

Osteoporosis

Osteoporosis literally means, "porous bones," and is a condition of abnormally low bone mass for a person's age and height. This condition affects 25 million Americans a year. Most at risk are older women, with 1 in 3 over the age of 50 suffering at least one fracture, however, men can develop it as well. According to the National Osteoporosis Foundation, 1.5 million fractures occur in the United States per year and these results in \$10 billion in health care costs.

Don't become a statistic. While there is no cure for osteoporosis, you can delay the onset and lessen the severity.

LifeQuest wants to help, so we have provided information below to assist in your understanding of the development of osteoporosis, assess your risk, and help you prevent complications such as fractures.

Causes of Osteoporosis

- Your bones are similar to a bank account: the more "deposits" you make while young, the more "withdrawals" you can make when older. Deposits include weight bearing activity, adequate calcium intake, and adequate vitamin D intake. Withdrawals begin around the age of 40 for women, later for men.
- When bone loss exceeds bone formation, we begin to lose bone mass
- Various risk factors are associated with increased risk of osteoporosis:

family member was diagnosed	have an eating disorder
female	lead a sedentary lifestyle
smoker	menopausal
high intake of alcohol	over the age of 40 (women)
lack of calcium	certain medications
inadequate vitamin D	

Assess Your Osteoporosis Risk

Assess Your Risk for Osteoporosis

Take the following quiz to determine if you may be at risk. *If three or more of the following apply to you, you may be at elevated risk.* This is quiz not intended for self diagnosis, if you feel that you are at risk or have further concerns, please speak with your health care provider.

- Female
 - Over the age of 40
 - Family member was diagnosed
 - Post menopausal
 - Caucasian or Asian
 - Lactose intolerant
 - Suffer from an eating disorder
 - Sedentary lifestyle
 - Heavy alcohol intake
 - Smoker
 - Heavy caffeine intake
 - Currently or previously on any of the following medications:
steroid drugs, chemotherapy, diuretics, tetracycline, lithium therapy
-

Osteoporosis and Exercise

Why workout to prevent osteoporosis?

- One of the primary causes of osteoporosis is prolonged bed rest and weightlessness.
- As gravitational or muscle forces are decreased, with inactivity, the density of one's bones significantly decreases. Unfortunately the body's reaction to a lack of stress being placed on the bones is to eliminate what isn't needed. Bones adapt to imposed stress or the lack thereof by forming or losing mass. In fact, for every week of bed rest or significantly decreased activity you lose an average of 1- percent, bone mineral content.

Where does exercise come into play?

- Exercise is so important because it causes the exact opposite effects of bed rest on the body. The bones actually become bigger and denser when stress, in the form of exercise, is applied in excess of normal levels. The exercise itself will stimulate remodeling and additional bone growth. It has been proven in several studies that those who are physically active have a significantly higher density in their bones.
- In addition heavier people have less of a chance of developing osteoporosis, because of the increased stress on their bones.

So what type of exercise should I perform?

- The most beneficial types of exercise for the prevention of osteoporosis are weight bearing exercises, such as walking, running, and racket sports. Non-weight bearing exercises, such as biking, swimming, and rowing, have some beneficial effects, but not nearly as much as weight bearing exercises. Weight bearing places more stress on the bones and has been shown to aid in increasing the bone density of the leg and spinal bones. However the most beneficial form of exercise is strength training. Strength training allows us to apply stress to all of the bones of the body and exceed the levels of stress that weight bearing and gravity provide.

The more active you are throughout life the more benefits you will receive. Start ASAP. After the age of 35 your body stops laying down bone. However you can change the density by increasing or decreasing the mineral content of the bone you have. So start now and you may save yourself a lot of pain and agony later.

Maintain a healthy diet and get enough Calcium and vitamin D. If you do not have sufficient minerals to deposit in bones then they won't be deposited. It's as simple as that. All the exercise in the world won't make a difference if you don't have the minerals in your system.

Do what you can, don't cause yourself pain. Pain is bad. Enough said. If it hurts it usually means something is wrong. Don't over do it. If it hurts, back off and find out whether what you are doing is wrong or whether there is something wrong with the area that hurts.

If you have special concerns about exercising, you can either ask one of our trainers or talk to your personal physician.

Osteoporosis Prevention Tips

If you are under the age of 35, then you can decrease your risk by adopting the following habits:




- **Be sure to get adequate calcium intake every day (this varies by age and sex)**
- **Get some sun! (about 15 minutes a day is enough)**
-- sun light is used by our bodies to produce vitamin D, which is necessary for calcium absorption
- **Practice weight bearing exercise on a regular basis**
-- good exercises are jogging, weight training, low-impact aerobics
- Restrict your alcohol and caffeine intake
- **Stop smoking**

If you are over 35 or have already been diagnosed, the above recommendations in addition to a few new ones below, may help you to slow down bone loss and reduce your risk of fractures:

- Follow the tips from the list above!
- If you are a postmenopausal woman, consider hormone therapy
- If you are a man or unable to take estrogen, talk to your health care provider about Calcitonin
- Make your environment safe
- Beware of drugs that may impair your balance
- Avoid fatigue

- Be aware of the natural effects of aging - reaction time, sense of balance and coordiantaion naturally decline
- Wear hip pads

Osteoporosis Links

- [Dr. Koop's Community: Osteoporosis Resource Center](#) 
- [Mayo Clinic Health Oasis: Osteoporosis](#) 
- [National Osteoporosis Foundation](#) 
- [Why Milk?](#) 