



BONE DENSITY TESTS: WHEN YOU NEED THEM AND WHEN YOU DON'T

A bone-density test is a way to measure the strength of your bones. The test, called a DEXA scan, is a kind of X-ray. The main reason to have the test is to find and treat serious bone loss, called osteoporosis, and prevent fractures and disability.

A DEXA scan measures the mineral density of the bone, usually in the hip and spine. Results are given as a "T-score", which is your bone density compared to a normal young adult of the same sex.

MOST MEN AND WOMEN UNDER AGE 65 PROBABLY DON'T NEED THE TEST BECAUSE:

- **Most people do not have serious bone loss.**
Most people have no bone loss or have mild bone loss (called osteopenia). Their risk of breaking a bone is low so they do not need the test. They should exercise regularly and get plenty of calcium and vitamin D. This is the best way to prevent bone loss.
- **The bone-density scan has risks.**
A bone-density test gives out a small amount of radiation, but radiation exposure can add up. The effects can add up in your body over your life, so it is best to avoid it if you can.

WHO SHOULD GET A BONE-DENSITY SCAN?

Women should get a DEXA scan at age 65, and men age 70 and up. They may want to talk with their health care providers about the risks and benefits before deciding. Younger women and men ages 50 to 69 should consider the test if they have risk factors for serious bone loss. Common risk factors include:

- Breaking a bone in a minor accident
- Having rheumatoid arthritis
- Having a parent who broke a hip
- Smoking or drinking excess alcohol
- Having a low body weight
- Using corticosteroid drugs for three months or more

YOU MAY NEED A FOLLOW-UP BONE-DENSITY TEST AFTER SEVERAL YEARS

Most changes in bone density do not happen quickly. There is often no benefit having a follow-up DEXA scan for at least 5 years. If your T score from your first scan was 2.00 or more, you do not need another scan for 5 years. You may need a follow-up scan sooner if you have risk factors for bone loss, such as:

- Hyperparathyroidism (where your parathyroid gland is over-active),
- Taking certain medicines, such as steroids, or hormones for treating breast or prostate cancer
- Low levels of Vitamin D



HOW CAN YOU KEEP YOUR BONES STRONG?

The following steps can help you build bone:

- **Exercise.** The best exercise for your bones is exercise that makes your bones carry weight. When you walk, your bones carry the weight of your whole body. You can also lift weights. Aim for at least 30 minutes of weight-bearing exercise a day.
- **Get enough calcium and vitamin D.** They help keep your bones strong. Aim for at least 1,200 mg of calcium a day. Eat foods high in calcium, such as dairy products, leafy green vegetables, and canned sardines and salmon. You may need a calcium pill each day. Consider taking vitamin D if you are a woman in menopause or you get little sun. Take 800 IU a day.
- **Avoid smoking and limit alcohol.** Among other things, smoking and drinking alcohol can speed up bone loss. Quitting smoking can be difficult, but there are many treatments that can help you do it. Ask your health care provider or contact Quitline on 0800 778 778. For alcohol, limit yourself to one drink a day for women, and two drinks a day for men.
- **Try to avoid certain medicines.** Some medicines can damage bones. These include proton pump inhibitors (such as omeprazole, lansoprazole, and pantoprazole), used to treat heartburn; corticosteroids; and some of the newer antidepressants. If you take one of these medicines, ask your health care provider about whether these medications are right for you.

WHY WAS THIS RESOURCE DEVELOPED?

This Choosing Wisely resource is based on the top five practices that, based on clinical evidence, may have limited benefit, no benefit or may potentially cause harm, according to the New Zealand Association of Rheumatologists¹.

Choosing Wisely is a campaign to help health professionals and patients engage in conversations about unnecessary tests and treatments and make smart and effective choices to ensure high quality care. For more information on Choosing Wisely or to see other patient materials, visit www.ChoosingWisely.org.nz

SUPPORTING EVIDENCE FOR THE ISSUES DISCUSSED IN THIS RESOURCE

For a list of supporting evidence for the issues discussed in this resource, please see: <http://choosingwisely.org.nz/professional-resource/nzra/>

Developed by Choosing Wisely New Zealand, 2018. Adapted from Choosing Wisely Canada and Choosing Wisely USA/Consumer Reports (2016) "Bone density tests: when you need them and when you don't" and BPAC New Zealand (2008) "Prevention of Osteoporosis". Reasonable care is taken to provide accurate information at the time of creation. This information is not intended as a substitute for medical advice and should not be exclusively relied on to manage or diagnose a medical condition. Choosing Wisely does not assume any responsibility or liability arising from any error or omission or from the use of any information in these resources.

¹ <http://choosingwisely.org.nz/professional-resource/nzra/>