



IMAGE AWARENESS WELLNESS INSTITUTE

Wrinkles

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THE CONDITION

Wrinkles are evidence of skin damage as a result of excess free radical activity, often caused by sun exposure or smoking.

Heavy cigarette smokers were found in one study to be 4.7 times more likely to be wrinkled than non-smokers. Smokers tend to wrinkle 20 years sooner than nonsmokers.

Heavy sun exposure (50,000 lifetime hours) increased risk of wrinkling 3.1-fold. A combination of the two factors was multiplicative resulting in a twelve-fold increase.

REFERENCE:

Kadunce, Donald, et al., Cigarette smoking: Risk factor for premature facial wrinkling, *Annals of Internal Medicine*, May 15, 1991; 114(10):840-844.

DIET

Carbohydrates, particularly refined carbohydrates are a risk factor for wrinkling. A 50 gram increase in carbohydrate intake was linked to a 36% greater chance of wrinkling and a 33% greater risk of skin atrophy. The fact that sugar and vitamin C compete with one another for transport in the body may explain the increased wrinkling associated with excessive sugar intake. Sugars can also cross-link with the collagen that provides the structural integrity for the skin. The collagen then becomes stiff and inflexible.

The skin is high in fat content. It should not be surprising that adequate

intake of essential fatty acids and the antioxidants to protect these fats from deteriorating should be beneficial.

It is common practice in veterinary medicine to supplement dogs and cats with essential fatty acids to create soft skin and glossy coats. Essential fatty acids are no less important for sustaining the health and functionality of human skin.

Higher intake of linoleic acid has been associated with reduced risk of senile dryness and skin atrophy. This is in contrast to increased intake of unhealthy fats. A 17g increase in unhealthy fats was associated with a 28% increased risk of wrinkling and a 37% greater likelihood of skin atrophy.

Oxidation of the lipids or fats in the skin speeds the aging process causing not only wrinkling but also



the dark pigmentation of the skin associated with aging. A healthy intake of antioxidants in the form of carotenoid and flavonoid rich fruits and vegetables is essential to delay the aging of the skin.

REFERENCES:

Cosgrove MC, Mayes AE, et al, Dietary nutrient intakes and skin-aging appearance among middle-aged American women, *Am J Clin Nutr*, 2007; 86(4): 1225-31.

Ackerman, Lowell, D.V.M., Ph.D., "Dietary supplements: Therapy for the skin, *Dog World*, September, 1994;18-20.

NUTRIENTS

The importance of nutrients in prevention of aging of the skin is suggested by the frequent addition of nutrients to topical applications for the skin. For example, in one study vitamin B3 in the form of niacinamide was topically applied to the skin in a 5% solution and shown to significantly decrease fine lines and wrinkles, poor texture and blotchiness, yellowing of the skin and to improve skin elasticity. Nutrients currently being tested for their anti-aging effects on the skin include vitamins A, C, E, and K.

Increased intake of vitamin C reduced risk of wrinkling and dryness of the skin.

One surprising study found an inverse association between skin aging and blood levels of vitamin D. Women with low vitamin D levels were 5 times more likely to have damaged skin. Low vitamin D levels were as-



sociated with increased reddening of the skin, hyperpigmentation, and wrinkling. The authors of the study suggested a connection between low blood levels of vitamin D and aging of the skin.

REFERENCES:

Bissett DL, Oblong JE, Berge CA, Niacinamide: A B vitamin that improves aging facial skin appearance, *Dermatol Surg.*, 2005; 31(7 Pt 2): 860-65.

Bates, Betsy, Topical Vitamins on the Way For Skin Regeneration, *Skin and Allergy News*, September, 1996;31.

Chang AL, Tang JY, et al, Association of facial skin aging and vitamin D levels in middle-aged white women, *Cancer Causes Control*, 2010 Sep 30; [Epub ahead of print].

VITAMIN C

Vitamin C plays a special role in the health of the skin due to its dual function. Vitamin C is a potent antioxidant which works throughout the body. It also has the ability to regenerate a wide range of other antioxidants. Vitamin C is also critical for the production of healthy collagen, the “glue” that holds the body together.

The word collagen comes from a Greek word meaning “glue producer” because skin and sinews of horses were boiled to produce glue as far back as 8,000 years ago.

Collagen is the most abundant protein found in mammals. It is the main component of connective tissue and is essential for healthy blood vessels, tendons, ligaments, and skin. Gelatin is collagen which has been irreversibly hydrolyzed or broken down.

Collagen is composed primarily of

the amino acids glycine and proline. Vitamin C is essential for collagen synthesis. *Prolonged exposure of cell cultures to vitamin C increases synthesis of collagen 8-fold without increasing the synthesis of other proteins.*

Scurvy is the extreme example of what vitamin C deficiency will do to the health of tissues composed of collagen. Defective collagen prevents the formation of strong connective tissue. The gums begin to bleed and the teeth fall out, the skin discolors and can bleed, old wounds that have formed scar tissue rupture. Unhealthy collagen fibers are characteristic of autoimmune diseases such as lupus and rheumatoid arthritis.

Many bacteria have the ability to destroy collagen. Their destruction of tissue allows infection to spread. The late Robert Cathcart III, M.D., believed that the hemorrhagic fevers were associated with “acute induced scurvy.” He believed that intravenous use of vitamin C would save victims of these diseases. He notes that nurse Pineo, the first caucasian to survive Lassa fever, was taking vitamins on her own.

Vitamin C protects the skin from damage by ultraviolet light reducing risk of premature aging of the skin and also risk of skin cancer. The vitamin has been shown to prevent carcinogen-induced malignant transformation of cells in culture by changing lipid metabolism. Vitamin C also prevents lipid oxidation.

Exposure of the skin to sunlight can reduce vitamin C levels by approximately 2/3. This leaves the skin much more susceptible to damage. Vitamin C controls the inflammatory response and oxidative damage associated with exposure to UVA and UVB ultraviolet light causing connective tissue breakdown and resulting in premature aging, wrinkles, and skin cancer.

Super C

Research studies have shown that the higher the intake of vitamin C at one time the more rapidly it is excreted. At higher doses the half-life of vitamin C in the blood is only about 30 minutes.

Super C is an exclusive technologically-advanced threshold control formulation to allow a sustained release of vitamin C into the tissues for six hours or more. The supplement contains GNLD’s Neo-Plex concentrate with all the naturally-occurring factors in oranges. The supplement contains 10-20% more vitamin C than claimed on the label to assure potency throughout the shelf life of the product.

As mentioned previously, vitamin C is essential for collagen synthesis. The skin is much more likely to wrinkle and sag when vitamin C intake is inadequate. A diet high in foods rich in vitamin C and supplementation with Super C are important steps to achieve the goal of slowing the aging of the skin.

REFERENCES:

Murad, S., et al., Regulation of collagen synthesis by ascorbic acid, *Proc Natl Acad Sci USA*, 1981 May; 78(5):2879-2882.

<https://en.wikipedia.org/wiki/Collagen>

<http://www.orthomed.com/ebola.htm>

Henson, D.E., et al, Biological Functions in Relation to Cancer, *Journal of the National Cancer Institute*, 1991;83:847-550.

Does Vitamin C Protect Against UVA and UVB? *Patient Care*, May 30, 1992;14,17.

http://www.gnldcontent.com/pages/Business-Guide_CD1005/GNLDBusTools_WEB/content/pdf/products/vitamins/SuperC_US_SG_CAR.pdf

Roberts, Hilary, and Hickey, Steve, *Ascorbate*





The Science of Vitamin C, Lulu, 2004.

CAROTENOIDS

Carotenoids are one of the most potent photoprotective agents found in nature. This is a primary function they perform in plants and in the animals that eat the foliage of plants.

One needs no further demonstration of the protective effects of carotenoids against solar radiation than to raise a plant indoors and then take it out into the sunlight during the summer months. Unless the plant is slowly hardened to the outdoor environment it will probably die. Exposure to intense light upregulates the internal synthesis of carotenoids and flavonoids in plants. These potent antioxidants are a key part of the immune system of the plants.

Carotenoids accumulate in human skin and are one of the three major compounds responsible for skin color. The other two are hemoglobin and melanin. Carotenoids are excreted through the sebaceous or sweat glands and partially reabsorbed. The palm of the hand with its thicker skin and decreased tendency to sweat retains higher concentrations of the orange carotenoids which are often visible by clenching the fist then opening it quickly. The palm of the hand of all races tends to have less melanin than other parts of the body making the carotenoids more visible.

Repeated studies have shown that increasing carotenoid intake from either foods or supplements protects the skin from damage when it is exposed to ultraviolet light.

A mixture of antioxidants including vitamin E, carotenoids, and selenium has been shown to improve skin condition in as little as 12 weeks. These nutrients increased skin thickness and density and decreased roughness and scaling of the skin. The carotenoid mixture included lycopene, lutein, and beta-carotene.

A study of a natural carotenoid complex significantly reduced reddening of the skin after exposure to simulated solar radiation after 24 weeks. The carotenoids in leafy green foods, lutein and zeaxanthin, have a remarkable ability to protect the skin from sunlight and oxidative damage while improving skin elasticity and hydration.

ProVitality

GNLD produces a wide variety of supplements which can protect the skin and delay aging and wrinkling of the skin. Carotenoid Complex is a patented concentration of the wide spectrum of carotenoids found in foods. The exclusive Nutri-max process assures the potency of the supplement by protecting the carotenoids from exposure to oxygen. This product was the first reported in the scientific literature to increase blood levels of carotenoids other than beta-carotene.

A USDA study of Carotenoid Complex demonstrated significant depletion of carotenoid levels after only two weeks of reduced intake. This decline was associated with a significant decline in immune competence. Supplementation restored and increased immune competence in 20 days while supplementation with beta-carotene provided no such benefit.

Consuming a diet high in fruits and vegetables rich in carotenoids and supplementing with Carotenoid Complex is a good first step to slow the aging process.

GNLD provides Carotenoid Complex by itself or as part of its Pro Vitality Package of nutrients which

includes a vitamin/mineral capsule, Carotenoid Complex, and two of the lipids which promote optimal health of the skin—Tre-en-en grain and legume extracts and Salmon Oil Plus.

REFERENCES:

Alaluf, Simon, et al., Dietary carotenoids contribute to normal skin color and UV photosensitivity, *J Nutr*, 2002; 132:399-403.

Stahl, W., et al., Carotenoids and carotenoids plus vitamin E protect against ultraviolet light-induced erythema in humans, *Am J Clin Nutr*, 2000;71:795-798.

Heinrich U, Tronnier H, et al, Antioxidant Supplements Improve Parameters Related to Skin Structure in Humans, *Skin Pharmacol Physiol*, 2006; 19(4): 224-231.

Lee J, Jiang S, Levine N, Watson RR, Carotenoid Supplementation Reduces Erythema in Human Skin After Simulated Solar Radiation Exposure, *Proc Soc Exp Biol Med*, 2000;223:170-174.

Palombo, P., et al., Beneficial Long-term effects of combined oral/topical antioxidant treatment with the carotenoids lutein and zeaxanthin on human skin: A double-blind, placebo-controlled study, *Skin Pharmacol Physiol* 2007;20:199-210.

Carughi, Arianna, and Hooper, Fred G., Plasma carotenoid concentrations before and after supplementation with a carotenoid mixture, *Am J Clin Nutr*, 1994 April; 59(4): 896-899.

Carughi, A., Omaye, S., Furst, A., Plasma Carotenoid response to supplementation with a mix of vegetable extracts. Proceedings of Experimental Biology, March 31-April 4, 2001.

Kramer, Tim R., and Burri, Betty J., Modulated mitogenic proliferative responsiveness of lymphocytes in whole-blood cultures after a low-carotene diet and mixed-carotenoid supplementation in women, *Am J Clin Nutr* 1997;65:871-5.

NUTRIANCE

The GNLD skin care program is called Nutriance. The name is a combination of the words “nutrition” and “radiance.”

GNLD has developed a five step skin care program called the Nutriance Synergy Cycle. The programs





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were tested and developed in Europe's most prestigious dermatological research facility.

The program is designed to retain skin health and slow the aging of the skin. Nutriance corrects the balance of oil and moisture in the skin, smooths the skin, decreases the size of pores, and reduces wrinkling and fine lines. The skin care program provides antioxidant protection and guards against ultraviolet damage.

The five step skin care program begins with a cleanser targeted for an individual's skin type.

This is followed with a scrub designed to remove dead skin cells, stimulate circulation and accelerate cellular renewal. Clinical testing has shown that just one application of the scrub can increase the smoothness and softness of the skin by over 30%.

The third step focuses on toning the skin with select herbs to rebalance the oil/moisture balance, decrease the size of pores, and give the skin a healthy glow.

The fourth step involves locking moisture into the skin and providing sunscreens to protect the skin against photo-aging. The GNLD products

can increase moisture in the cells by up to 70% even four hours after application.

The final step is GNLD's breakthrough product the Renewing Antioxidant Treatment. It is common knowledge that as we age the process of the renewal of the skin slows down. GNLD research has unlocked the secret of restoring the skin's natural tendency to renew safely through nutritional means. This process is called Activated Cellular Response (ACR).

ACR saturates the skin with antioxidant protectors including vitamins A, C and E. Green tea and echinacea offer additional antioxidant protection and immune support.

ACR is an alternative to the use of acids which can assault and damage the skin. Many companies make great promises with this approach but scientific studies have shown these acids do long term damage to the skin. Testing on GNLD's ACR technology has shown that lines and wrinkles can be reduced by as much as 28% in 28 days without using harsh chemicals which can damage the skin.

For problem skin an extra touch is available with GNLD's remarkable Nourishing Collagen Cream. It bathes

the skin in nutrients plumping the cells and drenching them in moisture. Clinical testing demonstrated 76% greater moisture content in the skin 30 minutes after application.

WEB RESOURCES

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