

## Introduction to Anemia

Blood circulation is necessary to transport substances required for tissue cellular metabolism, eliminate metabolic waste products, provide defense against invading microorganisms and injuries, and regulate acid-base balance.

Anemia is a disorder characterized by a deficiency in the number of red blood cells or a decrease in the quantity of hemoglobin in the blood. Red blood cells and hemoglobin are crucial for transporting oxygen from the lungs to the body's tissues and organs.

This learning module focuses on the disease process of anemia and enables you to meet the following course outcomes:

- CO 1: Analyze pathophysiologic mechanisms associated with selected disease states across the lifespan.
- CO 2: Examine the way in which homeostatic, adaptive, and compensatory physiological mechanisms can be supported and/or altered through specific therapeutic interventions across the lifespan.
- CO 3: Distinguish risk factors associated with selected disease states across the lifespan.
- CO 4: Integrate advanced pathophysiological concepts in the diagnosis and treatment of health problems in selected populations.