RESISTANCE OF THE BODY TO INFECTION
• 1-INNATE IMMUNITY
• Phagocyte, destruction by digestive enzymes,
• Resistance of skin, chemicals in the blood (lysozyme, polypeptide, complement complex
• 20 protein, lymphocyte killer)
• 2-AQUIRED (ADAPTIVE) IMMUNITY
• 2-Aquired
• A-Circulating antibodies (humoral, B-Cell)
• B-Cell mediated immunity, (T Cell immunity)

• Activated lymphocytes
• A- T (Thymus) T cell
• B-Liver ,bone marrow ,B cell
• T and B lymphocyte react highly specifically
• Against specific antigen (Clone)
• -Activation of clone: either antibody on the surface of the cell or receptor protein on the surface.
• Clone: Different lymphocytes capable forming one specific of antibody or T cell
• Memory cells and secondary response
• CLASSES OF ANTIBODY
• IgA, IgD, IgE, IgG, IgM
• ACTION OF ANTIBODY
• 1-Direct : Agglutination, precipitation, neutralization, and lysis.
• 2-Activation of complement system (20 Protein ): Many of them enzyme precursor not activated but can activated by classic pathway.
• Classic pathway : AB AG reaction, phagocyte, lysis, agglutination and neutralization, chemotaxis, activation of mast cell and basophil.
• Tolerance of the acquired immunity system to one's own tissues cause autoimmune disease like RH fever, Glomerulonephritis, Mysthenia gravis, lupus erythromatosis (many tissues).
• IMMUNITY BY INJECTION
• 1-Passive by inject antibody
• 2-Injected of antigen
• A-Dead organism like Diphtheria, Whooping cough, Typhoid fever
• B-Toxin treated like tetanus
• C-Attenuated live organism like polio, measles, smallbox and many other viral disease
• ALLERGY AND HYPERSENSITIVITY

• 1-Delay reaction allergy: By activated T cell not antibody with repeat exposure, T cell will release many toxic substances and invasion of tissue by macrophage. Tissue damage will develop where the antigen present like skin, lungs (lung edema) and Asthma.
• 2-Allergy in person who has excess IgE antibodies (Atopic allergies). Genetic type,
• Cause antigen antibody reaction as Anaphylactic shock, Urticaria, hay fever, and asthma.