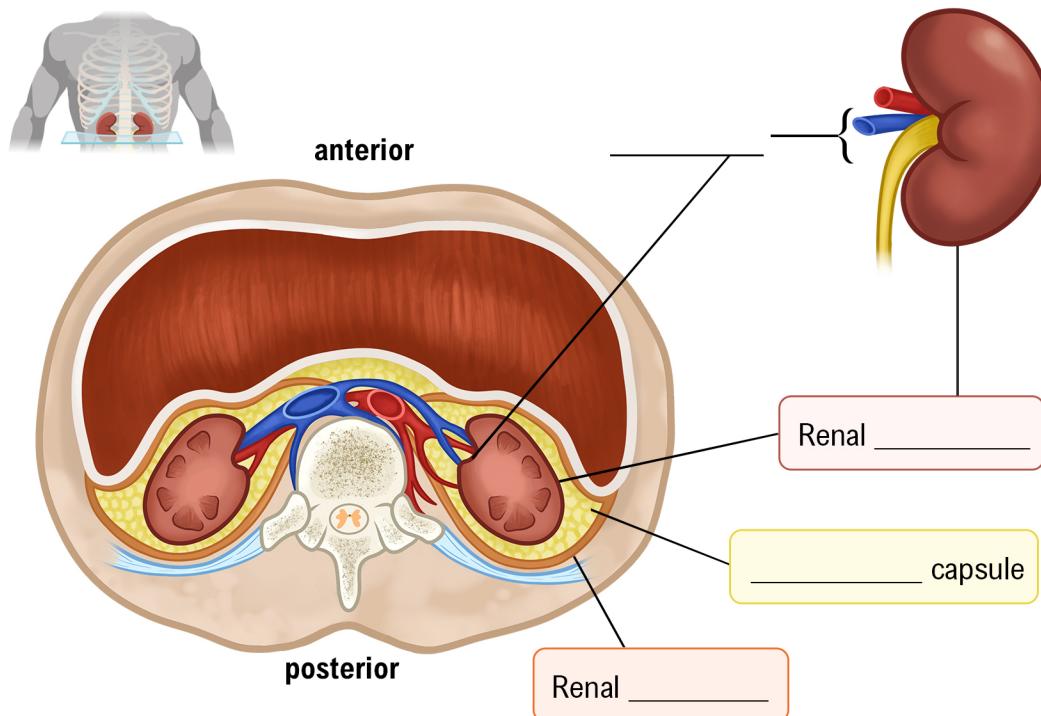


TOPIC: THE KIDNEYS

External Anatomy

- ♦ Exterior of the kidney is covered by the **renal _____**.
 - Thin layer of collagenous connective tissue; tough and _____.
- ♦ **Renal _____**: Cleft on medial surface of kidney where ureter and blood vessels enter/exit.
- ♦ The kidneys are held in place and protected by _____ layers of tissue:
 - 1 - **Renal Fascia**: Dense, collagenous connective tissue.
 - 2 - **Adipose Capsule**: Thick layer of _____ tissue.

Recall **Fascia**
Fascia is a layer of connective tissue that plays a role in supporting and protecting structures.



EXAMPLE

Which of the following correctly names the three protective layers surrounding each kidney from innermost to outermost?

- Renal fascia, adipose capsule, renal capsule.
- Renal capsule, adipose capsule, renal fascia.
- Adipose capsule, renal fascia, renal capsule.
- Renal fascia, renal capsule, adipose capsule.

TOPIC: THE KIDNEYS

PRACTICE

In the event of a traumatic injury, which layer surrounding the kidney provides a cushioning effect due to its fatty composition?

-
- a) Renal capsule.
 - b) Adipose fascia.
 - c) Nephron tissue.
 - d) Adipose capsule.

TOPIC: THE KIDNEYS

Internal Anatomy

◆ There are _____ main regions within the kidney.

1. **Renal Cortex:** Most superficial region, light-colored.

2. **Renal Medulla:** _____ region. Contains 2 structures:

- **Renal Pyramids:** _____-shaped masses made of parallel bundles of tubes and capillaries; darker in color.

► Tip of renal pyramid is called the **papilla**.

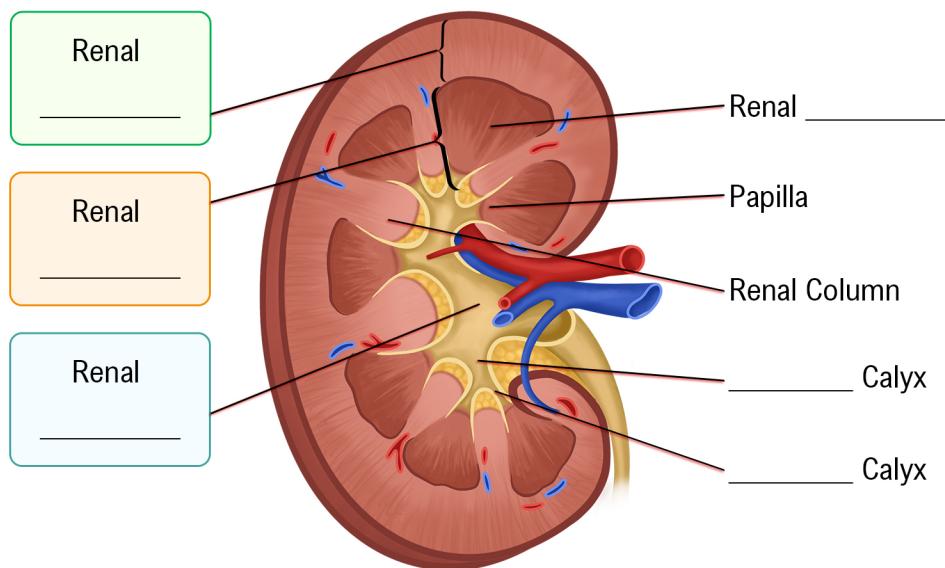
- **Renal Columns:** Inward extensions of _____ tissue, separate the pyramids.

3. **Renal Pelvis:** A funnel-shaped tube; continuous with the _____.

- **Minor Calyx:** Funnel-shaped tube that collects urine at papilla of renal _____.

- **Major Calyx:** Funnel-shaped tube formed by convergence of _____ minor calyces.

► Drains urine into the renal _____.



EXAMPLE

Which of the following statements best describes the renal pelvis:

- a) It is the outermost layer surrounding the kidney.
- b) It is located within the renal medulla.
- c) It consists of renal pyramids and is the main location of blood filtration.
- d) It is a funnel-shaped structure where urine collects.

TOPIC: THE KIDNEYS

PRACTICE

The kidneys are surrounded by a tough, fibrous layer of tissue called the:

-
- a) The renal capsule.
 - b) The renal cortex.
 - c) The renal medulla.
 - d) The adipose capsule.