

## Lymphatic System and Immunity

### Chapter 13

1. Lymphatic System Essential Function #1 - Fluid Return
  - A. Fluid Movement Issues (Pages 291 - 292)
    - i. Hydrostatic vs. Interstitial Pressures
  - B. Body Fluids
    - i. Plasma
    - ii. Interstitial Fluid
    - iii. Plasma
2. Lymphatic Vessels and Capillaries (Page 292 ff)
  - A. Vessel Types
    - i. Lymphatic Capillaries
    - ii. Lymphatic Vessels
    - iii. Trunks
      - a. Right Lymphatic Duct
      - b. Thoracic Duct
    - iv. Subclavian Veins

- B. Fluid Movements
  - i. Pressure Issues
  - ii. Valves and Muscular Movements
  
- 3. Lymphatic System Essential Function #2 - Immunity (Page 292 ff)
  - A. Portals of Entry
  
  - B. Lymph Nodes
  
  - C. Immune Cells
  
- 4. Lymph Nodes (Page 293 - 294)
  - A. Location
  
  - B. Structure
    - i. Afferent and Efferent Vessels
  
    - ii. Fiber Network
  
    - iii. Immune Cells

5. Spleen (Page 294)

A. Vascular Supply

B. Functions

6. Tonsils (Pages 295)

A. Function

B. Locations / Names

i. Palatine Tonsils

ii. Pharyngeal Tonsil

iii. Lingual Tonsils

7. Thymus (Pages 293)

A. Location

B. Function

i. Immunocompetence

ii. T Lymphocytes (T Cells)

8. Nonspecific Defense Mechanisms (Pages 297 - 298)

A. Mechanical Barriers – First Line of Defense

i. Skin

ii. Mucous Membrane

iii. Acid

B. Chemical Barriers

i. Lysozyme

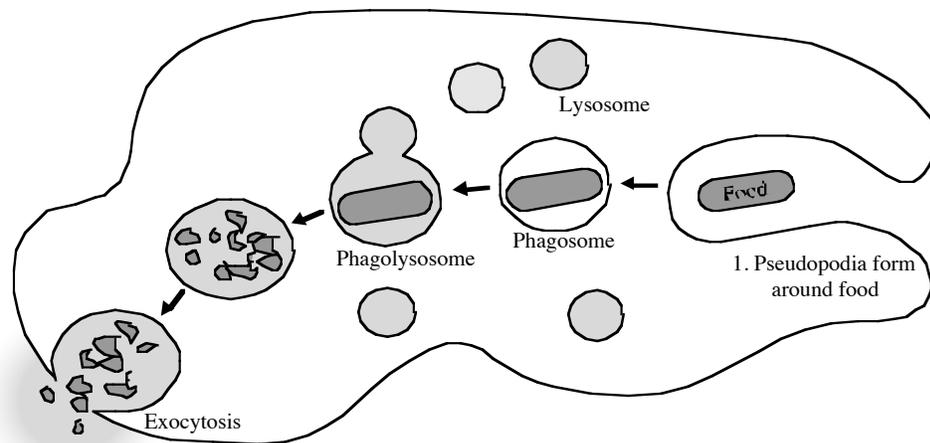
ii. Acid / Digestive Enzymes

iii. Interferon

C. Nonspecific Phagocytosis

i. Macrophages

ii. Phagocytic Process



D. Inflammation (Pages 298)

i. Vasodilation and Histamine

ii. Heat

iii. White Blood Cell migration and action

iv. Clotting Functions

v. Healing

9. Specific Host Immunity (Page 299 ff)

A. Chemical Agents Defined

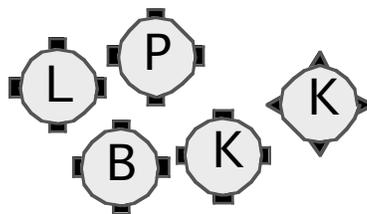
i. Antigen

ii. Antibody

a. Major Histocompatibility Complex



b. Antigen



c. Immunocompetence

B. Cellular Immunity and T Cells (Pages 299 - 300)

i. Antigen Presenting Cell (APC)

ii. T Cell Types

a. Cytotoxic T Cells

b. Helper T Cells

c. Suppressor (Regulatory) T Cells

d. Memory T Cells

iii. Process

C. Humeral Immunity and B Cells (Pages 301 - 302)

i. B Cell Types

a. Plasma Cells

- Antibodies

b. Memory B Cells

ii. Process

10. Immune Responses (Page 302 - 303)

A. Broad Categories

i. Active

ii. Passive Immunity

B. Specific Categories

i. Naturally Acquired Active Immunity

ii. Artificially Acquired Active Immunity

iii. Naturally Acquired Passive Immunity

iv. Artificially Acquired Passive Immunity