

MODULE 6 L03

Immune Response

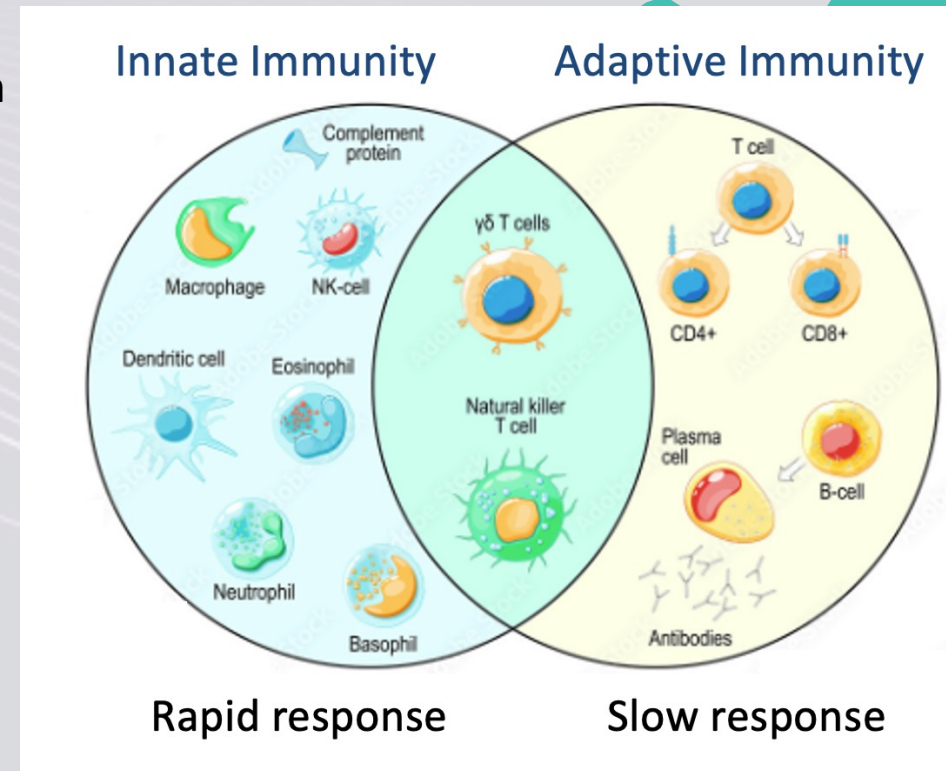
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3. Immune Response

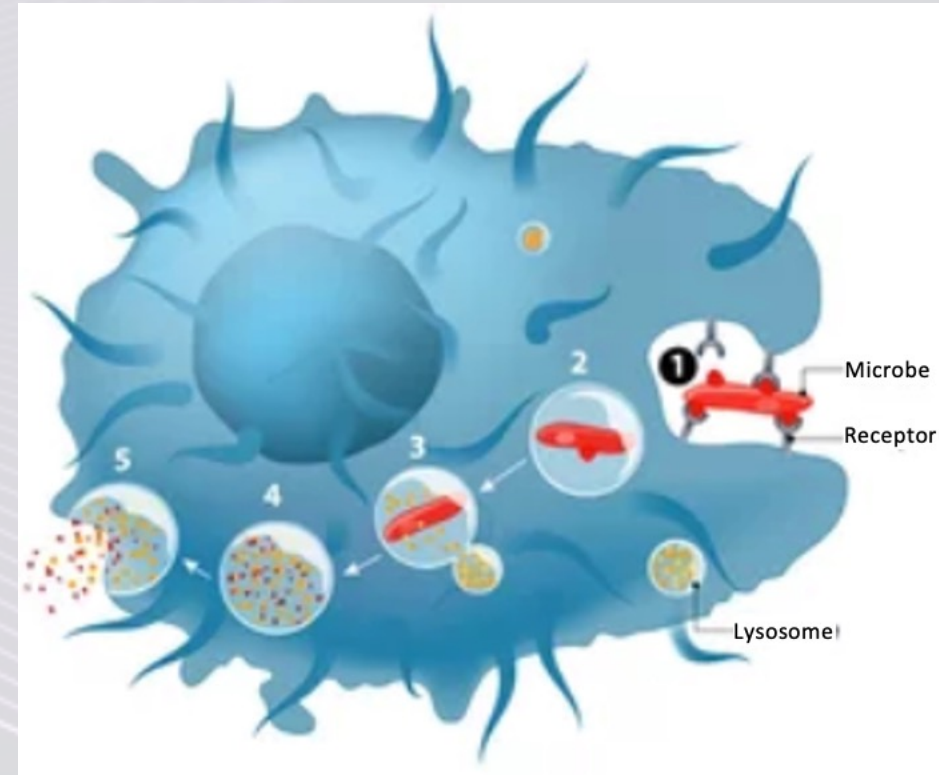
1. Innate immune response
 - Relatively rapid
 - Nonspecific
 - Not always effective
2. Adaptive immune response
 - Slower in its development during an initial infection
 - Highly specific
 - Highly effective



Innate Immune Response

- Physical barriers
 - ❖ Skin
 - ❖ Saliva
 - ❖ Mucosal surfaces
 - ❖ Ciliated epithelial cells
 - ❖ Normal flora
- Cells:
 - ❖ Macrophages
 - ❖ Neutrophils
 - ❖ Natural killer cells - apoptosis

Phagocytosis



Adaptive Immune Response

- Also known as:
 - ❖ Acquired immunity
 - ❖ Specific immunity
- Benefits
 - ❖ Its specificity
 - Ability to specifically recognize a pathogen
 - Make a specific response against each pathogen
 - Antigenes are recognized by receptors
 - Surfaces of B and T lymphocytes
 - Distinguish between self-antigens and foreign antigens
- Exposure to pathogen:
 1. Primary adaptive response – first exposure
 - Symptoms are severe
 2. Secondary adaptive response
 - Faster response
 - Stronger response
 - Immunological memory

