



ANTIBIOTICS Vs PAINKILLERS

ANTIBIOTICS

- Different bacterial infections need to be treated with different antibiotics.
- Antibiotic resistant bacteria are starting to appear. This may be due to overuse of antibiotics and patients not completing the full course of antibiotics the doctor prescribes.
- Penicillin was the very first antibiotic discovered.
- Antibiotics kill bacterial pathogens.
- The use of antibiotics led to a huge drop in deaths from bacterial infections.

PAINKILLERS

- Painkillers do not actually kill anything. Bacteria, viruses etc. are safe!
- Painkillers reduce the pain you feel: they only treat the symptoms of the disease.
- Symptoms that painkillers can help with include:
Fever
Headache
Pain
- Most painkillers come from man-made sources or are synthesised in the laboratory
- Some painkillers are found in natural sources e.g. aspirin in willow bark

ANTIBIOTICS DO NOT KILL VIRUSES !
Effective antiviral drugs are difficult to develop. Why is this? Because viruses are found inside cells, any drugs that kill viruses may also cause damage to the cells.

QUESTIONS

1. Name a painkiller that has been used by humans for hundreds of years.
2. Which of the following symptoms cannot be relieved by the use of a painkiller.
Underline the correct answer.

Fever Muscular Pain Swelling
3. Which type of micro-organism can be killed using antibiotics?
4. Describe the advice a doctor may give a patient when they prescribe antibiotics.
5. Which was the first antibiotic to be discovered?
6. Species of antibiotic resistant bacteria are becoming more common.
Why is this a problem?
7. Which type of medicine would you take you wanted to reduce your temperature when you are infected with a flu virus?
8. **Extended:** Explain why antibiotics are not useful to treat cold virus infections.