

WHO ARE YOU?

An adventure in identifying microbes!



QUESTION 1

What is your favorite type of food?



Fruits and Berries - *go to Question 2*



Vegetables - *go to Question 3*



Hot Dogs and Burgers - *go to Question 4*



Grains (like cereal!) - *go to Question 6*



Canned food - *go to Question 7*



Seafood - *go to Question 8*



Chicken - *go to Question 5*

QUESTION 2

What weather do you prefer? The snow?? The summer?? Or do you not care because you like to stay inside?



Cold *Page 3*



Warm *Page 1*



I'm an indoor cat *Question 9*

QUESTION 3

How do you prefer to travel? Road trip, cruise, flight?



Road Trip *Page 1*



Cruise *Page 10*



Flight *Page 5*

QUESTION 4

Are you a good Swimmer?



Yes *Page 4*



Only If I need to *Page 3*

QUESTION 5

Would you describe yourself as a positive person?



Yes *Page 3*



No *Page 1*

QUESTION 6

Would your friends describe you as a fun guy or are you the serious kind?



Serious *Page 6*



Fun guy *Page 9*

QUESTION 7

Can you hold your breath underwater for a long time?



Yes *Page 7*



No *Page 8*

QUESTION 8

Do you like salty snacks?

Yes *Page 2*



No *Page 7*



QUESTION 9

Are you wearing a coat ?



Yes *Page 5*



No *Page 10*

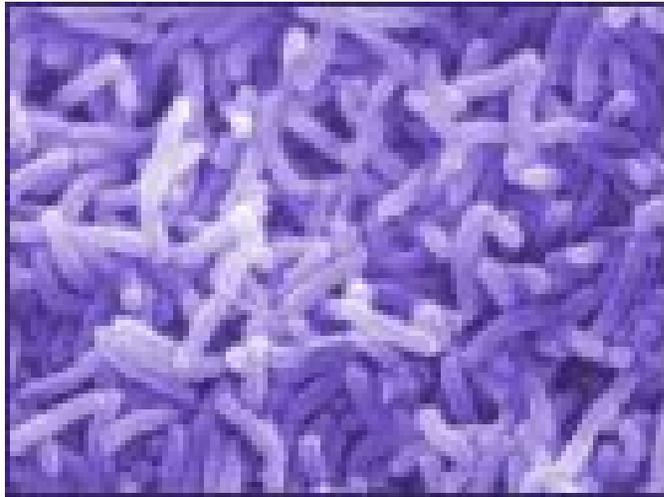
1. *salmonella*:



Salmonella, the name of a group of bacteria, is one of the most common causes of food poisoning in the United States. Usually, symptoms last 4-7 days and most people get better without treatment. But, *Salmonella* can cause more serious illness in older adults, infants, and persons with chronic diseases. *Salmonella* is killed by cooking and pasteurization.

- Separate cooked foods from ready-to-eat foods. Do not use utensils on cooked foods that were previously used on raw foods and do not place cooked foods on plates where raw foods once were unless it has been cleaned thoroughly.
- Wash your hand after contact with animals, their food or treats, or their living environment.

2. VIBRIO



Vibrio vulnificus (*V. vulnificus*) and *Vibrio parahaemolyticus* (*V. parahaemolyticus*) are bacteria that occur naturally in warm coastal areas, such as the Gulf of Mexico. These bacteria are found in higher concentrations in the summer months when water gets warmer.

Vibrios typically cause disease in people who eat contaminated seafood.

- *V. parahaemolyticus* typically causes non-bloody diarrhea.
- Avoid eating raw or undercooked shellfish

3. *Listeria monocytogenes*



Listeria is a bacteria found in soil, water, and some animals, including poultry and cattle. It can be present in raw milk and foods made from raw milk. It can also live in food processing plants and contaminate a variety of processed meats. *Listeria* is unlike many other germs because it can grow even in the cold temperature of the refrigerator. *Listeria* is killed by cooking and pasteurization.

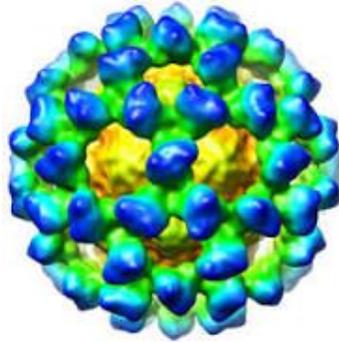
4. *ESCHERICHIA COLI*



E. coli is the name of a type of bacteria that lives in your intestines and in the intestines of animals. Although most types of *E. coli* are harmless, some types can make you sick.

The worst type of *E. coli*, known as *E. coli* O157:H7, causes bloody diarrhea and can sometimes cause kidney failure and even death. *E. coli* O157:H7 makes a toxin called Shiga toxin and is known as a Shiga toxin-producing *E. coli* (STEC). There are many other types of STEC, and some can make you just as sick as *E. coli* O157:H7.

5. NOROVIRUS



Norovirus is the leading cause of illness and outbreaks from contaminated food in the United States.

The virus can easily contaminate food because it is very tiny and infective. It only takes a very small amount of virus particles (as few as 18) to make someone sick.

Food can get contaminated with norovirus when:

- infected people who have stool or vomit on their hands touch the food,
- tiny drops of vomit from an infected person spray through the air and land on the food.

Foods can also be contaminated at their source. For example:

- oysters that are harvested from contaminated water, or
- fruit and vegetables that are contaminated in the fields

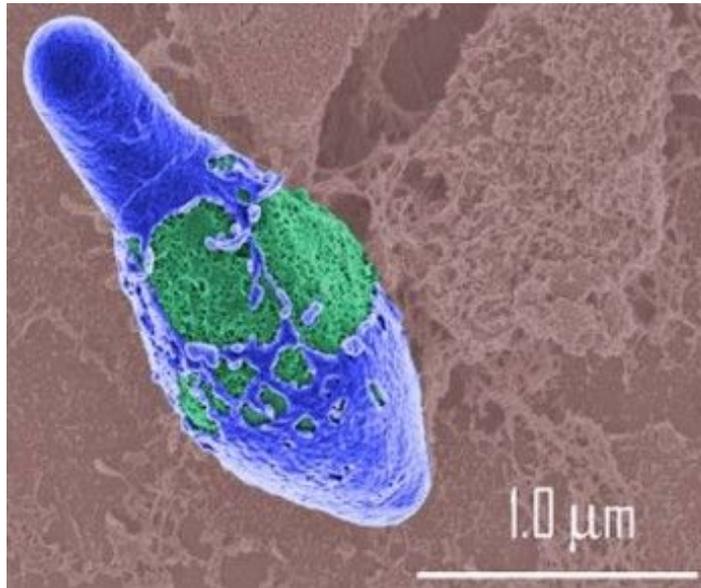
6. *Bacillus cereus*



Bacillus cereus or *B. cereus* is a type of bacteria that produces toxins. These toxins can cause two types of illness: one type characterized by diarrhea and the other, called emetic toxin, by nausea and vomiting. These bacteria are present in foods and can multiply quickly at room temperature.

Sources A variety of foods, particularly rice and leftovers, as well as sauces, soups, and other prepared foods that have sat out too long at room temperature.

7. *CLOSTRIDIUM BOTULINUM*



C. botulinum spores are often found on the surfaces of fruits and vegetables and in seafood. The organism grows best under low-oxygen conditions and produces spores and toxins. The toxin is most commonly formed when food is improperly processed (canned) at home. Botulism is a paralyzing disease affecting the body's nervous system that is caused by the ingestion of one of the potent neurotoxins produced by *C. botulinum* bacterium. This neurotoxin is among the most toxic substances known; even microscopic amounts can cause illness.

8.STAPHYLOCOCCUS aureus



Staphylococcus aureus (or *Staph aureus*) is a type of bacteria commonly found on the skin and hair as well as in the noses and throats of people and animals. These bacteria are present in up to 25 percent of healthy people and are even more common among those with skin, eye, nose, or throat infections.

Staphylococcus can cause food poisoning when a food handler contaminates food and then the food is not properly refrigerated. Other sources of food contamination include the equipment and surfaces on which food is prepared. These bacteria multiply quickly at room temperature to produce a toxin that causes illness. *Staphylococcus* is killed by cooking and pasteurization.

9. *ASPERGILLUS*:



The aflatoxins are a group of chemically similar toxic fungal metabolites (mycotoxins) produced by certain moulds of the genus *Aspergillus* growing on a number of raw food commodities. Aflatoxins are highly toxic compounds and can cause both acute and chronic toxicity in humans and many other animals. Aflatoxins may be present in a wide range of food commodities, particularly cereals, oilseeds, spices and tree nuts. Maize, groundnuts (peanuts), pistachios, brazils, chillies, black pepper, dried fruit and figs are all known to be high risk foods for aflatoxin contamination, but the toxins have also been detected in many other commodities.

10. CYCLOSPORA



Cyclospora is a single-cell parasite spread by people ingesting something, such as food or water, that was contaminated with feces (stool). *Cyclospora* needs time (days to weeks) after being passed in a bowel movement to become infectious for another person. Therefore, it is unlikely that *Cyclospora* is passed directly from one person to another.

Cyclospora infects the small intestine (bowel) and usually causes watery diarrhea with frequent, sometimes explosive, bowel movements.