Imagine being able to reduce fine lines and wrinkles, while renewing dull, dry hair and brittle nails, all with one supplement. Not only that, the same nutrient strengthens bones, encourages healthy joints, keeps blood vessels smooth and elastic and reduces the risk of Alzheimer's disease. No, it's not something from the Fountain of Youth. It's silicon, a trace mineral that has solid scientific support behind its long list of benefits.

If you haven't heard of silicon, you're not alone. After a flurry of scientific interest in the 1970s, silicon was off the radar screen until recently. Many people are unaware that it is an essential nutrient. From the Inside Out

Silicon's status as a well-kept secret is likely to change soon. Research shows that silicon can have an effect on issues that matter to the baby boomer generation. When it comes to reducing wrinkles, for example, silicon accomplishes what no cosmetic cream can—it works from inside the body to enhance production of collagen, the protein that supports the outer layer of skin. In fact, a 2005 study of 50 women found that those who were given 10mg of silicon supplements daily for five months experienced improvement in shallow wrinkles, along with greater elasticity of their skin. There was also a significant reduction in brittleness of nails and hair. The women in the placebo group did not experience any of these improvements.

But silicon's collagen-promoting advantages are more than skin deep. Joints also require healthy collagen production to function properly and perform necessary repair chores. Without it, the cartilage and connective tissue in joints can't maintain the "cushions" that keep bones from making contact. Result: the pain, swelling and difficulty moving that characterize osteoarthritis.

From Bones to Brains

Similarly, silicon can help maintain bone strength, again because of its link to enhanced collagen production. A study reported in the February 2003 issue of Bone found that silicon stimulated bone formation, a key step in enhancing bone mineral density (important for osteoporosis prevention).

Furthermore, in an animal study in Spain, researchers found that silicon-enriched water provided protection for the brain and other organs from aluminum accumulation through diet. In humans, aluminum buildup in the brain may contribute to various dementias, including Alzheimer's disease.

Silicon is clearly shaping up in a number of ways as a significant ally for the baby boom generation.

The Simple Supplement Solution

Since silicon is the second most plentiful element on earth, plants such as fruits, vegetables and grains are rich sources of the nutrient. But with aging, our bodies don't process it as well. So although silicon is found in brown rice, soybeans, leafy green vegetables and whole grains, supplements are a good idea. A daily dose of 1-10mg is considered safe. There are several types of silicon supplements on the market today, but research has shown that the most bioavailable form is stabilized orthosilicic acid. Below are a few examples of products that contain silicon, also sold as silica.

- JARROW FORMULAS BIOSIL has 5mg of silicon (orthosilicic acid).
- ALTA HEALTH PRODUCTS SILICA WITH BIOFLAVONOIDS features horsetail extract, which is naturally high in silica (silicon dioxide).
- NATUREWORKS BODY ESSENTIAL SILICA combines silica (silicon dioxide) with calcium.