



# What Happens When Bones Become Weak, Brittle and Break?

**Health of Your Bones** 

We have over 200 bones that make up our skeletal system. These bones function to move, support, and protect the various organs of the body, produce red and white blood cells and store minerals. Bones are at their strongest at around age thirty and thereafter their strength and integrity begins to decline. Maintaining bone strength is extremely important as you age, to prevent your bones becoming weak and brittle, and to prevent osteoporosis.

# What is Osteoporosis?

Osteoporosis is a serious condition in which the bones become brittle and fragile, leading to a higher risk of fractures than in normal bone. This occurs when bones lose minerals, such as calcium, more quickly than the body can replace them. This leads to a loss of bone thickness (i.e. a loss of bone mass or density). As the bones become thinner and less dense, even a minor bump or accident can cause serious fractures.

#### **A Silent Disease**

The most common sites affected by osteoporosis are bones in the hip, spine, wrist, ribs, pelvis and upper arm; however, any bone can be affected by osteoporosis. Osteoporosis is often called the 'silent disease', as usually there are no signs or symptoms that bones are thinning until a fracture occurs.

#### Osteoporosis is On The Rise

Recent statistics show that in Australia, 1 in 2 women and 1 in 3 men over 60 years of age will have an osteoporotic fracture in their lifetime. In fact, every 8 minutes, someone is admitted to an Australian hospital with an osteoporotic fracture. This is expected to rise to one every 3 to 4 minutes by the year 2021, as our population ages.

## **Risk Factors for Osteoporosis**

You can significantly increase your risk of developing osteoporosis by:

- Smokina
- Drinking excessive amounts of alcohol
- Not getting enough sunlight exposure
- Leading a sedentary lifestyle
- Eating a diet low in calcium

## **Calcium is Vital For Bones**

Calcium is a vital mineral required for the formation of strong bones, as it helps increase the density and strength of bones. Calcium can be found in some foods, particularly dairy. However, many people do not get their recommended daily intake (RDI) of calcium from their diet. Fortunately, if you are not getting enough calcium from your diet, calcium can be taken in the form of a natural supplement.

## Do You Know What The Best Form of Calcium is?

If you need to take a calcium supplement, keep in mind that not all calcium supplements are created equal. Microcrystalline hydroxyapatite is a form of calcium shown to be superior to other forms of calcium. This form of calcium has been shown to be very well absorbed and highly effective in the management of osteoporosis. As well as calcium, microcrystalline hydroxyapatite also contains all the natural elements of healthy bone, including silica, boron, type 1 collagen, zinc, manganese, copper, and the all-important GAGs (glycosaminoglycans). GAGs are proteins upon which bone tissue is built, and are not present in other types of calcium supplements.

#### **Nutrients to Build Bone**

As well as microcrystalline hydroxyapatite, the following herbs, vitamins and minerals also help to keep your bones healthy and strong:

- **Epimedium** Is a herb shown to enhance bone strength, by stimulating the activity of the cells that are responsible for bone formation.
- Vitamin D Is required for the absorption of calcium and phosphorus. It is necessary for the proper growth and development of bones.
- Magnesium Is an important mineral for the growth and strength of bone. Correct levels of magnesium are needed to ensure the proper utilisation of calcium in the growth of bone tissue.

If you need extra calcium, talk to your Practitioner.
Your Practitioner can also advise you on a natural supplement that contains all of these nutrients in one convenient tablet.

## **Look After Your Bones**

As well as supplements to reduce the risk of you developing osteoporosis there are some simple diet and lifestyle changes that you can make, including the following:

- Eat a diet rich in high calcium foods, including dairy, almonds, buckwheat, egg yolk, green leafy vegetables and sardines.
- Increase the amount of weight bearing exercise you do each week (e.g. walking).
- Quit smoking.
- Decrease your alcohol intake.
- Make sure you get some mild sun exposure (i.e. just 10 to 15 minutes most days) to increase your natural vitamin D production.

There is a lot that can be done to reduce your risk of developing osteoporosis. For advice on diet and lifestyle modifications, as well as the best supplements to minimise your risk of developing osteoporosis and bone fractures, come and see our qualified Practitioners today.