The endocrine system is a network of glands and organs that produce, store, and secrete hormones. Hormones are really important to bone health and strength. Too much or too little of certain hormones in the body can contribute to osteopenia and osteoporosis. These are conditions in which bones become weak and are more likely to fracture or break.

**WHAT IS OSTEOPOROSIS?**

Osteoporosis, which means porous bones, is a progressive condition in which bones become weak and more likely to fracture or break. Osteopenia is the more moderate decline in bone mass than occurs in osteoporosis.

Throughout the early part of your life, the amount of bone lost and the amount of bone gained—called bone turnover—remains balanced. Bone mass (size and thickness) increases during childhood and early adult life. After mid-life, more bone is broken down than is formed, and bone mass slowly declines.

**DID YOU KNOW?**

Bone loss is a natural part of aging, but there are things that you can do to help keep your bones healthy.

- In the United States, 44 million Americans are at risk for osteoporosis.
- 10 million Americans already have osteoporosis.
- Women make up 80% of osteoporosis cases.
- Each year 1.5 million people suffer a fracture from bone loss.

*Source: Report from the Surgeon General*
OSTEOPOROSIS AND HORMONES

**UNCONTROLLABLE RISK FACTORS**

- Being over age 50
- Being female
- Menopause
- Family history

**CONTROLLABLE RISK FACTORS**

- Low body weight (small and thin)
- Being Caucasian or Asian

**Therapy with a steroid (such as prednisone) for any significant length of time can also increase your risk.**

**TREATMENT**

Along with prevention and lifestyle changes, you may need medication to stop bone loss and decrease the risk of fractures. Certain drugs slow down bone loss. If you are taking hormone medications, talk with your doctor to get the most appropriate does to treat your condition.

**PREVENTION**

- Get enough calcium and vitamin D, either through diet or supplements (at least 1,000-1,200 mg of calcium; 400-800 IU of vitamin D daily under age 50 or at least 800-1,000 IU after age 50)
- Do weight-bearing exercises and stay physically fit
- Avoid smoking
- Don’t drink too much alcohol

Your doctor can order a bone density test (DXA scan) to determine your risk of bone fractures. If you are over 65 and you do not have any risk factors for osteoporosis, you should still have a bone density test.