

Lutein

What does it do? Lutein is an antioxidant in the carotenoid family (naturally occurring fat-soluble pigments found in plants). Lutein is the primary carotenoid present in the central area of the retina called the macula. Lutein may act as a filter to protect the macula from potentially damaging forms of light. Consequently, lutein appears to be associated with protection from age-related macular degeneration (the leading cause of blindness in older adults).

Where is it found? Spinach, kale, collard greens, romaine lettuce, leeks, and peas are good sources of lutein.

Who is likely to be deficient? While a deficiency has not been identified, people who eat more lutein-containing foods appear to be at lower risk of macular degeneration. One study found that adults with the highest dietary intake of lutein had a 57% decreased risk of macular degeneration compared with those people with the lowest intake, and of the carotenoids, lutein/zeaxanthin are most strongly associated with this protection.¹ In at least one trial, a similar link was suggested between low dietary lutein and increased risk of cataracts.²

How much is usually taken? People showing protection from macular degeneration have been reported to have eaten about 6 mg of lutein per day from food. Lutein, in

supplemental form, should be taken with food to improve absorption.

Are there any side effects or interactions? No lutein toxicity has been identified.

Lutein functions together with zeaxanthin, another antioxidant found in the same foods and supplements as lutein.

References:

1. Seddon JM, Ajani UA, Sperduto RD, et al. Dietary carotenoids, vitamins A, C, and E, and advanced age-related macular degeneration. *JAMA* 1994;272:1413–20.
 2. Hankinson SE, Stampfer MJ, Seddon JM, et al. Nutrient intake and cataract extraction in women: A prospective study. *Br Med J* 1992;305:335–39.
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