

Astaxanthin ~ King of Carotenoids The Natural Powerhouse Pigment

Astaxanthin is a red-coloured carotenoid which is found in various microorganisms and marine animals, such as algae, yeast, salmon, lobster, krill and shrimp. It is naturally found most abundantly in *Haematococcus pluvialis*, a freshwater microalga.¹

Our body's cells produce free radicals during normal metabolic processes. At the same times, cells also produce antioxidants to neutralise these free radicals. When there is an imbalance of free radicals and antioxidants in our body, oxidative stress can occur and create damage to our body cells, proteins and DNA.

Dubbed the "king of carotenoids", Astaxanthin is scientifically proven as the most powerful carotenoid antioxidant which exhibits very strong free radical scavenging and singlet oxygen quenching activities²⁻⁴. Furthermore, astaxanthin has been classified as a "pure anti-oxidant" unlike other popular carotenoids which may show "pro-oxidative" characteristics under certain conditions⁵.

Astaxanthin is one of the strongest antioxidants found in nature

Antioxidant Power of Astaxanthin Against Singlet Oxygen²



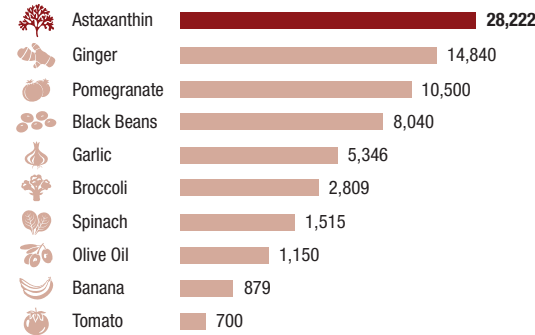
"Astaxanthin is 6000 times STRONGER than Vitamin C in removing a singlet oxygen³."

Why Choose Optixanthin?

It is functional superfood

- In natural oil form, not in synthetic tablets, capsule, pills or powder.
- Virgin coconut oil (VCO) helps the body absorption of Astaxanthin.
- Cultivation process was done in safe and clean environment.
- Solvent and chemical-free extraction process.
- Natural plant-based product, suitable for vegetarians.

Super Food vs. Astaxanthin (ORAC – Oxygen Radical Absorbance Capacity)



REFERENCE:

1. Ranga Rao, A.; Phang, S. M.; Sarada, R; Ravishankar, G.A. Astaxanthin: Sources, extraction, stability, biological activities and its commercial applications – a review. *Mar. Drugs*. 2014, 12, 128 – 152.
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Astaxanthin from algae, is recognized as safe (GRAS) by the USFDA, and approved as Food Category by MOH

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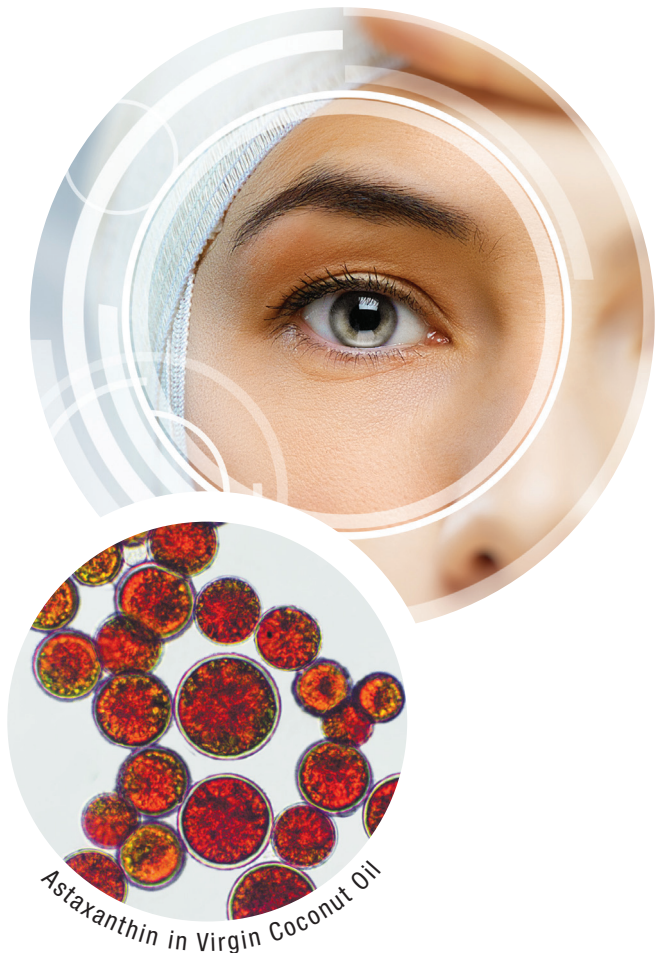
Optixanthin Sdn Bhd (1331899-x)
No.145-2, Jalan Radin Bagus Sri Petaling,
57000 Kuala Lumpur.
T: +603-9054 6186 / +603-9054 6189
www.optixanthin.com.my



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Improving Your Vision with Optixanthin

Benefits of natural astaxanthin for vision and eye health



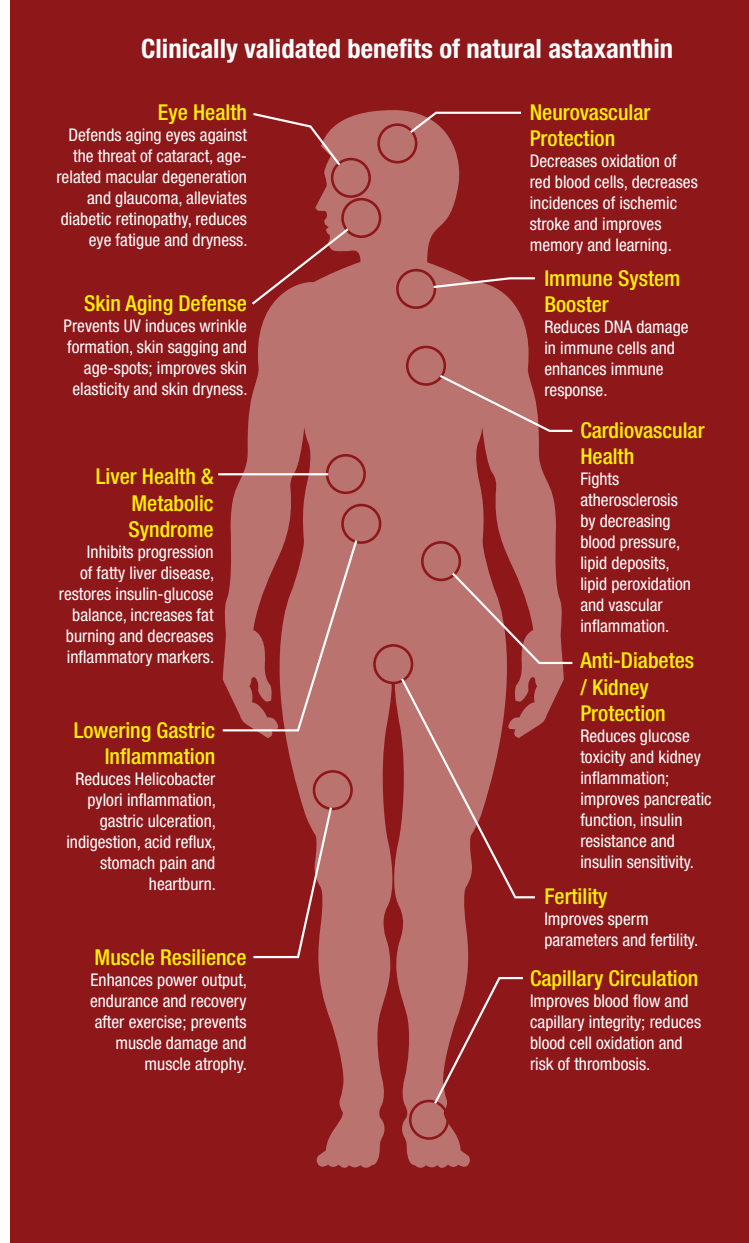
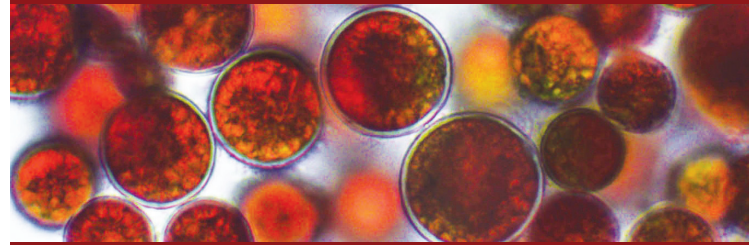
Astaxanthin ~ In a League of Its Own

Unlike majority of antioxidants which work either only on the outer water-soluble (eg: vitamin C) or inner fat-soluble (eg: vitamin E, beta-carotene) layer of cell membrane, Astaxanthin is able to protect both water- and fat-soluble parts of the cells from free-radical attacks and **reduces DNA damage**⁶.

Astaxanthin is also a very potent **anti-inflammatory** and **pain reliever**. It acts on at least five different inflammation pathways, make it very effective for virtually any inflammatory conditions from joint problems such as rheumatoid arthritis to cancer.^{7,8}

“Astaxanthin is the ONLY carotenoid that is able to cross BLOOD-BRAIN barrier and BLOOD-RETINAL barrier.”⁹

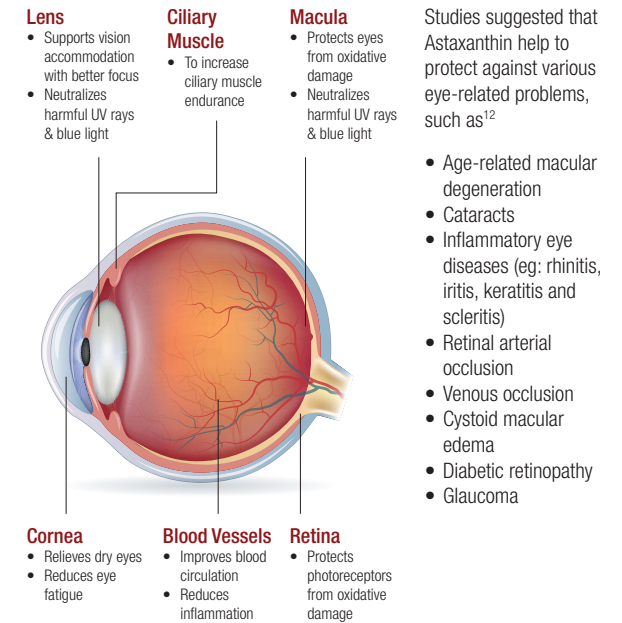
Another unique features of Astaxanthin is its ability to cross the blood-brain barrier and blood-retinal barrier⁹, allowing its effective delivery, which has **huge implications for the health** of your eye, brain, heart, skin and other parts of the body. Astaxanthin has numerous health benefits that are supported by extensive scientific research, including more than 50 human clinical trials and 1400 peer-reviewed papers¹⁰.



Astaxanthin ~ Ultimate Carotenoid for Eye Health

Loss of vision is a terrifying reality for millions of aging Malaysians. Age-related macular degeneration, cataracts and glaucoma are the three major age-associated causes of blindness, which are related to chronic oxidative damage and involve some degree of inflammation¹¹. Astaxanthin supplementation can improve eye health in various ways.

Astaxanthin Is A Potent Protector of Vision



“Well-designed clinical studies have shown that Astaxanthin improves diabetic retinopathy, macular degeneration, eye strain and fatigue by quenching cellular inflammation that emerges during persistent visual stress and tension of ciliary muscle.”¹²

Computer Vision Syndrome (CVS) or Digital Eye Strain is strain on eyes that happens when your eyes focus on a computer or digital device for prolonged periods of time. The most common symptoms associated with CVS or digital eye strain are eye strain, blurred vision, dry eyes, headache, neck and shoulder pain. Numerous clinical studies have shown that natural Astaxanthin supplementation improves eye fatigue in increasing blood flow to the retina and improving the nutrition, oxygenation, waste removal and tissue rejuvenation function of the eye.¹³

虾红素~红萝卜素之王，天然色素之冠

虾红素是一种可在各种不同的微生物和海洋生物¹，如藻类、酵母菌、三文鱼、龙虾、磷虾、小海虾中获得的红萝卜素。它在*Haematococcus pluvialis*，一种淡水微藻类中能大量取得。

在新陈代谢的过程中，人体细胞会分泌自由基。同时，人体细胞也会分泌抗氧化剂来中和这些自由基。当体内的自由基和抗氧化剂失衡时会发生一种现象，称为氧化压力。这种现象会对人体细胞、蛋白质和去氧核糖核酸(DNA)带来伤害。

虾红素已在医学上被证实为最有效的抗氧化红萝卜素。它能清除大量自由基和减少活性氧在体内的活跃性及破坏性²⁻⁴。抗氧化剂会导致体内物质的氧化，从而破坏人体细胞。然而，虾红素在特定的条件下不会显示出助氧化剂的特征⁵，因此被归类为“纯抗氧化剂”。

虾红素是自然界中最强的抗氧化剂之一

虾红素防止活性氧氧化的功效是²

500倍
维生素E

560倍
绿茶所含的儿茶素

3000倍
葡萄所含的白藜芦醇

800倍
CoQ10

6000倍
维生素C

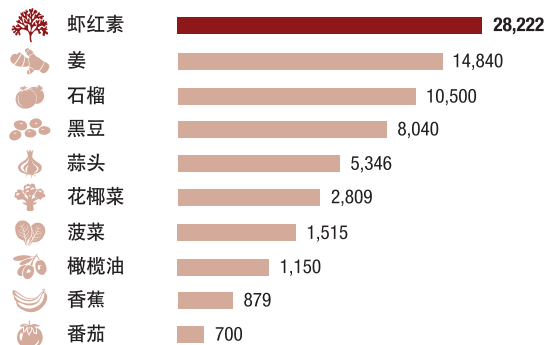
“虾红素清除单线态氧的功效是维生素C的6000倍³。”

为什么选择Optixanthin?

它是功能性的超级食物

- 处于天然的油态，并非人造药片、胶囊、药丸或粉末。
- 初榨的椰子油有助于提升人体对虾红素的吸收。
- 种植工作在封闭，无菌的良好卫生环境下进行。
- 提取椰子油的过程中无添加任何化学药品。
- 主要成分为天然植物，适合素食者食用。

超级食物与虾红素抗氧化能量显示表(ORAC, 美国农业部)



REFERENCE:

1. Ranga Rao, A.; Phang, S. M.; Sarada, R.; Ravishankar, G.A. Astaxanthin: Sources, extraction, stability, biological activities and its commercial applications – a review. *Mar. Drugs*. 2014, 12, 128–152.
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藻类中的虾红素已被美国食品药品监督管理局公认安全(GRAS), 也被马来西亚卫生部(MOH)归为粮食类。


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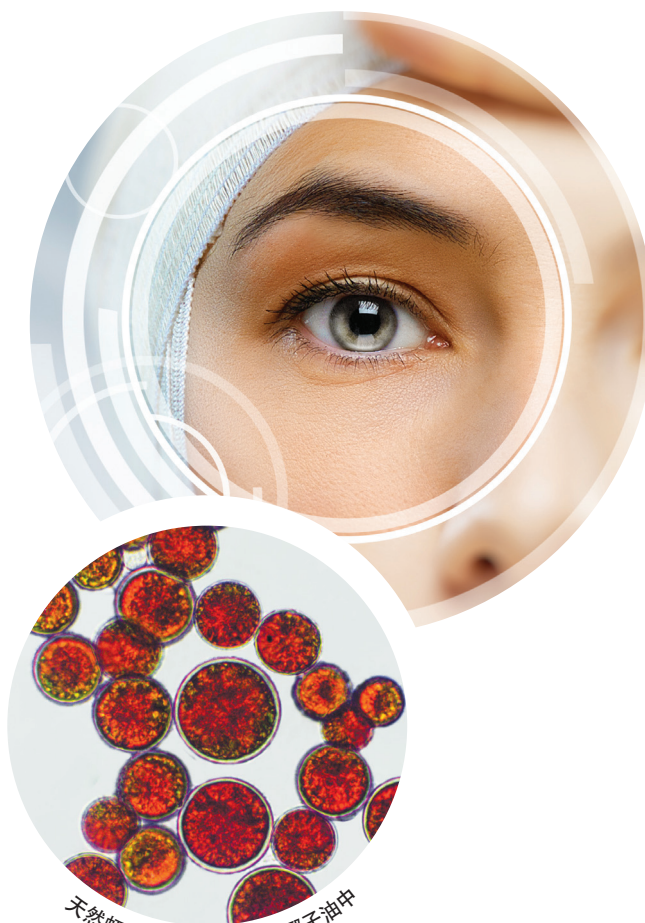
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No.145-2, Jalan Radin Bagus Sri Petaling,
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Optixanthin 虾红素能让您改善视力

天然虾红素对视觉与眼球健康带来众多好处



天然虾红素，分布在初榨椰子油中

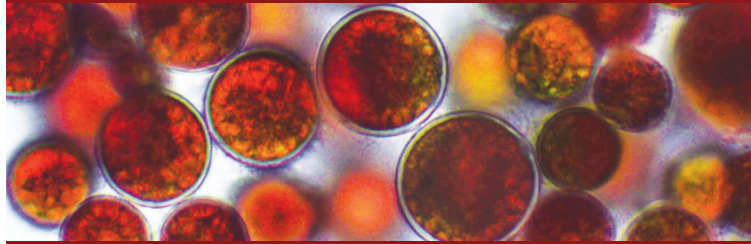
虾红素的独特之处

大多数的抗氧化剂只能在外细胞膜(如维生素C)或内细胞膜(如维生素E, B-胡萝卜素)发挥其功效。虾红素能穿越细胞膜的内外两侧, 由内而外提供最完整的抗氧化效力。这可以减少自由基对细胞膜、脂肪、蛋白质及去氧核糖核酸(DNA)的破坏⁶。

虾红素也拥有强大的消炎和舒缓疼痛的功效。它在至少5种造成发炎的状况见效。小至关节问题如风湿, 大至癌症^{7,8}, 它都能有效地解决几乎所有造成发炎的情况。

“虾红素是唯一一个能通过血脑屏障和血眼屏障的红萝卜素。”

虾红素的独特之处是它能通过血脑屏障和血眼屏障的功效⁹。这会增加它在体内流动的效率, 为眼睛、大脑、皮肤及身体的其他部位带来很大的益处。虾红素的好处已被医学研究证实, 其中包括超过50项人体临床测试以及1400项同行审议¹⁰。



天然虾红素已获医学认可的好处

保持眼球的健康

- 减缓眼球的老化。
- 避免白内障、黄斑点老化、青光眼及糖尿病视网膜病变。
- 舒缓眼睛疲累和干燥的状况。

减缓皮肤的老化

- 避免由紫外线所导致的皱纹、皮肤下垂和老年斑。
- 改善皮肤的弹性和滋润。

维持肝脏的健康及避免代谢综合征

- 抑制非酒精性脂肪肝的形成。
- 确保胰岛素及葡萄糖量处于平衡。
- 增加脂肪的燃烧和减少炎症标志物。

减缓胃部发炎的状况

- 减少由幽门螺旋杆菌所导致的发炎状况、胃溃疡、消化不良、胃酸逆流和消化不良所引起的胃灼热。

提高肌肉的复原度

- 提高身体对激烈运动的负荷、能量的输出及修复能力。
- 防止肌肉损伤和萎缩。

保护神经血管

- 降低红血球氧化的机率。
- 降低局部缺血性心脏病及中风的风险。
- 改善记忆力和学习能力。

提高免疫力

- 减少免疫细胞里去氧核糖核酸的损坏。
- 提高免疫反应。

保持神经血管的健康

- 降低血压, 预防脂肪沉淀、脂肪预氧化和血管发炎, 以避免血管硬化。

防止糖尿病/保护肾脏

- 减缓过剩葡萄糖的毒性和肾脏发炎。
- 改善肾脏的功能, 提高对胰岛素的抵抗性和敏感度。

改善男性不孕症

- 提高精子密度及活动量, 从而提高生育能力。

改善血液循环

- 改善血液循环和微血管的组织结构。
- 减少体细胞的氧化和血栓形成的风险。

虾红素~保护眼球最重要的的红萝卜素

在老化的过程中, 失去视觉是一件可怕的事实。失明的主要因素可以是因年纪增长造成的黄斑点老化、白内障和青光眼等。这些现象是由慢性氧化和某程度上的发炎所造成¹¹。摄取虾红素能改善眼球各部位的健康。

虾红素能:有效的视觉保护色素

眼球晶状体

- 增强眼球的聚焦能力, 使眼球更容易适应周围的环境
- 中和有害的紫外线和蓝光

睫状肌

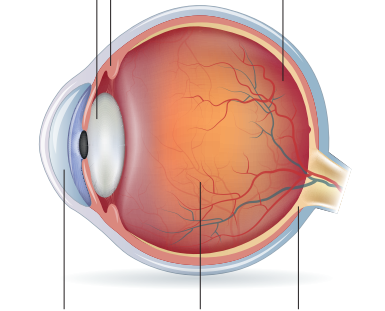
- 增强睫状肌的视觉耐力

视网膜黄斑

- 避免眼球受氧化
- 中和有害的紫外线和蓝光

医学研究证实虾红素可避免患上眼部疾病, 如¹²

- 因年纪增长造成的黄斑点退化
- 白内障
- 由眼部发炎造成的疾病(如鼻炎、眼角膜炎、虹膜炎及巩膜炎)
- 视网膜动脉闭塞
- 静脉闭塞
- 黄斑囊样水肿
- 糖尿病性视网膜病变
- 青光眼



眼角膜

- 缓和眼球干燥的状况
- 避免眼球过度疲劳

血管

- 改善血液循环
- 减缓发炎的状况

视网膜

- 避免眼球里的感光细胞被氧化

“医学研究已证实虾红素可减缓睫状肌过度拉扯, 由此降低炎症细胞的产生¹²。虾红素也可以改善糖尿病性视网膜病变和舒缓视觉压力。这些都能减少眼球的疲累感。”

当眼睛长时间盯着电脑或电子产品荧幕时, 对眼睛造成的压力称为**电脑视觉综合症(CVS)**。电脑视觉综合症最普遍的症状为眼睛疲累、视觉模糊, 眼睛干燥、颈部和肩膀酸痛及头疼。无数医学研究证实了虾红素可增加血液通往视网膜的流动量, 改善养分、氧化物和排泄物的排出及改善眼部细胞的再生能力¹³。这些都能有效地改善眼睛过度疲累的状况。