

BONE AND STRUCTURAL STRENGTH

Calcium

The bones serve as a reserve for calcium in the body; 98% of all calcium is stored in the bones, with a tiny but essential amount circulating in the bloodstream to enable nerves and muscles to work properly. When the blood maintains its alkalinity, at 7.38 pH, the calcium in the bones and the sodium in the stomach and joints remain safely in reserve. However, a high-protein diet or a diet that includes soda (phosphoric acid) drops the pH of the blood dramatically, and requires buffering minerals to be released into the blood to maintain its essential 7.38 pH.

A serving of kale or collard greens or other high-calcium food along with each protein serving (meat, egg, cheese, fish, protein) is a good way of balancing calcium with the acidic phosphorus and nitrogen in the meats. Another option is to carry calcium supplements to balance the proteins in your meals if you (like many Americans) are eating on the road. Please, keep your protein intake to 50-60 grams a day, and eliminate soda with phosphoric acid from your diet entirely.

Lifetime Calcium-Magnesium Citrate, 2 tps. 2 x a day, away from Strontium supplements

Vitamin D

Once thought of as the “sunshine vitamin that prevents rickets”, now Vitamin D is recognized as a hormone-like substance that supports immune health, bone density, mood, and avoidance of many cancers. For those living above the line between San Francisco and Philadelphia (this includes all of Massachusetts), supplemental vitamin D is essential. High levels of D allow intestinal absorption of both Calcium and Phosphorus (needed by bones), aid calcium transport to the bones, and reduce calcium loss through the kidneys, sparing calcium stores in the bones. It is also required for proper use of magnesium.

Elderberry D3fence, 1-2 daily, or any Vitamin D providing 2000 to 4000 IU daily.

Strontium Citrate – “STRONTIUM BONE MAKER”

Strontium is one of many trace minerals found in spring water and organic vegetables, but not found in processed foods. Its natural affinity is for the bone matrix and it is absorbed into bone tissue at the matrix surface. Researched since the 1950's, it promotes bone metabolism, leading to normal bone density. Strontium in the human skeleton is normally in a 3.5 to 100 ratio of strontium to calcium. Calcium, iron, and strontium all compete for the same absorption sites in the intestines, therefore leading to the recommendation that they be consumed at different times of day.

Like the claims of certain anti-osteoporosis medications, strontium stimulates an increase in the number of osteo-blasts (bone-building cells), while inhibiting the function of osteoclasts, the cells that reabsorb calcium into the bloodstream.

Animal studies have demonstrated that various forms of strontium are all effective as catalysts for bone rebuilding. One study resulted in an increase in osteoclasts in the thighbones of adult rats, with no side effect such as demineralization elsewhere. Another study showed a reversal of bone loss in female rats that had suffered estrogen loss.

Note: this product is very well tolerated and safe when calcium intake is supplied by supplements and the diet in adequate amounts, and vitamin D levels are adequate. It should **not** be used by those on kidney dialysis,

Strontium Bone Maker – 2 capsules daily, apart from calcium supplements, greens, or milk products.