Regenerate

Parker Family Care™

Clinical Applications

- Reduces Fine Lines and Wrinkles*
- Thickens and Strengthens Hair*
- Strengthens Nails*
- Supports Healthy Bone Mineral Density*
- Supports Bone Flexibility*
- Promotes Connective Tissue Formation for Healthy Joints*

Regenerate *features clinically tested ch-OSA® (choline-stabilized orthosilicic acid) complemented with biotin. ch-OSA naturally helps nourish your body's beauty proteins by supporting and activating enzymes used by collagen-generating cells to make collagen. Regular orthosilicic acid (OSA) has to be stabilized to avoid polymerization, a process that decreases bioavailability. ch-OSA's patented choline-stabilization technology prevents polymers from forming and ensures OSA's optimal absorption. By combining ch-OSA with biotin, Regenerate offers an even greater level of beauty support.**

All Parker Family Care Formulas Meet or Exceed cGMP Quality Standards

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Discussion

Silicon and Choline-Stabilized Orthosilicic Acid
Silicon is a ubiquitous element present in various tissues of the human body. It performs an important role in connective tissue health, especially in the formation of the organic matrix (e.g., collagen and glycosaminoglycan formation).[1] Cereal/grain-based products and vegetables are the main dietary sources of silicon, but modern processing is likely to reduce intake from these sources. Soluble silicon is found as orthosilicic acid (OSA) in beverages and water.[2] Because regular orthosilicic acid is highly unstable, leading it to form polymers, and because the polymers are too large for the human body to absorb, Regenerate features patented "choline stabilization" technology. This stabilization prevents polymers from forming, ensuring optimal absorption of orthosilicic acid. Choline-stabilized orthosilicic acid (ch-OSA®) is a bioavailable form of silicon that has been found to increase the hydroxyproline concentration in the dermis of animals.[2] Furthermore, the ch-OSA in Regenerate is clinically proven for your assurance.*[2-4]

"Beauty Proteins" and Orthosilicic Acid
ch-OSA helps naturally nourish the body's beauty proteins: collagen, elastin, and keratin. Collagen is the body's main structural protein. It makes up 70% of skin and gives skin its strength and elasticity. It forms 30% of bone to give bones the flexibility they need to withstand impact. Additionally, the collagen fibers in bone are the binding sites for calcium and other bone minerals.[5] Collagen is also the major component of fascia, cartilage, ligaments, and tendons. Unfortunately, collagen production begins decreasing at age 18. By the age of 40, the decrease is about 1% per year.[6] 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.[7] Adequate collagen production correlates with healthy bones and strong hair and nails.*[6-8]

For years, OSA 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 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.*[2-4]

ch-OSA Clinical Studies
In a 20-week, randomized, double-blind, placebo-controlled study of 50 women with photo-damaged facial skin, oral intake of 10 mg/d silicon as ch-OSA resulted in significantly improved skin visco-elastic properties and a 19% reduction in roughness with a 30% reduction in micro-wrinkle depth (measured as maximum roughness) compared to placebo.[2] In the same clinical trial, the women's hair and nails showed significant improvements in strength. Furthermore, serum silicon was significantly higher (+72%) in subjects after 20 weeks of supplementation with ch-OSA compared to the placebo group. In a nine-month, randomized, double-blind, placebo-controlled trial with 48 healthy Caucasian women with fine hair (average age 43.3 years), 10 mg/d of silicon as ch-OSA for nine months improved hair tensile strength including elasticity and break load and resulted in thicker hair.*[3]

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 thighbone mineral density at the hip (i.e., femoral neck) increase by 2.00% compared to placebo. This was as a result of an increase in actual bone formation, not just a decrease in loss.[4] Furthermore, 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.[4] Animal studies support the human clinical findings for ch-OSA with respect to collagen formation and bone mineral density.*[9-11]

In an open clinical study, 18 subjects were given five drops of ch-OSA twice daily for six months. Hair growth and hair loss assessments were performed using a semi-quantitative rating scale, and scores were analyzed using the Friedman test. At the end of the six months, 94% of respondents had improved hair growth with 58% in the categories of moderate to marked hair growth. All respondents noted improvement in the body and texture of their hair.*[12]

Biotin
Biotin, as an essential component of carboxylase enzymes, has diverse roles in maintaining health. While overt biotin deficiency is known to result in skin irritation and hair loss, anecdotal evidence suggests that biotin supplementation supports healthy hair growth, and supplementing with biotin is a common method for enhancing skin health and hair and nail strength. Studies testing the effects of biotin on nail health suggest that biotin supplementation improves nail thickness and reduces splitting.[13-15] In one study, 91% of subjects showed definite improvement with firmer and harder finger nails after 5.5+/-2.3 months of 2.5 mg/d biotin.[16] Higher doses of biotin (9 mg to 16 mg/d) are used to support healthy lipid and glucose metabolism; and more recently, doses up to 300 mg/d have been used to support muscle function related to neurologic health.*[17,18]

***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.**

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Supplement Facts

Serving Size: 1 Capsule
Servings Per Container: 60

	Amount Per Serving	%Daily Value
Biotin	5000 mcg	1667%
Choline (as choline-stabilized orthosilicic acid)	100 mg	**
Silicon (as choline-stabilized orthosilicic acid)	5 mg	**

** Daily Value not established.

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

Produced under US patents 5,922,360; 7,968,528; and 8,771,757.

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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.

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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.

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