

OSTEOPOROSIS

TAKING CARE OF YOUR BONES



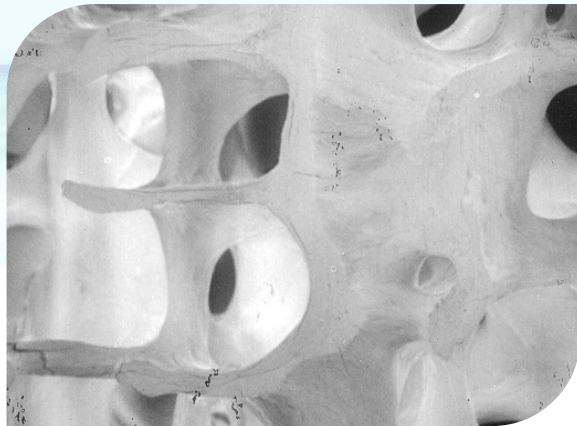
WHAT IS OSTEOPOROSIS?

BONE IS ALWAYS CHANGING AND GROWING.

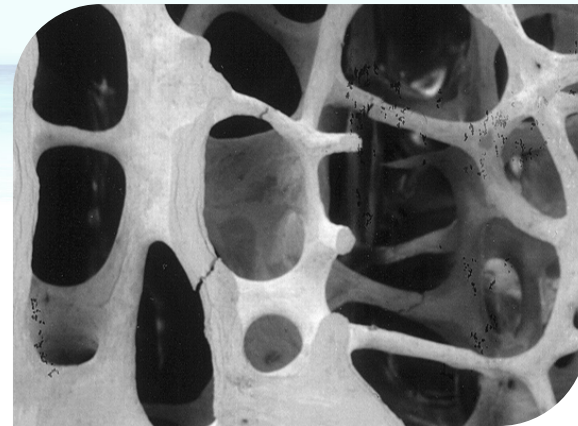
There are cells in your body that remove old bone and other cells that rebuild bone. It is an ongoing natural process happening in your body.

As you age, you lose more bone than you gain. This can develop into osteoporosis.

Osteoporosis is a loss of bone density and weakened bone structure, leading to an increased risk of fracture.



Bone without osteoporosis



Bone with osteoporosis

Bone images courtesy of David W. Dempster, PhD, 2000. Reproduced with permission.

When bones are affected by osteoporosis, the honeycomb spaces within the bone become much bigger, making the bones less dense, weaker, and more prone to breaking.



IMPACT OF OSTEOPOROSIS

Many women don't know they have osteoporosis until they break a bone, or experience height loss or hunched posture—**that's why osteoporosis is called a "silent" disease.**



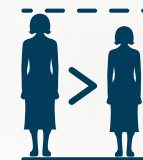
FRACTURE

- In the US, 1 in 2 women over the age of 50 will have a fracture due to osteoporosis in their lifetime.
- Bones may become so weak that a sudden twist, fall, or strain causes a break or fracture.
- Once you've had a fracture due to osteoporosis, your risk of having another fracture nearly doubles.
- A fracture can be a life-changing event, making it harder to do things on your own.



HUNCHED POSTURE

- It has been found that about two-thirds of spinal fractures are asymptomatic (aren't felt or noticed) and aren't brought to the physician's attention.
- Because these fractures may cause little pain at first, a person may only notice that they have osteoporosis after it has caused loss of height and/or hunched posture.



HEIGHT LOSS

- Losing more than an inch of height in a year may be an indicator of osteoporosis.

“Now, going for a walk is more difficult. I've had to change what I like to do.”

-Osteoporosis Patient

WHY AM I AT RISK?

ESTROGEN HELPS TO REGULATE THE PROCESS IN WHICH YOUR BODY BREAKS DOWN OLD BONE AND REPLACES IT WITH NEW BONE.

Because women's bodies have less estrogen after menopause, they can lose bone at a rate that is too fast. This can lead to postmenopausal osteoporosis.

Other indicators that you may be at risk of osteoporosis include:

- a parent who had a hip fracture or hunched posture as they aged
- a broken bone as an adult
- height loss of an inch or more in a year
- a thin frame/low body weight
- an inactive lifestyle
- low calcium in your diet
- low vitamin D level
- cigarette smoking

In the 5 to 7 years after menopause, **women can lose up to 20%** of their bone mass, leaving them at risk for fracture.



DIET/LIFESTYLE RECOMMENDATIONS

The National Osteoporosis Foundation (NOF) recommends that postmenopausal women 50 and older:

- Talk with their doctor about the risk of osteoporosis and fractures
- Examine their diet to see if they are getting sufficient amounts of calcium and vitamin D; if not, supplements may be necessary
- Get regular exercise: to be effective, exercise should be weight-bearing and strengthen muscles
- Avoid excessive alcohol use and smoking
- Measure their height every year

NOF recommends that you have a bone density test if:

- You are a woman age 65 or older
- You break a bone after age 50
- You are a woman of menopausal age with risk factors

In addition, the US Food and Drug Administration (FDA) has approved many medications to preserve bone density and/or to reduce the risk of fractures in women with postmenopausal osteoporosis.



HOW TO TEST AND T-SCORE EXPLANATION

A BONE MINERAL DENSITY (BMD) TEST IS USED TO DIAGNOSE OSTEOPOROSIS, DETERMINE HOW SEVERE IT IS, AND ASSESS FRACTURE RISK.

The test is **painless**, and patients usually don't need to change into a robe.

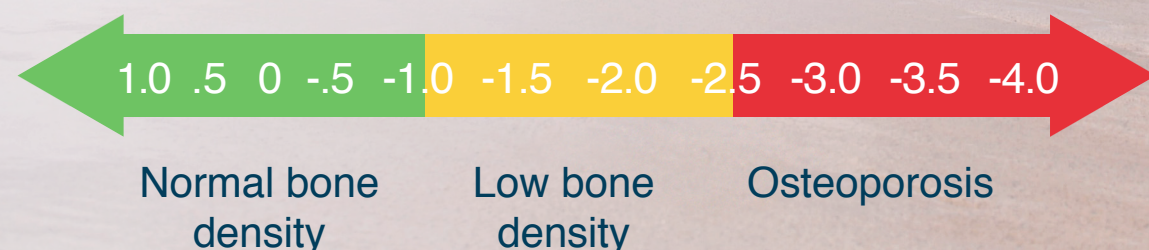


The **BMD test provides a T-score**, which compares the patient's bone density with healthy young adults of the same gender.

The **T-score is used to diagnose** and assess postmenopausal osteoporosis.

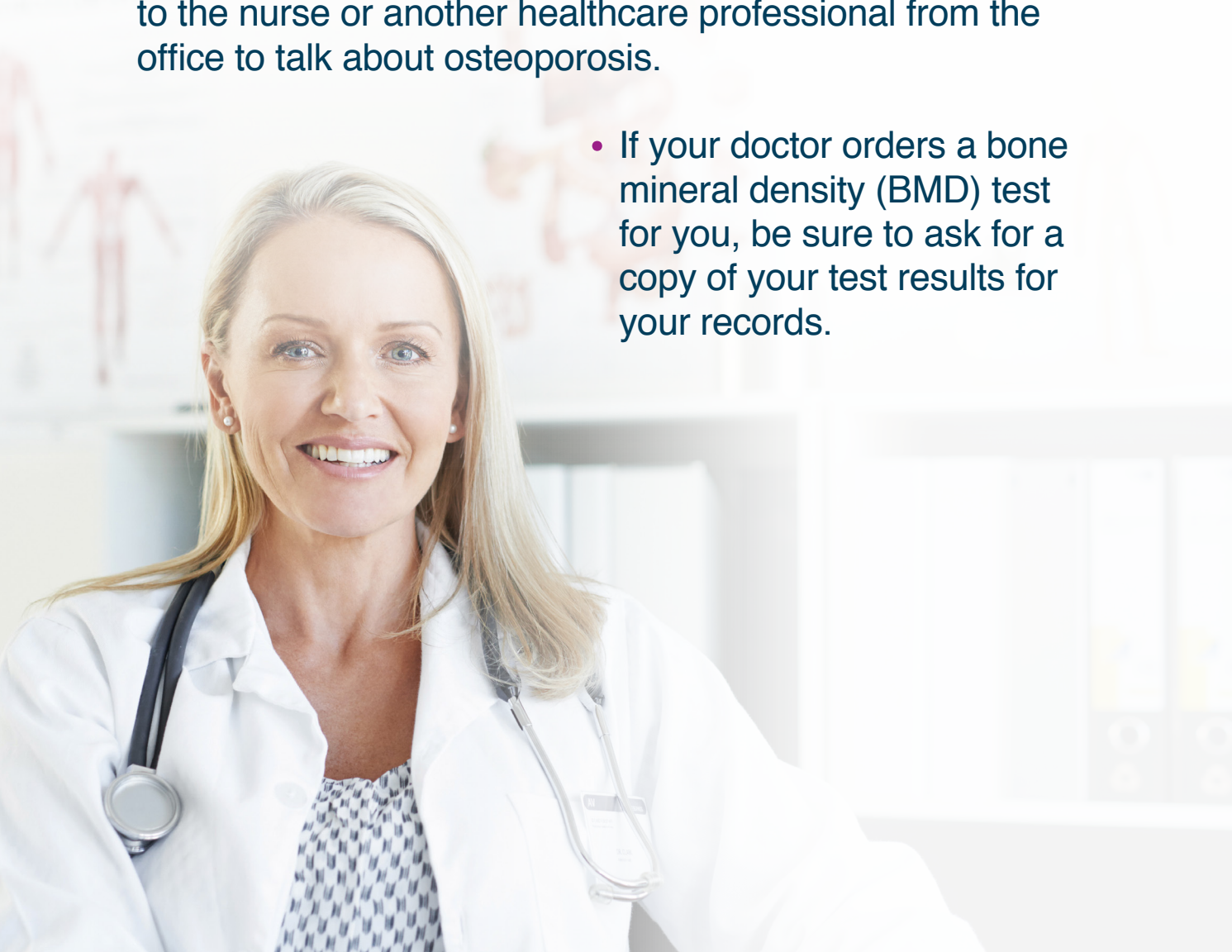
Each 1-point drop in the T-score means a loss of about 10% of bone density, which almost doubles the risk of fracture.

T-score: What it means for bone density



TALK WITH YOUR DOCTOR AT YOUR NEXT VISIT

- Know your family's medical history, especially any relatives with fractures or stooped posture.
- Know your medical history. Your doctor will ask about past and present medical conditions.
- When scheduling your appointment, ask for extra time to talk about osteoporosis. If that is not possible, ask to speak to the nurse or another healthcare professional from the office to talk about osteoporosis.
- If your doctor orders a bone mineral density (BMD) test for you, be sure to ask for a copy of your test results for your records.



Bring a list of questions. Some suggestions are below. Check the most important ones for you.

- ☐ How can I improve my bone health?
- ☐ Should I have a bone mineral density (BMD) test?
- ☐ How much calcium and vitamin D do I need?
- ☐ What are the best sources of calcium?
- ☐ What are the best sources of vitamin D?
- ☐ Do any medications I take affect my bones?
- ☐ How can I strengthen my bones?
- ☐ Does my posture need attention?
- ☐ How does caffeine affect my bones?
- ☐ How can smoking and drinking alcohol affect my bones?
- ☐ Do any of the medications I take affect my balance?
- ☐ Can I avoid future fractures without medication?
- ☐ Do I need to think about a drug treatment?
- ☐ What medication options are best for me?
- ☐ What are the benefits and risks of medication?

RISK FACTORS OF OSTEOPOROSIS

BONE LOSS CAN LEAD TO FRACTURES OF THE HIP, SPINE, AND WRIST.

Not all causes are known. However, if you are 50 and older and you have certain risk factors, you have a higher chance of developing osteoporosis.

Risk Factors You *Can* Change:

Are you physically inactive?	Yes No
Is your diet low in calcium?	Yes No
Is your diet low in vitamin D?	Yes No
Do you smoke cigarettes?	Yes No
Do you drink alcohol—more than one drink per day for women; more than two drinks per day for men?	Yes No
Do you often under-eat? Are you often on a diet?	Yes No

Risk Factors You *Cannot* Change:

Are you a woman?	Yes No
Are you a postmenopausal woman?	Yes No
Do you have a low body weight (less than 127 lbs.) or a small-boned frame?	Yes No
Has a member of your immediate family had a bone fracture from a minor fall or extreme spine curvature?	Yes No
Have you taken: <ul style="list-style-type: none">• drugs for asthma, arthritis, epilepsy, or certain cancers?• steroids for an extended length of time?• a high dose of thyroid medicine?	Yes No
Have you had extended periods of bed rest or immobilization?	Yes No



TAKE CARE OF YOUR BONES

IN THE 5 TO 7 YEARS AFTER MENOPAUSE, WOMEN CAN LOSE UP TO 20% OF THEIR BONE MASS, LEAVING THEM AT RISK FOR FRACTURE.

- Many women don't know they have osteoporosis until they break a bone, or experience height loss or hunched posture
- 1 in 2 women over the age of 50 in the US will have a fracture due to osteoporosis in their lifetime
- When dietary and supplemental calcium and vitamin D aren't enough, your doctor may recommend medication to help treat your osteoporosis

If you are a postmenopausal woman age 50 and over, ask your doctor about a bone mineral density (BMD) test.



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USA-785-81719 05/21