

Immunity

When a person catches a disease or infection the body may take time to recover but if the person catches it again, it won't take as long for the body to heal itself because it already knows how to. This is due to memory lymphocytes. They stay in the body for a long time. This is known as 'immunity'.

Antibodies are specific - they neutralize the microbe they have been made for.

Vaccines

Vaccines work by injecting a small amount of harmless germs that cause a certain disease into the body using a very fine needle. The body is then 'tricked' and produces antibodies ready to kill the disease as if it were a real infection. The information from the microbe is then stored in memory cells that 'remember' it and if the vaccinated person were to catch the disease, the body would fight it very quickly. This is why vaccines make people immune to certain diseases.

Antibiotics

Antibiotics are used to cure bacterial diseases by killing infective bacteria inside the body. Specific bacteria should be treated with specific antibiotics. Antibiotics are a very effective way of killing infections however there are two disadvantages to using them. They are:

- They can't be used to treat viral infections
- Bacteria can grow immune to antibiotics (e.g. MRSA 'superbug')

Communicable diseases

Communicable diseases are diseases that are contagious, meaning it can be passed from person to person. The main pathogens that cause these diseases are:

- Virus (e.g: measles, HIV, TMV)
- Bacteria (e.g: Salmonella, Gonorrhea)
- Fungus (e.g: rose black spot)
- Protists (Malaria)