

How nutrition and diet affect your visual performance

Did your mother or grandmother tell you that your vision would improve by eating carrots? She was partially correct, in that eating fruits and vegetables can improve vision, but it's also important to understand how the eye is affected by proper nutrition.

Numerous clinical studies have demonstrated that two dietary nutrients protect and enhance vision: zeaxanthin (zee-uh-zan-thin) and lutein. For casual and serious athletes or those who lead an active lifestyle, this information is very important because eating a diet rich in those nutrients can result in significant visual improvements.

Zeaxanthin and lutein are macular pigments that function like a pair of internal sunglasses to filter harmful blue light and enhance vision. Thick or dense macular pigments protect the photoreceptors -which are responsible for and vital to our vision. Healthy macular pigment density provides a host of visual performance benefits including:

- * Improved contrast sensitivity - for example, seeing a white golf ball or baseball against a light blue sky.
- * Enhanced glare recovery time - recovering faster from temporary "blinding" caused by high intensity lighting such as automobile or stadium lights.
- * Reduced light sensitivity and visual discomfort - experiencing less discomfort on bright sunny days or other times when exposed to bright light.
- * Increased visual processing speed - seeing an object more clearly facilitates visual processing speed, enabling improved reaction time.

So, how does one increase macular pigment density to get these benefits? One way is to add these nutrients to a diet or take them as an eye vitamin. The average U.S. daily diet doesn't consist of an adequate quantity of fruits and vegetables necessary to achieve a proper macular pigment density in the retina. Dr. Stuart Richer, a pioneer in ocular nutrition recommends that 50 percent of daily caloric intake should be derived from fruits and vegetables. The average American only obtains 8 to 10 percent of their daily caloric intake from these sources.

Because of this, zeaxanthin is scarce in the U.S. diet. To achieve an adequate daily intake of dietary zeaxanthin, one must consume a significant quantity of brightly colored fruits and vegetables. For example, one would have to eat 20 ears of corn or 10 orange bell peppers per day to obtain 8 to 10 milligrams of dietary zeaxanthin - the minimum daily intake most commonly associated with improved visual performance. Since eating large quantities of fruits and vegetables is impractical for many, dietary zeaxanthin supplementation is an alternative.

People who took an eye vitamin containing 8 milligrams of dietary zeaxanthin daily for one year in the FDA-registered clinical study, "The Zeaxanthin and Visual Function Trial" by Richer and his colleagues improved several aspects of their visual performance including: seeing 8.5 more letters on an eye chart, improved vision while driving, fine details more clearly, and elimination of blind spots in their visual field.

Dr. Larry Lampert, a leader in the sports vision field, emphasizes the visual performance benefits of optimal nutrition and zeaxanthin supplementation. Lampert has worked with professional athletes from the PGA, LPGA, MLB, NFL, ATP, and is one of only 450 doctors worldwide to have completed a fellowship in developmental vision. "Many athletes take their vision for granted, unaware that there are simple, natural ways to maintain healthy eyes and improve athletic performance," Lampert says. "They also need to consume certain nutrients to sustain optimal visual performance. Numerous studies reveal that the key nutrient for maintaining visual performance is dietary zeaxanthin."

Whether you're an athlete or someone who simply wants to improve their vision, zeaxanthin and lutein can help. Eat more brightly colored fruits and vegetables regularly and take an eye vitamin like EyePromise that contains natural forms of these important ingredients at an optimal daily amount. Increasing the density of macular pigments in your eyes to protect your visual cells and enhance your visual performance.

