

Collagen Max



Clinical Applications

- Reduces Fine Lines and Wrinkles*
- Thickens and Strengthens Hair*
- Strengthens Nails*
- Increases Hip Bone Mineral Density*
- Adds Flexibility to Bones*
- Promotes Healthy Joints*

*Collagen Max provides ch-OSA® (choline-stabilized orthosilicic acid), that helps naturally nourish your body's beauty proteins. Regular orthosilicic acid is highly unstable, leading it to form polymers. These polymers are too large for the human body to absorb. But the patented "choline stabilization" technology in Collagen Max prevents the polymers from forming, ensuring optimal absorption. Collagen Max has been formulated with clinically proven ch-OSA for your assurance.**

All Living Health Integrative Medicine Formulas Meet or Exceed cGMP Quality Standards

Discussion

Collagen is the body's main structural protein. Collagen makes up 70% of skin and gives skin both strength and elasticity. Collagen forms 30% of bone and gives bones the flexibility they need to withstand impact. The collagen fibers in bone are the binding sites for calcium as well as all bone minerals.^[1] Collagen is the major component of fascia, cartilage, ligaments, and tendons. But collagen production begins decreasing at age 18. By the age of 40, the decrease is about 1% per year.^[2] For women, the decline equates to a loss of 7% of skin thickness every 10 years. Following menopause, the decline in thickness accelerates to as much as 1.13% annually, while skin elasticity degrades 0.55% per year.^[3] Adequate collagen production correlates with healthy bones and strong hair and nails.*^[2-4]

For years, orthosilicic acid was the focus of intense research because it was viewed as a potential collagen generator. As a result of that research, the molecular complex known as choline-stabilized orthosilicic acid (ch-OSA®) was created. Choline not only has the positively charged nitrogen atom that forms the vital bond with OSA, but according to leading collagen researchers, choline transports the orthosilicic acid into target cells where it activates the pathways involved in collagen production. Clinical trials also suggest that beyond its ability to generate collagen, ch-OSA promotes keratin and elastin formation—two proteins that assist in skin elasticity and hair tensile strength.*^[5-7]

In a 20-week, randomized, double-blind, placebo-controlled study of 50 women with photo-damaged facial skin, oral intake of two ch-OSA capsules resulted in significantly improved skin, visco-elasticity properties, and a 30% reduction in micro-wrinkle depth compared to placebo.^[5] In the same clinical trial, the women's hair and nails showed significant improvements in strength. In a nine-month, randomized, double-blind, placebo-controlled trial with 48 healthy Caucasian women with fine hair (average age 43.3 years), ch-OSA (in daily capsules) significantly improved hair thickness and hair tensile strength.^[6] In a 12-month clinical trial conducted at St. Thomas' Hospital in London, women already taking 1000 mg of calcium and 800 IU of vitamin D to which they added ch-OSA saw thigh bone mineral density at the hip increase by 2.00% over the placebo as a result of an increase in actual bone formation, not just a decrease in loss.^[7] The procollagen marker P1NP (procollagen type-1 N-terminal propeptide) increased significantly after 12 months in women who took ch-OSA compared to women in the placebo group. P1NP is known as the most sensitive marker for bone collagen formation and an early marker of bone formation.^[7] Animal studies support the human clinical findings for ch-OSA with respect to collagen formation and bone mineral density.*^[8-10]

***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.**

Supplement Facts

Serving Size: 1 Capsule
Servings Per Container: 60

	Amount Per Serving	%Daily Value
Choline (as choline-stabilized orthosilicic acid)	100 mg	18%
Silicon (as choline-stabilized orthosilicic acid)	5 mg	**

** Daily Value not established.

Other Ingredients: Microcrystalline cellulose, HPMC (capsule), and purified water.

U.S. Patent Number 5,922,360 and other patents pending.

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Directions

Take one capsule two times per day, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

Does Not Contain

Wheat, gluten, corn, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or preservatives.

References

1. Viguet-Carrin S, Garnero P, Delmas PD. The role of collagen in bone strength. *Osteoporos Int.* 2006;17:319-336. [PMID: 16341622]
2. Shuster S. Osteoporosis, a unitary hypothesis of collagen loss in skin and bone. *Med Hypotheses.* 2005;65(3):426-432. [PMID: 15951132]
3. Calleja-Agius J, Muscat-Baron Y, Brincat MP. Skin ageing. *Menopause Int.* 2007 June;13(2):60-4. [PMID: 17540135]
4. Sumino H, Ichikawa S, Abe M, et al. (2004). Effects of aging and postmenopausal hypoestrogenism on skin elasticity and bone mineral density in Japanese women. *Endocr J.* 2004 Apr;51(2):159-164. [PMID: 15118265]
5. Barel A, Calomme M, Timchenko A, et al. Effect of oral intake of choline-stabilized orthosilicic acid on skin, nails and hair in women with photodamaged skin. *Arch Dermatol Res.* 2005 Oct;297(4):147-153. [PMID: 16205932]
6. Wickett RR, Kossmann E, Barel A, et al. Effect of oral intake of choline-stabilized orthosilicic acid on hair tensile strength and morphology in women with fine hair. *Arch Dermatol Res.* 2007 Dec;299(10):499-505. [PMID: 17960402]
7. Spector TD, Calomme MR, Anderson SH, et al. Choline-stabilized orthosilicic acid supplementation as an adjunct to calcium/vitamin D3 stimulates markers of bone formation in osteopenic females: a randomized, placebo-controlled trial. *BMC Musculoskelet Disord.* 2008 Jun 11;9:85. [PMID: 18547426]
8. Calomme MR, Vanden Berghe DA. Supplementation of calves with stabilized orthosilicic acid. Effect on the Si, Ca, Mg, and P concentrations in serum and the collagen concentration in skin and cartilage. *Biol Trace Elem Res.* 1997 Feb;56(2):153-165. [PMID: 9164661]
9. Calomme MR, Wijnen P, Sindambiwe JB, et al. Effect of choline-stabilized orthosilicic acid on bone density in chicks. *Calcif Tissue Int.* 2002, 70:292. Presented at: 29th European Symposium on Calcified Tissues; May 25-29, 2002; Zagreb, Croatia.
10. Calomme MR, Geusens P, Demeester N, et al. Partial prevention of long-term femoral bone loss in aged ovariectomized rats supplemented with choline-stabilized orthosilicic acid. *Calcif Tissue Int.* 2006, Apr;78(4): 227-232. [PMID: 16604283]

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