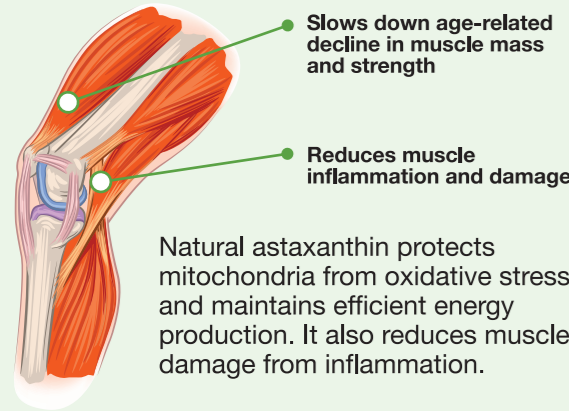


Muscle Health

Natural Astaxanthin Enhances Muscle Endurance and Recovery



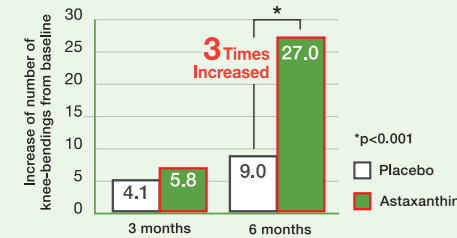
Significantly Lowers Oxidative Muscle Damage Markers

Effectively protects muscles against exercise-induced oxidative stress and enhances recovery.

Djordjevic et al. (2012) J Sports Med Phys Fitness 52 (4): 382-92.

Improves muscle endurance

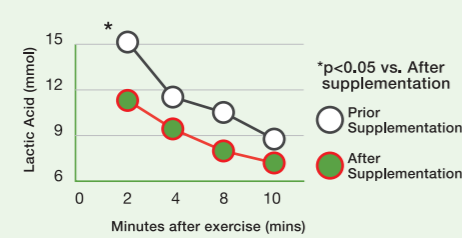
Increased knee-bendings drastically.



Malmsten et al. (2008) Carotenoid Science 13: 20-22.

Reduces Muscle Fatigue

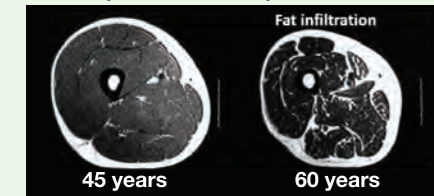
Lower lactic acid built-up.



Sawaki et al. (2002) J Clin Ther Med 18(9): 1085-100.

Natural Astaxanthin Slows Down Age-Related Muscle Decline

Sarcopenia is the progressive loss of muscle mass and declining muscle strength due to ageing. It often contributes to frailty and reduces mobility in the elderly.



Significant Improvements In the elderly (>65 years of age)

Maximal voluntary contraction of leg muscles.

Muscle Strength

Distance walked in Six Minute Walking Distance test.

Mobility

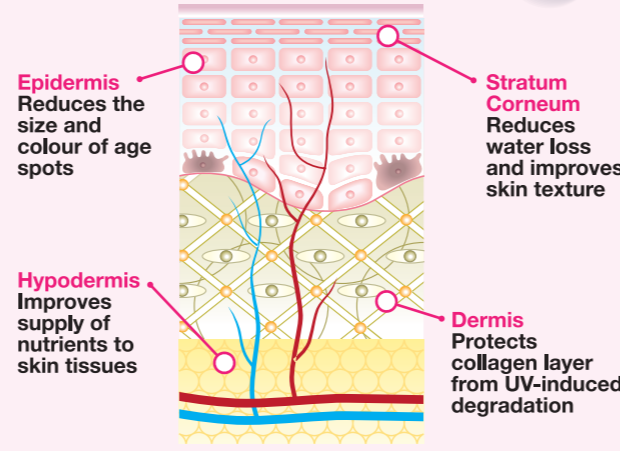
Conley et al. (2017) Preliminary study results. University of Washington. Fujino et al. (2016) Medicine & Science in Sports & Exercise 48:129.

Skin Health

Natural Astaxanthin Offers Protection to All Skin Layers

Natural astaxanthin is active in each of the skin's layers, providing protection against UV-induced oxidative damage to the skin.

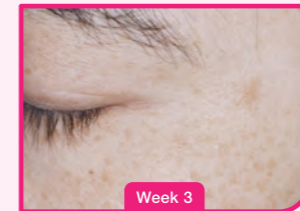
For better skin health results, combine the oral supplement with a topical application product.



Reduced wrinkles



Reduced age spot size



Improved skin sagging



Seki et al. (2001) Fragrance Journal 12:98-103.



Reduces symptoms of atopic dermatitis

Reduces chronic itching

Reduces inflammation

Rebalances immune response in skin cells

Sato et al. (2009) Journal of Environmental Dermatology and Cutaneous Allergology 3(5):429-38.

Total Antioxidant Support with AstaReal® ACT₂

Supplement Facts

Serving Size: 2 capsules per day
Servings per container: 60 vegetable capsules

Amount per serving:

AstaReal Astaxanthin 16mg, Vitamin C 30mg, Tocotrienols 40 mg

Direction for use: Take 2 capsules per day after meal. Keep away from heat, light and moisture.

Not suitable for pregnant women and children below 18 years of age.

Available through medical health professionals only.

Made in **JAPAN**



For better skin health results, use AstaReal ACT₂ in combination with

A'astarism

Astaxanthin Serum for Topical Use Only.

Made in **JAPAN**

Superior quality and safety of AstaReal® Astaxanthin

- AstaReal® is the world's most studied brand of natural astaxanthin: the clinical database for AstaReal® safety studies includes nearly 50 human studies involving more than 1,400 subjects. All studies revealed no adverse effects.
- AstaReal® has been the leading player in the natural astaxanthin market for more than 20 years since its first consumer product launch in Europe in 1995.
- Supported by its unique Japanese technology, AstaReal® astaxanthin has attained various quality and safety recognitions in Japan, Europe and the USA. For example, it was granted the Generally Recognized As Safe (GRAS) status by U.S. Food and Drug Administration (FDA) in 2010.

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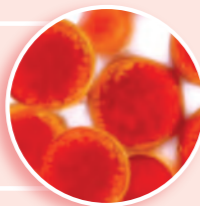
Fulfilling new nutritional needs for better health management with

NATURAL ASTAXANTHIN



Natural Astaxanthin has been clinically proven to be able to offer protective effects in various ageing organs.

What is Astaxanthin? A natural red carotenoid pigment harvested from freshwater microalgae



The Antioxidant Effect of Astaxanthin is

- 110** times stronger than Vitamin E
- 560** times stronger than Green tea catechins
- 800** times stronger than CoQ 10
- 3000** times stronger than Resveratrol
- 6000** times stronger than Vitamin C

Nishida et al. (2007). Carotenoid Science, 11, 16-20.

Only low amounts of astaxanthin are present in the normal human diet as it is only found in red seafood (e.g. prawns, salmon) which feed on the microalgae that produce astaxanthin.

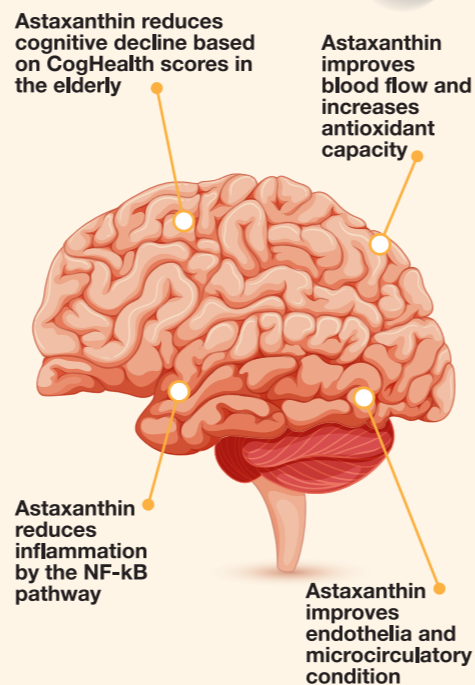
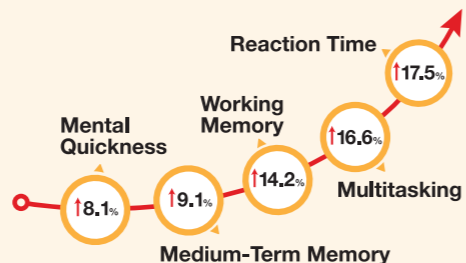


Brain Health

Natural Astaxanthin Helps Keep the Brain Healthy

Excessive persistent oxidative stress and chronic inflammation in the brain have been linked to the development and progression of neurodegenerative conditions, such as Alzheimer's disease and Parkinson's disease, and also linked to cerebrovascular diseases, such as ischemic stroke and vascular dementia.

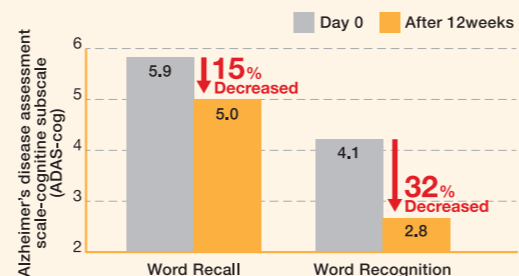
Satoh et al. (2009) J Clin Biochem Nutr 44(3):280-4.



Improved Cognitive Function

Improvement of Alzheimer's Disease Assessment Scale – cognitive subscale (ADAS-cog) after taking astaxanthin for 12 weeks.

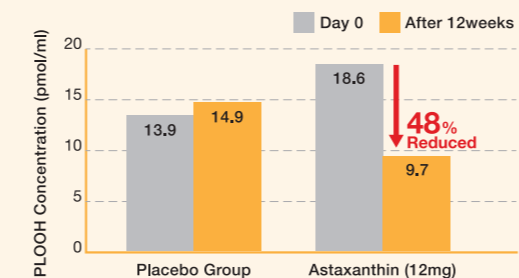
Zanotta et al. (2014) Neuropsychiatr Dis Treat Feb 3 10:225-30.



May reduce severity of dementia

A lower level of phospholipid hydroperoxides in red blood cells is linked to decreased dementia-linked oxidation of red blood cells.

Nakagawa et al. (2011) Br J Nutr. Jun; 105(11): 1563-71.

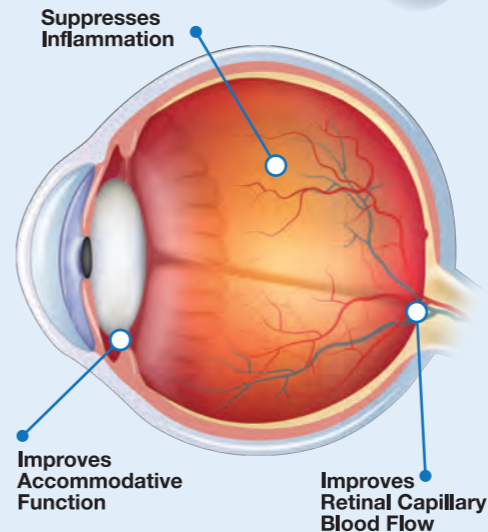


Eye Health

Natural Astaxanthin Fights Eye Fatigue and Computer Vision Syndrome (CVS)

Natural astaxanthin alleviates eye fatigue by quenching the cellular inflammation that emerges during persistent visual stress and contraction of the ciliary muscle. It may also reduce oxidative damage induced by the blue light from digital screens.

Astaxanthin offers front-of-the-eye antioxidant protection. Other antioxidants, such as lutein / zeaxanthin, protects the eye from the back (macula).



77% Subjects saw improvement in eye strain symptoms

Kajita et al. (2009) Medical Consultation & New Remedies 46(3): 89-93.

46% Reduction in the number of visual display terminal workers who complained about eye strain

Nagaki et al. (2002) J Trad Med 19:170-73.

27% Improvement in accommodation range

Up to 48% Improvement in accommodation speed

Accommodation range and speed determine the ability to maintain visual acuity when refocusing between far and near objects.

Shiratori et al. (2005) J Clin Therap Med 21(6):637-50.



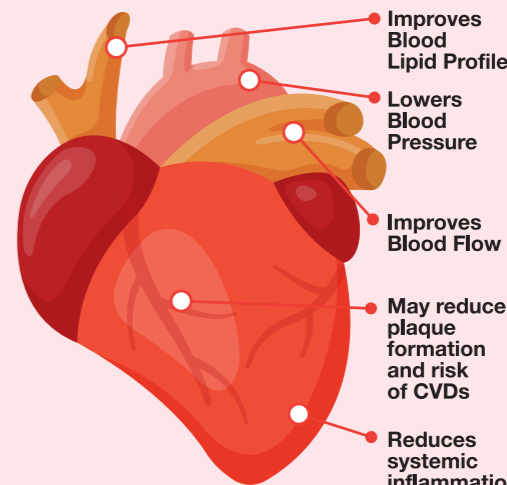
Improves capillary blood flow in the eye Ensures sufficient oxygen and nutrient supply to the eyes.

Saito et al. (2012) Graefes Arch Clin Exp Ophthalmol. 250:239-45.

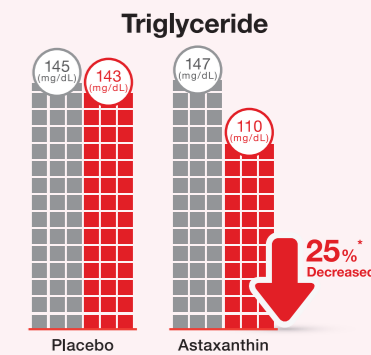
Cardiovascular Health

Natural Astaxanthin Improves Overall Cardiovascular Health

Oxidative stress and inflammation are widely recognized as contributing factors for atherosclerotic cardiovascular diseases (CVDs). Natural astaxanthin's superior antioxidant activity and anti-inflammatory effects may help lower the risk of CVDs.

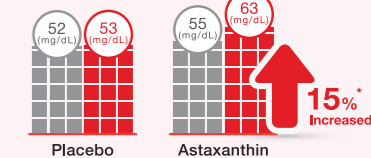


Improves blood lipid profile



*p<0.05 vs week 0

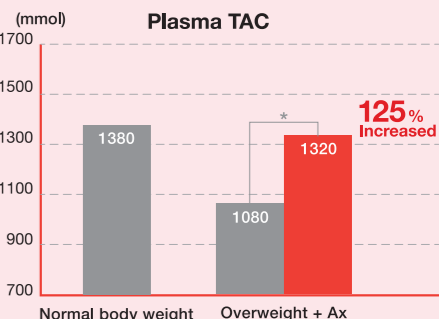
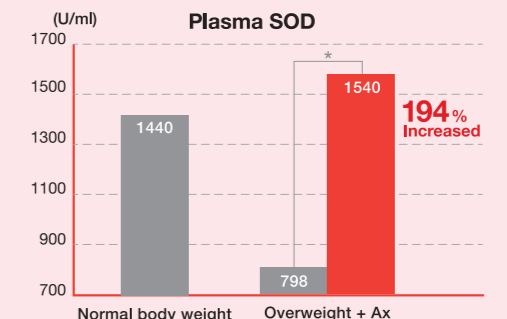
HDL-Cholesterol



*p<0.01 vs week 0

Yoshida et al. (2010) Atherosclerosis 209 (2):520-23.

Boosts blood antioxidant defences in overweight individuals



SOD: Superoxide Dismutase TAC: Total Antioxidant Capacity

*p<0.001

Choi et al. (2011) Phytother. Research 25 (12): 1813-18.