**Diurectics**

* promote water loss from the body into the urine
* act at the kidneys
* used to relieve edema, CHF and hypertension
* increase rate of urine flow
* 5 classes: osmotic, carbonic anhydrase inhibitors, thiazide, loop diuretics, potassium sparing

thiazide diuretics

* inhibit sodium reabsorption - water follows salt
* enhance chloride, potassium and bicarbonate excretion - water follows salt
* commonly used as adjunct therapy for hypertension, CHF and edema
* ex. Hydrochlorothiazide
* suffix “thiazide” in generic name

Loop diuretic

* act directly on loop of henle of kidney tubules to inhibit sodium and chloride reapsorption - water follows salt.
* more rapid and effective than thiazides, stronger used mainly for emergencies like acute pulmonary edema or CHF
* Side effect of diuretics is loss of potassium (K+) causing hypokalemia (low blood potassium) symptoms of hypokalemia = muscle cramps and weakness, lethargy, irregular pulse, confusion
* hyperkalemia symptoms = thirst, dry mouth, drowsiness
* example: Furosemide(Lasix)

Potassium sparing diuretics

* produce mild diuresis without affecting blood calcium levels.
* spironolactone (Aldactone) competes with hormone Aldosterone for receptor. (antagonist)
* Sodium reabsorption by kidney tubule is prevented.  Water follows salt.

**Gastroesophageal reflux disease GERD**

* treatment approach = reduce HCL production in the stomach

proton pump inhibitors

* acid production depends on production of hydrogen ions (H+)
* examples: Nexium,Prilosec,Protonix,Aciphex, Prevacid
* suffix “prazole” in generic name

Histamine 2 (H2) receptor antagonists

* Acid secretion is stimulated by H2 receptors.  Block them with antagonists
* Examples: Tagamet, Zantac, Pepcid
* Suffix “tidine” in generic name

**osteoporosis**

* reduction in bone mass sufficient to compromise normal function.  bone become fragile and easily broken by normal activities. (opening a stuck window, knocking hip into a table)
* bisphosphonates
* most commonly prescribed
* inhibits bone resorption, action at osteoclasts not totally known.
* Examples: Actonel, Boniva
* hormonal agents
* act as agonists at estrogen receptors
* reduce bone resorption, serum cholesterol and LDL
* serious adverse effects - blood clots and stroke
* Example: Evista