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## What is Bone Mineral Density/DEXA?

DEXA stands for 'dual energy X-Ray absorptiometry'. It is a test that measures the density of bones. The bone mineral content or density can be used by your doctor to predict the loss of calcium in your bones (pending or existing osteoporosis).

### How does it work?

A DEXA scan uses low-energy X-Ray from two different sources that pass through the bone being tested. One source is absorbed mainly by soft tissue; the other by bone. As bone blocks a certain amount of the X-Rays.

The denser the bone is, the fewer X-Rays will pass through to the detector. The soft tissue amount can be subtracted from the total and what remains is your bone mineral density. By using two different X-Ray sources rather than one, it greatly improves the accuracy in measuring the bone density.

### Preparation

There is no preparation required for a DEXA scan.

If you have had other imaging procedures involving X-ray contrast or nuclear medicine scans in the last week please inform our staff when making your appointment. You may be required to delay your appointment until any contrast has cleared. Please advise our staff if you have had a hip replacement or implants in your lower spine.

If you are pregnant it is imperative to advise our staff of this before entering the exam room. BMD testing is contraindicated during pregnancy.

For all examinations we ask that you bring along any previous BMD scans or related results. For progress and comparative studies we recommend that you have your BMD using the same method and preferably at the same practice. The use of the same scanner can assist in minimising the variables affecting results.

At Direct Radiology we require a request from a referring doctor before undertaking medical imaging examinations. Please ensure you bring your referral with you to your appointment.

For billing purposes please bring your Medicare card.

The density information from the detector is sent to a computer, which calculates a score of the average density of the bone. This score is then compared to the expected range for someone of your age, height and weight. A low score indicates that the bone is less dense than it should be, and is therefore more prone to fracture.

### How long does it take?

A DEXA scan takes only 15 – 20 minutes, and is a painless procedure. You simply need to lie still on the specially designed table as the X-Ray source and detector slowly move over the areas being tested. These are typically your lower back and one hip.

Once the scan is complete, the Radiologist will review all of the statistical information and send a full report to your doctor.



## FAQs

An estimated 4.7 million Australians over the age of 50 currently have osteoporosis or osteopenia, with over 144,000 associated fractures 920130.

In general practice, early detection can prevent a first fracture. For people who have already suffered a fracture, investigation and initiation of osteoporosis medication is crucial to reduce the very high risk of subsequent fractures

Osteoporosis is more common at older ages, with over 1 in 5 women (22.8%) over the age of 65 years having osteoporosis, compared with around 1 in 20 men (5%)

### Who is at risk?

- Women with early menopause, surgical menopause
- Low body weight compared to height
- Diet - low intake of milk products and lack of vitamin D
- Life-style factors: cigarette smoking, caffeine, alcohol abuse, lack of exercise
- Drugs and diseases, corticosteroid treatment, hyperthyroidism, anorexia nervosa, amenorrhoea, arthritis, long term diabetes
- Genetic factors (including family history and ethnicity)

We also offer Whole Body Imaging for Total Body Mass Index. This service is ideal for people who are serious about improving their health and getting into shape. This emerging technology is being used in the fitness area and is considered to be highly accurate in measuring the body's soft tissue composition including muscle mass and fat mass making it ideal for tracking progress.

The scan is for three main groups:

1. Professional and recreational athletes, body builders
2. Personal training clients
3. Weight loss patients