

Pathogen	Disease-causing organisms E.g. bacteria, viruses, fungi, protozoans, etc.
Typhoid fever	Pathogen- Salmonella typhi (bacteria) Mode of infection- contaminated air, utensil, etc. Symptoms- stomach ache, constipation, intestinal perforation, etc.
	Test- Widal test Pathogen- <i>Streptococcus</i> <i>pneumoniae, Haemophilus</i> <i>influenzae</i> (bacteria) Mode of infection- contaminated
Pneumonia	food and water Symptoms- fever, chills, cough, alveoli gets filled with fluid, respiratory problems



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	Pathogen- Rhinoviruses
Common cold	Mode of infection- through cough and sneeze of an infected person or things
	Symptoms- nasal congestion, cough, headache, etc.
Malaria	Pathogen- <i>Plasmodium vivax, P. malaria</i> (protozoan)
	<i>P. falciparum</i> - malignant malaria
	Mode of infection- insect bite of an infected female <i>Anopheles</i> mosquito (vector)
	Symptoms- high fever, chills, etc.
<i>Plasmodium</i> Sporozoites	Infectious stage, produced in the gut of mosquito after fertilisation, migrates to the salivary glands of the mosquito
	Injected to human by mosquito bite, reaches liver of the host then to RBCs in the blood, reproduces asexually



Haemozoin	Released by rupture of RBCs caused by <i>Plasmodium</i> sporozoites Causes chills and relapsing high fever
Plasmodium Gametocytes	Sexual stage, produced in the RBCs of human Female <i>Anopheles</i> takes up gametocytes with the sucked blood Fertilisation takes place in the mosquito gut
Amoebiasis (Amoebic dysentery)	Pathogen- <i>Entamoeba</i> <i>histolytica</i> (protozoan) Mode of infection- contaminated food and water by faeces of an infected person Carrier- Houseflies
	Symptoms- constipation, abdominal pain, excess mucus and blood in the stool



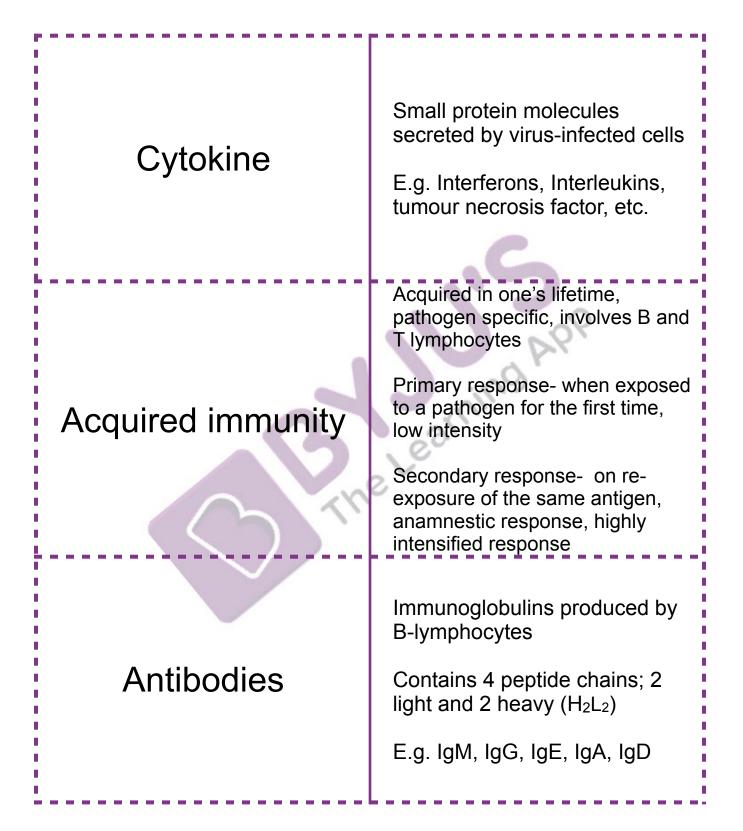
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Ascariasis	Pathogen- Ascaris (helminth)
	Mode of infection- contaminated fruits, vegetables and water by faeces of an infected person
	Symptoms- muscular pain, fever, internal bleeding, anaemia, blockage of intestine
Elephantiasis (filariasis)	Pathogen- <i>Wuchereria bancrofti and W. malayi</i> (helminth)
	Mode of infection- transmitted by mosquito bite
	Symptoms- inflammation in the lymphatic vessels of lower limb
Ringworm	Pathogen- <i>Microsporum,</i> <i>Trichophyton and</i> <i>Epidermophyton</i> (fungi)
	Mode of infection- soil or by using a contaminated towel, comb, etc.
	Symptoms- dry and scaly lesions on the skin, nails, scalp, etc.



Flashcards for NEET Biology: Human Health and Disease

Gambusia	A fish It feeds on insect larvae Used to control and eliminate
Innate immunity	vectors of many diseases Present by birth Non-specific defence Skin, mucus, saliva, WBCs, cytokine, etc.
Cellular barrier	Specialised cells, which can phagocytose and kill microbes WBCs or leukocytes, macrophages E.g. Neutrophils, monocytes, Natural killer cells





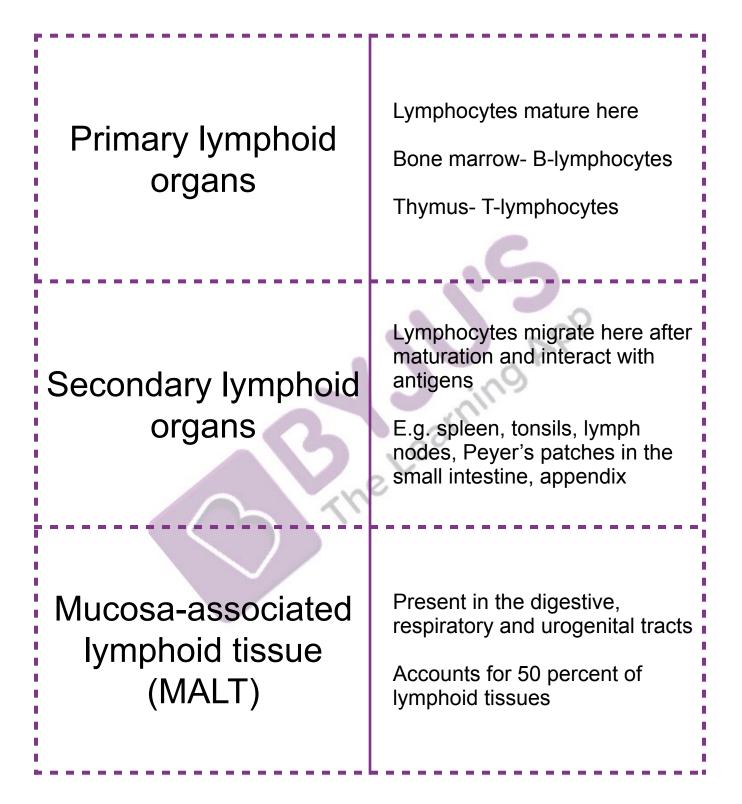


Humoral immune response	A type of acquired immunity Antibody-mediated B-lymphocytes produce antigen- specific antibodies in the circulatory system
Cell-mediated immunity (CMI)	A type of acquired immunity T-lymphocytes mediated CMI is responsible for graft rejection
Active immunity	The immune response on the exposure of an antigen Antibodies are produced specifically to the antigen During immunisation or vaccination, attenuated microbes are injected to induce active immunity



Passive immunity	Readymade antibodies are given to protect against a foreign antigen Colostrum- the first milk of mother, contains IgA- provides protection to infants IgG antibodies can cross the placenta and provide passive
Allergy	immunity to the growing foetus Intense immune response on exposure to allergens IgE mediated response Mast cell secretes histamine, serotonin
Auto-immune disease	When our immune system fails to distinguish self cells from foreign antigens and starts attacking self cells E.g. Rheumatoid arthritis







AIDS	Acquired Immunodeficiency Syndrome
	Caused by HIV virus, a retrovirus
	Transmitted through body fluids, sexually, using infected needles and can cross placenta too
	Test- ELISA (Enzyme-linked immunosorbent assay)
HIV replication	In Macrophages- forms DNA by reverse transcription and gets inserted into host cell genome producing multiple copies
	In T _H cells- replicate and attacks other T-lymphocytes, decreasing the number of T-lymphocytes
Tumours	Cells, lose regulatory mechanism and contact inhibition, show uncontrolled division and proliferation
	Benign- remain confined to the original location
	Malignant- neoplastic cells, invade surrounding tissues



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