

NAWI CLIL

**Why antibiotics only destroy bacteria and not our own cells.**

1. Read the following text and highlight important phrases and words.
2. Answer the questions below.

Antibiotics are medicines that help treat infections caused by bacteria. They are designed to target specific parts of bacterial cells that our own cells do not have. Bacteria are simple organisms, but they have structures that are very different from human cells. For example, bacteria have a cell wall that human cells do not. Many antibiotics work by attacking this cell wall, causing the bacteria to break apart and die.

Another difference is that bacteria have unique proteins and enzymes that are not found in human cells. Antibiotics can target these proteins to stop bacteria from growing or multiplying. Since human cells don't have these same structures, antibiotics don't affect our cells. Our cells are much more complex and have different mechanisms that antibiotics can't easily harm.

This is why antibiotics can fight bacterial infections without hurting our own healthy cells. However, antibiotics don't work against viruses, because viruses are very different from bacteria and don't have the same structures for antibiotics to target.

Questions

1. What is the main reason antibiotics only destroy bacteria and not human cells?
2. How do antibiotics harm bacteria cells?
3. Do antibiotics work against viral infections? Why or why not?

Answer key

- 1: Antibiotics destroy bacterial structures, like cell walls and specific proteins, that human cells do not have. These structures allow antibiotics to target and harm the bacteria without affecting human cells.
- 2: When the cell wall breaks down, bacteria stops growing or multiplying.

3: No, antibiotics do not work against viral infections because viruses are very different from bacteria and do not have the same structures (like cell walls or specific proteins) that antibiotics can target.