

New clinical study supports astaxanthin supplementation for skin protection

02 July 2018 | News

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Skin is the first line of defense against the assaults of nature, stress, and time. But it needs nutrients just as the rest of the body does. One nutrient shown to be particularly exemplary at protecting the skin from within is natural astaxanthin, a powerful carotenoid antioxidant.

We have scientific evidence from human, animal, and cellular models, demonstrating astaxanthin enhances the innate sun protection and reduces UV damage and other insults that cause skin to age. Nature has already tuned into this: fish and birds accumulate astaxanthin from microalgae in order to enhance their protection from oxidative stress and UV radiation. Human skin can benefit as well. In fact, natural astaxanthin from microalgae is the ideal "summer supplement." The global nutricosmetics market is estimated to reach \$12.6 billion by 2024 (according to Variant Market Research), growing at a CAGR of 12.6% from 2017 to 2024.

The new study, published June 25, 2018, in the journal *Nutrients*, was conducted at the Pharmaceutical and Healthcare Research Laboratories in the Research and Development management headquarters of the FUJIFILM Corp. in Kanagawa, Japan. In the 10-week, double-blind, placebo-controlled study, volunteer participants received either 4mg of algal food-derived

astaxanthin or an inert placebo. The researchers used *Haematococcus pluvialis* microalgae cultivated and produced by Algatech.

Results were determined by measuring the minimal erythema dose (MED)—the minimal dose of UV light that induces any visible reddening—and analyzing UV-induced changes of moisture and trans-epidermal water loss (TEWL). Measurements were taken both at baseline and following nine weeks of supplementation. The subjects taking astaxanthin showed increased MED (increased time to redness under exposure to UV light) compared with those taking the placebo. In addition, the astaxanthin group had a reduced loss of skin moisture in the area exposed to the light compared with the placebo group.

The authors concluded that “These results demonstrated the protective role of dietary supplementation with Astaxanthin against UV-induced stimuli and its usefulness for the maintenance of healthy skin.”

“Subjective skin conditions for ‘improvement of rough skin’ and ‘texture’ in non-exposed areas also were significantly improved by supplementation with astaxanthin, demonstrating astaxanthin’s ability to help protect skin from UV-induced deterioration while helping to maintain healthy skin in healthy people,” explains Tair Lapidot, PhD., CSO for Algatech.

A previous clinical study of 39 women conducted by FUJIFILM’s research group and using Algatech’s all-natural astaxanthin also indicated that a combination of oral supplement and cosmetic cream yields greater overall skin moisture, in comparison to an orally delivered placebo and commercial cosmetic cream.

“Algatech’s facility is located in the Arava desert, where there is ample sunshine all year round. The same mechanism that protects the algae from the desert’s harsh sun light is what gives our AstaPure unique potency to help in protecting our skin and eyes in summer. Astapure, natural astaxanthin, is the perfect supplement for the summer,” concludes Efrat Kat, Algatech’s VP of Sales and Marketing.