

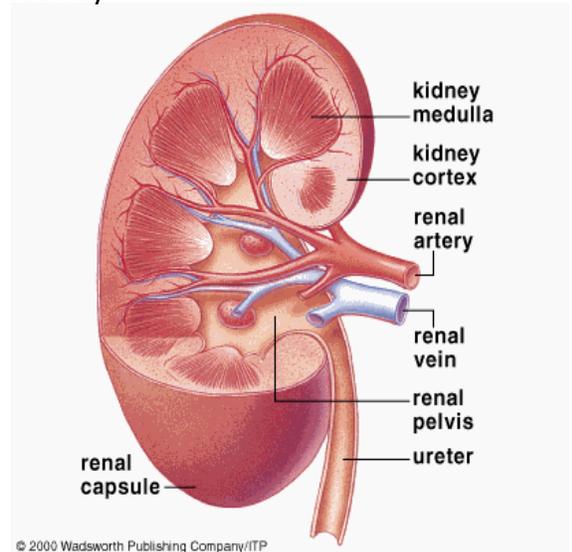
# Excretory System

## Kidney Location

- Located near on the left & right sides of the \_\_\_\_\_ at the small of the back.
- Kidneys are \_\_\_\_\_ " long & \_\_\_\_\_ " wide.
- Left kidney sits \_\_\_\_\_ than the right due to the large size of the \_\_\_\_\_.

## Kidney Physiology

- \_\_\_\_\_ of waste products
- Maintenance of \_\_\_\_\_ in the body
  - Balance of water in the blood.
  - Balance of electrolytes in the blood.
  - Regulates pH of blood.
- Release of important \_\_\_\_\_

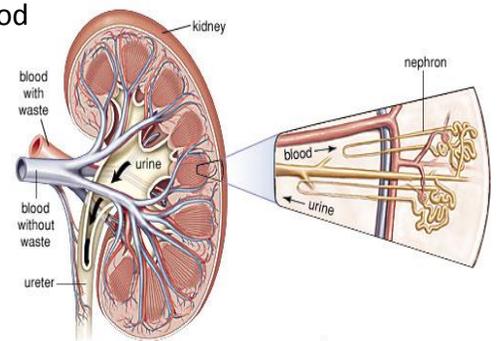


## Kidney Anatomy

- **Outer** \_\_\_\_\_
- **Inner** \_\_\_\_\_
- **Renal Artery:** Receives \_\_\_\_\_ blood
- **Renal Vein:** Removes \_\_\_\_\_ blood
- \_\_\_\_\_ : Make urine

## Nephrons

- Major functional unit
- Makes urine by:
  - \_\_\_\_\_ blood of water, salt, glucose & urea
  - \_\_\_\_\_ useful solutes back into the blood stream.
  - Allowing waste molecules to filter into \_\_\_\_\_.



## Kidney Hormone Function

- \_\_\_\_\_ : Increases reabsorption of ions & water in the kidney.
- **Erythropoietin:** Acts on bone marrow to increase production of \_\_\_\_\_ cells.

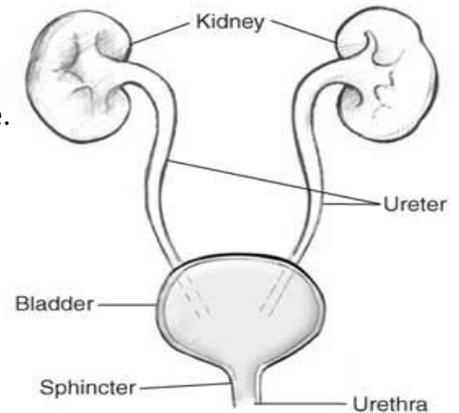
- **Calcitriol:** Promotes the absorption of \_\_\_\_\_ from the food in the intestines and acts directly on bones to shift calcium into the blood stream.

### Ureters

- \_\_\_\_\_ inch slender tubes that connect the kidneys above to the urinary bladder.
- Transport \_\_\_\_\_ to the \_\_\_\_\_
- Ureters contain \_\_\_\_\_ muscle tissue and
  - about every \_\_\_\_\_ seconds, peristaltic contraction sends urine to bladder!
- Uretal openings are \_\_\_\_\_, to prevent backflow of urine into kidney

### Bladder

- \_\_\_\_\_ sac that temporarily stores urine.
- Connects to the \_\_\_\_\_
- Can hold up to \_\_\_\_\_ of urine
- Has an internal & external \_\_\_\_\_



### Urethra

- Thin-walled tube that carries urine from the \_\_\_\_\_ to the outside of the body.
- Located above the \_\_\_\_\_ opening in females (\_\_\_\_\_ inch in length)
- Serves to carry urine and \_\_\_\_\_ out of the penis in males (\_\_\_\_\_ inches in length)
- \_\_\_\_\_: The act of urinating.

### Disorders

- **Urinary Tract Infections:** \_\_\_\_\_ invades the urethra & bladder. Much more common in females than males because it is shorter and positioned closer to the anus.
- **Kidney Stones:** \_\_\_\_\_ deposits, magnesium salts, or crystal of uric acid can form solids within the \_\_\_\_\_ or \_\_\_\_\_.
- **Incontinence:** Inability to \_\_\_\_\_ urination
  - Babies, women after birth, elderly