

What is Osteoporosis?

Osteoporosis is a condition that causes bones to become weak and brittle, increasing the likelihood of a fracture (most common fractures are in the hip, wrist or spine). Bone is a living tissue that is constantly being broken down and remade. Osteoporosis occurs when the body cannot replace it as fast as it is broken down. It is common in older individuals, especially women.



Click on the link below for more information!

<https://www.mayoclinic.org/diseases-conditions/osteoporosis/symptoms-causes/syc-20351968>

Osteoporosis Prevention

It is estimated that about 2 million fractures are caused by osteoporosis each year. So, what can you do to protect your bones and prevent osteoporosis?

- Eat a well-balanced diet that includes enough calcium AND Vitamin D
- Eat plenty of fruits and vegetables
- Exercise on a regular basis
- Avoid excess alcohol intake and smoking

Calcium and Vitamin D

Calcium and vitamin D are the two most important nutrients to maintain good bone health. So, how much calcium and vitamin D does the average person need on a daily basis?

Table 1. Recommended calcium intake.

WOMEN AND MEN

Under age 50	400-800 international units (IU) daily**
Age 50 and older	800-1,000 IU daily**

Table 2. Recommended vitamin D intake.

WOMEN

Age 50 & younger	1,000 mg* daily
Age 51 & older	1,200 mg* daily

MEN

Age 70 & younger	1,000 mg* daily
Age 71 & older	1,200 mg* daily

If you want to know about how much calcium you eat, go to this link or scan the QR code for information by the National Osteoporosis Foundation.



<https://www.iofbonehealth.org/calcium-calculator>

If you are not getting enough of these nutrients, what are some good sources of each? Many people know that calcium is in dairy products and that vitamin D can be made by our body in the presence of light, but as you can see below there are many other food options for each.

Table 3 & 4. Estimated calcium in various food.

Fortified Food	Serving Size	Estimated Calcium*
Almond milk, rice milk or soy milk, fortified	8 oz	300 mg
Orange juice and other fruit juices, fortified	8 oz	300 mg
Tofu, prepared with calcium	4 oz	205 mg
Waffle, frozen, fortified	2 pieces	200 mg
Oatmeal, fortified	1 packet	140 mg
English muffin, fortified	1 muffin	100 mg
Cereal, fortified 35	8 oz	100-1,000 mg
Other	Serving Size	Estimated Calcium*
Mac & cheese, frozen	1 package	325 mg
Pizza, cheese, frozen	1 serving	115 mg
Pudding, chocolate, prepared with 2% milk	4 oz	160 mg
Beans, baked, canned	4 oz	160 mg

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Vitamin D can be found in fatty fish and is added to milk, orange juice, soy milk, and some cereals. If you do not believe you are getting adequate intake of calcium or vitamin D, talk to your doctor about adding a supplement to your diet.

<https://www.nof.org/preventing-fractures/prevention/>



Osteoporosis Education and Recipes

- Recipes from osteoporosis foundation website:
<https://www.iofbonehealth.org/recipes>



Fall Prevention Video:

https://www.youtube.com/watch?v=tx3Oc0SIZnI&ab_channel=NationalCouncilonAging

Key Points:

- Find a balance or exercise program
- Talk to your doctor
- Review your medication
- Get your hearing and vision checked
- Keep your home safe
- Talk with your family



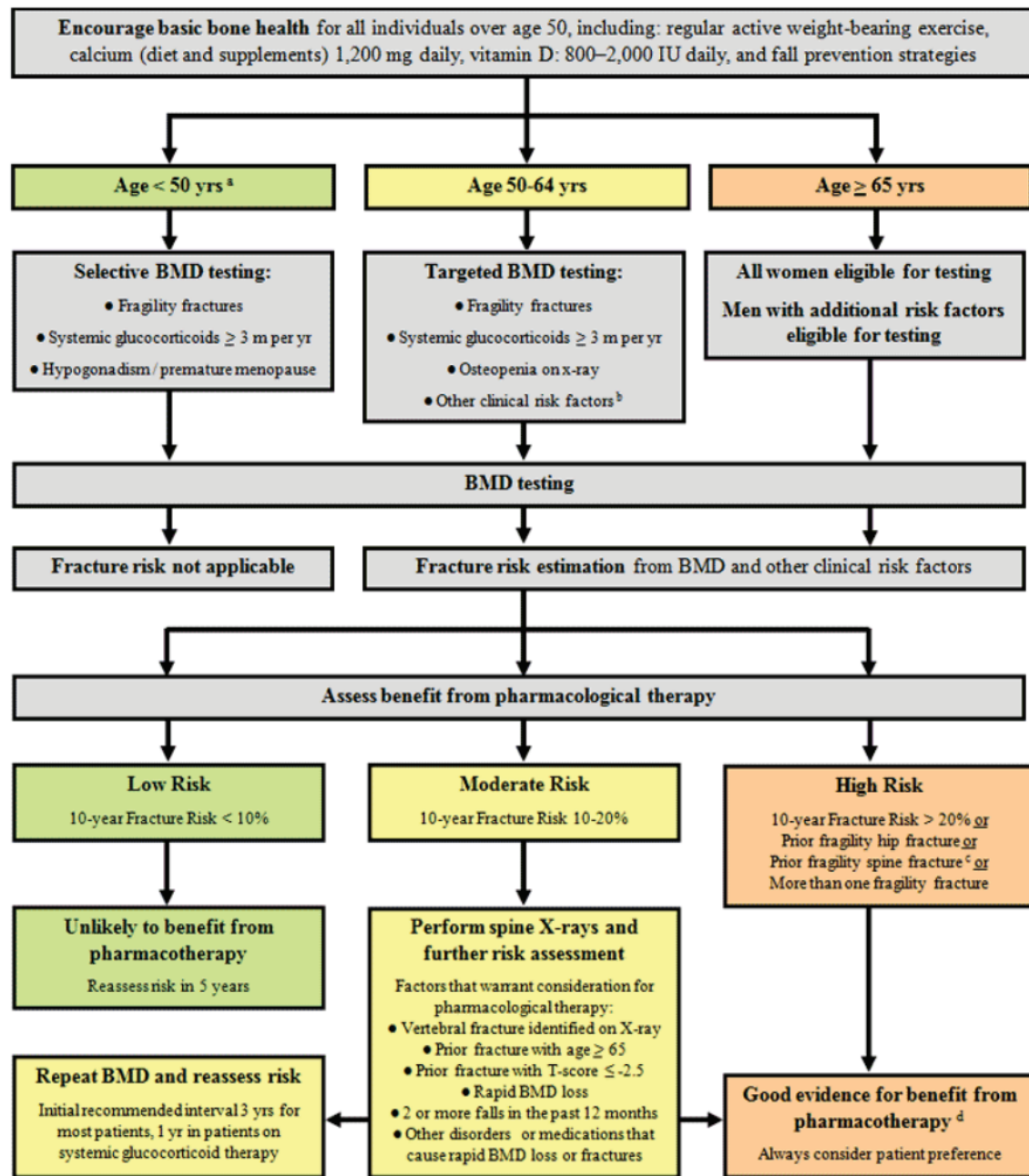
Testing/Screening:

- Basic bone health - All individuals over age 50 should:
 - Participate in regular weight-bearing exercise
 - Take a daily calcium supplement (1,200 mg)
 - Take a daily Vitamin D supplement (800-2,000 IU)
 - Implement fall prevention strategies
- Your risk of a fracture can be estimated with a Bone Mineral Density test. See the graphic for age specific testing information.
- Speak with your physician about your bone health

<https://professionals.wrha.mb.ca/old/extranet/eipt/files/EIPT-031-001.pdf>



Appendix A₁ University of Manitoba Osteoporosis Flowchart (table 1)
With Bone Mineral Density testing



^aOther disorders such as (incomplete list)
 Malabsorption syndromes
 Chronic inflammatory conditions
 Primary hyperparathyroidism

Footnote a, b, c, d see page 17

Osteoporosis Bone Testing:

<https://www.nof.org/patients/diagnosis-information/>



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Bone Basics

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Bone Density Testing

When you have osteoporosis, your bones become weak and are more likely to break (fracture). You can have osteoporosis without any symptoms. Because it can be prevented and treated, an early diagnosis is important. However, you can take steps at any age to protect your bones and reduce your chance of breaking a bone. You can find out whether you have osteoporosis or if you should be concerned about your bones by getting a bone density test. Some people also call it a bone mass measurement test. This test uses a machine to measure your bone density. It estimates the amount of bone in your hip, spine and sometimes other bones. Your test result will help your healthcare provider make recommendations to help you protect your bones.

What a Bone Density Test Can Do

A bone density test tells you if you have normal bone density, low bone density (osteopenia) or osteoporosis. It is the only test that can diagnose osteoporosis. The lower your bone density, the greater your risk of breaking a bone. A bone density test can help you and your healthcare provider:

- learn if you have weak bones or osteoporosis before you break a bone
- predict your chance of breaking a bone in the future
- see if your bone density is improving, getting worse or staying the same
- find out how well an osteoporosis medicine is working
- let you know if you have osteoporosis after you break a bone

Who Should Have a Bone Density Test?

Certain people are more likely than others to develop osteoporosis and broken bones. Factors that increase the likelihood of developing osteoporosis are called "risk factors." The more risk factors you have, the more likely you are to break a bone. Many of the risk factors for osteoporosis and broken bones are listed on Table 1 (see page 2). These risk factors include many of the medicines and medical conditions that can cause bone loss.

The National Osteoporosis Foundation (NOF) recommends that you have a bone density test if:

- you are a woman age 65 or older
- you are a man age 70 or older
- you break a bone after age 50
- you are a woman of menopausal age with risk factors (see page 2)
- you are a postmenopausal woman under age 65 with risk factors (see page 2)
- you are a man age 50-69 with risk factors (see page 2)

A bone density test may also be necessary if you have any of the following:

- an X-ray of your spine showing a break or bone loss in your spine
- back pain with a possible break in your spine
- height loss of ½ inch or more within one year
- total height loss of 1½ inches from your original height