

Antibiotics Quiz



Antibiotics- Penicillin

- Penicillin was the first antibiotic to be discovered.
- It was discovered in 1928 by Alexander Fleming, a Scottish scientist working in St Mary's Hospital London.
- Fleming discovered that mould from a *Penicillium* fungus had antibacterial properties. The antibiotic was named penicillin after the fungus.
- Antibiotics can be derived from fungi, other microorganisms or can be synthetically produced



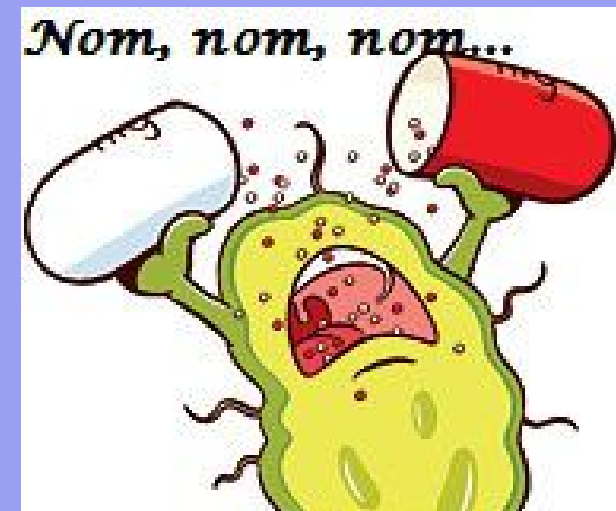
Antibiotics

- Used only to fight Bacterial Infections
- Can be broad or specific
- Work by
 - ♦ attacking the cell wall of bacteria
 - ♦ Prevent bacteria from synthesizing peptidoglycan
 - ♦ Inhibit DNA replication
 - ♦ Inhibit protein synthesis
- Will not work on Viruses
 - ♦ Why?

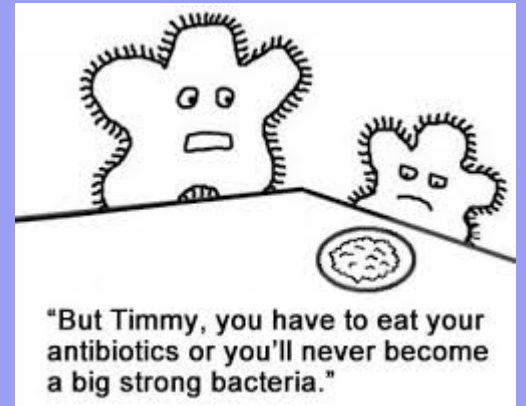


Antibiotics resistance

- Bacteria are continually adapting to develop ways of not being killed by antibiotics.
 - ♦ This is called antibiotic resistance.
 - ♦ Resistance develops due to mutations in the bacterial DNA.
 - ♦ The genes for antibiotic resistance can spread between different bacteria in our bodies through
 - Conjugation
 - Reproduction

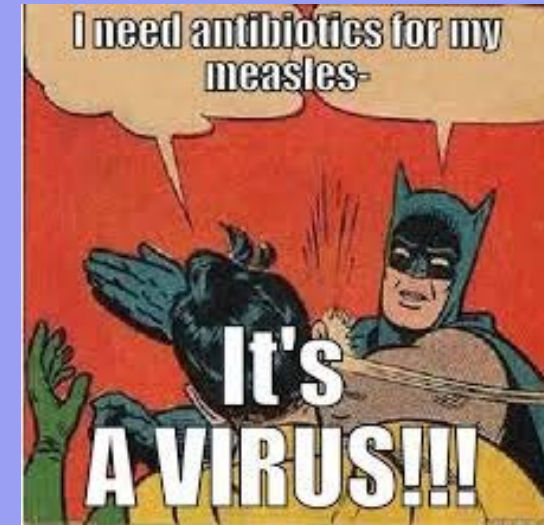


- Antibiotic resistant bacteria can be carried by healthy or ill people and can spread to others just as other types of microbes would
 - ♦ by shaking hands or touching all types of surfaces on animals, vegetables or food where bacteria are present.
- Antibiotic resistance arises in our bodies bacteria, or in animals, due to the overuse and misuse of antibiotics.
- The more often a person takes antibiotics, the more likely they are to develop antibiotic resistant bacteria in their body.



Preventing Resistance

- To prevent resistance, antibiotics should only be taken as prescribed by a doctor or nurse.
- The important points to remember are:
 - ♦ 1. antibiotics do not need to be taken for colds and flu or most coughs, sore throats, ear infections or sinusitis as these usually get better on their own
 - ♦ 2. it is important to take the antibiotic exactly as instructed and complete the course of antibiotics, to decrease the risk of emergence of resistance
 - ♦ 3. antibiotics are personal and prescribed for individuals and for a particular infection. They should not be shared or taken for a different illness



Antibiotic Resistance

- [Antibiotic Resistance TedX](#)
- **Resistance Documentary- Netflix**

