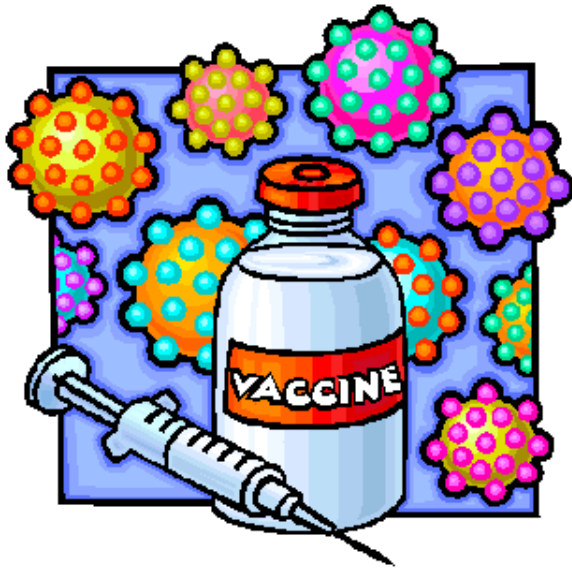
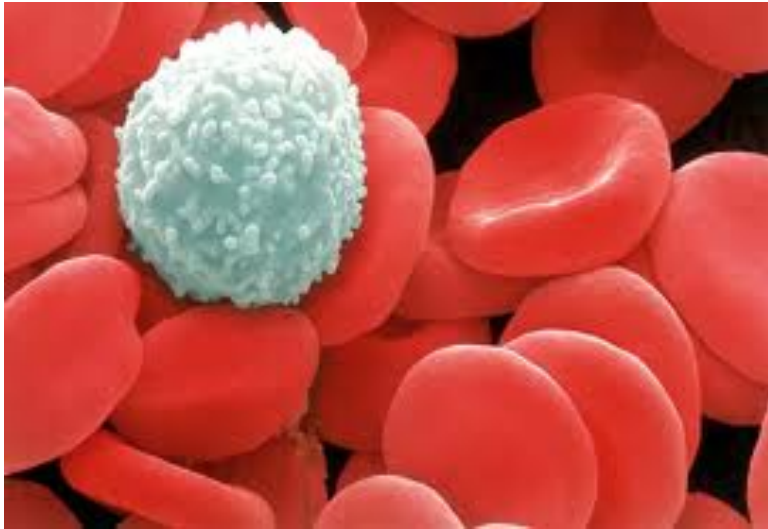


Immune System



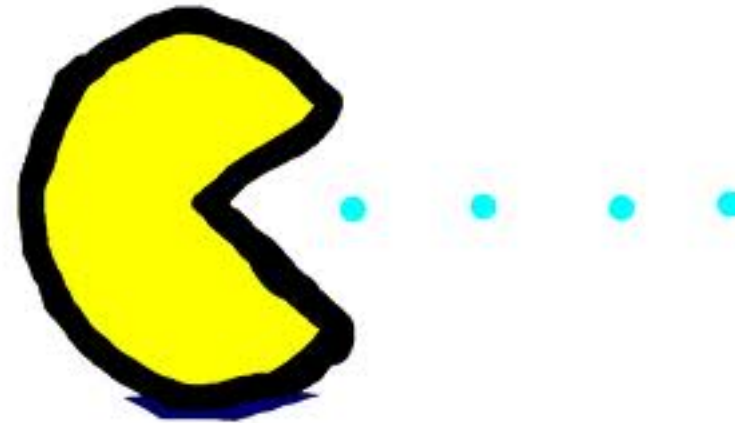
Diseases

- Infectious – Can spread from one person to another. Caused by viruses or bacteria.
- Noninfectious – Cannot spread from one person to another. Caused by genes, injury, lifestyle, or nutritional deficiencies.
- Antibiotics – Kills or slows down the growth of bacteria



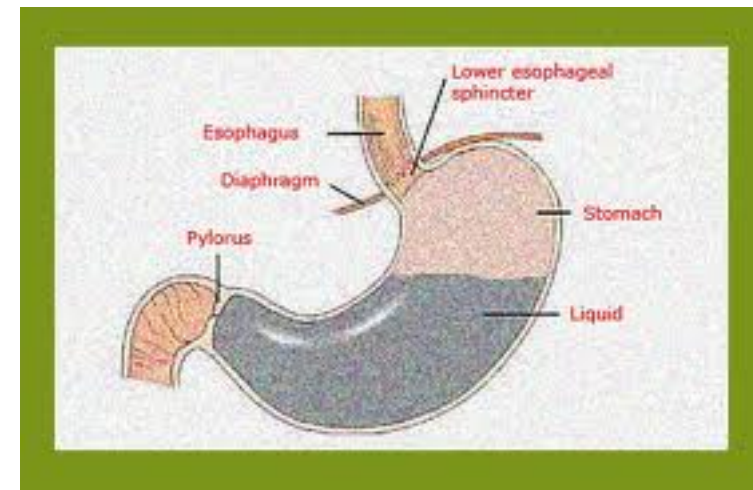
Immune System

- Helps you fight off illness and disease
- can become weaker if you don't eat well or get enough sleep
- Fights off pathogens (microorganism such as a virus, bacterium, or fungus)



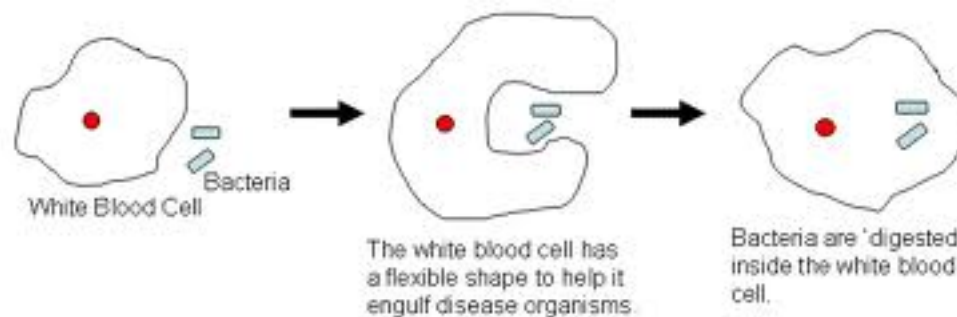
Keeping out pathogens

- Skin prevents pathogens from entering your body
- Mucus in your nose traps many pathogens you inhale
- Stomach acids kill bacteria on food you eat



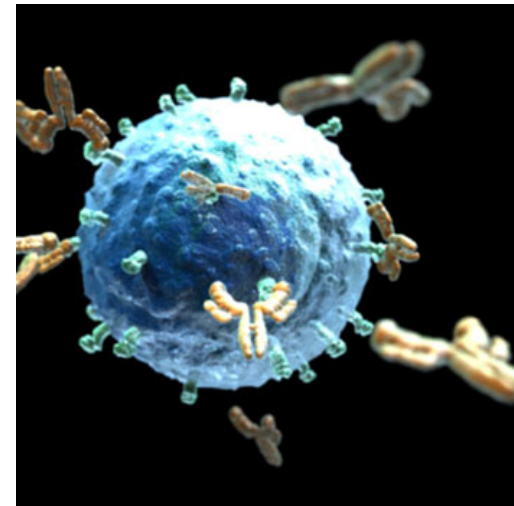
White Blood Cells

- Patrol your bloodstream looking for pathogens
- If they recognize a germ, they kill it before you get sick
- Create anti-bodies to fight infection
- Anti-bodies mark germs for white blood cells to kill



Anti-bodies

- White blood cells create anti-bodies to fight infection.
- Anti-bodies mark pathogens for white blood cells to kill.
- Immune system remembers which anti-bodies to make for a particular disease.



Vaccines

- A tiny amount of a virus is injected into a person
- Your body makes anti-bodies for the virus
- Your body will remember which anti-bodies it made for a disease and you will be immune to the disease



Allergies

- The immune system treats harmless substances as pathogens
- Can cause symptoms such as runny nose, asthma, hives, itching, and anaphylaxis
- Anaphylaxis is a swelling of tissue

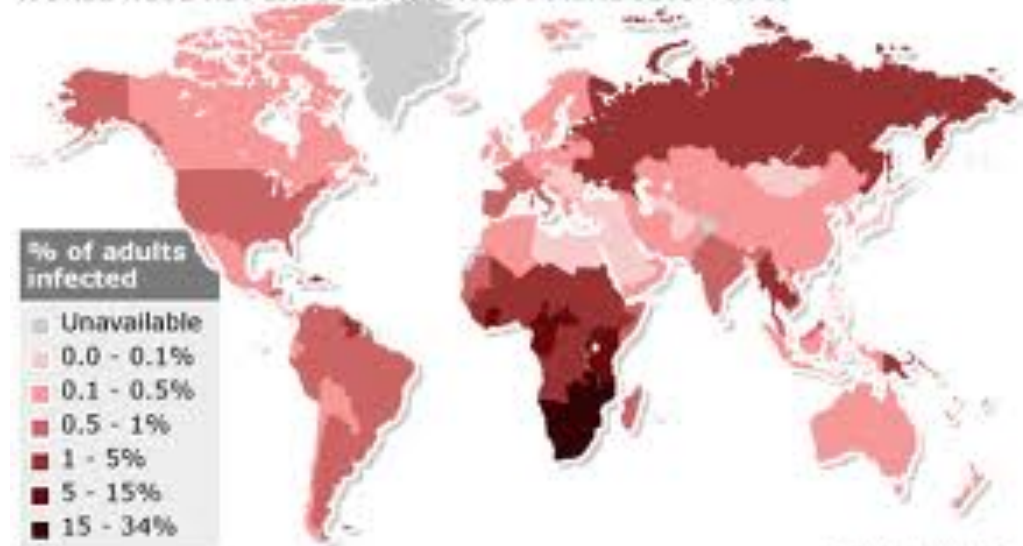


AIDS

- HIV is the virus that causes AIDS
- HIV attacks white blood cells and weakens the immune system
- Your body is not able to defend itself against disease



WORLDWIDE HIV INFECTION RATES FOR ADULTS - 2005



Flu or Influenza

- Respiratory illness caused by the influenza viruses
- Can cause fevers, aches, stuffy noses, and upset stomachs
- Very contagious

