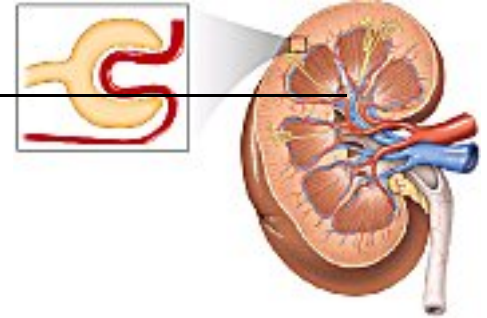
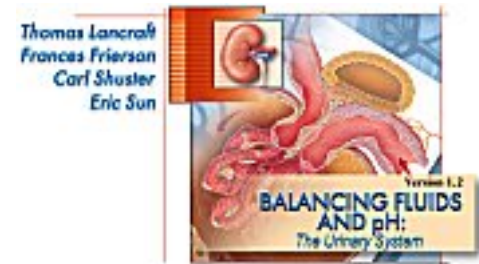


# Overview of Nephron

## Directions:

- a. Click the "Contents" button.
- b. Open the *Urinary System* File.
- c. Click *Anatomy Overviews*.
- d. Click *Overview of Nephron*.

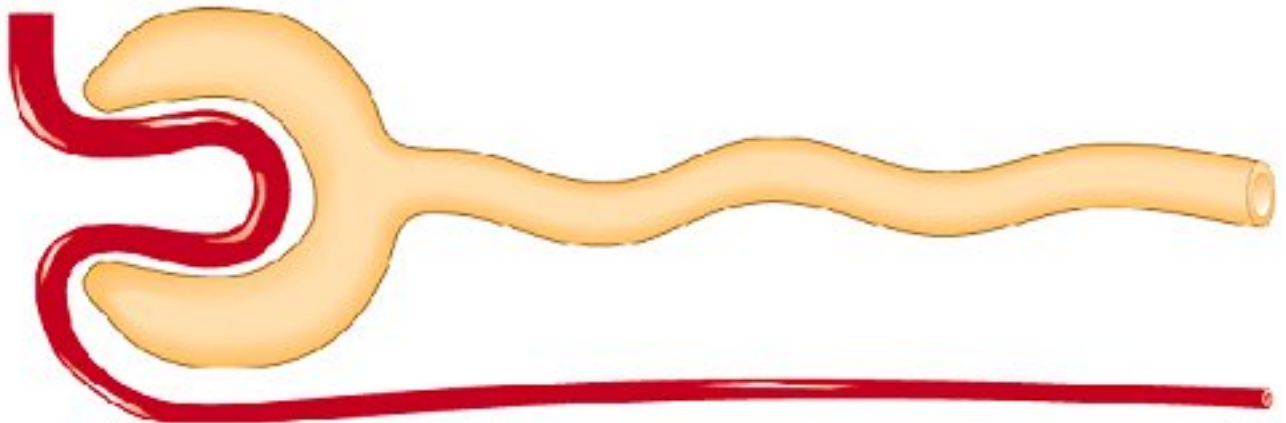


- 1. What is a *nephron*? \_\_\_\_\_
- 2. From the main Nephron page, click on the *Functional Anatomy of a Nephron*.

a. Identify each of the following:

*renal corpuscle*  
*afferent arteriole*  
*peritubular capillaries*  
*region of tubular secretion*

*renal tubule and collecting duct*  
*efferent arteriole*  
*region of tubular reabsorption*



- b. Identify the two parts of a nephron. \_\_\_\_\_
- c. Where is blood "filtered?" \_\_\_\_\_
- d. How/where is the filtrate altered? \_\_\_\_\_
- e. In the diagram above, show:
  - i. filtration direction \_\_\_\_\_
  - ii. tubular reabsorption \_\_\_\_\_
  - iii. tubular secretion \_\_\_\_\_

3. Return, again, to the main Nephron page. Click on *Fluid Flow Through a Nephron*.

a. Sequence the following in order of fluid flow through a juxtamedullary nephron.

- i. Thick ascending limb of the loop of Henle
- ii. Descending limb of the loop of Henle
- iii. Thin ascending limb of the loop of Henle
- iv. glomerular (Bowman's) capsule
- v. Distal convoluted tubule
- vi. Proximal convoluted tubule

b. Using arrows, show this fluid movement in the larger juxtamedullary nephron diagram above.

c. Why is fluid flow through a nephron highly regulated? \_\_\_\_\_

\_\_\_\_\_

d. Describe a *glomerulus*. \_\_\_\_\_

\_\_\_\_\_

