

# Green Tea and Skin Health

## **Q: What causes skin damage?**

A: The sun light has short wave lengths of light (UVB) and longer wave lengths of light (UVA). The UVB causes chemical changes in the epidermis (the outer layer of the skin) and the UVA affects in the dermis (the inner layer of the skin.) These chemical changes produce free radicals. Free radicals are minute chemical particles that have unstable unpaired electron. To be stabilized, the particle steals an electron. This is damage, and collective damaged cells cause organ dysfunction and eventually lead to death. Aging is a progression of damage, caused by free radicals. Free radicals also contribute to the development of a number of health problems including cancer and heart diseases. The four major causes of free radicals in the skin:

- 1) daily chemical processes that give off free radicals as a natural byproduct
- 2) unprotected sun exposure,
- 3) pollution, and
- 4) products applied to the skin such as sunscreen made with unnatural substances.

## **Q: What do Antioxidants do for skin?**

A: Antioxidants are chemicals which donate an electron to a free radical without becoming a free radical. When a free radical acquires an electron and is stabilized, the chain of the damage, or process of aging, stops or slows down. Antioxidants such as polyphenols in green tea neutralize free radicals, and reduce or help prevent some of the damage caused by free radicals. Eating a diet that is rich in antioxidants is an excellent anti-aging strategy including skin care too. Scientific studies show the associations between nutrient intakes and skin-aging appearance. Up to about age 27, the body's free radical activity is less than the antioxidant supply so there is less damage. After age 27, the free radical damage exceeds the repair process and damage progressively increases as we age. Exposed to 5,000 free radicals every day, skin is the most vulnerable and fastest aging cells among all the organs. If the speed of free radical damage drops down to less than the speed of the repair process, then rejuvenation occurs.

## **Q: What dietary nutrients are important for skin health?**

A: Important dietary nutrients for strength and repair for skin are EGCG antioxidants, Omega 3 oils, calcium, sulfur, selenium, zinc, vitamin C, keratin-building amino acids, like glycine, alanine, cysteine, to name a few. Eating nutrient-packed whole foods in as many meals as possible is your best approach to skin health. **Edible Green® Sencha green tea powder and Matcha**, as a whole food, provides Vitamins and Minerals as well as EGCG antioxidants. Notice foods that produce an improvement and use them more often. Calcium is very crucial for your skin health. The skin's calcium content regulates cell turnover via cell differentiation and maintains a constant thickness of living layers. High calcium content in the epidermis helps maintain continual and efficient barrier functions.

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*Referral: "The Clinical Reference Guide" Dr. Royal Lee, Standard Process, Inc. Bion-research University of Maryland Medical Center  
"Dietary nutrient intakes and skin-aging appearance among middle-aged American women" Maeve Cosgrove, Oscar Franco, Stewart Granger, Peter Murray and Andrew Mayes.*