BIOGENESIS NUTRACEUTICALS

Presents for your consideration:

OsteoGenesis™ and OsteoGenesis E.S.™

? ? **Supports healthy bone density and growth**

? ? **Maintains optimal bone health and structure**

For the most complete bone density building products, choose OsteoGenesis™ or OsteoGenesis E.S.™ These two products are formulated to completely support the maintenance and development of healthy bones. Multi-supplement prescribing is no longer necessary to effectively support your patients bone metabolism. Clinical studies have shown that the ingredients in OsteoGenesis™ and OsteoGenesis E.S.™ can actually increase bone density.

Calcium

OsteoGenesis™ and OsteoGenesis E.S.™ provide your patients with two forms of highly bioavailable calcium.

Microcrystalline Hydroxyapatite (MCHA) Calcium is a calcium protein matrix that actually incorporates into bone. MCHA supplies the essential calcium, hydroxyapatite and collagen proteins, glycosaminoglycans, and trace minerals that are essential for a complete bone food.

Calcium Citrate/Malate is considered to be the most soluble and bioavailable form of calcium available. It has been reported to be six times more soluble than either calcium citrate or calcium malate alone. Supplementation reduces risk of post-menopausal bone loss, osteoporosis, and fracture.

OsteoGenesis™	Amounts per serving
Serving size	3 capsules
Number of servings per container	30
Calcium (150 mg. From 600 mg. MCHA Ca) (150 mg. From Ca citrate/malate)	300 mg.
Vitamin D3	150 IU
Vitamin K	200 mcg.
Phosphorus (MCHA)	60 mg.
Magnesium (150 mg. From Mg glycinate) (150 mg. From Mg citrate/malate)	300 mg.
Zinc (amino acid chelate)	8 mg.
Copper (amino acid chelate)	1 mg.
Manganese (amino acid chelate)	1 mg.
Equisetum arvense (Horsetail) 4:1 (organic silica)	100 mg
Ostivone (Ipriflavone)	100 mg.
Boron (citrate)	2 mg.
Vanadium (amino acid chelate)	100 mcg.
Suggested Dose: Take 1-2 capsules three times per day or as directed by your health care practitioner.	

OsteoGenesis E.S™	Amounts per serving
Serving size	6 capsules
Number of servings per container	30
Calcium (citrate/malate)	1000 mg.
Vitamin D (cholcalciferol)	400 IU
Vitamin K1	100 mcg.
Vitamin C (ascorbyl palmitate)	60 mg.
Magnesium (citrate)	500 mg.
Zinc (picolinate)	15 mg.
Copper (Gluconate)	1 mg.
Manganese (aspartate)	1 mg.
Equisetum arvense (Horsetail) 4:1 (organic silica)	50 mg.
Boron (citrate, aspartate)	4 mg
Suggested Dose: Take 1-2 capsules three times per day, or as directed by your health care practitioner.	

Magnesium

OsteoGenesis™ magnesium is supplied in both the glycinate and citrate/malate forms. In OsteoGenesis E.S.™ magnesium is provided in the citrate form only. Both products supply highly bioavailable forms of magnesium. Magnesium has been shown to regulate active calcium transport and optimize bone response when taken ***with calcium.*** Studies have shown that magnesium significantly increases bone density in menopausal women. Magnesium acts as a cofactor in vitamin D hormone

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activation, and in alkaline phosphatase enzyme formation of bone crystals. Magnesium also contributes to parathyroid hormone regulation.

Vitamin D3 (Cholecalciferol) is the natural form of Vitamin D. It has several beneficial actions on bone metabolism. It is essential in prevention of fractures resulting from osteoporosis and helps prevent bone loss in elderly women. Vitamin D enhances calcium transport across intestinal mucosal cells and enhances osteoblastic bone matrix production. It enhances production of the pro-bone hormone osteocalcin and has regulatory effects on alkaline phosphatase enzyme and collagen protein synthesis. In OsteoGenesis™ and OsteoGenesis E.S.™ we do not attempt to supply 100% of the RDA of Vitamin D. Many patients take a multivitamin/mineral formula that also contains Vitamin D. **UltraGenesis™ Multivitamin/mineral** with or without iron would be an excellent choice.

Boron improves the metabolism of calcium, phosphorus, and magnesium. It reduces the loss of these minerals through the urine. Boron influences the synthesis of estrogen, Vitamin D, and other steroidal hormones, extending their half-life by protecting them from rapid breakdown. Boron has been shown to increase the tensile strength of connective tissue in bone.

Horsetail (Equisetum arvense) is a natural organic source of water-soluble colloidal silica. Silica strengthens bone matrix connective tissue by enhancing cross-linking of collagen strands. Silica actually concentrates at calcification points of growing bone. Animals fed a silica deficient diet show bone developmental abnormalities.

Ostivone (Ipriflavone) is a synthetic derivative of a naturally occurring soy isoflavones. Ipriflavone helps to slow the rate of bone loss by regulating osteoclastic bone cell activity. In addition, Ipriflavone supports type 1 collagen (bone collagen) formation and promotes the secretion of calcitonin thus helping to regulate intracellular calcium.

Zinc, Copper, Manganese, Vanadium and Vitamin C assist in the production of type 1 collagen essential for healthy bone remineralization.

References:

1. Joiner-Bey, Natural Bone Health Agents. Monograph. 2000.
2. Dawson-Hughs B, et. al. A controlled trial of the effect of calcium supplementation on bone density in postmenopausal women. The New England Journal of Medicine 1990;323(13):878-883.
3. Pines A, Raafat H, Lynn AH, Whittington J. Clinical trial of microcrystalline hydroxyapatite compound ('Ossopan') in the prevention of osteoporosis due to corticosteriod therapy. Curr Med Res Opin 1984;8(10):734-742.
4. Anusdei D, et al. A double blind, placebo-controlled trial of ipriflavone for prevention of postmenopausal spinal bone loss. Calcif Tissue Int 1997 Aug;61(2):142-7.
5. Gennari C, et. al. Effect of ipriflavone – a synthetic derivative of natural isoflavones – on bone mass loss in the early years after menopause. Menopause 1998 Spring; 5(1): 9-15.
6. Nielson FH, et. al. Effect of dietary boron on mineral, estrogen, and testosterone metabolism in postmenopausal women. FASEB J 1987 Nov;1(5):394-397.
7. Ooms ME, et. al. Prevention of bone loss by vitamin D supplementation in elderly women: a randomized double-blind trial. J Clin Endocrinol Metab 1995 Apr; 80(4): 1052-8.

For Quality and Value without Compromise

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Is the logical choice!

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