



Chapter 26

The

Urinary System

The Urinary System

- The urinary system consists of the kidneys, ureters, bladder, and urethra, along with its associated nerves and blood vessels.
- The system maintains homeostasis by:
 - Regulating **blood volume, pressure, pH, and concentration** (osmolarity) of electrolytes (Na^+ , K^+ , Ca^{2+} , Cl^- , HPO_4^{3-} , Mg^{2+} , HCO_3^-)
 - **Reabsorbing glucose** and **excreting wastes**
 - Releasing certain **hormones** like renin and EPO

Renal Anatomy

- The **kidneys** are bean-shaped organs located just above the waist between the peritoneum and the posterior wall of the abdomen (in the _____ space).
- They are partially protected by the eleventh and twelfth pairs of ribs.
- Because of the position of the liver, the right kidney is slightly lower than the left.

