

❖ **OSTEOPOROSIS**

This is a condition where bones become brittle and porous and become more likely to break easily. It is more common in women than men especially after menopause, it can occur when on certain medications or having certain medical conditions, as well as being of low or extremely high body weight.

**How can I prevent Osteoporosis?**

You need to have sufficient calcium and vitamin D levels in your body. Regular blood tests are recommended to assess your levels and it may be advisable to have a bone density scan so that you can track the integrity of your bones. This may also be relevant for the extraction of teeth or placing an implant for your dentist, as the integrity and strength of your bones are critical for a successful outcome.

You should aim for a minimum of 3-5 serves of calcium rich food per day and these can be found in; yoghurt, milk, cheese, tofu, soy, broccoli, cabbage, chickpeas, almonds and cereals. This is particularly important whilst pregnant, as there is a growing need to supply calcium for your baby's bone development as well as maintaining the health of yours.

Vitamin D is also essential for strong bones and is active in the D3 form. You can get small amount of vitamin D2 in herring, eggs, mackerel and liver but it needs to be converted in the body into its active form. Vitamin D3 is obtained through sunlight. On average people need 6 to 8 minutes per day of sunlight before 10am and after 2pm; but this does depend on your skin colour and other factors. The table below is from the Osteoporosis Australia regarding the recommended times in the sun;

Skin Type	Season	Skin Exposed	Recommended time of day	Sun Exposure
Moderately Fair	Summer	Arms or equivalent	mid morning or mid afternoon	5 – 10 minutes
Darker skin	Summer	Arms or equivalent	mid morning or mid afternoon	15 – 60 minutes*

\*depends on location within Australia and type of skin

Skin Type	Season	Skin Exposed	Recommended time of day	Sun Exposure
Moderately Fair	Winter	Arms or equivalent	midday	7 – 30 minutes*
Darker skin	Winter	Arms or equivalent	midday	20 min – 3hrs*

\*depends on location within Australia and type of skin

As well as this, you should try to limit the consumption of caffeine and alcohol which can leach calcium out of bones. It is also advisable to stay within the healthy BMI, because being underweight can greatly increase your chances of having brittle bones.

Doing weight bearing exercises such as light weights, squats and lunges can help increase the strength of bones. It is also important not to be overweight as this puts extra strain on the bones.

**How can I treat Osteoporosis over-the-counter?**

There is no 'treatment' over-the-counter as they all require a prescription from your doctor and regular blood tests and monitoring to minimise the possible harm and progress of the condition.

However you can try to maintain bone health through adequate Calcium intake and Vitamin D supplementation if suitable for you. Below are the daily recommended amounts of each in men and women;

	<b><u>MEN 19-70 and WOMEN 19-50</u></b>	<b><u>MEN &gt; 70 and WOMEN &gt;50</u></b>
<b><u>CALCIUM</u></b>	1000mg per day	1300mg per day
	<b><u>MEN AND WOMEN &lt; 70</u></b>	<b><u>MEN AND WOMEN &gt; 70</u></b>
<b><u>VITAMIN D</u></b>	600 IU per day	800 IU per day

### **What products are available OTC to treat osteoporosis?**

There are various combinations of calcium and vitamin D that are available in products in pharmacies or health food stores. It depends on the dosage that you require of each based on your bone health.

The main consideration is that Calcium is available in different salt forms; and the Citrate salt is absorbed better and has less stomach related side effects including constipation. The Carbonate form is absorbed less; but the stomach related side effects may be reduced by taking the tablets with food and drinking plenty of water.

<b>PRODUCT</b>	<b>INGREDIENTS</b>	<b>DOSAGE</b>	<b>COMMENTS</b>
CITRACAL	Calcium Citrate 600mg	1-2 tablets daily	Absorbed well in the citrate form, so less stomach side effects
CITRACAL + D	Calcium Citrate 600mg + Vitamin D3 400IU	1-2 tablets daily	Absorbed well in the citrate form, so less stomach side effects plus the benefits of D3
CALTRATE	Calcium Carbonate 600mg	1-2 tablets daily	
CALTRATE + D	Calcium Carbonate 600mg + Vitamin D3 500IU	1-2 tablets daily	
CALTRATE PLUS	Calcium Carbonate 600mg, Vit D3 500IU, Magnesium, Zinc, Copper and Manganese	Take 1-2 tablets daily	Contains extra minerals to improve bone strength and vitality
ETHICAL NUTRIENTS BONE BUILDER	Equivalent to 366.5mg Calcium, Phosphorus 120mg, Boron 1mg, Vitamin K 27mcg, Vitamin D3 333.3IU	1 three times a day	Part of the calcium is in the form of hydroxyapatite which is well absorbed and has less stomach side effects
OSTELIN	Vitamin D3 1000 IU	1 daily	Gel caps which are easy to swallow and quite small
OSTEVIT D	Vitamin D3 1000 IU + Calcium Carbonate 600mg	1-2 tablets daily	High strength vitamin D and Calcium

For further information visit [Osteoporosis Australia](http://www.osteoporosis.org.au) which has very useful information about maintaining optimal bone health as well as having an excellent information leaflet that you can access directly from [http://www.osteoporosis.org.au/images/stories/consumer\\_resources\\_updated/oa\\_consumer\\_calcium.pdf](http://www.osteoporosis.org.au/images/stories/consumer_resources_updated/oa_consumer_calcium.pdf)

### **What If I am taking Prescription Medication for my Osteoporosis?**

If you are taking medications prescribed by your doctor, commonly known as Bisphosphonates then you must inform your dentist immediately on the Medical history form provided to you. This is critical as these medications can cause osteonecrosis of the jaw and miscommunication to your dentist can cause you severe complications when receiving dental treatment, particularly extractions and implants, however not only reserved to these. Please do inform your dentist of all accurate and updated medication that you are taking.