



Lutein and Zeaxanthin

WHAT IS IT?

Lutein is a carotenoid (a pigment that comes from plant sources) that has been shown to be very beneficial for eye health and visual functioning. It is found in high amounts in the eye and helps filter out the most harmful of the sun's rays. Lutein is also concentrated in the skin and helps to protect against skin damage from ultraviolet radiation.

Zeaxanthin is a sister compound to Lutein. They are frequently found together in foods, and have very similar activities in the body.

Lutein and zeaxanthin are found in the highest levels in spinach, kale and other dark leafy vegetables. They can also be found in tomatoes, corn, eggs, grapes, pistachio nuts and squash (including zucchini). They are better absorbed by the body when eaten with a small amount of fat, such as adding olive oil to dark leafy vegetables. Eggs and pistachio nuts already contain fat, and lutein and zeaxanthin are naturally better absorbed from these sources.

Notes:

WHO MIGHT CONSIDER TAKING THIS?

Lutein and zeaxanthin supplementation are often recommended for a variety of eye diseases including:

- Improving Visual acuity
- Retinitis pigmentosa
- Age-Related Macular Degeneration (10mg Lutein and 2mg zeaxanthin taken for 10 years decreased the risk of macular degeneration by about 10%)

PREPARATIONS AND DOSAGE

Dose:

10–20mg of Lutein and 2–4mg of Zeaxanthin is a standard dose that has been tested for the above conditions.

Food Sources:

Increasing consumption of dark leafy vegetables, oranges, grapes, eggs, tomato juice, and squash is an excellent way to get more lutein and zeaxanthin.

There are no side effects from taking lutein or zeaxanthin supplements and they do not interact with medications.

2ND PAGE SINGLE COLUMN STYLE

The omega-3 fatty acids are essential nutrients for humans. They are found in the diet as **alpha-linolenic acid (ALA)**, eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA). Each serves a different function in the body. ALA is considered an essential fatty acid (EFA) because humans cannot produce it in the body. Both EPA and DHA can be obtained directly through foods, but the body can also make them from ALA.

Omega-3 fatty acids have been shown to reduce inflammation and lower triglycerides, and may have beneficial effects on blood pressure and depression. DHA is the major polyunsaturated fatty acid found in the brain and the retina and is essential for healthy brain and eye development and function.

Resources

-  [Weblink 1](#)
-  [Weblink 2](#)
-  [PDF weblink](#)
-  [YouTube link](#)

List with CheckMarks

- List item 1
- List item 2
- List item 3
- List item 4

Alha-linolenic acid (ALA), can be converted to EPA, though conversion to DHA is poor in humans. There are vegetarian forms of DHA available in the marketplace made from algae.

WHY SHOULD I CONSIDER TAKING THIS?

Most American diets provide at least ten times more omega-6 than omega-3 fatty acids. Omega-6 fatty acids eventually metabolize to produce hormone-like substances that can elevate inflammation.

Your healthcare provider may recommend omega 3 supplements if you have any of the following:

- | | | |
|--|--|----------------------|
| <input type="checkbox"/> Small List Item 1 | <input type="checkbox"/> Small List Item 5 | • Small List Item 9 |
| <input type="checkbox"/> Small List Item 2 | <input type="checkbox"/> Small List Item 6 | • Small List Item 10 |
| <input type="checkbox"/> Small List Item 3 | <input type="checkbox"/> Small List Item 7 | • Small List Item 11 |
| <input type="checkbox"/> Small List Item 4 | <input type="checkbox"/> Small List Item 8 | |

TEXT BOX WITH WARM GRAY FILL AND AZURITE 0.75 STROKE

The omega-3 fatty acids are essential nutrients for humans. They are found in the diet as alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA). Each serves a different function in the body. ALA is considered an essential fatty acid (EFA) because humans cannot produce

TEXT BOX WITH COOL GRAY FILL AND AZURITE 0.75 STROKE

The omega-3 fatty acids are essential nutrients for humans. They are found in the diet as alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA). Each serves a different function in the body. ALA is considered an essential fatty acid (EFA) because humans cannot produce