

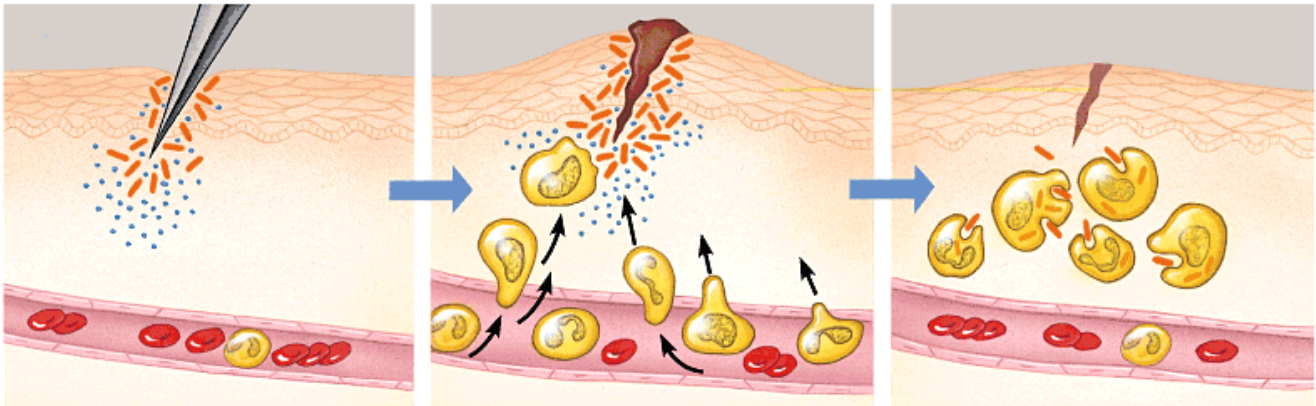
CHAPTER 24 - The Immune System
Chapter Reading Guide

Nonspecific Defenses Against Infection

1. Describe the frequency with which new people are infected with HIV in the United States and the world. Explain what people can do to decrease their risks of acquiring this virus.

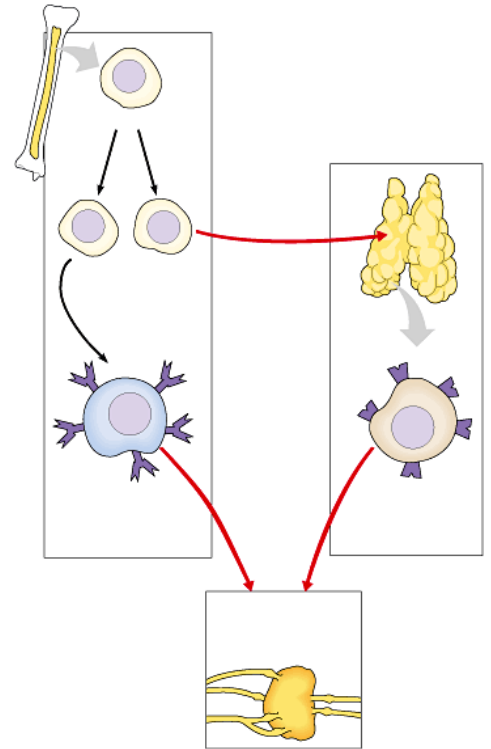
2. Describe the nature of nonspecific human defenses against infection.

3. a) *In your own words*, describe the events of the inflammatory response in the space provided.



b) Explain how the **inflammatory response** helps to prevent the spread of disease.

4. Describe the structure and functions of the lymphatic system. using the diagram to the right. **Begin by labeling the diagram.**



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Specific Immunity

5. a) Describe the **specific** nature of an immune system response.

b) Define the following:

antigen -

antibody -

passive immunity -

active immunity -

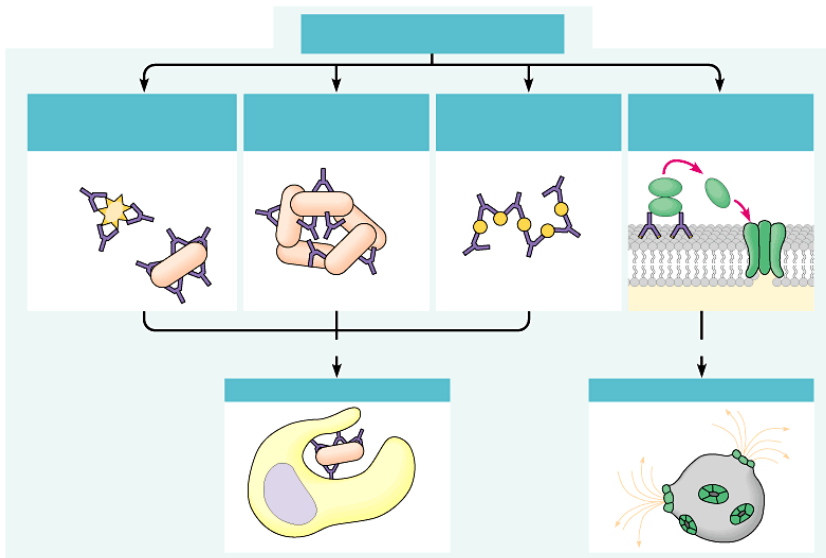
6. Describe the development and functions of B and T lymphocytes.

7. Describe the nature of antigens. Explain how an antigen and its antibody interact.

8. Compare the **primary** and **secondary** immune responses. Distinguish between the functions of plasma cells and memory cells.

9. Relate the specific **structure** of an antibody to its **functions**.

10. Describe the effector mechanisms triggered by antibodies binding to antigens. Begin by labeling the diagram below.



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11. Describe the production of and uses for monoclonal antibodies.

12. Describe the specific functions of **cytotoxic T cells** and **helper T cells**. Note their interactions with other cells.

13. Explain how the immune system identifies the body's own molecules and how this system creates problems for organ transplantations.

Disorders of the Immune System

14. Describe examples of how the malfunction or failure of the immune system causes disease.

15. Explain the mechanism of HIV infection and the medical consequences.