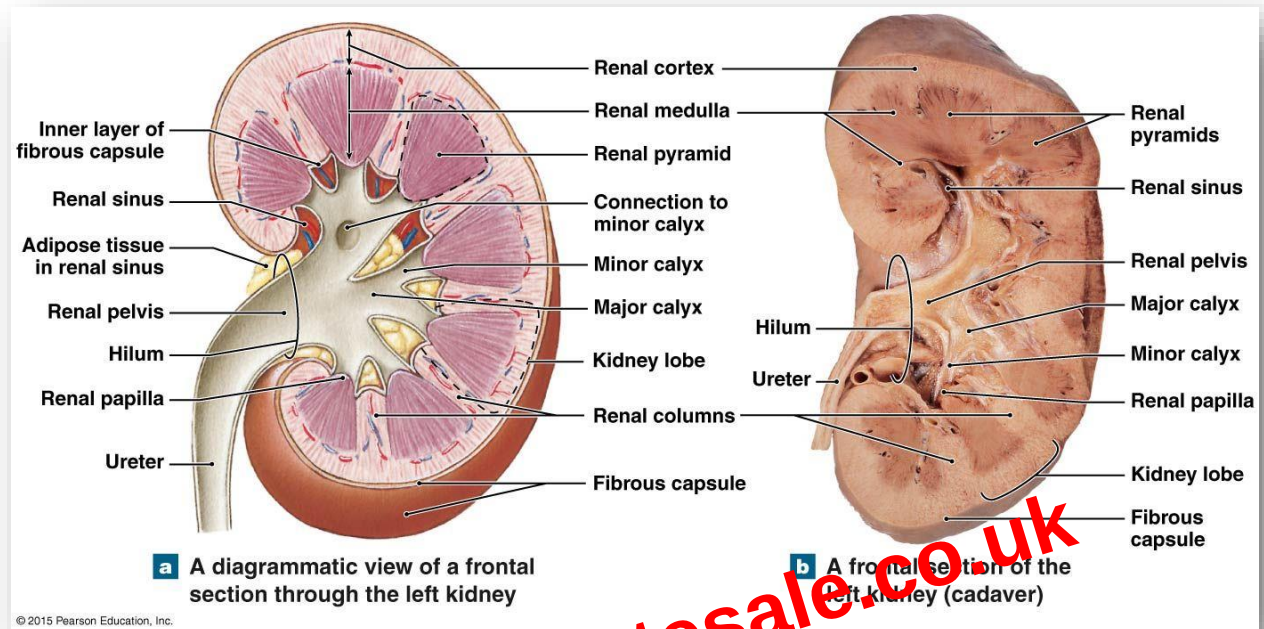


continuously from the papillae, and empty it into the renal pelvis. The urine then flows through the renal pelvis and into the ureter, which moves it to the bladder to be stored.

- **Illustration:**



- **Homeostatic Imbalance:**

1. **Pyelitis:** Pyelitis is an infection of the renal pelvis and calyces. Inflammations that affect the entire kidney are pyelonephritis.

2. **Causes:**

Fecal bacteria: Kidney infections in females are usually caused by fecal bacteria that spread from the **anal region to the urinary tract**. Less often they result from blood borne bacteria (traveling from other infected sites) that lodge and multiply in a kidney. In severe cases of **pyelonephritis**, the kidney swells, abscesses form, and the pelvis fills with pus. Untreated, the kidney may be severely damaged, but antibiotic therapy can usually treat the infection successfully.

- **Blood and Nerve supply:**

1. Kidneys often cleanse their blood, thus they have rich pure blood.
2. Renal arteries deliver a large portion of the blood to the kidneys.
3. Renal arteries exit from the abdominal aorta to the kidneys where they divide into 5 different segmental arteries.
4. Each segmental artery branches further to form several interlobar arteries.
5. They further branch into arcuate arteries at the cortex medulla junction.
6. They then arc over the bases of the medulla pyramids.
7. Small cortical radiate arteries radiate outwards from arcuate arteries.