

Unit 1: Anatomy and Physiology
Chapter 8: The Cardiovascular and Respiratory Systems

Section 8.1: The Heart:

- Know the basic structure of the heart and be able to label a diagram
- Know how blood circulates through the heart
- Understand the SA and AV nodes and functions

Section 8.2: The Vascular System and Blood Flow

- Know the different blood vessels and characteristics of each
- Know blood and its components

Section 8.3: Cardiovascular Dynamics

- Know what cardiac output, heart rate, blood pressure and blood flow distribution are

Section 8.4: The Respiratory System

- Know the three main functions of the respiratory system are.
- Understand the difference between External and Internal respiration
- Know what the conductive and respirator zones are.

Understand the mechanisms of breathing pages 250 -251

Section 8.5: Gas Exchange and O₂ and CO₂ Transport

- Understand factors that affect the rates of diffusion
- Know how O₂ and CO₂ transport is accomplished

Section 8.6: Respiratory Dynamics

- Know what occurs during changes in pulmonary ventilation, external respiration and internal respiration.
- Know what a-VO₂ difference is.
- Know some common respiratory diseases

Section 8.7: The Integration of Cardiovascular and Respiratory Functions

- Know what VO₂ Max is how its measured

Section 8.8: The Rest to Exercise Transition

- Understand what Oxygen Deficit is and when it occurs
- Understand what blood lactate accumulation is. (fig. 8.15, table 8.5)