MacuHealth





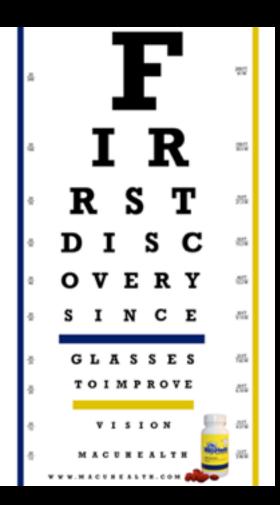
Macular pigment, which consists of Lutein, Zeaxanthin and Meso-zeaxanthin, protects the central retina by:

- Filtering harmful visible blue light;
- Neutralising damaging free radicals;

A formulation containing all three macular carotenoids, as in MacuHealth with LMZ3, is required to exert maximum antioxidant effect¹ and to maximally increase macular pigment;²

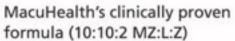
- Studies on the singlet oxygen scavenging mechanism of human macular pigment. Li, B, F. Ahmed, and P.S. Bernstein, Arch.Biochem.Biophys., 2010, 504: pp. 56-60.
- A central dip in the macular pigment spatial profile is associated with age and smoking. Kirby M, Beatty S, Loane E, Akkali M, Connolly EE, Stack J, Nolan JM. Investigative Ophthalmology and Visual Science 2010; 51: pp, 6722-8.

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PRESENTATION OF THE PRESEN

Peerreviewed science – high impact factor journals

MacuHealth is manufactured from natural ingredients to the highest possible quality standards and has been tested for stability, safety and patient benefit.

- The superiority of this carotenoid formula, which uniquely contains meso-zeaxanthin, over formulation lacking this essential carotenoid;
- That this supplement enhances visual function in patients with retinal disease (e.g. age-related macular degeneration and diabetic retinopathy);
- That this supplement enhances visual function in patients free of retinal disease (e.g. athletes; pilots; military).

Research supported by independent government grants CREST (IRC; 281096)



Level 1 evidence – meta-analysis and double-blind placebo controlled clinical trials

10 head-to-head clinical trials - 373 citations from international peer-reviewed journals



THE BENEFITS OF ENRICHING MACULAR PIGMENT

The macular pigment in the eye is made up of nutrients called carotenoids, which can be found in many leafy greens, coloured fruits and vegetables. So what does macular pigment do for us? Firstly, it has major antioxidant properties, which makes it ideal for neutralizing free radicals which destroy the cells we need for vision. Secondly, it filters short-wavelength blue light. This is important because blue light also produces free radicals, and because blue light is deleterious for visual performance and experience.

The two main reasons why we get AMD are oxidative stress - which is damage caused by free radicals in the eye - and cumulative exposure to blue light. Macular pigment protects us from both. So by enriching macular pigment, we could potentially stop the disease developing in the first place!

Our Idea: Take young and healthy people with normal vision, and enrich their macuar pigment to give them better visual performance.

Even a healthy person with a well-balanced diet consumes far less carotenoids then are needed to maintain optimal levels of macular pigment. This means we are all walking around with sub-optimal levels of carotenoids! An average western diet contains about 1.5 mg of the macular pigment carotenoids per day. Studies show that if you want to change retinal tissue levels, to a point that has a positive implication in terms of function, you need to be consuming between 10 and 20 mg per day... Here's where we introduce MacuHealth, a supplement that combines all three carotenoids to enrich and restore macular pigment levels.

By combining these three carotenoids, we can actually create a better, more effective visual experience in a younger population, while also having a positive impact on patients with AMD. So what exactly do we mean by better visual experience?

Firstly, we mean enhancing contrast sensitivity. Contrast sensitivity is a very important measure of visual function, especially in situations of low light, fog or glare, when the contrast between objects and their background often is reduced. Driving at night is an example of an activity that requires good contrast sensitivity for safety. Studies show that enriching macular pigment will actually enhance our contrast sensitivity, making our vision sharper and clearer no matter our surroundings.

Secondly, we mean macular pigment's ability to optimise visual performance by attenuating chromatic aberration, veiling luminance, and blue haze. Chromatic aberration, also known as "color fringing" or "purple fringing", is a common optical problem that occurs when a lens is either unable to bring all wavelengths of color to the same focal plane, and/or when wavelengths of color are focused at different positions in the focal plane. Enriching macular pigment reduces the effects of these optical problems!

Finally, these carotenoids may even have an effect on brain health. Studies show that people with high macular pigment levels have better cognitive performance, and that patients with Alzheimer's disease are deficient in these key nutrients. Don't wait. Enrich your macular pigment today!