence in their intestines [64,97-103]. Hazards causing human food poisoning as virus, such as norovirus, which is sometimes known as Norwalk virus, rotavirus, astrovirus, sapovirus and hepatitis A virus [24,31,53,104-109].

## Conclusion

The present review article was made for hazards causing food poisoning. The human food protection from the hazards causing food poisoning is better than treatment. Nobody should be exposed to hazards causing human food poisoning. People spreading hazards causing human food poisoning on crops, in homes, or in gardens should be adequately protected. People not directly involved in the spread of hazards causing human food poisoning should stay away from the area during and just after a spread. Human food that is sold or donated, such as food aid, should comply with food regulations. People who grow their own food should use food masks as necessary. Consumers can further limit their intake of hazards causing human food poisoning by peeling or washing fruit and vegetables, which also reduces other food borne hazards, such as harmful bacteria. Pregnant women and infants should apply particular care to determine appropriate re-entry times for hazards causing human food poisoning. Thorough cooking of the meat.

## Conflicts of Interest

The authors declare no conflicts of interest.

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