

# Bone density testing

## What is a bone density test?

The technical name for a bone density test is 'dual energy X-ray absorptiometry' (DXA for short). It uses two X-ray beams to work out how strong (or dense) your bones are. DXA measures bone density at the spine and the hip, although some testing centres may measure at other bone sites too.

## Why has my GP recommended I have a DXA test?

A DXA test is the best way to detect osteopenia – which is weakening of the bones – and the more severe form called osteoporosis. Your GP has probably suggested that you have the test as you:

- may have sustained a recent fracture from a fall
- are over 70 years of age, or
- because you have a risk factor for low bone density.

There are many risk factors for low bone density such as different lifestyle factors, medical problems, or some medications that stop calcium getting into your bones or anything that makes the calcium leak out of your bones more quickly. Sometimes your GP may recommend a follow up DXA after a few years to check how your bones are doing, although this is often not needed.

## What will the test involve?

DXA is a painless test. It is quick (around 20 minutes) and you don't have to fast or prepare in any special way. You may be asked to wear a gown during the test to ensure that no metal interferes with the images. You will need to lie on a bed and be still for the few minutes that it takes for the pictures to be taken. Usually there is a special brace that rotates your leg inwards slightly to get a good picture of the hip. The technicians are generally very good at working around any difficulties or pains you may have. There is a small amount of radiation involved in the test, but this is much less than a normal X-ray.

## What does the test cost?

For a limited number of medical conditions and circumstances there is a Medicare rebate for the test, however some people will not be eligible for this rebate. Ask your GP if you are eligible for the Medicare rebate, and when booking the test ask what costs you should expect.

## What will the results mean?

The report will include lots of different numbers, a picture and often a graph of your bone density. Your GP will discuss this information with you as the results need to be looked at together with your medical history – everyone is different.

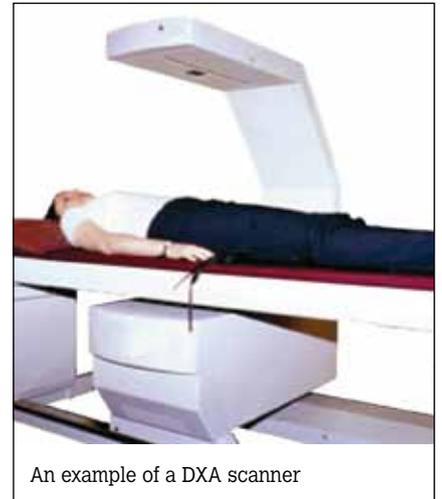
In general though, the T-score from your hip and spine are the most important results. A T-score is a way of reporting your bone density compared to a healthy young adult. As bone density reduces with age we expect your T-score to be negative (or less than that of a healthy young adult). However, a T-score of less than  $-2.5$  indicates osteoporosis and your GP will discuss treatment options with you. A T-score better than  $-2.5$  but less than  $-1.0$  indicates osteopenia or some bone weakening. Your GP will explain what this means for you.

## What can I do to prevent osteoporosis?

Several factors affect bone density and many of them are 'lifestyle' related – meaning you can control them. Weight bearing exercise (such as walking), adequate calcium in the diet, and normal vitamin D levels all help build up bone density. Alcohol, smoking and restrictive diets can reduce bone density.

## Where can I find further information?

Your GP will give you further information when you return to discuss your test results. Osteoporosis Australia has good information – check their website at [www.osteoporosis.org.au](http://www.osteoporosis.org.au) or telephone toll free 1800 242 141.



An example of a DXA scanner

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