
HORMONE BALANCE, NUTRITION & OSTEOPOROSIS

Bones are living tissue that grow, mend when broken, and continually renew themselves.

There are two types of bone cells

-

Osteoclasts that locate old bone needing renewal, dissolve it and leave tiny unfilled spaces behind (bone loss),

-

Osteoblasts that move into these spaces and produce new bone.

Childhood and early adulthood are critical times for building healthy bone - the pituitary growth hormone is most active and new bone formation dominates. After puberty these two activities are usually in balance and the bone mass and strength should remain constant.

Osteoporosis means porous or honeycombed - osteoclasts are more active and bones become thin and brittle - bones break into tiny splinters.

This progressive lifestyle disease, where bone loss exceeds new bone formation, resulting in decreased bone density, is preventable. Proper treatment and prevention strategies have been hampered by misinformation viz that Osteoporosis is a/an

Ø

calcium deficiency disease - most women with osteoporosis, even those with a poor diet, are getting more than the minimum daily requirement of calcium in their diet.

Ø

estrogen deficiency disease - osteoporosis begins before estrogen levels fall and escalates at menopause. Estrogen can slow bone loss but cannot rebuild new bone. Progesterone on the other hand stimulates new bone formation.

Ø

disease of menopause - osteoporosis begins between 5 and 20 years before menopause when estrogen levels are high. A

Canadian study done on young female marathon runners developing osteoporosis found that they had stopped ovulating and their progesterone levels had dropped - they were estrogen dominant and progesterone deficient.

FACTORS INFLUENCING BONE LOSS

Low calorie diets deficient in calcium and other nutrients
Excessive alcohol and caffeine intake
High phosphorus intake - dairy products, meat, poultry, seafood, nuts, processed foods and carbonated drinks
High protein, sugar or sodium intake
Lack of Vitamin D
Too much or too little calcium
Too little magnesium
Sedentary lifestyle
Smoking
Imbalance of estrogen and progesterone
Diuretics, antibiotics, cortisone, anticoagulants, antacids, fluoride and metabolic acidosis

KEEPING YOUR BONES STRONG

Calcium is the predominant mineral in bone building and needs adequate gastric hydrochloric acid and Vitamin D to be absorbed.
Magnesium may be more important because it is necessary to move calcium into the bone and also helps to make the bone more flexible.
Other trace minerals such as boron, manganese, zinc, silicon and copper, together with Vitamin A, C and K are necessary for calcium to be incorporated into bone.

Exercise is a necessity for building and maintaining strong bones and should consist of at least 30 minutes of weight-bearing exercise five times a week.

Nutrients never act in isolation. Calcium on its own cannot build a shred of bone. Bone building requires many nutrients and if any one is in short supply bone formation will be retarded.

Daily nutritional requirements include complete protein for optimum functioning of the hormonal, enzyme and immune systems; vitamins to regulate metabolism and other biochemical processes and minerals to maintain healthy blood, bone, body fluids, nerve function and muscle tone.

Start a programme to bring your body back into balance with the addition, to your diet,

of whole food supplements that provide the correct balance of all amino acids, vitamins and minerals.

It takes effort to build bone with diet and lifestyle changes, and the only side effects are positive ones that enhance your overall well-being.