15.9: XV Glossary

Active transport: Movement of solutes and ions across a cell membrane against a concentration gradient from an area of lower concentration to an area of higher concentration using energy during the process.

Chvostek’s sign: An assessment sign of acute hypocalcemia characterized by involuntary facial muscle twitching when the facial nerve is tapped.

Diffusion: The movement of solute particles from an area of higher concentration to an area of lower concentration.

Edema: Swelling caused by excessive interstitial fluid retention.

Extracellular fluids (ECF): Fluids found outside cells in the intravascular or interstitial spaces.

Filtration: Movement of fluids through a permeable membrane utilizing hydrostatic pressure.

Hydrostatic pressure: The pressure that a contained fluid exerts on what is confining it.

Hypercapnia: Elevated levels of retained carbon dioxide in the body.

Hypertonic solution: Intravenous fluids with a higher concentration of dissolved particles than blood plasma.

Hypervolemia: Excess intravascular fluid. Used interchangeably with “excessive fluid volume.”

Hypotonic solution: Intravenous fluids with a lower concentration of dissolved particles than blood plasma.

Hypovolemia: Intravascular fluid loss. Used interchangeably with “deficient fluid volume” and “dehydration.”

Interstitial fluids: Fluids found between the cells and outside of the vascular system.
**Intracellular fluids (ICF):** Fluids found inside cells consisting of protein, water, and electrolytes.

**Intravascular fluids:** Fluids found in the vascular system consisting of the body's arteries, veins, and capillary networks.

**Isotonic solution:** Intravenous fluids with a similar concentration of dissolved particles as blood plasma.

**Oncotic pressure:** Pressure inside the vascular compartment created by protein content of the blood (in the form of albumin) that holds water inside the blood vessels.

**Osmolality:** Proportion of dissolved particles in a specific weight of fluid.

**Osmolarity:** Proportion of dissolved particles or solutes in a specific volume of fluid.

**Osmosis:** Movement of fluid through a semipermeable membrane from an area of lesser solute concentration to an area of greater solute concentration.

**Passive transport:** Movement of fluids or solutes down a concentration gradient where no energy is used during the process.

**Renin-Angiotensin-Aldosterone System (RAAS):** A body system that regulates extracellular fluids and blood pressure by regulating fluid output and electrolyte excretion.

**Trousseau's sign:** A sign associated with hypocalcemia that causes a spasm of the hand when a blood pressure cuff is inflated.

**Urine specific gravity:** A measurement of hydration status that measures the concentration of particles in urine.