3.2: Glossary- Introduction

**abdominopelvic cavity**: division of the anterior (ventral) cavity that houses the abdominal and pelvic viscera

**anabolism**: assembly of more complex molecules from simpler molecules

**anatomical position**: standard reference position used for describing locations and directions on the human body

**anatomy**: science that studies the form and composition of the body’s structures

**anterior cavity**: larger body cavity located anterior to the posterior (dorsal) body cavity; includes the serous membrane-lined pleural cavities for the lungs, pericardial cavity for the heart, and peritoneal cavity for the abdominal and pelvic organs; also referred to as ventral cavity

**anterior**: describes the front or direction toward the front of the body; also referred to as ventral

**catabolism**: breaking down of more complex molecules into simpler molecules

**caudal**: describes a position below or lower than another part of the body proper; near or toward the tail (in humans, the coccyx, or lowest part of the spinal column); also referred to as inferior

**cell**: smallest independently functioning unit of all organisms; in animals, a cell contains cytoplasm, composed of fluid and organelles

**computed tomography (CT)**: medical imaging technique in which a computer-enhanced cross-sectional X-ray image is obtained

**control center**: compares values to their normal range; deviations cause the activation of an effector
cranial cavity: division of the posterior (dorsal) cavity that houses the brain

cranial: describes a position above or higher than another part of the body proper; also referred to as superior

deep: describes a position farther from the surface of the body

development: changes an organism goes through during its life

differentiation: process by which unspecialized cells become specialized in structure and function

distal: describes a position farther from the point of attachment or the trunk of the body

dorsal cavity: posterior body cavity that houses the brain and spinal cord; also referred to the posterior body cavity

dorsal: describes the back or direction toward the back of the body; also referred to as posterior

effector: organ that can cause a change in a value

frontal plane: two-dimensional, vertical plane that divides the body or organ into anterior and posterior portions

gross anatomy: study of the larger structures of the body, typically with the unaided eye; also referred to macroscopic anatomy

growth: process of increasing in size

homeostasis: steady state of body systems that living organisms maintain

inferior: describes a position below or lower than another part of the body proper; near or toward the tail (in humans, the coccyx, or lowest part of the spinal column); also referred to as caudal

lateral: describes the side or direction toward the side of the body

magnetic resonance imaging (MRI): medical imaging technique in which a device generates a magnetic field to obtain detailed sectional images of the internal structures of the body

medial: describes the middle or direction toward the middle of the body

metabolism: sum of all of the body’s chemical reactions

microscopic anatomy: study of very small structures of the body using magnification

negative feedback: homeostatic mechanism that tends to stabilize an upset in the body’s physiological condition by preventing an excessive response to a stimulus, typically as the stimulus is removed

normal range: range of values around the set point that do not cause a reaction by the control center

nutrient: chemical obtained from foods and beverages that is critical to human survival
organ system: group of organs that work together to carry out a particular function

organism: living being that has a cellular structure and that can independently perform all physiologic functions necessary for life

organ: functionally distinct structure composed of two or more types of tissues

pericardium: sac that encloses the heart

peritoneum: serous membrane that lines the abdominopelvic cavity and covers the organs found there

physiology: science that studies the chemistry, biochemistry, and physics of the body’s functions

plane: imaginary two-dimensional surface that passes through the body

pleura: serous membrane that lines the pleural cavity and covers the lungs

positive feedback: mechanism that intensifies a change in the body’s physiological condition in response to a stimulus

positron emission tomography (PET): medical imaging technique in which radiopharmaceuticals are traced to reveal metabolic and physiological functions in tissues

posterior cavity: posterior body cavity that houses the brain and spinal cord; also referred to as dorsal cavity

posterior: describes the back or direction toward the back of the body; also referred to as dorsal

pressure: force exerted by a substance in contact with another substance

prone: face down

proximal: describes a position nearer to the point of attachment or the trunk of the body

regional anatomy: study of the structures that contribute to specific body regions

renewal: process by which worn-out cells are replaced

reproduction: process by which new organisms are generated

responsiveness: ability of an organisms or a system to adjust to changes in conditions

sagittal plane: two-dimensional, vertical plane that divides the body or organ into right and left sides

section: in anatomy, a single flat surface of a three-dimensional structure that has been cut through

sensor: (also, receptor) reports a monitored physiological value to the control center

serosa: membrane that covers organs and reduces friction; also referred to as serous membrane

serous membrane: membrane that covers organs and reduces friction; also referred to as serosa
**set point**: ideal value for a physiological parameter; the level or small range within which a physiological parameter such as blood pressure is stable and optimally healthful, that is, within its parameters of homeostasis

**spinal cavity**: division of the dorsal cavity that houses the spinal cord; also referred to as vertebral cavity

**superficial**: describes a position nearer to the surface of the body

**superior**: describes a position above or higher than another part of the body proper; also referred to as cranial

**supine**: face up

**systemic anatomy**: study of the structures that contribute to specific body systems

**thoracic cavity**: division of the anterior (ventral) cavity that houses the heart, lungs, esophagus, and trachea

**tissue**: group of similar or closely related cells that act together to perform a specific function

**transverse plane**: two-dimensional, horizontal plane that divides the body or organ into superior and inferior portions

**ultrasonography**: application of ultrasonic waves to visualize subcutaneous body structures such as tendons and organs

**ventral cavity**: larger body cavity located anterior to the posterior (dorsal) body cavity; includes the serous membrane-lined pleural cavities for the lungs, pericardial cavity for the heart, and peritoneal cavity for the abdominal and pelvic organs; also referred to as anterior body cavity

**ventral**: describes the front or direction toward the front of the body; also referred to as anterior

**X-ray**: form of high energy electromagnetic radiation with a short wavelength capable of penetrating solids and ionizing gases; used in medicine as a diagnostic aid to visualize body structures such as bones

---

**Anatomy & Physiology. Authored by**: OpenStax College. **Provided by**: Rice University. **Located at**: [http://cnx.org/contents/14fb4ad7-39a1-4eee-ab6e-3ef2482e3e22@9.1](http://cnx.org/contents/14fb4ad7-39a1-4eee-ab6e-3ef2482e3e22@9.1), **License**: CC BY. **License Terms**: Download for free at [http://cnx.org/contents/14fb4ad7-39a...2482e3e22@9.1](http://cnx.org/contents/14fb4ad7-39a...2482e3e22@9.1)