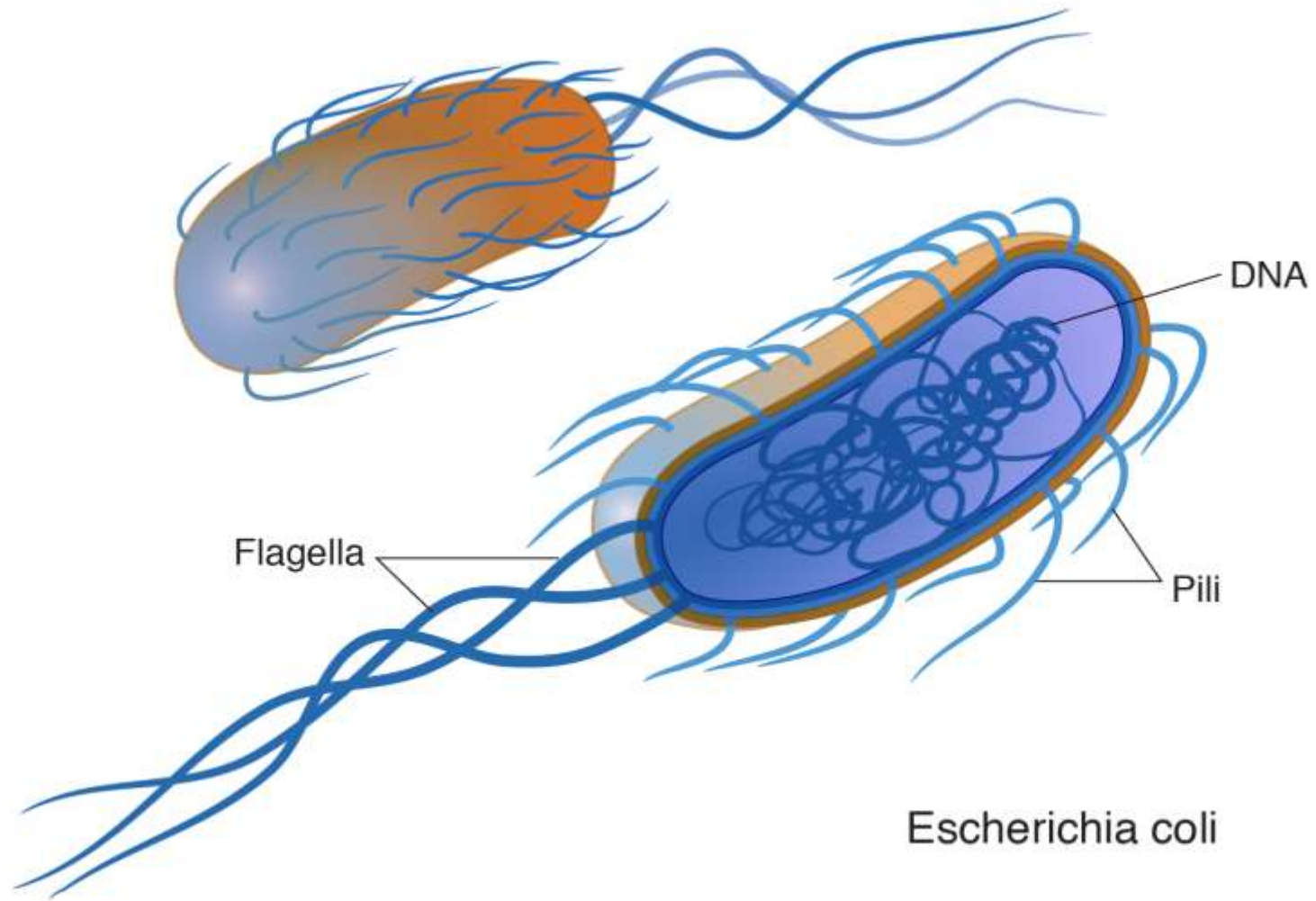


Biology

Lab 3

Bacteria

- Bacteria are small single-celled organisms. Bacteria are found almost everywhere on Earth and are vital to the planet's ecosystems. Some species can live under extreme conditions of temperature and pressure. The human body is full of bacteria, and in fact is estimated to contain more bacterial cells than human cells. Most bacteria in the body are harmless, and some are even helpful. A relatively small number of species cause disease.



Escherichia coli

•Bacteria are microorganisms that come in various shapes. They can be spheres, they can be rods, or they can be spirals. There are bacteria that are bad, that we call pathogenic, and they will cause diseases, but there's also good bacteria. As an example, in our digestive system, in the gut, we have bacteria that are very necessary to help our bodies function in a normal way. What's interesting about bacteria is that in our bodies we have 10 times more bacterial cells than we have human cells. Bacteria are also important in biotechnology. They are also important in that they, again, will help the body maintain itself in a healthy manner.

Bacteria



Sphere-shaped
(cocci)



Rod-shaped
(bacilli)



Spiral-shaped
(spirochetes)

What's interesting about bacteria?

Is that in our bodies we have 10 times more bacterial cells than we have human cells. Bacteria are also important in biotechnology. They are also important in that they, again, will help the body maintain itself in a healthy manner.

What are the 4 main types of bacteria?

There are four common forms of bacteria-coccus, bacillus , spirillum and vibrio.

1-Coccus form:- These are spherical bacteria.

2-Bacillus form:- These are rod-shaped bacteria.

3-Spirilla form:- These are spiral-shaped bacteria that occur singly.

4-Vibrio form:- These are comma-shaped bacteria.

Are bacteria harmful?

Many disease-causing bacteria produce toxins — powerful chemicals that damage cells and make you ill. Other bacteria can directly invade and damage tissues. Some infections caused by bacteria include: Strep throat.

Where do bacteria come from?

Bacteria are found in every habitat on Earth: soil, rock, oceans and even arctic snow. Some live in or on other organisms including plants and animals including humans. There are approximately 10 times as many bacterial cells as human cells in the human body.

How long can bacteria live?

Bacteria divide somewhere between once every **12** minutes and once every **24** hours. So the average lifespan of a bacterium is around **12 hours** or so.

