

OSTEOPOROSIS

Osteoporosis is a condition where there is decrease in bone mass. The fragile bones that result are likely to break when exposed to stresses that would normally be tolerated. Factors which may increase the risk of developing osteoporosis include age, a significant family history of osteoporosis, premature menopause, a history of amenorrhoea (loss of periods), being underweight, long-term use of medications such as corticosteroids and certain ant-acid drugs. Bone density naturally decreases from the mid-thirties onwards. As sex hormones, primarily oestrogens in women and androgens in men, are important in maintaining normal rates of bone deposition the process is accelerated after the menopause. Because men continue to produce androgens until relatively late in life severe osteoporosis is less common in males below the age of 60. Although this natural ageing process cannot be prevented there are several lifestyle and nutritional factors, which may slow down the process or prevent a sharp decline in bone density.

EXERCISE

Regular physical exercise has been shown to prevent loss of bone mass. The level of exercise achieved depends on the individual. As a guideline, one hour of moderate physical exercise three times a week is advisable. Walking, dancing, gentle jogging and aerobics are all great. Weight-bearing exercise is particularly useful and tailor-made programmes can be devised at a local gym. Vulnerable areas such as wrists can be strengthened by exercises such as squeezing a tennis ball or lifting tins of food!

NUTRITION

Minerals

Calcium is essential for healthy bones and teeth. The amount of calcium absorbed by the bones in youth and middle age influences the bone mass in later life. It is suggested that an adequate and continuing intake of calcium in the diet after middle age will also help to maintain healthy bones.

Calcium is not the only important mineral as others are required for efficient absorption of calcium into the bones. These include magnesium, manganese, zinc and boron.

Dietary sources of calcium

These include kelp; blackstrap molasses; oily fish; tofu and other soya products; sesame seeds; almonds; chickpeas; oranges and baked beans. Dairy products are not necessarily the best natural source of calcium as they are low in magnesium and high in animal protein. In the USA 25% of the average diet is made up of dairy products yet osteoporosis is still widespread. In China and areas of Southeast Asia, where dairy product intake is minimal, osteoporosis and other bone disorders are far less common when compared to Western countries.

Dietary sources of minerals

Dark green leafy vegetables such as broccoli, cabbage and watercress; seaweed; nuts and seeds; dried fruits; soya beans are all mineral rich foods. Herbs, which are rich in minerals, include nettles, parsley, alfalfa, yellow dock, horsetail and dandelion. Some of these can be included in the diet or they can be taken as herbal teas.

Vitamin D

Vitamin D is necessary for the absorption of calcium. The best natural source is sunshine but fish liver oils; sardines, herring, salmon and tuna are also rich sources.

Vitamin C

Vitamin C enhances bone formation and can be found in raw fresh fruit and vegetables such as berries, red peppers, green leafy vegetables, cauliflower and kiwi fruits.

The trace element boron enhances the activity of oestrogen in bone metabolism. Foods rich in boron include apples, pears, grapes, raisins, peaches, soya beans, almonds and hazelnuts. Phyto-oestrogen rich plants and foods help boost oestrogen levels in the body and are therefore beneficial at the menopause. The best natural sources are soya products, linseeds, wholegrains, nuts and legumes.

Foods to Avoid

Certain foods are known to affect mineral absorption and should be reduced in the diet or avoided altogether. Coffee, tea, white sugar, alcohol, fatty foods and foods with high acidity such as rhubarb, spinach and citrus bind with calcium making it unavailable for absorption. Smoking has the same effect.

Foods high in phosphates also inhibit calcium absorption. These include convenience and 'junk' foods.

A diet high in animal protein from meats, dairy products and eggs is believed to inhibit mineral absorption. Vegetarians have been shown to be less at risk of developing osteoporosis.

Food Supplements

A supplement can never be a substitute for a good nutritious diet, however if you feel you are missing out on some important nutrients a supplement can ensure optimum intake. Ask your herbalist for advice based on your individual requirements.

Menopausal women: supplements containing calcium, magnesium and boron are recommended

Multiminerals: high quality supplements containing all the essential minerals. Chelated mineral supplements are combined with amino acids to enhance mineral absorption. Blue-green algae: are rich in minerals including calcium and magnesium.