

How to maintain healthy bones

Weight bearing exercise

Your skeleton grows stronger if you do regular weight-bearing exercise. This is any kind of physical activity where you are supporting the weight of your own body, for example jogging, aerobics, tennis, dancing, tai chi and brisk walking.

Weight lifting is another good type of bone-building exercise, where the action of the tendons pulling on the bones seems to boost strength.

Diet

99 percent of calcium is stored in our bones. While it is important to eat plenty of calcium to help build or maintain healthy bones, other vitamins and minerals are also important. If you enjoy a wide variety of food you will get a mix of all the vitamins and minerals you need.

Foods rich in calcium:

- Dairy products; milk, cheese, yoghurt
- Broccoli, spinach, kale, okra
- Pulses; baked beans, kidney beans, lentils
- Dried fruit; figs, prunes, raisins
- Oily fish; sardines, pilchards, salmon
- Dairy alternatives; soya milk, tofu

Vitamin D is vital to help the body absorb calcium. The main source is the sun through our skin which the body converts into vitamin D and stores in our fat.

To gain sufficient amounts of Vitamin D most people need approx 20 minutes sunlight exposure to their face and arms every day during the summer months.

Certain foods also provide Vitamin D, these include:

- Oily fish; sardines, pilchards, mackerel
- Cod liver oil supplements
- Liver
- Egg yolks
- Fortified products; milk, cereal, margarine, fruit juices

Other Lifestyle changes

- Stop smoking – smoking increases the rate of bone loss
- Reduce alcohol intake to less than 3-4 units a day

In Summary

- Speak to your GP if you are concerned you may have Osteoporosis to ensure you are on the right types of medications.
- Make sure you are getting enough calcium, Vitamin D & sunlight.
- And keep up the exercise!

Bone Health & Osteoporosis



A guide on risk factors for osteoporosis and how you can maintain healthy bones

Falls Prevention Service

Bone is alive and constantly changing throughout life. Old, worn out bone is broken down and replaced by bone building cells in a process of renewal called bone turnover.

After the age of 35, bone loss increases very gradually as part of the natural ageing process. This bone loss becomes more rapid in women for several years following the menopause due to reduction in the levels of the hormone; oestrogen. This can lead to osteoporosis and an increased risk of broken bones, especially in later life.

Osteoporosis causes the inner structure of bones to become thin, which makes the bone more fragile and prone to break after a minor bump or fall. These broken bones are often referred to as fragility fractures. Although fractures can occur in different parts of the body, the wrist, hip and spine are most commonly affected.

In the UK, **one in two women** and **one in five men** over the age of **50** will break a bone mainly because of poor bone health.

Risk factors for Osteoporosis

There are certain things that make people more at risk of developing osteoporosis:

- Low bone mineral density
- Older age
- Women more than men
- Smoking
- +4 units per day alcohol
- Glucocorticoid treatment (affects formation of new bone)
- Parental history of hip fracture.
- Previous Fragility Fracture
- Having a small thin frame
- Rheumatoid arthritis

Diagnosing Osteoporosis

You may need a special scan which measures bone density, called a dual energy x-ray absorptiometry (DXA) scan. It is a simple, painless procedure and is recommended for those considered to be at high risk of fragility fractures and who may need medication to strengthen their bones.

Alternatively, the diagnosis of Osteoporosis may be assumed in women aged 75 years or older if clinical signs and risk factors are present. In these cases treatment can be started straight away without the need for a DXA scan.

Medication

There are different types of medication your doctor may prescribe to improve the health of your bones. Something as simple as Calcium and Vitamin D may be sufficient to protect your bones or you may require additional medication as well. The aim of all drug treatments is to lower your risk of future fractures and there are a range of effective medications that do just that.

It is important to remember that there are now many different medications available to treat Osteoporosis, so if you have any difficulties taking one type, there is often something that may suit you better. Always speak to your GP if you feel you are encountering side effects with your medication.