get a liver? Should an obese person get a heart? How do we decide who

deserves the organs?

## **Diseases**

A pathogen is an organism that causes infectious diseases. There are various ways pathogens can be spread:

- Water, like cholera.
- Food, like salmonella.
- Direct or indirect contact, like athlete's foot.
- Bodily fluids, like HIV.
- Air, like influenza.
- Animals:

Houseflies spread dysentery pathogens to food with their feet. Anopheles mosquitoes spread malaria. They feed on someone, suck up the protozoan for malaria, and then bite someone else and pass it on.

## **Defences**

Antibiotics: they kill bacteria by destroying the cell wall. However, remustrit or overuse them, as it can cause them to be resistant Than MRSA happened basically.

Antifungals: unsurprisingly, fill find

nonings, the growth of bacteria, but most commonly refers to cleaners.

Antiseptics: kill pathogens outside the body. Used to swab wounds, clean skin, clean surfaces etc. Unfortunately, we can't ingest them.

## **Bodily defences: physical**

- Skin is one, obviously.
- Mucus in lungs traps bacteria and tiny hairs called cilia sweep it out
- Thorns on plants

## **Bodily defences: chemical**

- Lysozyme in tears
- Hydrochloric acid in stomach
- Sebum on skin
- Platelets clot over wounds
- **Antibodies**

