

Notes

Immunity: Immunity is the body's ability to protect itself and fight against any pathogen or foreign body. Our immune system protects our bodies from getting sick.

Immunity is divided into two types:

Innate immunity: that is already there when a person is born. Our body's defence system is made up of four different kinds of barriers.

- Skin and mucus on the epithelial lining of the respiratory, gastrointestinal, and urinary tracts are physical barriers.
- Saliva, tears, and stomach acid all act as physiological barriers.
- Cellular barriers: neutrophils, monocytes, natural killer lymphocytes
- Cytokine barriers: interferons made by cells that have been infected with a virus

Acquired immunity: is something we get over time and is specific to a certain pathogen. It is particular to the pathogen and characterized by memory. B and T cells are responsible for both primary and secondary responses. B-lymphocytes generate antibodies with the assistance of T-cells. The response produced by blood-borne antibodies IgA, IgM, IgE, IgG, and IgD is known as humoral immune response (antibody-mediated). Type 2: Immune Response Mediated by Cells (also known as Cell-Mediated Immunity) (CMI). T-cells facilitate CMI.

Active immunity: Antibodies are made by the body of the host in response to an antigen. Responses that work well take time. A type of active immunity is getting a shot of a pathogen that has been weakened.

Passive immunity: is when you give a person ready-made antibody so they can quickly fight off a pathogen. Passive immunisation is what happens when you get a shot of antitoxin for a snakebite, which has antibodies against the venom.