

Osteoporosis: Prevention and treatment the natural way

By Alexis Touyz

Osteoporosis is a condition where the decline of bone density affects the health of an individual. The consequence is fractured bones often broken hips and wrists or compression fractures of the spinal vertebrae. An estimated 1 in 4 people in North America will be affected by osteoporosis and most will be unaware of the state of their bones until a fracture occurs.

Bone is living tissue. There is a 2 part process to releasing/absorbing minerals

1. **Osteoclasts** are cells within the bone which clear away old material or weak tissue, which is then removed by the blood. **Parathyroid hormone (PTH)** encourages osteoclast activity.
2. **Osteoblast** cells are cells which deposit new material and collagen back into the bone. **Calcitonin** is the hormone which encourages osteoblast activity

A key factor contributing to the development of osteoporosis is the chronic acidosis typical in most western diets. This acidosis stresses the body and the **acid alkaline balance** of the blood. Acidosis will cause blood calcium levels to decline as calcium is one of the main nutrients used to neutralize acids. The body will draw calcium out of the bones to maintain balance i.e. increased osteoclast activity. Alkaline reserves are also stored in the bone in the form of salts. These salts also neutralize harmful excess acids (biochemical waste from metabolic function). Spontaneous neutralization occurs which keeps harmful acids from forming. This causes depletion of mineral reserves, which causes osteoporosis.... (1) Diets high in acid forming foods (meat and carbohydrates) reduce our mineral reserves.

Bones needs Calcium. The body cannot make it so we have to eat it. Recommended daily allowances are: 1200mg in post menopausal women, 1000mg in pre menopausal women. Dietary sources of calcium are, dairy, white beans, spinach, turnip, greens .broccoli. bok choy, garbanzo, beans, kale, almonds, sardines, salmon, soybeans and certain fortified cereals.

There is a tremendous emphasis placed on the importance of dairy as the source of calcium. While this is true, there are startling figures which suggest dairy may not be the miracle it's touted to be. The instance of

osteoporosis is higher in countries which consume higher levels of dairy
“African Women in the United states eat at least 4 times more calcium than African women in Africa and have at least 9 times more osteoporosis. ... Calcium consumption in Hong Kong and Greece has doubled in the last 30 years and the rate of osteoporosis has tripled in Hong Kong and more than doubled in Greece.”(2) Other minerals are also incredibly valuable in the dealing with osteoporosis.

Milk has 10x more calcium than **Magnesium**. Magnesium helps suppress Osteoclast activity and stimulates calcitonin which encourages the deposition of minerals back into the bone. If there is a Magnesium imbalance parathyroid hormone dominates which stimulates osteoclast activity and there is net bone loss instead. The ideal ratio of calcium to magnesium is 1:1 or minimally 2:1.

Magnesium is hard to get nutritionally. The best sources are whole grains, leafy greens, beans avocados and nuts. Magnesium is essential to calcium absorption so supplementation is often recommended. Supplements often have a 6:1 ratio. This is inadequate. The ratio needs to be at least 2:1 calcium to magnesium. If you take 1200mg of calcium you need 600mg of magnesium. This high a dose can cause diarrhea so splitting the dose during the day and taking it with food is advisable.

Potassium and **Phosphorus** are other essential minerals. Taken as a carbonate or a citrate provides the essential bicarbonate (detoxifying compound) which neutralizes the acids made by the body. **Vitamin D** helps with calcium absorption and **Vitamin K** helps bind calcium to the bone especially after there is a decline in estrogen levels. Too much Vitamin A can inhibit new bone growth as well stimulate osteoclast activity. Vitamin A also interferes with the absorption of Vitamin D.

There are many excellent supplements available today. These usually form part of a treatment plan for osteoporosis. Healthcare providers can help sort out supplementation protocols. Osteoporosis is a condition where the nutrition required for healthy body is insufficient. Nutritious mineral rich herbal teas can also be included in a healthy diet. This will also help boost the minerals and vitamins available on a daily basis. Homeopathy maintains the body in optimum condition. A well selected remedy also corrects problems with function in the body. The function of the calcium based systems is compromised. Correcting the imbalance in phytonutrients and

using your constitutional homeopathic remedy is an excellent choice for correcting this

Avoid **bone damaging substances** like excess salt, protein, alcohol, tobacco, coffee, carbonated beverages, fat, processed food and sugar as these are all acid forming and thus eat away at bone.

Exercise! Strength training and low impact aerobics like walking dancing and gardening stimulate bone. Flexibility exercises are important for joint mobility. Avoid high impact jarring exercises as well as twisting, bending forward at the waist, sit-ups and rowing. Don't forget you posture.

Risk factors for Osteoporosis

Menopause before 48
Ovarian surgical removal
Insufficient Calcium intake
Not doing enough exercise
Smoking
A family history of the condition
Osteopenia
Alcohol abuse
A thin body and small frame
Fair skin
Hyperthyroidism
Long term use of steroids

References

1. <http://www.health-reports.com/Osteoporosis.html>
2. <http://www.medicinenet.com/osteoporosis/article.htm>
3. <http://www.naturalsolutionsmag.com/index.cfm/fuseaction/center.subTopic/subTopicID/37/Osteoporosis>
4. <http://www.mayoclinic.com>
5. NIH. National institute of Arthritis and Musculoskeletal and skin disorders
6. NIH. Senior health: Osteoporosis

Footnotes

1. Susan Brown, Are your Bones strong enough
<http://www.naturalsolutionsmag.com/index.cfm/fuseaction/center.subTopic/subTopicID/37/Osteoporosis>
2. Hoe to prevent or treat Osteoporosis naturally
<http://www.health-reports.com/Osteoporosis.html>