



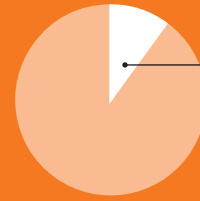
Zeaxanthin nutrition the way nature intended

OPTISHARP™ Natural is a naturally-sourced dietary zeaxanthin ingredient from the same makers of FloraGLO® Lutein – the most clinically-researched and science-backed lutein brand in the world*.¹ And just as FloraGLO® did for lutein, OPTISHARP™ Natural is setting a new standard for zeaxanthin. The same “free” form as is found naturally in our diet, OPTISHARP™ Natural from marigolds helps you provide the clinically-proven benefits of the zeaxanthin nutrient the way nature intended.

OPTISHARP™ Natural can help your customers bridge the zeaxanthin gap in their diets and give you a naturally sourced, advantageous approach to meet new eye health formula recommendations.



The latest research recommends at least 10 mg of lutein and 2 mg of zeaxanthin daily to demonstrate eye health benefits and improve visual performance.²⁻¹¹ However, getting these amounts through diet alone can be difficult, and in the case of zeaxanthin, it's incredibly difficult.



Most people consume only **10%** of the zeaxanthin and lutein needed each day to help protect their eyes and keep them healthy.¹²

Zeaxanthin – the way nature intended

For many people, an eye vitamin is the best source for their daily supply of zeaxanthin. However, many formulations don't provide the clinically-studied amounts of dietary zeaxanthin that your customers need each day for optimal vision. When you choose FloraGLO®, choose OPTISHARP™ Natural as well and deliver zeaxanthin the way nature intended.

Eye Protection

Zeaxanthin, like lutein, is a protective antioxidant that our bodies need to help keep our eyes healthy. The body selectively deposits zeaxanthin and lutein in the macula as macular pigment. Higher macular pigment translates to a stronger layer of protection. Supplementing our diets with at least 10 mg of FloraGLO® Lutein and 2 mg of zeaxanthin is clinically proven to increase macular pigment.²⁻¹¹

A Good Thing for Everyone

Together, zeaxanthin and lutein can help reduce the risk of certain eye conditions, including age-related macular degeneration (AMD).¹³⁻¹⁶ But the benefits of zeaxanthin aren't reserved just for those at risk for eye conditions or for those over 50. Zeaxanthin can help to enhance visual performance and help maintain the quality of vision as we age.⁷⁻¹⁰ That's market potential.

Meet the demand for AREDS2 eye vitamin formulations with OPTISHARP™ Natural – the naturally-sourced and dietary, free-form of zeaxanthin, a nutrient proven to promote eye health.



Choosing OPTISHARP™ Natural – an important difference

Not all dietary zeaxanthin is the same – it can be either in a non-esterified (free) or an esterified form; however, 93% of the total zeaxanthin and lutein in the diet is present in the free-form. To absorb an esterified form of zeaxanthin, it must first be de-esterified by the body – an enzymatic process that varies among individuals and can affect absorption.¹⁷ Free-zeaxanthin, like OPTISHARP™ Natural, is directly absorbed into the bloodstream delivering important benefits.¹⁷

When you buy zeaxanthin that contains both free and esterified forms, it can present labeling and formulation issues.

Demand the real thing

Unfortunately, some zeaxanthin represented as “zeaxanthin isomers” or dietary zeaxanthin is purposefully formulated to contain 3R,3’S-*meso*-zeaxanthin, a zeaxanthin isomer which is quite different than dietary zeaxanthin and is not a suitable replacement.

Meso-zeaxanthin isn’t found naturally in the diet – for a reason.

Nature has given us abundant sources of dietary zeaxanthin like the dietary zeaxanthin found in OPTISHARP™ Natural. *Meso*-zeaxanthin; however, is not found naturally in the diet. Although *meso*-zeaxanthin is a component of the macular pigment, research supports that it is a result of a natural conversion of lutein in the macula.

“There is limited regulatory approval for the use of *meso*-zeaxanthin in foods or food supplements globally. In the EU, it has not been approved and JECFA has not evaluated the safety of *meso*-zeaxanthin. In the US, only limited notifications are available.”

Meso-zeaxanthin science is in its infancy.

Evidence to support the efficacy of *meso*-zeaxanthin is lacking compared to studies linking dietary zeaxanthin and lutein supplementation to improved eye health.¹⁸ This includes the landmark AREDS2 study, which did not include *meso*-zeaxanthin in any of the test supplements.

Additionally, the reported research on the eye health benefits of *meso*-zeaxanthin also reports that *meso*-zeaxanthin – as well as dietary lutein and zeaxanthin – were in the study test articles, supporting that the observed benefits are not attributable to *meso*-zeaxanthin alone.

Further *meso*-zeaxanthin research on its safety, benefits and interaction with lutein and zeaxanthin is needed. Evidence suggests *meso*-zeaxanthin may compete with zeaxanthin and lutein absorption, hindering these two nutrients from reaching the macula where they are critical for maintaining healthy eyes and protecting our vision as we age.^{19–21}

	Dietary lutein (as FloraGLO®) and zeaxanthin	<i>Meso</i> -Zeaxanthin (in combination with lutein and zeaxanthin)
Years of clinical study	30*	8
Total number of published human clinical trials	64*	7
Trials with different investigators†	✓	-
Found Naturally in...		
Diet	✓	-
Macula	✓	✓
Skin	✓	-
Breast Milk	✓	-
Brain	✓	-
Included in AREDS2	✓	-

* Based on a biannual PubMed search analysis as of January 2014. Counts include studies using FloraGLO® Lutein—the most clinically researched lutein brand worldwide.¹ Numbers are considerably higher when other sources of dietary lutein and zeaxanthin are considered.

† Refers to trials where there were not individual investigators in common among all trials.

**Dietary, free-form
of zeaxanthin**

**Naturally sourced
from marigolds**

**From DSM, the FloraGLO®
lutein pioneer**

Naturally-sourced ingredients from a name you can trust

Backed by nearly 20 years of worldwide scientific research, FloraGLO® Lutein is the most trusted and recommended lutein brand on the market. When you choose OPTISHARP™ Natural Zeaxanthin, you're getting that same exceptional quality and service you've come to expect from FloraGLO®.

Based on AREDS2 research, the National Eye Institute in USA recommends 10 mg of lutein and 2 mg of zeaxanthin as the new standard of care for eye health.²² OPTISHARP™ Natural is the perfect way to update your formulations to meet those recommendations. In an absorbable form, beneficial, and naturally sourced – OPTISHARP™ Natural raises the bar among zeaxanthin ingredients and helps you confidently deliver quality, plant-based nutrients your customers can count on for maintaining the health of their eyes, every day.



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