**Strontium Bone Maker**

60 and 120 Veggie Caps

Ingredients per 2 capsules:
- Strontium ...........................................680 mg (elemental from 2194mg strontium citrate)

**Excipients:** modified cellulose (vegetarian capsule), cellulose, magnesium stearate (vegetable source).

**Suggested Adult Use:** Take two capsules daily. Calcium intake must also be adequate.
- Take your calcium supplement separate, i.e. not with the Strontium Bone Maker and at least 2 to 3 hours apart.
- And take your calcium an hour later.
- Take with or without food.

Note: Individuals with severe renal impairment should check with a health practitioner before using this product.

Suitable for vegetarians.

**Ingredients**

Strontium is a naturally occurring mineral present in water and food. Trace amounts of strontium are found in the human skeleton. Strontium has an affinity for bone and is taken up at the bone matrix crystal surface. The influence of strontium on bone metabolism has been researched since the 1950s. Studies show that strontium positively affects bone metabolism to promote bone formation and decrease bone resorption, leading to normalized bone density. Strontium citrate is a naturally occurring compound supplying stable strontium that is safe and suitable for consumption as a dietary supplement. (This form strontium is entirely different from the radioactive “strontium-90” formed by nuclear fission.)

**The Role of Stable Strontium in Human Bone**

Strontium is found naturally in the human skeleton. The level of strontium in bone tissue is approximately 3.5% of the calcium content of bone. Strontium taken orally through the diet and from supplements is preferentially incorporated into the teeth and bones. Research suggests that the oral absorption of strontium is dependent on age and decreases with increasing age. Scientists have suggested two methods of absorption of strontium from the gastrointestinal tract: passive diffusion and carrier-mediated absorption. In adults, strontium is absorbed to a lesser extent than calcium, possibly due to the larger molecular size of strontium in comparison to the calcium molecule. Both calcium and strontium compete with one another for absorption in the intestines. High dietary intake of calcium has been shown to reduce concurrent absorption of strontium. It has been proposed that when both elements are present together, twice the amount of calcium is absorbed from the intestines in comparison with strontium.

Animal studies suggest that extremely high dietary intakes of strontium, in the absence of adequate calcium intake, can actually disturb bone mineralization. At such concentration levels, strontium replaces calcium ions in bone. The unbalanced incorporation of strontium into bone tissue in the place of calcium may cause a disturbance of the bone lattice, resulting in decreased bone mineral density. It is precisely for this reason that calcium intake must be adequate when supplementing with strontium.

Further studies in animals reveal that strontium given as a part of the normal diet (when calcium intake is adequate) may have profound effects on bone formation and density. Oral administration of strontium doses to rats was shown to enhance the rate of bone formation and trabecular bone density.

**Benefits**

**Helps Maintain Strong, Healthy Bones**

**Mechanism of Action**

Strontium is a bone-seeking mineral incorporated by ionic substitution for calcium onto the crystal surface of bone.

Researchers have looked at the therapeutic potential of strontium based on in vitro and human studies. After assessing and analyzing the results of several investigations, scientists theorize that strontium may benefit bone health via a two-pronged effect. It appears that strontium interacts with the cells responsible for the normal bone remodeling process. The cells responsible for bone formation are known as osteoblasts, and the cells responsible for bone breakdown, or resorption, are called the osteoclasts. Strontium may stimulate the replication of pre-osteoblasts, leading to increased proliferation of osteoblasts (cells that build bone). This causes an increased synthesis of bone matrix. In terms of effects on osteoclasts (cells responsible for bone resorption), in vitro work shows that strontium directly inhibits their activity and prevents bone breakdown.

**Animal Studies**

Animal studies have shown that supplementation with strontium is extremely beneficial as a bone building catalyst.

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In one such study, strontium administered at low doses has been shown to increase the number of bone forming sites in thighbones of adult rats, without adverse effects on the mineral content of bone or mineralization of the organic bone matrix. A second study in rats indicated that strontium could reverse bone loss associated with a deficiency of the hormone estrogen in females.

Clinical Trials
Multiple clinical studies utilizing different forms of strontium have been conducted since the 1950s. Stable strontium as gluconate, carbonate, lactate and chloride have all been used in various trials that have reported efficacy of supplemental strontium in promoting healthy bones. Regardless of the form, it is the elemental strontium itself that exerts the positive effect on bone. While all of the various forms have a bioavailability of between 25 and 30%, gastric tolerance is reportedly better with strontium citrate, the form used in Strontium Bone Maker.

Safety
Supplementing with strontium is an effective means for supporting bone health and optimal bone density. When taken orally as recommended, strontium is well-tolerated and very safe. It is important to ensure calcium and vitamin D intakes are adequate when supplementing with strontium. This is underscored by earlier research on animals suggesting that increasing the intake of strontium via diet may demineralize bone when calcium is deficient. In rats with chronic kidney failure, strontium has been shown to cause osteomalacia, a condition in which bone is softened due to lack of mineral content. For this reason, people on kidney dialysis should not use strontium supplements. There are no published reports of toxic effects in humans due to strontium overdosing.

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Scientific References
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Helps maintain strong, healthy bones.*

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Distributed by: Doctor’s Best, Inc.
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Supplement Facts
Serving Size: 2 capsules
Servings per container: 30 servings
Amount per serving % Daily Value
Strontium 680 mg †
† Daily Value not established.

Other ingredients: modified cellulose (vegetarian capsule), cellulose, magnesium stearate (vegetable source).

Suggested Adult Use: Take two capsules at the same time daily with or without food. Be sure to take at least the RDI of calcium and vitamin D3. Do not take this product at the same time as a calcium supplement, as these minerals may compete with each other for absorption.

Note: Individuals with severe renal impairment should check with a health practitioner before using this product.

Suitable for vegetarians
CONTAINS NOTHING OTHER THAN LISTED INGREDIENTS