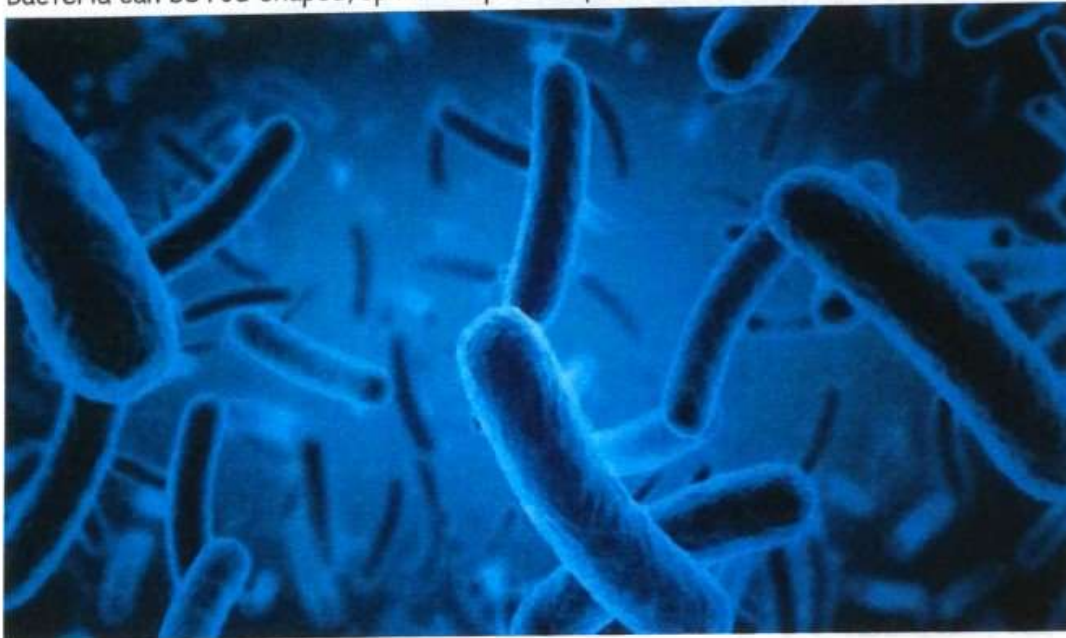


Bacteria

Bacteria are small organisms, or living things, that can be found in all natural environments. Bacteria are found in nearly every habitat on earth, including within and on humans. Most bacteria are harmless or helpful, but some are pathogens, causing disease in humans and other animals.

Bacteria can be rod-shaped, spiral-shaped or spherical.



Bacteria take in food and send out waste through their cell walls. Most bacteria reproduce by dividing down the middle to form two separate cells. These each divide again to form a total of four cells. Through this process, billions of bacteria may form from a single bacterium in only 24 hours. Bacteria that cause diseases can get into the human body through the nose, the mouth, and cuts in the skin. Once inside, these bacteria quickly reproduce and cause illness, called an infection. The infection may result from the bacteria themselves or from their poisonous waste products, called toxins. Luckily, the immune system of the human body can fight these threats.

Sometimes the immune system needs help in fighting off bacteria. Doctors may inject dead or weakened bacteria into the human body. This is called a vaccine. A vaccine prepares the body to fight off the same bacteria in the future. Doctors may also use medicines called antibiotics to kill bacteria in the body. Some bacteria can be useful, such as certain types found in the stomach, but other nasty kinds can give you a bad tummy ache or a sore throat.

