

Question 2019 CSS 05 b

Why an indiscriminate / casual use of antibiotics may prove dangerous?

Antibiotics are chemical compounds used to kill or inhibit the growth of infectious organisms but indiscriminate use of them may cause severe side-effects and prove to be dangerous than useful.

- ① Over-use of antibiotics can destroy the strains of bacteria that are harmless to our body. It allows the **resistant bacterias** growth and **replace** harmless bacteria.
- ② Overusage led to emergence of 'superbugs' that is difficult to cure later.
- ③ They can also damage body organs i-e **Aminoglycosides** can damage kidney and can cause hearing impairment. **Penicillin antibiotics** can reduce the count of platelets.



Question 2019 C55 Q3 d

What is the difference between vaccines and antibiotics? How do antibiotics and vaccines contribute to health?

Difference between vaccines and antibiotics

Vaccines

(a) "Vaccines are biological preparations that help body's immune system to fight against pathogens such as bacteria or virus."

(b) It contains an agent that resembles with disease-causing micro-organism to stimulate body's immune system to recognize it as foreign, remember it and destroy it. If later encounter with this type of micro-organism.

(c) It has no severe side-effects.

Antibiotics

(a) "Antibiotics are chemical compounds that are used to kill or inhibit the growth of infectious organisms."

(b) It kills the bacteria after it enters into a body and causes severe effects. It is used to disrupting processes bacteria need for its survival. It also prevents reproduction of bacteria.

Severe

(c) It has 1 side-effects.

Contribution of antibiotics and vaccines to health

Vaccines

Vaccines work very well. Of course there is no medicine which is perfect but there are some vaccines that work very well. Childhood vaccines produce immunity 90 to 100%. Vaccines help immune system to recognize antigens and destroy them. People who get vaccinated every year, get protective effect. Vaccines have an agent that resembles with disease-causing micro-organism that stimulates body's immune system to act against it and remember it for later and it also helps immune system to train against such type of pathogen.

Antibiotics

Antibiotics are chemical compounds that are used to kill infectious organisms. It kills bacteria and prevents its reproduction that helps immune system.

