

### How baby boomers can keep eyes healthy with their 'internal sunglasses'

Independence and aging well is something we all hope for as we grow older, but things like healthy vision are often taken for granted until they are lost or impaired. Baby boomers - those born between 1946 and 1964, represent a rapidly aging population unprecedented in the history of this country. Unfortunately, this group is susceptible to a host of vision risks.

Most people are familiar with UV or ultra-violet light and many wear sunglasses and sunscreen to protect their eyes and skin. UV falls in the spectrum of invisible light and is potentially damaging to the front of the eye, or the cornea and lens, i.e. cataract. But, what about blue light? How does this "other" light affect the back of the eye and what can you do to protect your vision?



Blue light waves are visible to the eye and on a different or longer range of the light spectrum than UV; blue light waves are all around us and can damage the photoreceptors (rods and cones) in the retina in the back of the eye. The eye's natural protective filter, macular pigment, acts like internal sunglasses to block harmful blue light before it reaches the photoreceptors. However, if your macular pigment density is thin (a reality for most), your photoreceptors are at a greater risk of being damaged by blue light.

So, what's the big deal if you lose some of your rods or cones? Well, photoreceptors don't regenerate and each person has a finite number of them. The other potential problem is that low macular pigment is a key risk for Age-Related Macular Degeneration (AMD), which destroys central vision, and is the leading cause of vision loss in people over age 50, according to the American Optometric Association. Science indicates that damage from blue light exposure is a significant contributing factor to AMD, and if you make a fist and hold it between your eyes, you'll see what vision loss from AMD can look like.

Leaves on a tree are protected from damaging light by carotenoids including zeaxanthin (zee-uh-zan-thin) and lutein, which are seen as leaves change colors. An apple's skin also provides protection, however when the apple is sliced open, the inside eventually turns brown - a process known as oxidation. Oxidative stress also occurs in our eyes and carotenoids like zeaxanthin and lutein help protect our vision.

Macular pigment is comprised of two dietary carotenoids: zeaxanthin and lutein, which protect the photoreceptors that are responsible for vision. Low macular pigment density is also a key risk factor for AMD, and the macular pigments have also been demonstrated to enhance visual performance in sports, night driving, reduce sensitivity to bright light, and improve vision in low light situations. Our bodies cannot synthesize or make zeaxanthin or lutein, as they must be obtained from our diet. Too many Americans are not consuming enough and their vision can be adversely affected or even endangered.

A diet rich in dark green leafy and brightly colored fruits and vegetables can increase macular pigment density, however most Americans consume less than 25 percent of the recommended quantity of these sources. Zeaxanthin, in particular, is very difficult to obtain in one's daily diet; you'd have to eat 20 ears of corn to equal the recommended daily amount of 8 milligrams of dietary zeaxanthin. Many eye care professionals recommend eye vitamins to help replenish what your eyes need most.

As blue light-induced damage accumulates over a lifetime, by the time you are in your 40s and 50s, you are at an increased risk for AMD, vision impairment, and decreased visual performance. Visit your eye care professional and ask about having your MPOD (Macular Pigment Optical Density) measured - it's simple, affordable and takes only a few minutes. If you do not eat the recommended five to nine servings of fruits and vegetables each day, consume a high-quality eye vitamin like EyePromise that is doctor recommended, all natural and has an unconditional money-back guarantee.

Vision becomes even more precious as we age with loss of independence a very real threat to aging Americans. Reduce your risk of the harmful effects of blue light to your vision by increasing the density of your "internal sunglasses."