

## COLLOIDAL SILICA – THE ANTI-AGEING ELEMENT

Silicon has only been recognized as an essential trace element since 1972. It is present in human tissue at just 0.05%, mostly in connective tissue. Silicon is primarily a structural element which contributes to the synthesis of **collagen**, **elastin**, **proteoglycans** and the **mineral matrix** in skin, hair, eyes, nails, cartilage, bone, teeth and all connective tissue.

Collagen and elastin are tissues which give strength and flexibility where these are necessary: in the blood vessels and heart, trachea and lungs, tendons, muscles, digestive tract, skin, hair, eyes and nails.

Proteoglycans are molecules made up of polysaccharides bound to proteins which can absorb large amounts of water, keeping tissues plump and hydrated.

The mineral matrix is the cross-linked molecular structure which provides the framework for these tissues, including keratin in hair and nails.

Therefore, silicon is needed by the body to provide a strong and supportive tissue structure and to maintain strength, resilience, moisture and integrity in many other tissues.

Silicon as an element never occurs naturally in isolation, it is bound to other substances as a compound. Silicon, oxygen and water occur together in living tissue as **silicic acid**. Various salts of silicic acid (**silicates**) occur in rock crystals and siliceous earth (eg. alumino-silicate clays). **Silicon dioxide**, the silicon and oxygen molecule, also occurs in mineral earth including sand, which is used in the manufacture of glass.

Of these natural compounds, silicic acid can be utilized more readily by our bodies. Silicon dioxide barely dissolves in water and therefore cannot penetrate our tissues either when consumed or externally applied.

Silicic acid in plants such as horsetail, nettles and wholegrains can be effectively absorbed but its concentration in these sources is low and readily destroyed by food processing and cooking.

Silicic acid as a colloidal preparation is the most concentrated and effective form of supplemental silicon for human tissue. As the silicic acid is suspended in water as fine particles which have themselves absorbed water, it forms a natural gel which is attracted to and binds with water molecules in human tissues. **Colloidal silica** can be taken internally to improve nutritional silicon and contribute to metabolic processes and applied externally to penetrate the upper layers of skin tissue, contributing to moisture content, elasticity, cross-linking of collagen and generalized tissue repair (all cell membranes contain silicic acid to help maintain structure and integrity).

Thus, regular application can visibly reduce loose skin and wrinkles, assist acne and wound healing and improve skin problems like eczema and psoriasis.

The silicic acid content of our tissues reduces drastically with ageing, making internal and external supplementation all the more necessary as we get older.

Third Stone Botanicals has developed two new products formulated with colloidal silica. **Green Tea Eye Serum** (20ml/0.7fl oz.) contains colloidal silica combined in cold formulation with certified organic rosewater, pro vitamin B5 and extracts of green tea, cucumber, chamomile and aloe vera. Immediate effects are seen and felt in reduction of inflammation and tightening of tissue, with longer-term wrinkle reduction possible with daily use.

**Manuka Spot Gel** (20ml/0.7fl oz.) is an excellent treatment for tissue repair. Colloidal silica is combined with certified organic manuka honey and lavender water with aloe vera and calendula extracts plus manuka and lavender essential oils for added healing properties. Use Manuka Spot Gel on sunburn and first degree burns, acne, cuts and minor wounds, cold sores, eczema and psoriasis for rapid relief of symptoms and speedy healing.

Colloidal silicic acid can also be applied to joints to relieve inflammation and repair damaged cartilage and bone, while taken internally it can assist a depressed immune system and help to strengthen and repair damaged and ageing hair, skin, nails, eyes, teeth and improve overall appearance and vitality.

Tess Dingle, ND.  
B H Sci (Comp Med)  
Adv Dip H Sci (Naturopathy/Homeopathy)

### References

Haas, E., Staying Healthy With Nutrition, Celestial Arts, California, 1992

Oppermann, J., Beauty From Inside Out With Silicic Acid, Lebensbaum Verlag, Germany, 2002