OSTEOPOROSIS:

Osteopenia:

- osteo means "bone" and penia means "decrease or deficiency". Osteopenia is diagnosed when your BMD (Bone Mineral Density) is low. Your <u>DEXA scan</u> "T-scores" will fall between -1 and -2.5 standard deviations below a young female adult.

Osteoporosis:

- osteo means "bone" and porosis means "porous bone." Osteoporosis is diagnosed when your BMD is very low. Your DEXA scan "T-scores" will be less then -2.5 standard deviations below a young female adult.

TREATMENT FOR OSTEOPOROSIS:

1. Pharmacotherapy:

Medication: *only if you are moderate, high, or very high risk

- I would start with alendronate (Fosamax) 70 mg tab, one tab 1x/week, same day, same time.

- take first thing in the morning and more than 30 minutes before your first food, beverage (except plain water), or other medication(s) of the day.

- do not take with mineral water or with other beverages.
- take with a full 16 oz of water and remain standing for 1/2 hr, to reduce esophageal irritation.
- most common side effects are reduced blood calcium and/or phosphate.
- less common side effects are heart burn, nausea, diarrhea, bloating, flatulence

Supplements:

a) Vitamin D3 at 5,000 IU daily until your levels are between 50-75, then 3,000 IU daily maintenance dose. Vit D blood levels must be monitored every three mos.

b) calcium 600 mg twice daily (as much as possible from wholesome foods).

Education: Risks of alendronate (Fosamax), which is a bisphosphonate:

- esophagitis (inflammation of esophagus): this can be minimized by taking pill with a full 16 oz of water and remain standing for 1/2 hr.

- osteonecrosis of jaw (very rare), this can be prevented by maintaining routine preventative dental care and let dentist know you are on this medication.

- atypical femur fracture (rare). This is more common after many years of use. Preventative measures are taken by taking a "drug holiday", typically done after 3-5 yrs of use.

- harm to kidneys, when pt has more advanced underlying kidney disease (stage III or IV), this can be prevented by monitoring kidney function closely with lab tests.

2. Life Style Changes:

- weight bearing exercise 30 min 5d/week

- walk 2 miles a day, slowly increase 1/2 mile every mos or so. Goal is 5 miles daily for 5 days per week.
- posture exercises are very important.
- fall prevention: if you feel balance is diminishing rec PT for balance.
- limit or avoid alcohol consumption.
- avoid processed foods, sodas, caffeine; eat whole foods, lean meats, veggies & some fruit
- no high fat dairy.

3. LABS (every 3 mos)

- CMP to monitor calcium and kidney function; phosphorous levels
- Vitamin D levels
- thyroid function tests