

Renal Physiology – C26
Hot List Questions

1. What are the functions of the urinary system?
2. What are the organs of the urinary system?
3. What are the four steps in urine formation?
4. After filtration, what is the bidirectional movement of solute within the kidney?
5. What is the pathway of the filtrate through urinary system to exit body?
6. Where is most of the filtrate reabsorbed? How is this characterised?
7. What is the function of aldosterone? Nickname? Produced where? Receptors located where?
8. What term is often used to describe the kidney's position?
9. What is the structure and function of the urinary bladder?
10. What is the difference between filtration and reabsorption in the kidney?
11. What capillaries are associated with the convoluted tubules in the renal cortex?
12. What capillaries are associated with the Loop of Henle?
13. Where and how is glucose reabsorbed?
14. How much glucose is reabsorbed in a healthy person?
15. What term describes a reflex to void the urinary bladder?
16. How much urine is formed daily?
17. What is the significance of glucose transport maximum?
18. What mechanisms are used by aldosterone and antidiuretic hormones to move water back into the body? How do these mechanisms affect tonicity?
19. Where are the receptors for ADH and aldosterone located?
20. What mechanisms are responsible for making the deep medullary interstitial fluid hypertonic? Associated capillaries?
21. What mechanism protects and maintains the hypertonic medulla?
22. What is the significance of the counter current exchange? Structures and location?
23. What is the significance of the counter current multiplication? Structures and location?
24. Filtrate, tubular fluid, and urine are terms used to describe liquid as it passes through the nephron. Where within the nephron are these terms used?
25. What percent of the glomerular filtrate is reabsorbed?
26. What disease is caused by a lack of ADH secretion?