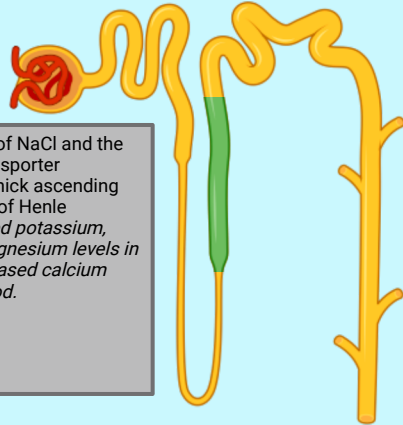


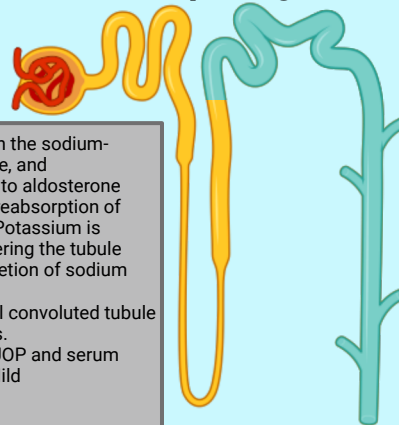
Diuretics

Loop diuretics



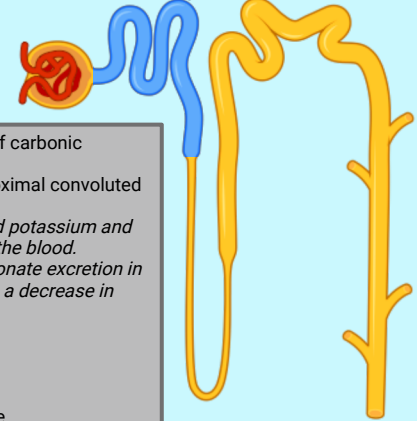
MOA: Inhibition of NaCl and the NA-K-2CL cotransporter
Site of action: Thick ascending limb of the loop of Henle
Effect: Decreased potassium, sodium, and magnesium levels in the blood. Increased calcium levels in the blood.
Examples:
 furosemide
 torasemide
 bumetanide

Potassium-sparing diuretics



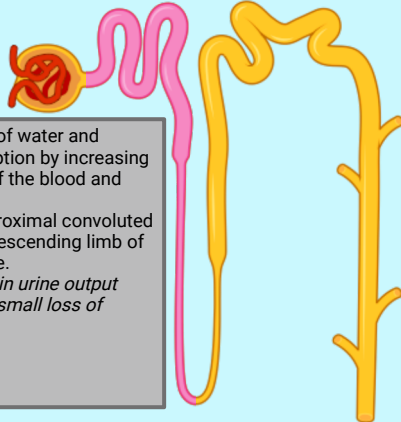
MOA: Interferes with the sodium-potassium exchange, and competitively binds to aldosterone receptors blocking reabsorption of sodium and water. Potassium is prevented from entering the tubule resulting in the excretion of sodium and water.
Site of action: Distal convoluted tubule and collecting ducts.
Effect: Increase in UOP and serum potassium levels. Mild antihypertensive.
Examples:
 amiloride
 spironolactone
 triamterene

Carbonic anhydrase inhibitors



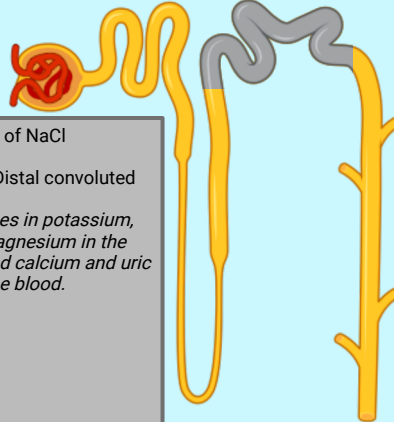
MOA: Inhibition of carbonic anhydrase
Site of action: Proximal convoluted tubule
Effect: Decreased potassium and sodium levels in the blood. Increased bicarbonate excretion in the urine causing a decrease in blood pH.
Examples:
 acetazolamide
 dorzolamide
 methazolamide
 dichlorphenamide

Osmotic diuretics



MOA: Inhibition of water and sodium reabsorption by increasing the osmolarity of the blood and renal filtrate.
Site of action: Proximal convoluted tubule and the descending limb of the loop of Henle.
Effect: Increase in urine output with a relatively small loss of sodium.
Examples:
 mannitol
 isosorbide

Thiazide diuretics



MOA: Inhibition of NaCl cotransport
Site of action: Distal convoluted tubule
Effect: Decreases in potassium, sodium, and magnesium in the blood. Increased calcium and uric acid levels in the blood.
Examples:
 HCTZ
 chlorthalidone
 amiloride
 clopamide
 indapamide

