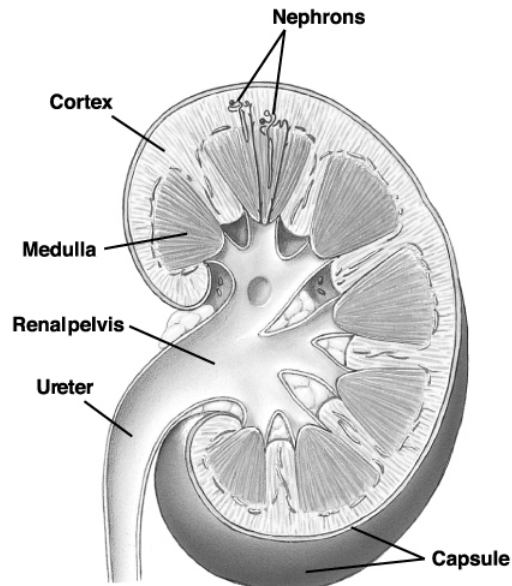
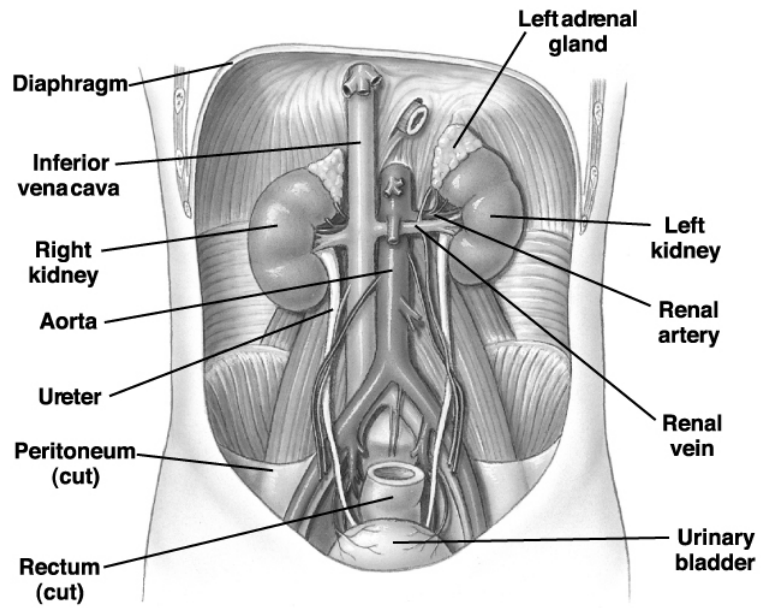
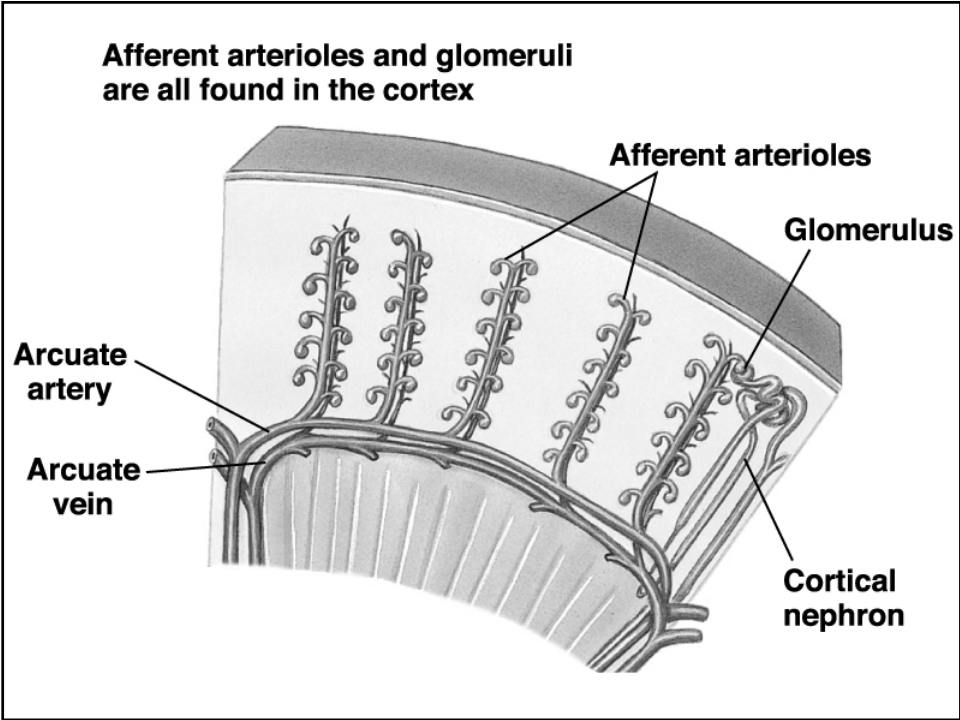
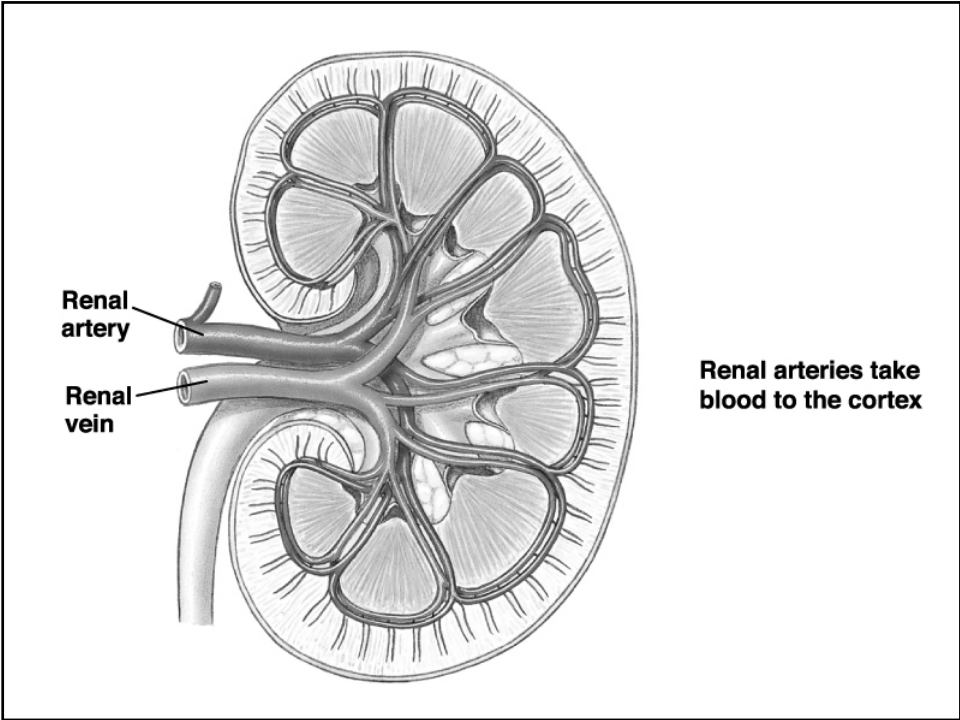


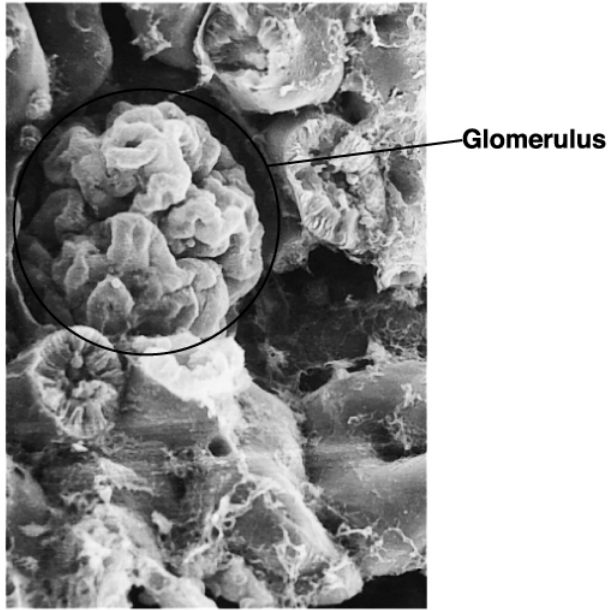
The kidneys are located retroperitoneally at the level of the lower ribs.



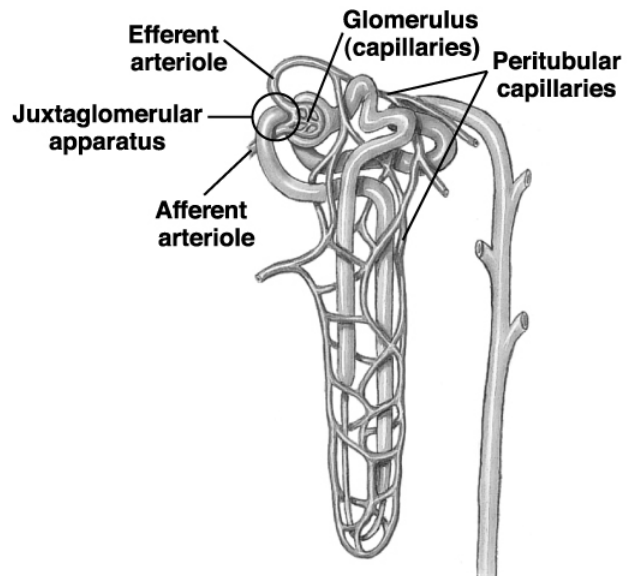
In cross section, the kidney is divided into an outer cortex and an inner medulla. Urine leaving the nephrons flows into the renal pelvis prior to passing through the ureter into the bladder.

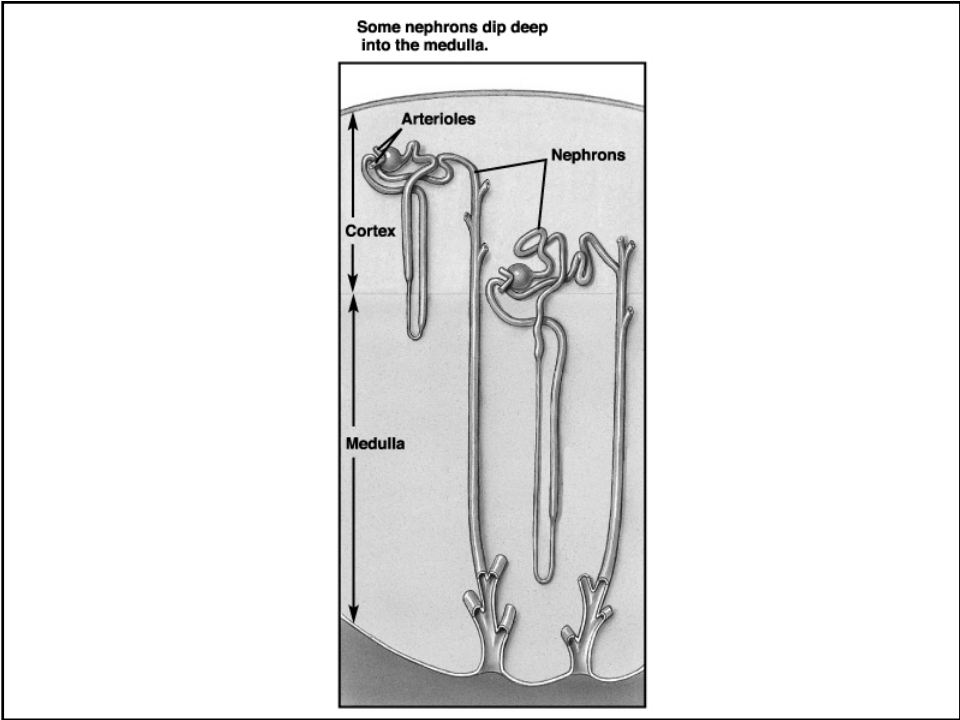
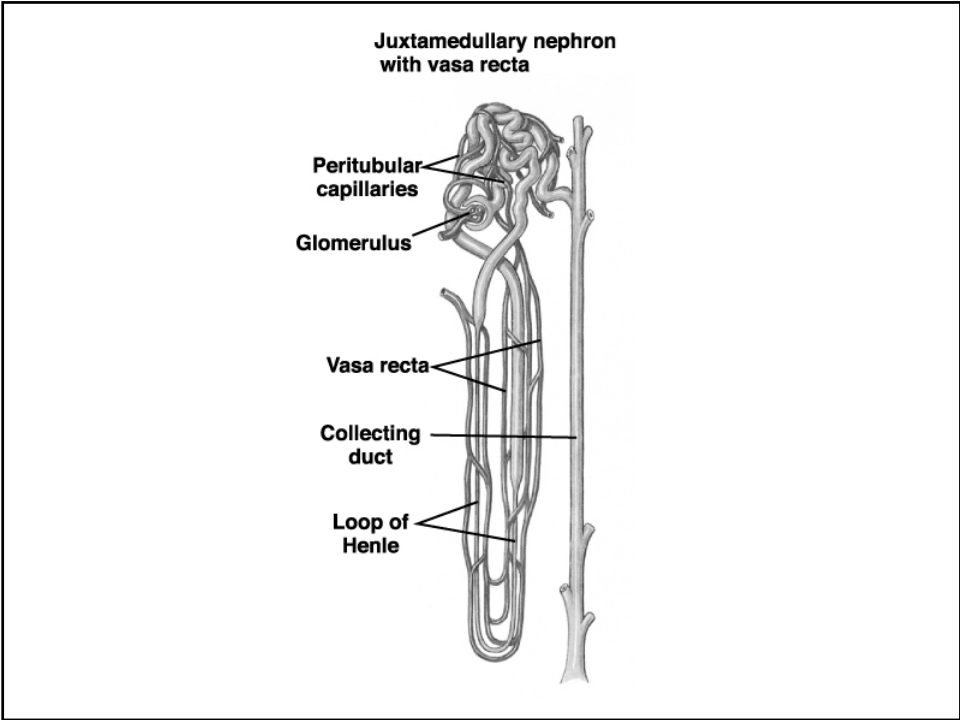


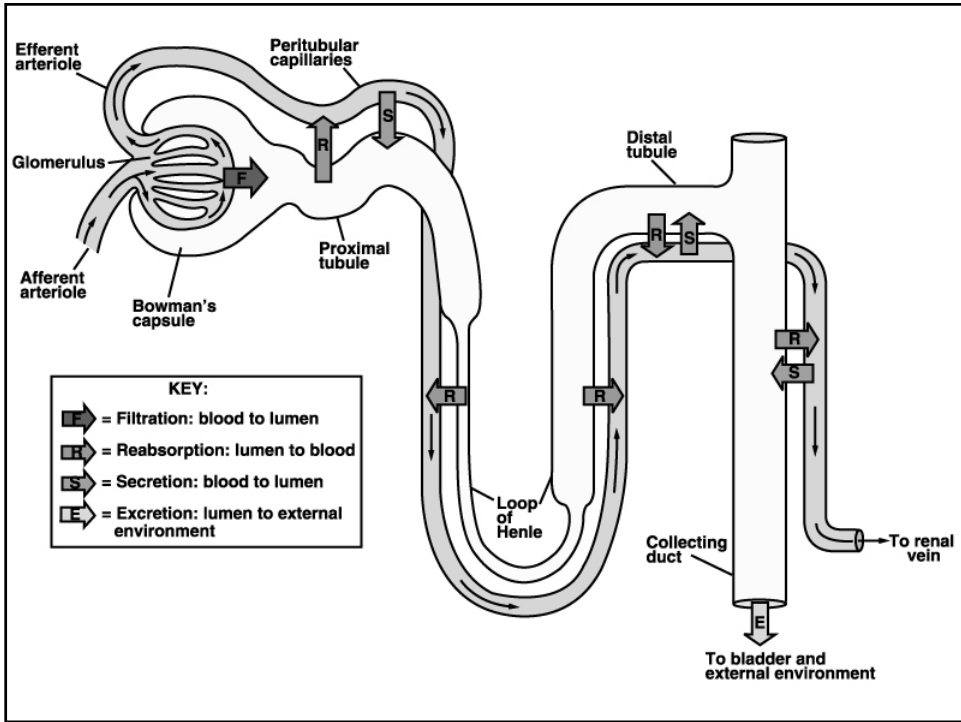
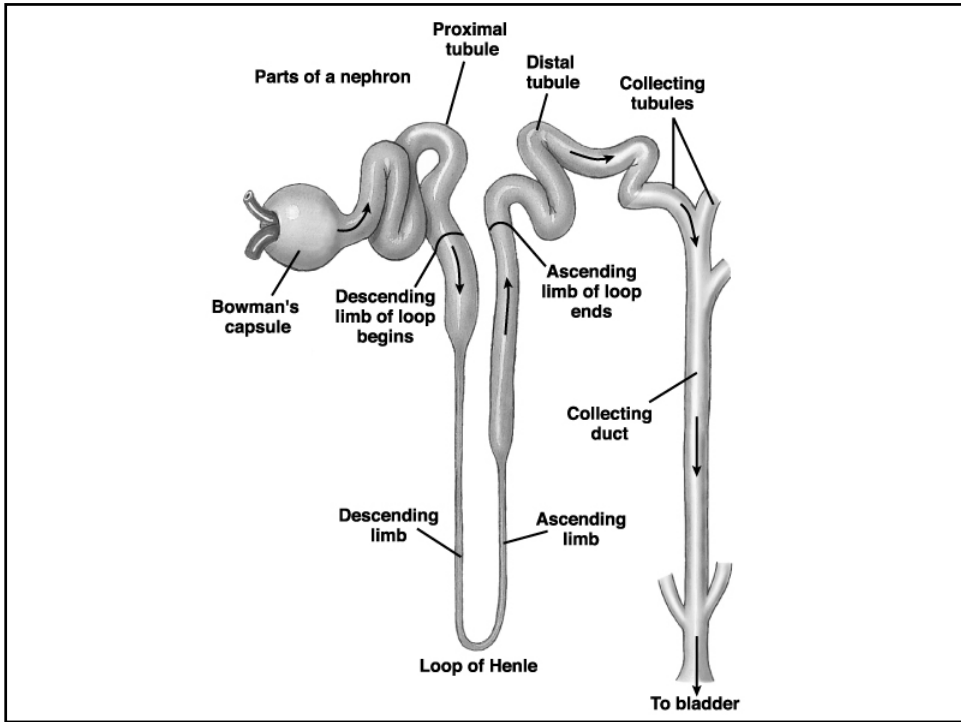
The capillaries of the glomerulus form a ball-like mass.

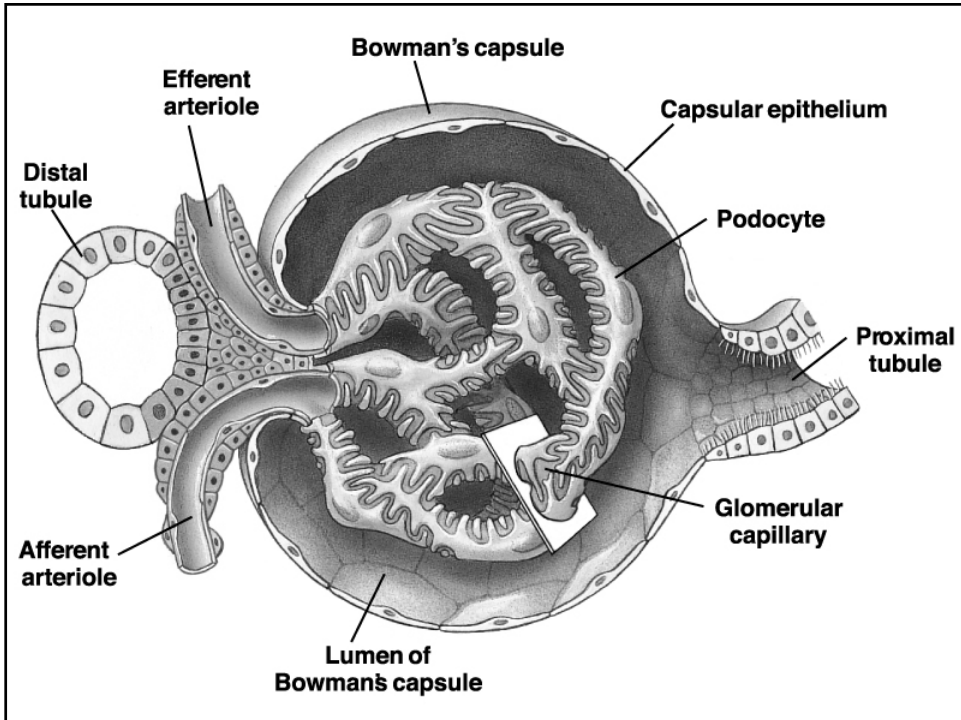
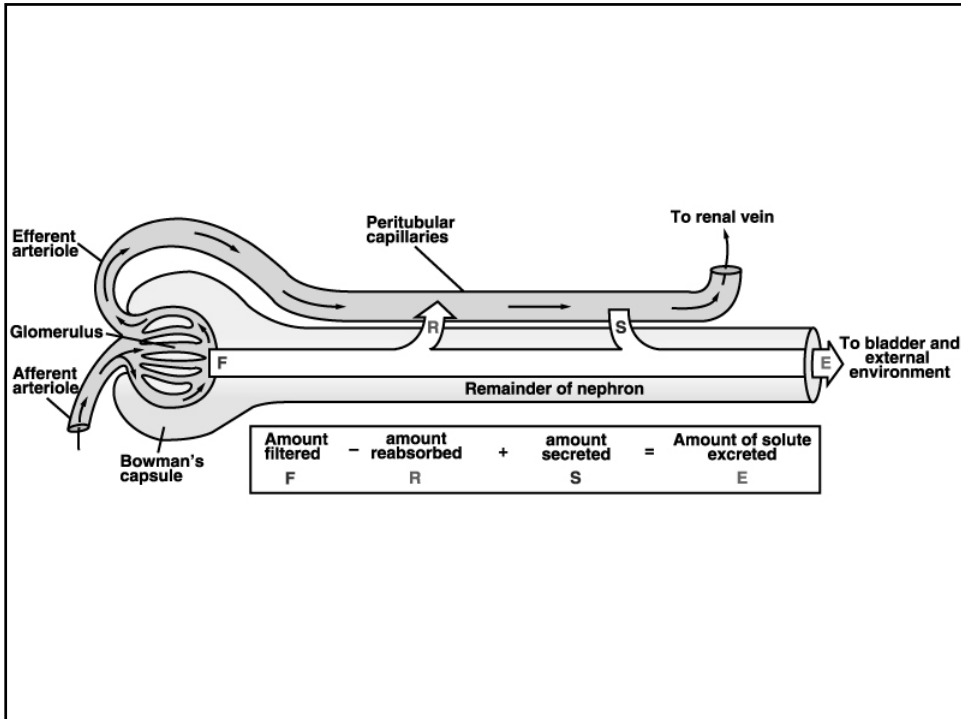


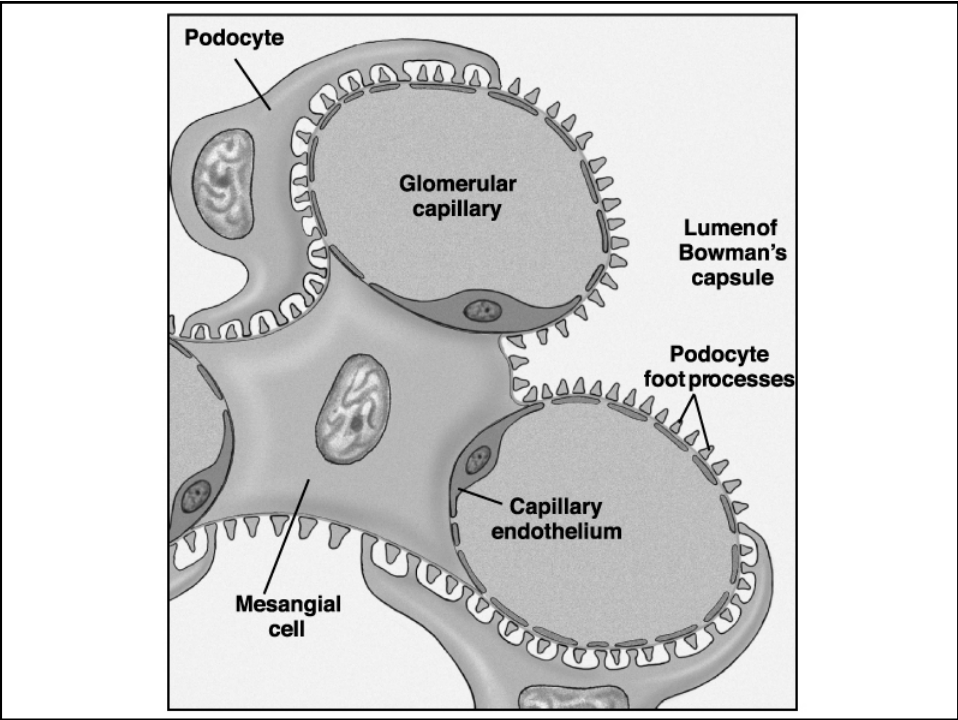
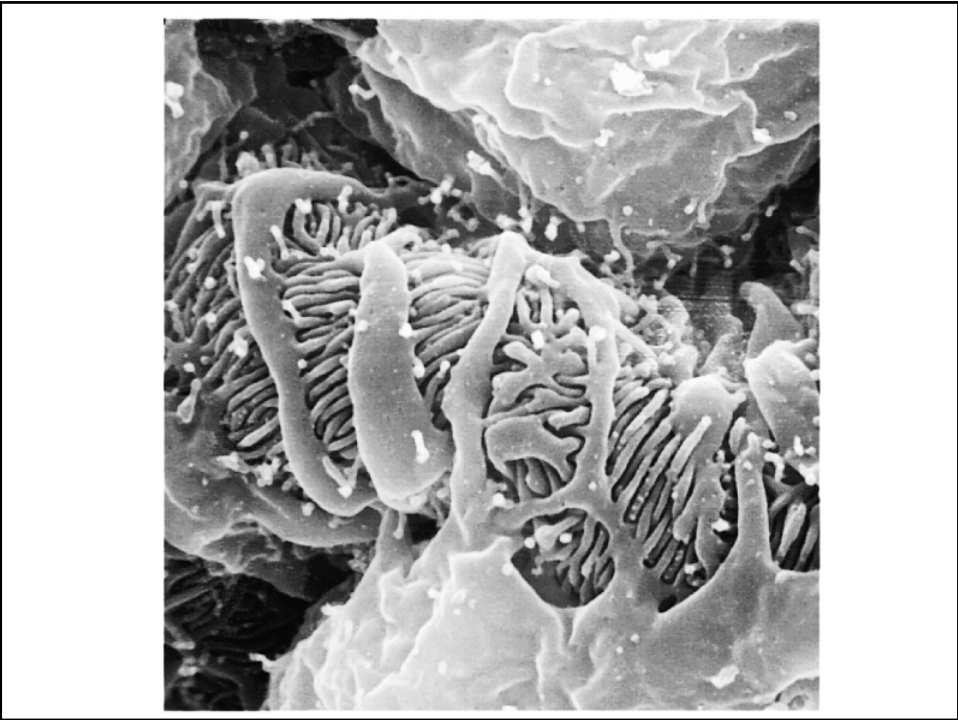
Each nephron has two arterioles and two sets of capillaries associated with it.

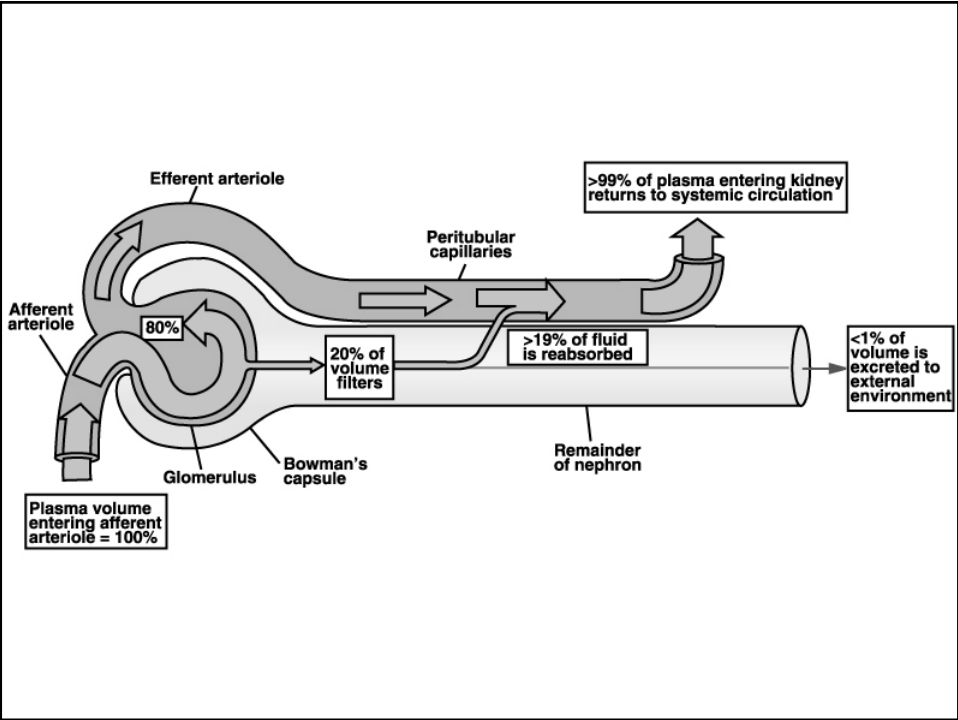
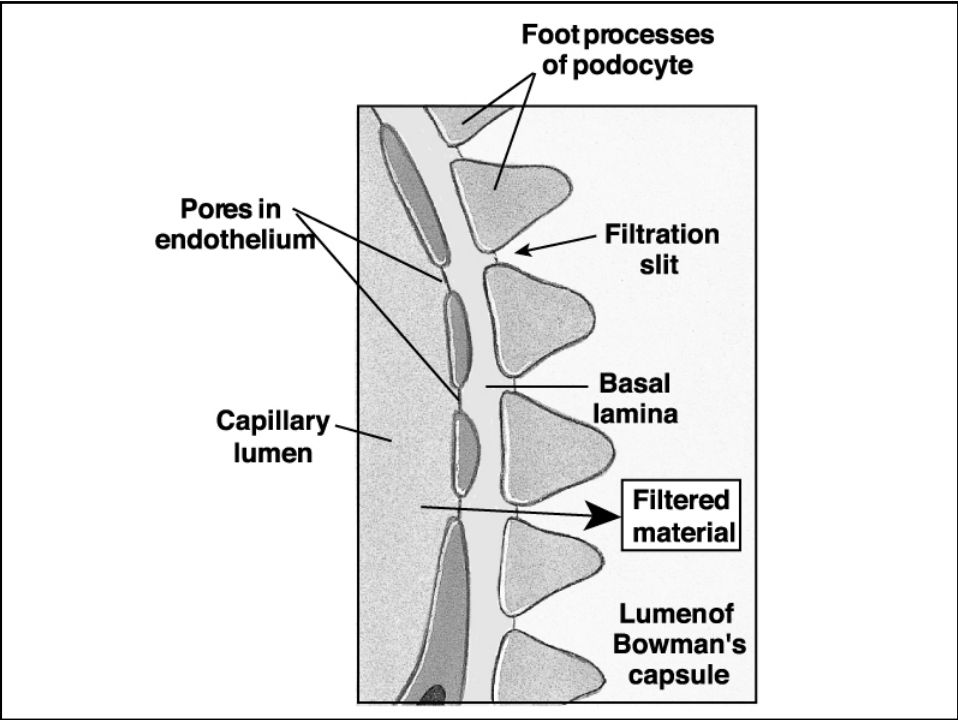


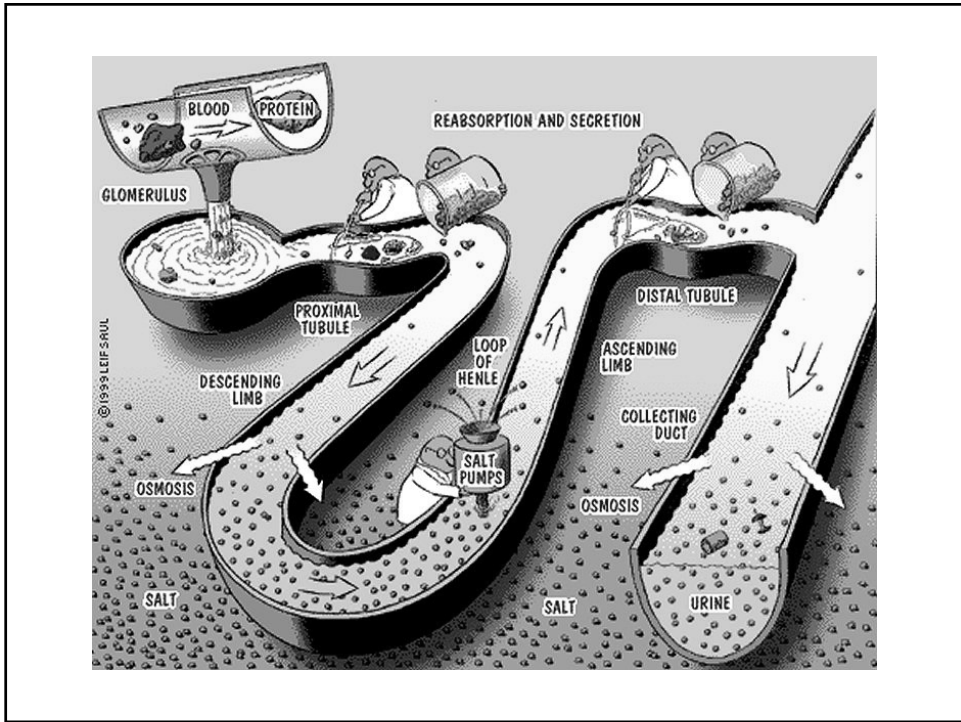
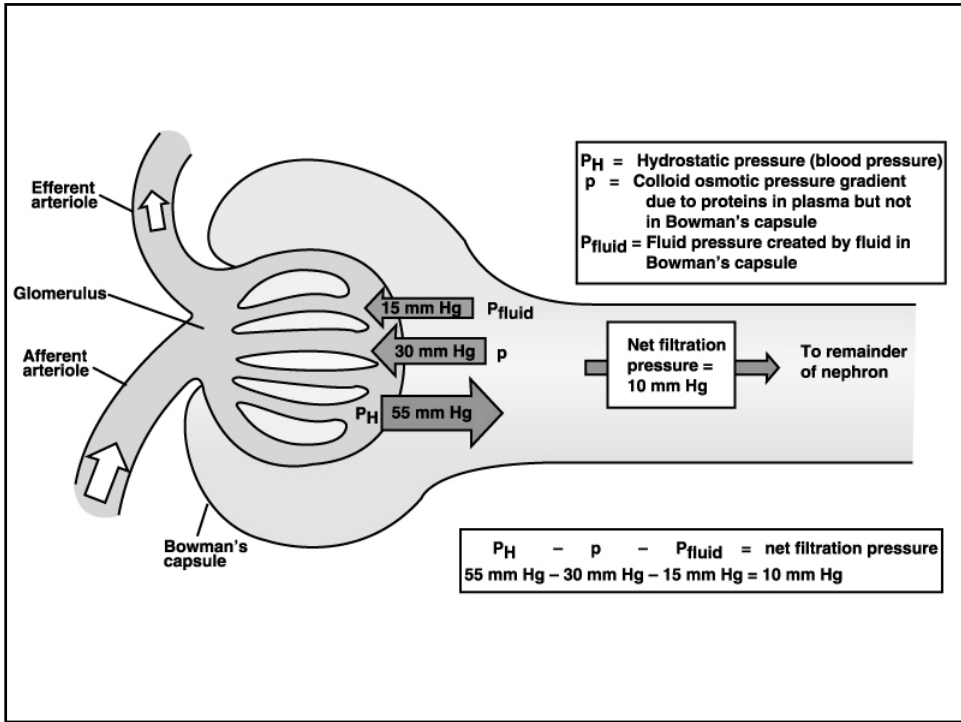


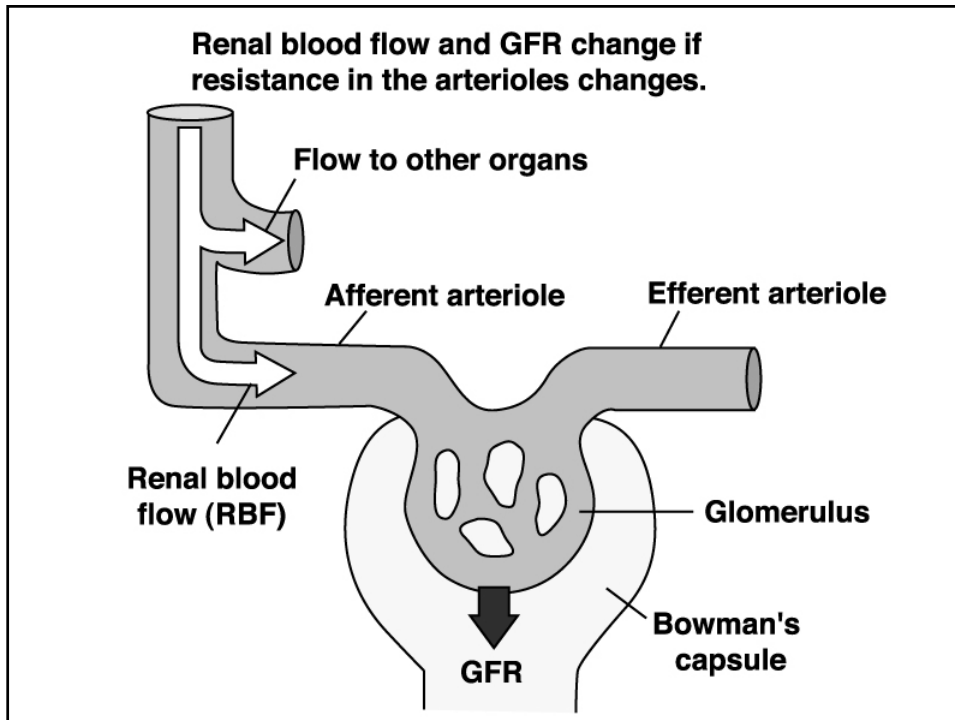
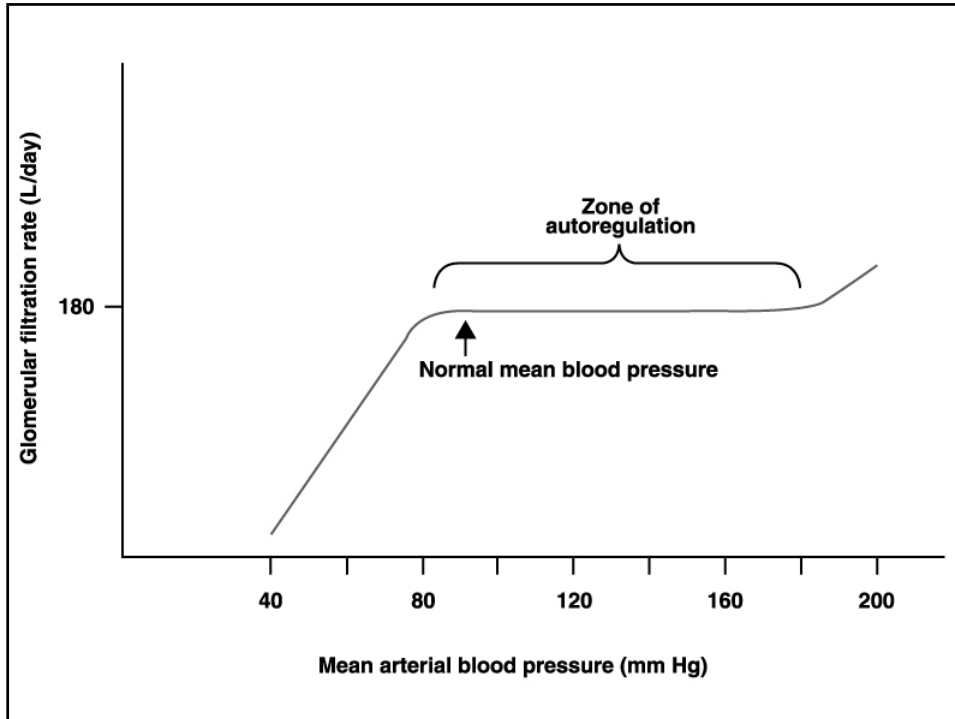




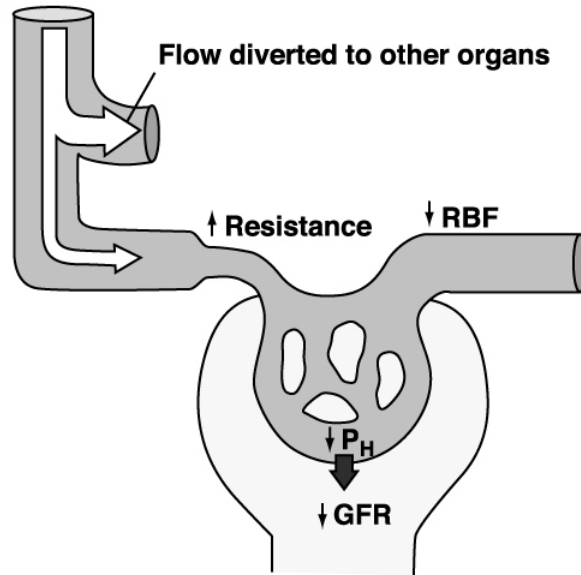




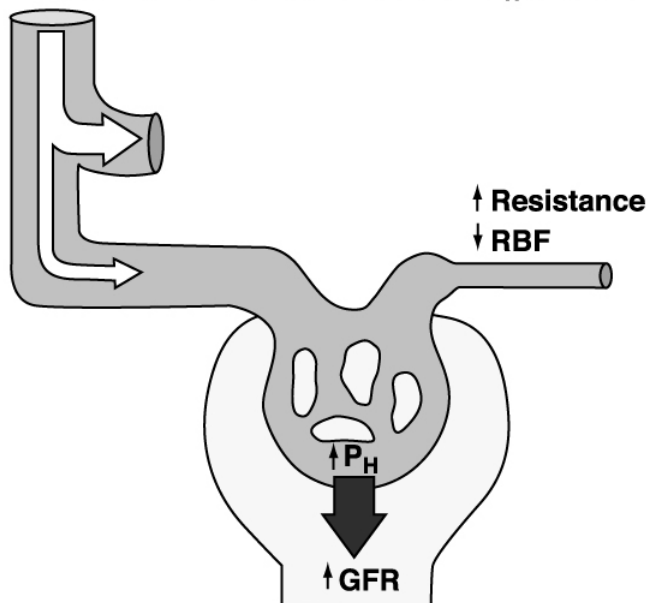


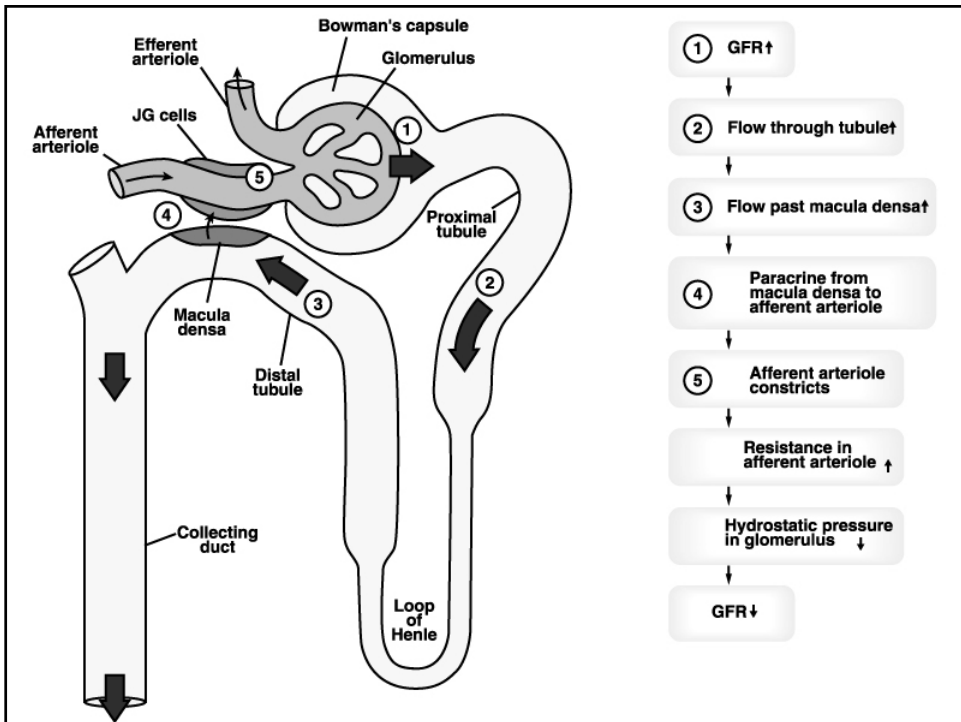
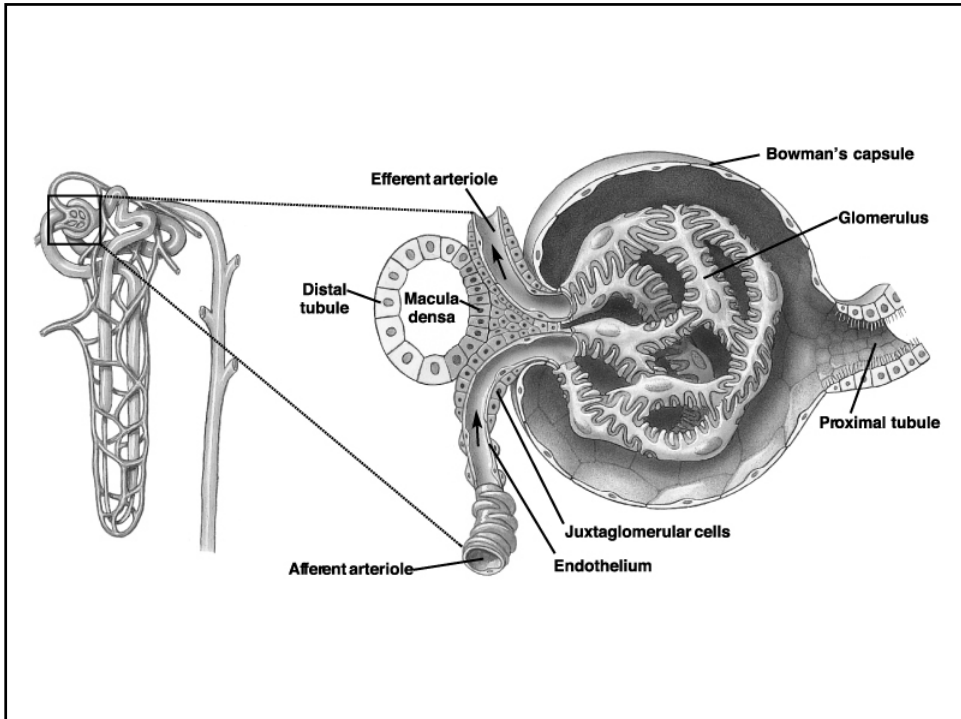


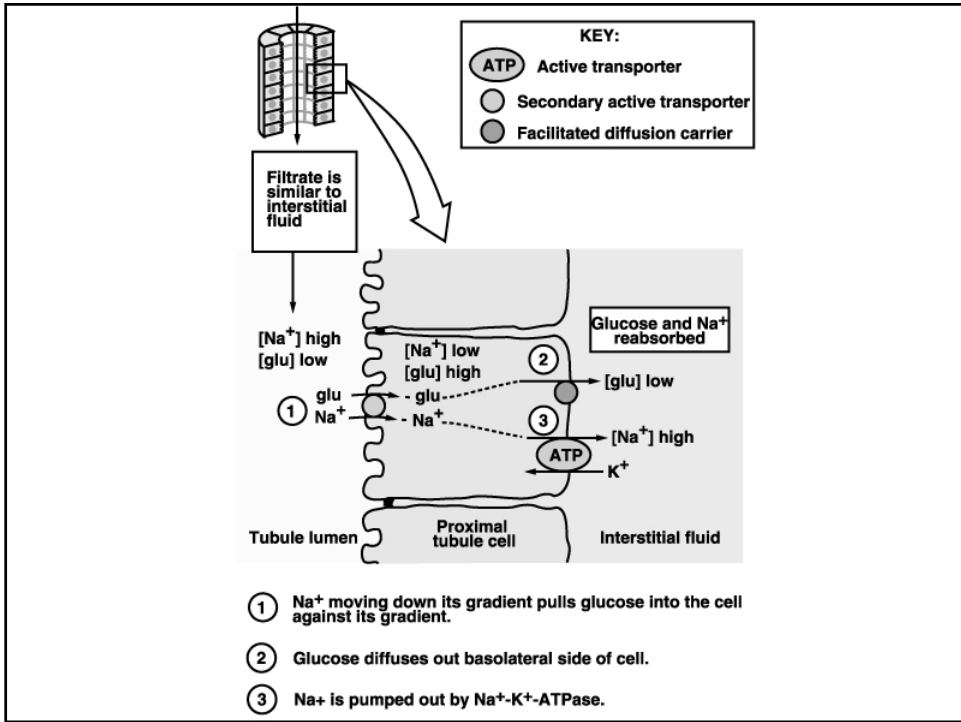
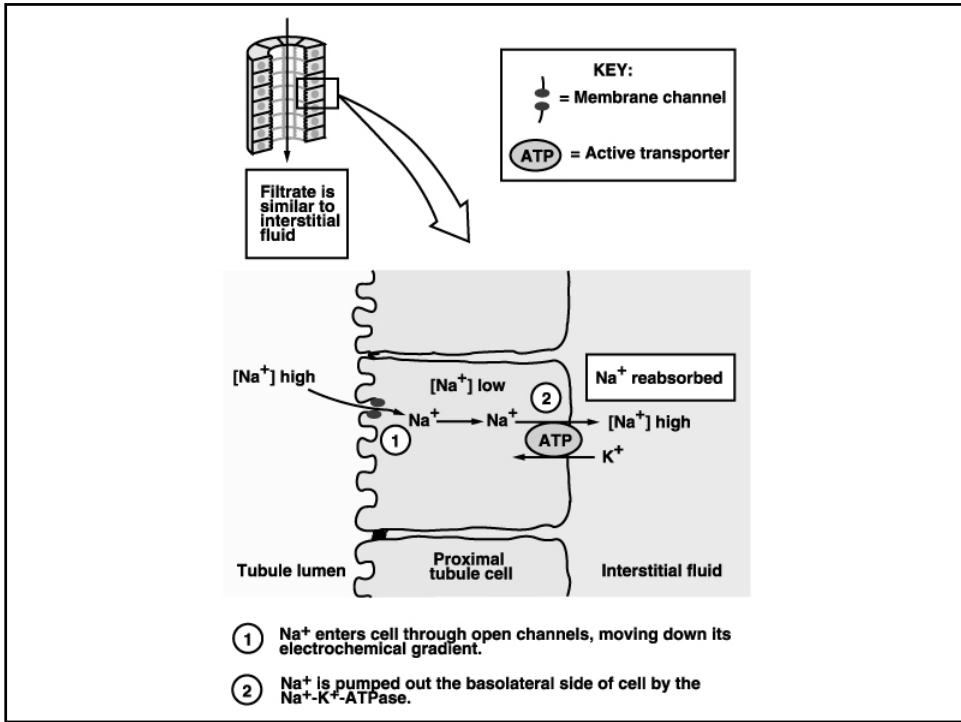
Vasoconstriction of the afferent arteriole increases resistance and decreases renal blood flow, capillary blood pressure (P_H), and GFR.

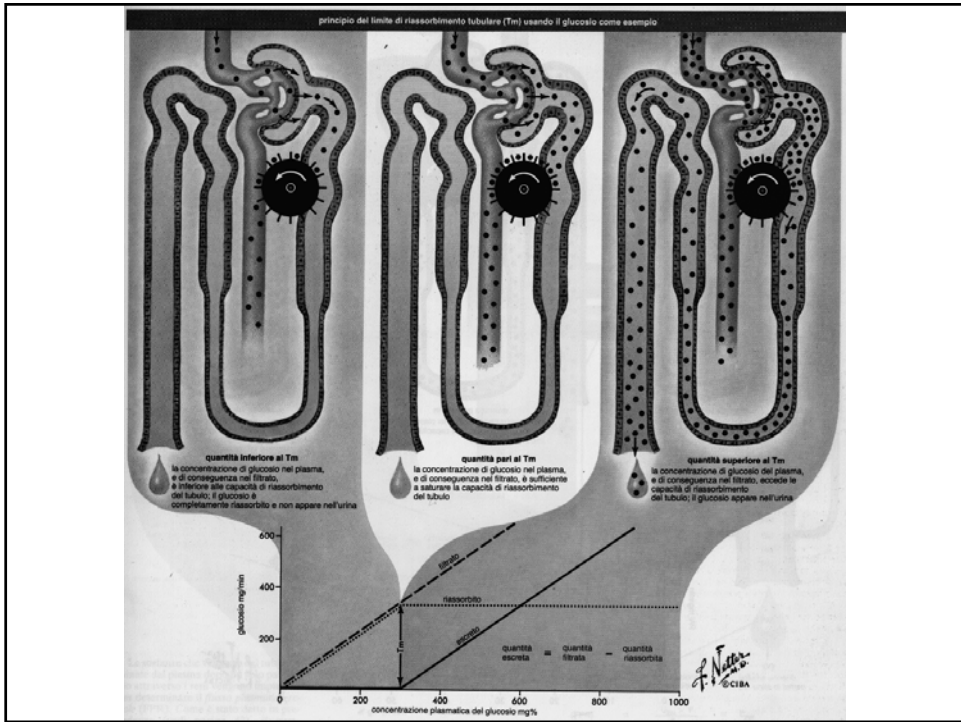
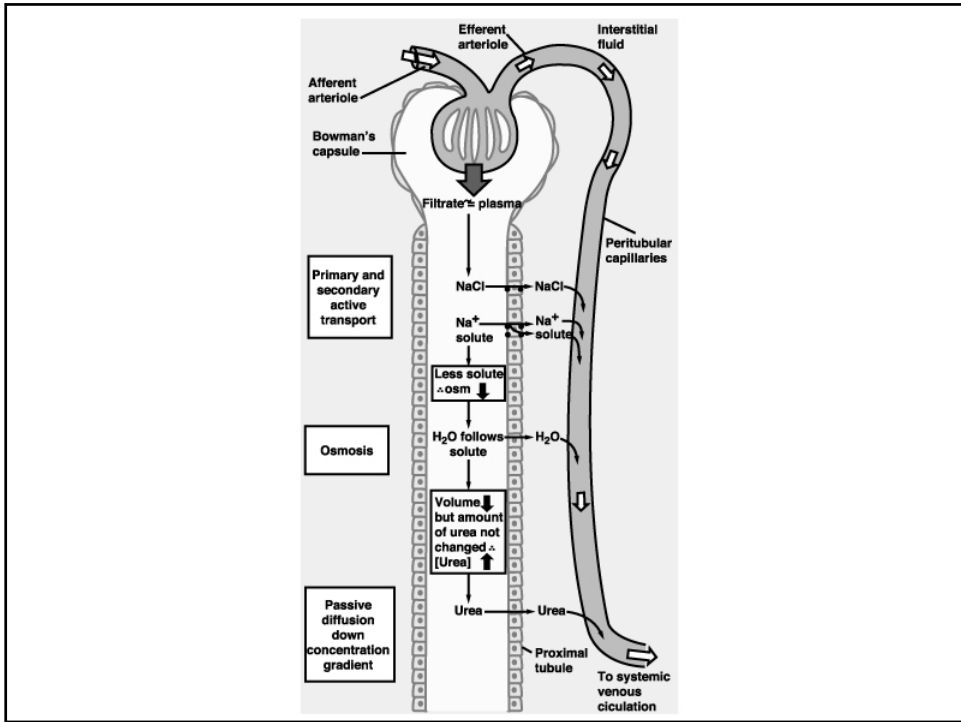


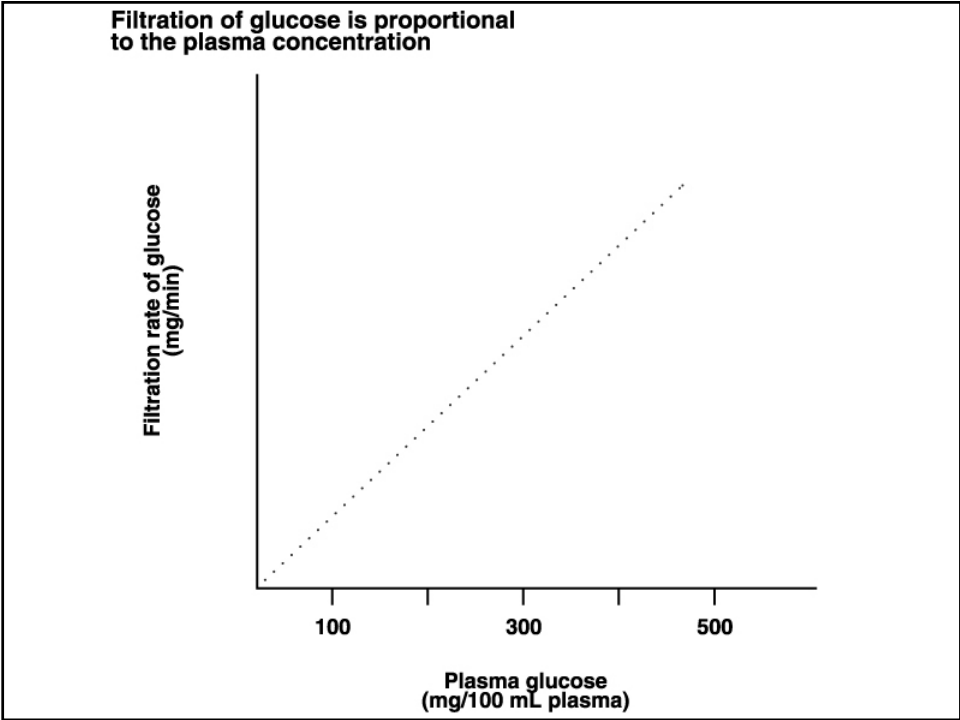
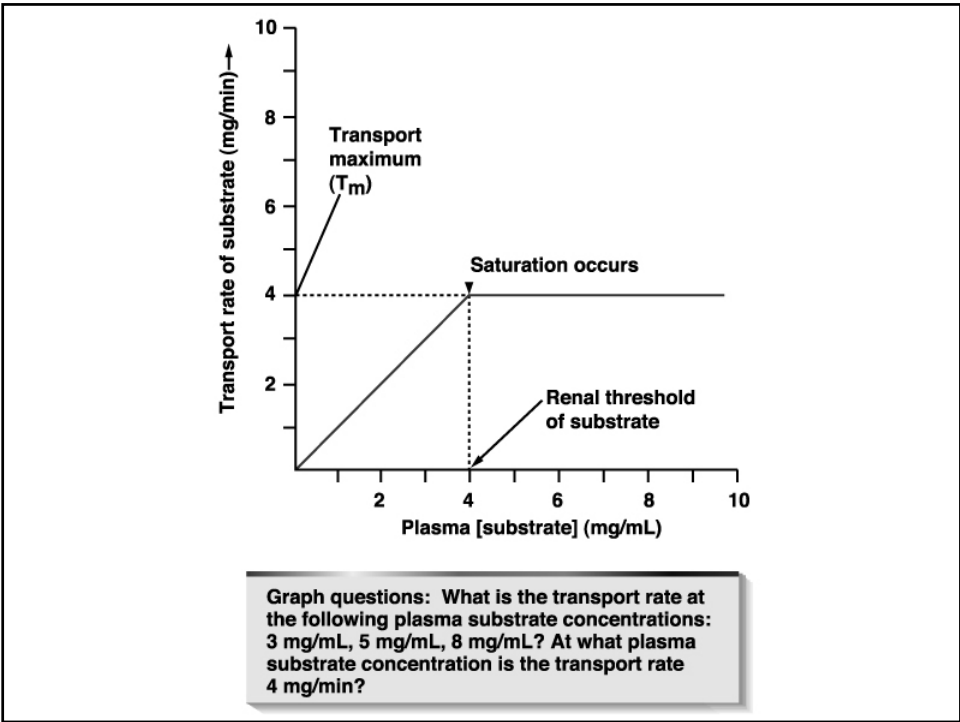
Increased resistance of efferent arteriole decreases renal blood flow but increases P_H and GFR.



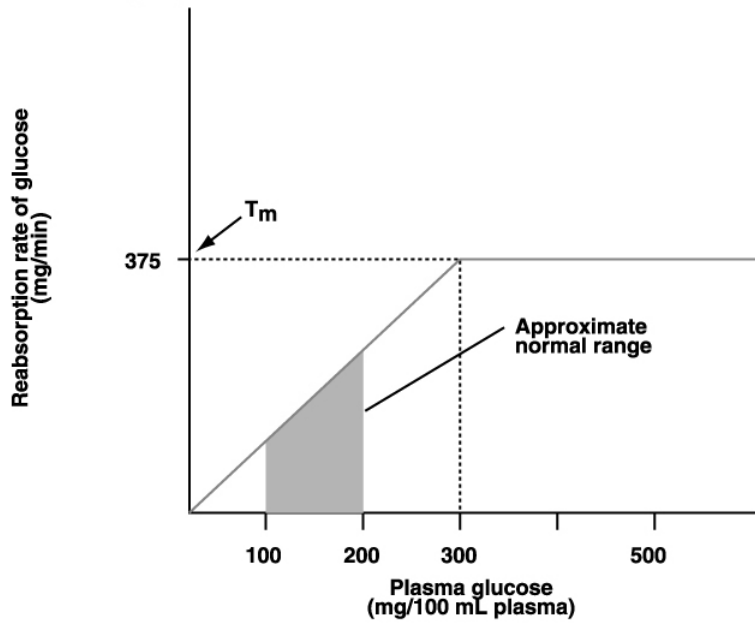




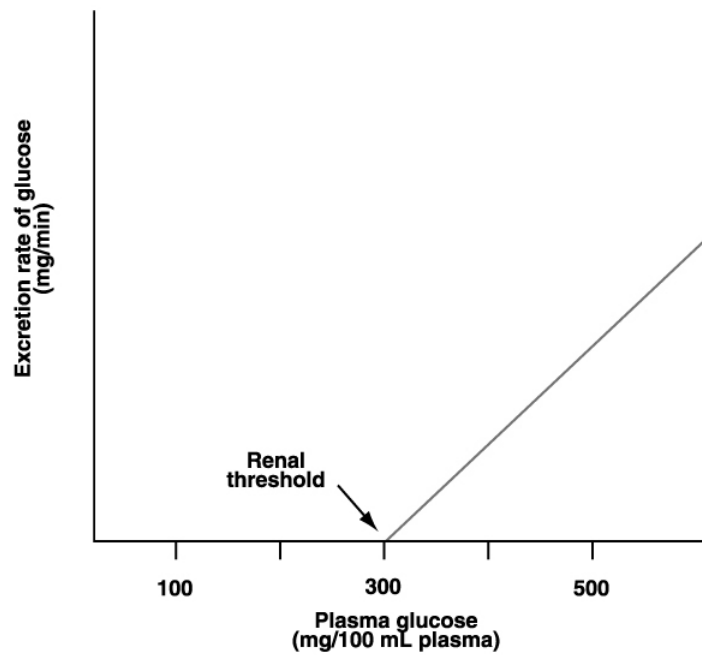




Reabsorption of glucose is proportional to plasma concentration until the transport maximum (T_m) is reached



Glucose excretion is zero until the renal threshold is reached



Composite graph shows the relationship between filtration, reabsorption, and excretion of glucose

