7078 - OSTEOPOROSIS

Osteoporosis is a disease that makes the bones thin and weak. This decreases your bone density and increases the risk of fractures. 1 in 4 women over the age of 50 are affected.

We have cells in our body called osteoclasts that help to get rid of damaged bone. We also have cells called osteoblasts which help to build new bone. At about 30 years of age we begin to lose bone because the repair process is not as efficient as it once was. Estrogen levels begin to drop during menopause and we have increased bone loss.

Major Risk Factors

- age 65 or older
- vertebral (spine) compression fracture
- fracture with minimal trauma after age 40 (i.e. broken wrist from a fall)
- family history of fracture (esp. if your mother had a hip fracture)
- long term (more than 3 months) use of glucocorticoid
- medical condition (celiac disease) that affects nutrition
- primary hyperparathyroidism (parathyroid hormone regulates calcium and phosphate levels)
- early menopause

Fracture Risk - Five factors that affect your risk.

1. Age (your risk increases with age)

2. Sex (female)

3. Bone mineral density (low BMD increases your risk)

4. History (a previous fracture increases your risk)

Decrease your Risk Factors

1. Increase your intake of Calcium and Vitamin D

19-50 yrs old - 1000 mg* 400 IUs**

50 + - 1500 mg 800 IUs

*mg – milligrams ** - international units

2. Strengthen Bones with Physical Activity

To increase bone density you need to increase the load or force on the bones. There are several ways to accomplish this.

- participate in weight bearing activities like walking, running, or hiking
- take part in resistance training (weight lifting) 2-3 times per week
- improve balance and co-ordination to decrease the chance of falls
- improve flexibility and posture with stretching activities and core exercises (abdominal and low back muscle work)

3. Medication

- speak to your family physician

Diagnosing-Bone Mineral Density (BMD) Test of the hip or spine using a low radiation x-ray. Results of your BMD test are given as a T-score. Your T-score compares the amount of bone you have against an established standard. The difference between your score and the standard is measured in standard deviations (SD).

T-score Diagnosis: 1 SD or above is normal bone density. Between 1 & -2.5 SDs low bone density (osteopenia). Below -2.5 SDs osteoporosis.