Cinnamon as an Anti-Aging Skin Nutrient
By Byron Richards, CCN – March 30, 2012

In recent years a water-soluble cinnamon extract originally developed by the U.S. Department of Agriculture has shown great promise in lowering blood sugar, correcting insulin resistance, and improving metabolic signaling to combat obesity and the metabolic syndrome. A new study* expands on the role of cinnamon extracts, showing that cinnamon can promote collagen synthesis in skin, leading researchers to conclude, “cinnamon extract is useful in anti-aging treatment of skin.”

The research studied skin fibroblasts, the carpenter cells in skin that are needed for rejuvenation. These cells become dormant during aging, which causes nonoptimal synthesis of new collagen for your skin matrix. Cinnamon extract potently turned the fibroblasts back on, in turn stimulating collagen synthesis. A significant improvement in growth hormone activation within the fibroblasts was detected, a major factor contributing to the rejuvenation effects of cinnamon extract.

* See study referenced below

http://www.wellnessresources.com/health/articles/cinnamon_as_an_anti-aging_skin_nutrient/

---

Cinnamon Boosts Skin Collagen Synthesis

**Study Title:**
Cinnamon extract promotes type I collagen biosynthesis via activation of IGF-I signaling in human dermal fibroblasts.

**Study Abstract:**
The breakdown of collagenous networks with aging results in hypoactive changes in the skin. Accordingly, reviving stagnant collagen synthesis can help protect dermal homeostasis against aging. We searched for type I collagen biosynthesis-inducing substances in various foods using human dermal fibroblasts and found that cinnamon extract facilitates collagen biosynthesis. Cinnamon extract potently up-regulated both mRNA and protein expression levels of type I collagen without cytotoxicity. We identified cinnamaldehyde as a major active component promoting the expression of collagen by HPLC and NMR analysis. Since insulin-like growth factor-I (IGF-I) is the most potent stimulator of collagen biosynthesis in fibroblasts, we examined the effect of cinnamaldehyde on IGF-I signaling. Treatment with cinnamaldehyde significantly increased the phosphorylation levels of the IGF-I receptor and its downstream signaling molecules such as insulin receptor substrate-1 and Erk1/2 in an IGF-I-independent manner. These results suggested that cinnamon extract is useful in antiaging treatment of skin.

**Study Information:**

Department of Biological Chemistry, Division of Applied Life Science, Graduate School of Life and Environmental Sciences, Osaka Prefecture University, Naka-ku, Sakai, Japan.

http://www.wellnessresources.com/studies/cinnamon_boosts_skin_collagen_synthesis