

The Facts about Osteoporosis

What is Osteoporosis?

- Osteoporosis is a decrease in bone density and strength that increases the risk for bone fractures.
- The most common bone fractures are spine, hip, and wrist fractures.
- Osteoporosis typically occurs in white and Asian older women. However, younger women, men and people of all races can develop osteoporosis.

How can I prevent osteoporosis?

Get Calcium!

Calcium is important for building bones. Calcium can be obtained from food and from supplements.

Sources of Calcium

<u>Foods</u>	<u>Calcium supplements</u>
<ul style="list-style-type: none">▪ Dairy: milk, yogurt, cheese▪ Dark green vegetables: broccoli, collard greens, bok choy, spinach▪ Canned sardines or salmon with bones▪ Almonds▪ Foods fortified with calcium: orange juice, cereals, and bread	<ul style="list-style-type: none">▪ Calcium carbonate (Caltrate ©, Tums ©)▪ Calcium citrate (Citracal©) <p>Daily calcium recommendations:</p> <ul style="list-style-type: none">▪ Adults 19 - 50 years: 1,000 mg▪ Adults 51 and over: 1,200 mg

Calcium citrate is preferred if you are taking any of the following medications: Zantac (ranitidine), Tagamet (cimetidine), Pepcid (famotidine), Prilosec (omeprazole), Nexium (esomeprazole), Prevacid (lansoprazole), Protonix (pantoprazole), or Aciphex (rabeprazole).

The maximum amount of calcium absorbed by the body at one time is 500mg. So to get the full amount of calcium needed, take two or three doses at different times of the day. For example, take one dose at breakfast time and another at supper. Remember to count the food sources of calcium!

Vitamin D

Vitamin D increases calcium absorption and bone health.

Low levels of vitamin D decrease muscle strength and increase the risk of falling. Falls are the leading cause of bone fractures.

- Sunlight is a major source of Vitamin D. Generally, 15 minutes of skin exposure to sun per day during the months of June to mid-September is sufficient. Sunlight is strongest between noon and 2 pm.
- Skin exposure of parts of the body (arms, legs, or head) is sufficient.
- Sunscreen reduces the amount of vitamin D produced in the body.

Sources of Vitamin D

<u>Foods</u>	<u>Vitamin D supplements:</u>
<ul style="list-style-type: none"> ▪ Fish (such as salmon, canned tuna, sardines) ▪ Liver ▪ Fortified milk, ▪ Egg yolks 	Daily Vitamin D requirements <ul style="list-style-type: none"> ▪ Age under 50: 400 - 800 IU ▪ Age 50 and over: 800-1,000 IU

Exercise

Exercise increases bone strength. An inactive lifestyle can weaken bones.

Three types of exercise help increase bone strength and reduce the risk of bone fractures.

Type of Exercise	Weight bearing	Balance	Resistance
Examples	Hiking, jogging, running, stair climbing, walking	Tai Chi, postural activities (example climbing stairs or getting out of a chair)	Elastic exercise bands, weight machines, free weight training, swimming laps
How much?	30 minutes at once or divided throughout the	Daily	2 - 3 times per week with exercises for

	day, every day		major muscle groups with 8 - 12 repetitions
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National Osteoporosis Foundation. Prevention: Exercise for bones. 2009.
Available at : <http://www.nof.org/prevention/exercise.htm>

Lifestyle Matters

- Smokers are twice as likely to develop osteoporosis as non-smokers.
- Excessive alcohol consumption (3 or more drinks per day) reduces bone formation and calcium absorption.

How Do I Know if I Have Osteoporosis?

- Osteoporosis can occur without symptoms. Sometimes it can cause back pain, loss of height (especially with stooped posture), and fractures.
- Osteoporosis is diagnosed via a DXA scan, which is a non-invasive scan that measures the bone density of the hip and spine.
- Screening tests measure bone density at the wrist or heel of the foot.

Medications that Increase the Risk of Osteoporosis

Some medications can decrease bone density and increase the risk for osteoporosis.

- Oral corticosteroids (prednisone, methylprednisolone, hydrocortisone) if taken daily or frequently
- Anti-seizure medicines (phenytoin, phenobarbital, carbamazepine, and primidone)
- Chemotherapy
- Certain diuretics (water pills) such as furosemide, bumetanide, torsemide that increase the amount of calcium lost in the urine.

If you are taking these medicines talk to your doctor about what you can do to prevent osteoporosis.

How is Osteoporosis Treated?

- People at risk of osteoporosis should take adequate amounts of calcium and vitamin D.
- There are a number of prescription medications to prevent and treat osteoporosis. Most of these medications are pills. Some need to be taken only once a month. A new once-a-year injection is also available.
- All the medicines are helpful, but they cause different side effects so be sure to talk with your doctor about which one would be best for you.

For more information, please visit the following websites:

<http://www.JustAskBlue.com> for specific questions about osteoporosis and answers to personal questions you may have about osteoporosis medicines.

The National Osteoporosis Foundation at www.nof.org.

References:

Mayo Foundation for Medical Education and Research.

<http://www.mayoclinic.com/health/osteoporosis/DS00128>

National Institute of Arthritis and Musculoskeletal and Skin Diseases.

Osteoporosis. National Institutes of Health, Department of Health and Human

Services. http://www.niams.nih.gov/Health_Info/Bone/Osteoporosis/default.asp

National Osteoporosis Foundation. Prevention: Exercise for bones.

<http://www.nof.org/prevention/exercise.htm>