GENERAL

# Why you should always finish your antibiotics

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Do you also run away when your momma asks to take medicines? Its you hiding somewhere VS whole family searching for you. Sometimes we forget to take medicines , we can't follow schedule , BUT DO YOU KNOW WHAT HAPPENS WHEN YOU DON'T TAKE MEDICINES ?

**Antibiotic resistance**

Bacteria stop antibiotics. Bacteria evolve and become resistant to antibiotics. Antibiotics can't affect them. Bacteria divide constantly . Fungi , viruses and microbes also develop resistance. These organisms are called superbugs. This has become a threat .

One of the dangerous Bacteria like E. Coli secretes enzymes which damage antibiotics. Bacteria decrease the length of the cell wall so that antibiotics can't enter into bacteria. Microbes produce substances to stop antibiotics. They divide rapidly , genetic mutations make them resistant . it becomes difficult to treat such an infection. Resistance can spread in a community and affect the whole community.

**Recurring infection**

When you stop antibiotics immediately after feeling little good after some days you fall sick again. Your doctor prescribes antibiotics for a specific reason and duration. Adhering to their instructions is crucial for optimal health outcomes.

**Effective treatment**

When you complete the course it ensures all bacteria affected are killed. It ensures your health.

**Increased risk of complications**

The bacteria further affects the organ , body's immune system overreacts to infection and a life threatening condition develops called sepsis. Increased complications affect emotionally. Recovering immediately from infections is important.

**Why does antibiotic resistance occur?**

Overuse of antibiotics causes antibiotic resistance. When we are prescribed wrong medicines it causes antibiotic resistance. Antibiotic resistance is a natural process. Cows , livestocks are fed with antibiotics to prevent infection. This causes bacteria to become resistant to antibiotics. Bacteria may infect through dairy products. This affects farms also as we use organic manure.

Earlier we used to believe that bacteria move randomly to get nutrients buta New study has found bacteria can sense nutrients in their environment and move towards food (spatial sensing). This can help us to develop new defence mechanisms against bacteria.

**Do's**

- Store antibiotics properly
- Don't share antibiotics
- Follow hygiene

- Do sanitation
- Complete course
- Listen to your doctor

Reference;

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## Competing interests

The authors declare that they have no competing interests.

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