



HUMAN
ANATOMY

Seventh Edition

MARTINI
TIMMONS
TALLITSCH

17

The Nervous System: Autonomic Nervous System

Introduction

- The autonomic nervous system functions **outside** of our **conscious awareness**
- The autonomic nervous system makes routine adjustments in our body's systems
- The autonomic nervous system:
 - Regulates body temperature
 - Coordinates cardiovascular, respiratory, digestive, excretory, and reproductive functions

A Comparison of the Somatic and Autonomic Nervous Systems

- Autonomic nervous system
 - Axons innervate the visceral organs
 - Has **afferent** and **efferent** neurons
 - **Afferent** pathways **originate** in the **visceral receptors**
- Somatic nervous system
 - Axons innervate the skeletal muscles
 - Has afferent and efferent neurons
 - **Afferent** pathways **originate** in the **skeletal muscles**