

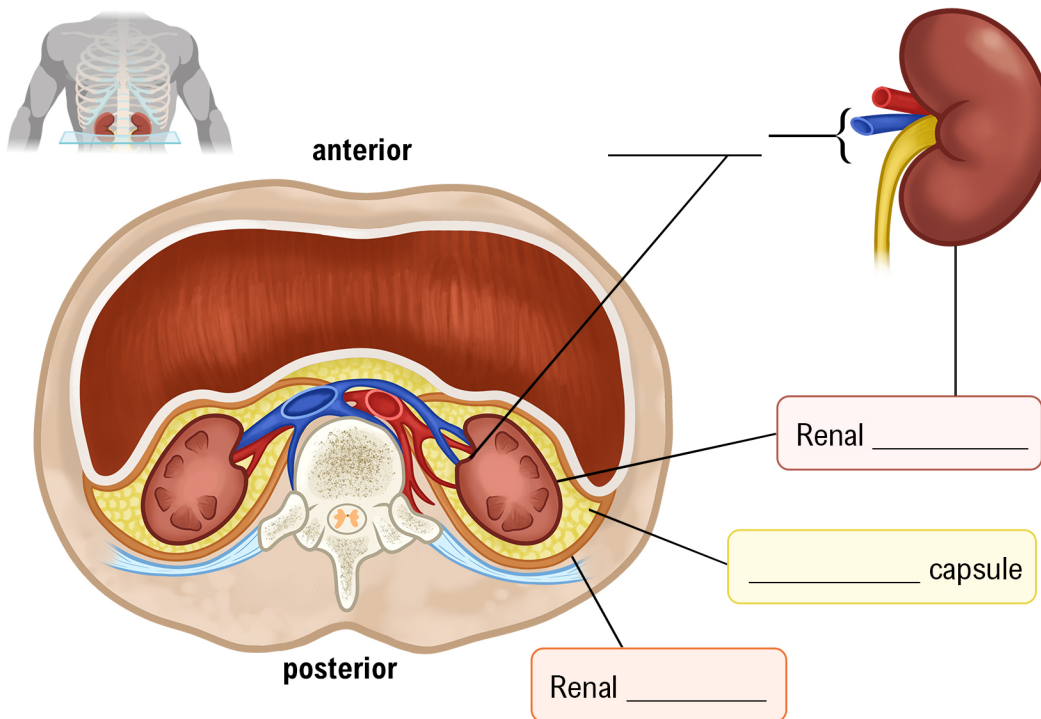
TOPIC: THE KIDNEYS

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?

- a) Renal fascia, adipose capsule, renal capsule.
- b) Renal capsule, adipose capsule, renal fascia.
- c) Adipose capsule, renal fascia, renal capsule.
- d) 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?

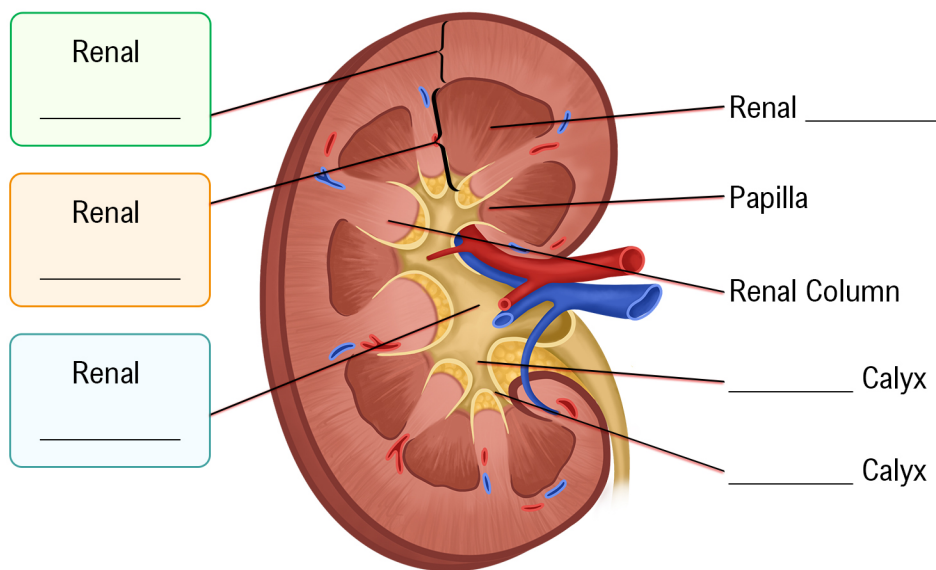
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|--------------------|---------------------|
| a) Renal capsule. | c) Nephron tissue. |
| b) Adipose fascia. | d) Adipose capsule. |

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. | c) The renal medulla. |
| b) The renal cortex. | d) The adipose capsule. |