

OSTEOPOROSIS

This briefing is produced as part of the Building Community Capacity Project by AVDC's Lynne Maddocks. Contact on 01296 585364 or lmaddocks@aylesburyvaledc.gov.uk for more information.

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The bones in our skeleton are made of a thick outer shell and a strong inner honeycomb mesh of tiny struts of bone. Osteoporosis means some of these struts become thin, which makes the bone more fragile and prone to break after a minor bump or fall.

Consequences of osteoporosis

Having osteoporosis does not automatically mean that your bones will break; it just means that you have a 'greater risk of fracture'. Thin, fragile bones in themselves are not painful but the broken bones that can result, can cause pain and other problems. Bones that break because of osteoporosis will still heal in the same way as they do in people who do not have osteoporosis, which is usually about six to eight weeks. Although fractures can occur in different parts of the body, the wrist, hip and spine are most commonly affected.

Risk Factors

Genes - Our bone health is largely dependent on the genes we inherit from our parents. In fact, if one of your parents has broken a hip, you may be more susceptible to developing osteoporosis and fragile bones.

Age - Bone loss increases in later life so by the age of 75 about half of the population will have osteoporosis. As we get older bones become more fragile and more likely to break.

Gender - Women have smaller bones than men. The female hormone oestrogen has a protective effect on bones, and after menopause this effect is lessened.

Low body weight – If you have low body mass index (under 19) you are at greater risk of developing osteoporosis. Calculating your own BMI is very easy if you know your height and weight: Take the weight (lbs) and divide it by height (in). Take the result of that calculation and divide it by height again. Then, multiply that number by 703. For example someone who is 6 stone 7 lb (91lb) & 5 ft 5 in (65in) $[91 \div (65)^2] \times 703 = 15.14$ BMI and 15 means they have a low body weight.

Previous fractures - If you have already broken bones easily, including in the spine, then you are much more likely to have fractures in the future

Smoking – current smokers are more likely to break bones

Alcohol - intake of more than 3 units daily can increase your risk of osteoporosis

What can I do to build healthy bones and to prevent fractures?

We think our skeleton will provide a solid framework for life but it needs tender loving care just like our skin, hair or heart. There are many steps you can take to help build healthy bones, which are all linked to leading a healthy lifestyle.

Get physical!

Your skeleton grows stronger if you do regular weight-bearing exercise, such as jogging, aerobics, tennis, dancing and brisk walking, and also weight lifting. If you have osteoporosis you may need to be careful of vigorous, high impact exercise but it's important to stay active and find something you enjoy. Try swimming, gardening, walking, golf and Tai Chi.

Eat your way to healthy bones

The body contains 1kg of calcium, 99 percent of which is stored in our bones. It is important to eat plenty of calcium to help build or maintain healthy bones, but other vitamins and minerals are also important. Eating a wide variety of food you will get all the vitamins and minerals you need.

The importance of vitamin D

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. Most of us will get enough sun to help our bones if we get out and about in the summer without even thinking about it.

However, older people, those who do not go out much and people who cover up for religious or cultural reasons may become deficient, and sometimes supplements may be prescribed.

For help in getting physical exercise that you can manage, contact AVDC's specialist Helen White on 01296 585195 or hwhite@aylesburyvaledc.gov.uk

National Osteoporosis Society Helpline: 0845 450 0230,
Email info@nos.org.uk Website: www.nos.org.uk

9am – 5pm, Monday – Friday