Can Nutrition help us look young as we age?

Growing older is inevitable but feeling and looking older is not. Skin has been reported to reflect both our general inner-health and our aging status. Nutrition and its reflection in our skin's appearance and resilience has been an interesting topic for scientists everywhere for centuries. Vitamins, bioflavonoids and a variety of nutrients have been reported to possess potent antioxidant properties and are widely used in the anti-aging care industry. We are not saying that nutrients will help us live forever. However, these nutrients each provide anti-aging properties beneficial to our overall health and quality of life as we age.

Vitamin C

Vitamin C, also named ascorbic acid, plays a significant role in skin health due to its antioxidant and collagen-building properties. The richest natural sources are fresh fruits and vegetables such as citrus, blackcurrant, rose hip, acerola cherry or chili pepper just to name a few. Acting as an antioxidant, vitamin C helps reduce the damage from ultraviolet (UV) light exposure, a major risk factor for skin cancer. Vitamin C also plays a role in collagen production. Collagen is a protein that helps maintain the structure of bone, tendon, skin, cartilage and all other connective tissues. Several studies conclude that a high intake of vitamin C contributes to better skin appearance and decreased skin wrinkling.

Vitamin E

Vitamin E, also called tocopherol, a fat-soluble, membrane-bound antioxidant and free-radical scavenger acts synergistically with vitamin C. When vitamin E is oxidized and reduces cellular free radicals, it will be regenerated by vitamin C. Besides vitamin C, glutathione and coenzyme Q10 can also recycle vitamin E. An oral combination of vitamins C and E, with other photo-protective nutrients, increases photo-protective effects dramatically compared with monotherapies.

Carotenoids

"Eat carrots for better eye-sight" an often repeated refrain about the benefit of carotenoids can be extended to skin health. Carotenoids including vitamin A, β carotene, lycopene, and retinol, are highly effective antioxidants documented to possess photo-protective properties. Some studies showed long-term topical use of vitamin A results in significant improvements in fine wrinkles, roughness, and the darkening of skin or nail. Although touted as a topical skin treatment, the consumption of vitamin A sources has also been linked to improve wound healing and the maintenance of epithelial tissues. A deficiency of vitamin A correlates with poor wound healing and certain skin problems.

Protein

Protein is very important for anti-aging. Not only does protein support muscle synthesis, it is also a building block for skin and cartilage and necessary for wound healing. With increasing age comes a decreasing ability for a proper self-healing mechanism. We require higher protein intake to prevent muscle loss. Some special amino acids such as glycine and proline found in protein, can promote collagen synthesis when combined with vitamin C.

Omega-3 fatty acids

Omega-3 fatty acids are admired for their role in the reduction of cardiovascular disease, and are also linked to healthy skin. Omega3 fatty acids can reduce inflammation induced by UV light, improve cell membrane integrity, and act as a barrier to harmful substances, an entrance for nutrients, and a reservoir to hydrating water. Furthermore, a study found oral supplementation of omega-3 fatty acids with antioxidants, and evening primrose oil significantly inhibited wrinkle formation caused by chronic UV light.

Polyphenols

Polyphenols are powerful antioxidants in a wide variety of plant-based foods. There are increasing studies showing their probable role in the prevention of various diseases associated with oxidative stress, such as cancer and cardiovascular and neurodegenerative diseases.

Laboratory studies (using different polyphenols such as, green tea polyphenols, grape seed proanthocyanidins, resveratrol, silymarin and genistein), conducted on animal models (to study UV-induced skin inflammation, oxidative stress and DNA damage), suggested that these polyphenols, combined with sunscreen protection, have the ability to protect the skin from the adverse effects of UV radiation, including the risk of skin cancers.