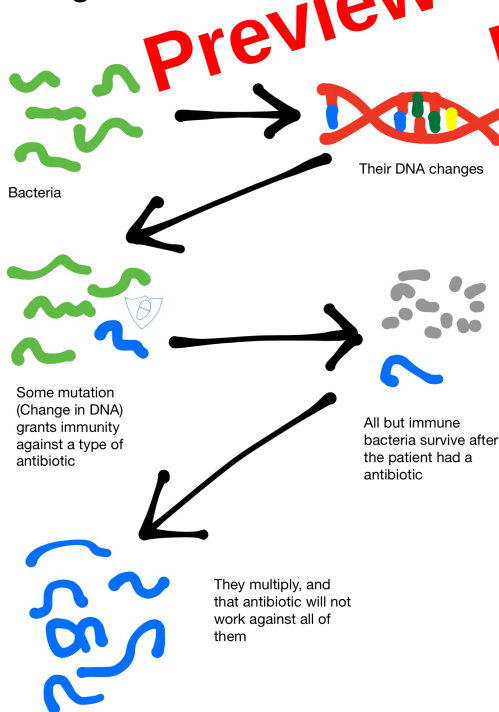


Superbugs

What is a superbug? How are they made?

Superbugs are the microorganism that causes diseases, but it has no/rare treatments to remove them. They have gained immunity against lots of antibiotics over a long time due to the process of the natural selection. (Natural selection is when a single organism develop and evolve into various ways, and the one that have evolved so that they can live better than the original organism which didn't evolve. Over time, the developed ones survive others die. For example, giraffes were believed to have short neck. However, some have grown longer necks, and was better for eating leaves on a tree. Soon, all the short necked giraffes starved to death, and the long necked one survived. Bacteria worked that way. They evolve a lot, and they mutated a bit that made antibiotics to not to kill them.

Diagram



Examples

Norovirus:

Symptoms: High temperature above 38 degrees, headache, stomach cramp, aching limbs

Treatment: No cure exists, but usually it can be treated naturally within few days.

Pseudomonas aeruginosa:

Symptoms: Fever, fatigue, ear/eye/soft tissue/respiratory system/bone/joint infection

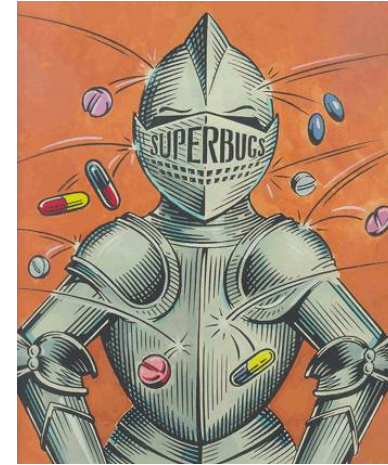
Treatment: Mixture of antibiotics, as they are immune to most of them.

News report relating to a superbug

There was a case where infected chickens and turkeys with MRSA bacteria with them. Despite the fact that this disease was new in that place, they took it that there is very low chance that a person might get affected from the disease, as they are usually cooked, which kills all the bacterias. Even the houses which have caught MRSA were treated in less than 24 hours and only caused a mild skin infection.

How can you prevent pathogens to mutate, become immune to certain antibiotics and spread?

1. Do not use antibiotics too much as it will result pathogens to gain immunity.
2. Hospital visitors must wash their hands.
3. It is usually better to isolate patients who are infected with the superbugs, as hospital will have lots of people who have their immune system weakened by other diseases.
4. Disinfect all the hospital equipments regularly.



You got a level a