The Know Your Medicine brochure series includes:

- Cholesterol
- Depression
- Diabetes (Type 2)
- Heart Failure
- High Blood Pressure
- Osteoporosis

The ElderCare Patient Education series includes:

- Aging and Your Response to Medicines
- Alcohol: Friend or Foe?
- The Caregiver's Guide to Using Medicine
- Choosing the Right Nonprescription Medicine
- The Consumer's Quick Reference to Using Medicines
- Eye Medicines: May Be More Than Meets the Eye
- Home Safety Issues
- How to Select Your Pharmacy and Pharmacist
- Medicines and Travel
- Personal Medicine Record
- Questions You May Have About Generic Medicines
- Vitamins Are Not Enough

The Peter Lamy Center
for Drug Therapy and Aging
University of Maryland School of Pharmacy

410-706-2434 (within Maryland)
877-706-2434 (toll free outside Maryland)
410-706-1488 (fax)
lamycenter@rx.umaryland.edu
www.pharmacy.umaryland.edu/~lamy

Produced by the University of Maryland Publications Office, 2000
Osteoporosis

Osteoporosis is often called “the silent disease.” It weakens the bones of older adults without any noticeable symptoms. Most people over 50 don’t know they have osteoporosis until they fall and break their wrist or hip—a medical emergency that strikes one in eight men and half of all women.

How Can I Find Out If I Have Osteoporosis?

You don’t have to break a bone to find out if you have osteoporosis. Your doctor can do a bone density study. Called a DEXA scan, this simple, non-invasive test can tell you if you’ve had significant bone loss. Unfortunately, it can’t tell you how much bone you are losing every day.

Risk Factors
Women are at greater risk, particularly if they...

• have a family history of osteoporosis
• are white or Asian
• started menopause early (before age 50)
• have a small body frame

• Make sure you received the correct medicine before you leave the pharmacy. If not, notify the pharmacist.

• Make sure you can read and understand the medicine name and directions on the container. If the label is hard to read, ask your pharmacist to use large type. If you have difficulty opening the bottle, tell your pharmacist.

DO NOT

• Stop taking a prescription drug unless your doctor says it’s OK—even if you are feeling better. If you are worried that the drug might be doing more harm than good, talk with your doctor. He or she may be able to change your medicine to another one that will work just as well.

• Take more or less than the prescribed amount of any drug

• Mix alcohol and medicine unless your doctor says it’s OK. Alcohol can affect how well a medicine works. Mixing alcohol and medicine can even make you sick.

• Take medicine prescribed for another person or give your medicine to someone else.
When Taking Your Medicine...

**ALWAYS**
- Take your medicine exactly the way your doctor prescribes it—no more and no less.

- Tell your doctor or pharmacist about any allergies you have. It also is important to tell them about any problems you have had with medicines in the past, such as rashes, indigestion, dizziness, or not feeling hungry.

- Keep a daily record of all the medicines you take. Include prescription and over-the-counter medicines. Write down the name of each medicine, the doctor who prescribed it, the amount you take, and the times of day you take it. Keep a copy in your medicine cabinet and one in your wallet or pocketbook.

- Review your medicine record with your doctor during every visit, especially if your doctor prescribes new medicine. Your doctor may have updated information about the medicines you are taking.

- Check the expiration dates on your medicine bottles. If your medicine has expired, throw it away.

- Call your doctor immediately if you have any problems with your medicines.

Men and women are at risk if they...

- don’t get enough exercise
- smoke
- have a history of drinking alcohol
- take certain medicines, such as systemic corticosteroids (i.e., prednisone), phenytoin, or other seizure medicines
- have a history of hyperthyroidism

**As everyone ages, their risk of osteoporosis increases.**
Taking Responsibility for Your Health

Your bones are strongest when you are in your early 30s, but you can reduce your risk by making sure your diet includes the Recommended Daily Allowance (RDA) of calcium.

- Postmenopausal women over 50 who are on estrogen replacement therapy need 1,000 mg a day.
- Men over 65 and postmenopausal women not on estrogen replacement therapy need 1,500 mg a day.

Also, you should exercise at least 4 times a week. Dancing, walking, hiking, or even water aerobics increase your bone mass and reduce your risk of falls.

- Before starting an exercise program, talk to your doctor and an exercise specialist.

It Is Important to...

- Talk to your doctor about osteoporosis, especially if you fit any of the risk factors.

- Include foods rich in calcium and Vitamin D in your diet, but watch the amount of fat in dairy products. Take supplements if necessary.

- Have your doctor recommend an exercise program.

- Think about home safety. To prevent falls, install hand rails, add lights to dark rooms, and secure loose rugs.
What About Nutritional Supplements?

Calcium is an essential nutrient that helps prevent osteoporosis. If you don't get enough calcium from dairy products and green leafy vegetables in your diet, there are several types of supplements you can take. Calcium even comes in some over-the-counter heart burn medicines.

Which Medicines Help?

**Estrogen (or Hormone) Replacement Therapy**

For women entering menopause, estrogen replacement therapy is the standard of care for preventing and treating osteoporosis. Even older women can benefit from it.

There are many different estrogen replacement products: pills, creams, patches. Your doctor or pharmacist can help you choose.

**Side Effects**

Headaches, bloating, weight gain, vaginal bleeding, breast tenderness, and an increased risk of breast cancer.

Hormone therapy is not recommended for women with a history (or family history) of breast cancer, a history of blood clots, or an unstable blood pressure.
Selective Estrogen Receptor Modulators

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>raloxifene</td>
<td>Evista</td>
</tr>
</tbody>
</table>

This medicine has been shown to increase bone density and reduce the risk of heart disease without increasing the risk of endometrial or breast cancer.

**Side Effects**
Upset stomach, leg cramps, and blood clots in the legs. This medicine does not alleviate hot flashes like estrogen replacement.

Bisphosphonates

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>alendronate</td>
<td>Fosamax</td>
</tr>
<tr>
<td>risedronate</td>
<td>Actonel</td>
</tr>
</tbody>
</table>

This medicine, which makes bones stronger, can be prescribed to prevent or treat osteoporosis.

**Side Effects**
Nausea, esophageal burning, reflux disorder, and constipation. Must be taken by itself on an empty stomach with water only. For 30 minutes after taking this medicine, you may not eat or drink, and you must remain in an upright position.

Calcitonin

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>calcitonin</td>
<td>Miacalcin</td>
</tr>
</tbody>
</table>

This medicine, which comes as a nasal spray, makes bones stronger and relieves pain associated with osteoporosis. To prevent nasal irritation, it is important to alternate nostrils for each metered puff of medicine. For people with severe arthritis or impaired movement, there are assistive devices that make this medicine easier to use. It must be stored upright in a refrigerator.

**Side Effects**
Upset stomach and nasal irritation.