

Supporting your structure

By **Helena Hall**
Nutritionist & Regular
industry advisor



Osteoporosis is commonly known as 'brittle bone disease'. Contrary to popular belief bone is not solid. A cross section of a bone is like looking at a 'Crunchie' chocolate bar split in half. There is a thick outer shell (the chocolate) and a strong inner honeycomb mesh of tiny struts of bone. The more holes there are, the more osteoporotic the bone. Broken wrists, hips and spinal bones are the most common fractures in people with osteoporosis and it often remains undetected until the time of that first broken bone.

What causes Osteoporosis?

Bones are constantly being worn away and rebuilt. In fact the entire skeleton is replaced about once every 10 years. In children and young people the rate of bone growth is faster than the rate of loss so that bones can grow and strengthen. However once we reach our 50s regeneration slows and bone loss increases.

When progesterone levels fall, before the menopause, the body starts to lose Calcium more rapidly. When oestrogen levels fall the rate of bone loss accelerates too which often results in postmenopausal osteoporotic fractures.

A recent survey by the British National Osteoporosis Society found thousands of women in their 50s suffer from fractures, chronic back pain and loss of height. A staggering one in two women and one in eight men will suffer a bone fracture at some point in their lives, often resulting in impaired mobility and independence.

What impact does diet have on bone density?

Calcium intake during childhood when bones are growing is important in contributing to bone mass in later life. However, Calcium in the diet or in supplements must be in combination with other elements in order for bone growth to occur. This includes Magnesium, which regulates the transport and metabolism of Calcium; Boron which is needed to help the enzymes which take part in bone growth; Manganese which is essential for the formation of the osteoid (the precursor of bone) and Vitamin D which is essential for Calcium uptake and distribution in the body.

Salt also increases Calcium loss from the body. The average salt intake in the UK is between 9 and 10g a day but the government recommends consuming no more than 6g a day which is about a teaspoonful. This is not a large amount, especially when you consider that 75% of the salt we eat is already in everyday foods. Fizzy drinks especially colas contain phosphoric acid which 'steals' Calcium out of the body.

If insufficient dietary Calcium is available during pregnancy it is leached out of the mother's bones for the growing foetus and whilst breastfeeding, for milk. Osteoporosis in pregnancy is becoming increasingly common in women in their 20s and 30s who continue to diet into their pregnancy for fear of weight gain.

How is osteoporosis treated?

Treatment of osteoporosis is often through the use of drugs called bisphosphonates. Bisphosphonates bind permanently to the

Osteoforce – Protect your bones for a healthy life

The more you look after your bones now, the less trouble they will give you later on. That means lower risk of painful conditions such as osteoporosis and osteoarthritis. As bones age, they lose calcium, particularly in post-menopausal women when oestrogen levels fall, although the conditions affect both men and women. So our new formulation Osteoforce provides Calcium as well as Magnesium, Zinc and Vitamin D, the sunshine vitamin. All these ingredients work together to promote healthy bones; the Vitamin D content increase the absorption of Calcium and the Magnesium works with

these two to increase bone density. One in three women and a high proportion of men over 60 will suffer a fracture due to osteoporosis – don't be one of them.

030413 Pot of 180 £6.95 4 daily
030413 Pot of 360 £11.95

Osteoforce contains..

- ✓ Vitamin C
- ✓ Calcium
- ✓ Magnesium
- ✓ Vitamin D3
- ✓ Zinc
- ✓ Boron
- ✓ Copper
- ✓ Manganese



surfaces of the bones and slow down the osteoclasts (bone-eroding cells). This allows the osteoblasts (bone-building cells) to work more effectively. However, side effects of bisphosphonates include nausea, abdominal pain and loose bowel movements.

HRT (Hormone Replacement Therapy) is also thought to help reduce the likelihood of developing osteoporosis. HRT usually contains either oestrogen and/or progesterone and it is most often used to treat symptoms of menopause. Evidence suggests that HRT may reduce the risk of osteoporotic fractures but research has come to light which demonstrates a 26% increased risk of breast cancer found in women taking HRT.

Many women are now choosing to reduce their menopausal symptoms and reduce their chances of developing osteoporosis with improvements in their diet, lifestyle and supplementation.

Can I prevent osteoporosis?

About 80% of our bone health is inherited from our parents. Research reveals that a family history of the disease leaves you at greater risk of the same happening to you. But there are steps you can take to influence the 20 percent of bone health left in your hands! It doesn't sound much but it's still an important amount that can make a difference.

Bone boosters

- ✓ Your skeleton grows stronger if you do weight-bearing exercise. This is any kind of physical activity where you are supporting the weight of your own body. Try jogging, aerobics, tennis, weight lifting, dancing or brisk walking.

- ✓ A reasonable amount of Calcium and Vitamin D in the diet is essential. Top Calcium foods include yoghurt, milk, cheese, salmon, tofu, broad beans, broccoli, almonds and sardines.

- ✓ Many studies have shown that a combination of Omega 3 and Omega 6 fats has a positive effect on bone health. So try to eat 2 portions of fish per week one of which should be oily e.g. mackerel, salmon and fresh tuna. If you don't eat fish then you should consider a supplement such as Cod Liver Oil.

- ✓ Consider taking an anti-osteoporosis supplement as a safety net. These can ensure you consume sufficient bone friendly vitamins and minerals everyday. Look for one which includes Calcium, Vitamin D, Magnesium, Manganese, Boron and Copper.

The Future

You cannot see or feel your bones getting thinner, so many people don't realise they have osteoporosis until it is too late. There are many simple steps which can be taken to improve our diet and lifestyle to help prevent osteoporosis. Supplementation is also of enormous benefit to ensure our body receives an optimum level of crucial nutrients on a daily basis.

To read and comment on this article, along with other articles written by our favourite healthcare experts, visit our website and click on 'Weblog' at the top of the screen:
www.healthydirect.co.uk

HOW DO YOU SCORE?

Check your osteoporosis risk below, if you answer 'yes' to two or more of the questions listed, you could be at high risk of developing osteoporosis:

1. Are you female?
2. Is their a family history (such as Mother or sibling) of osteoporosis?
3. Do you smoke?
4. Do you, or have you ever avoided dairy products such as milk and cheese?
5. Do you drink fizzy drinks regularly (more than 4 times a week)?
6. Do you sometimes consume more than 3 units (women)/4 units (men) of alcohol per day?
7. Do you have a sedentary lifestyle (rarely engaging in weight-bearing exercise)?
8. Do you add salt to cooking, to food at the table or do you eat salty snacks or ready meals?

Turn to **page 6** for a full range of **Bone Health products**

