

Alan D. Mendelsohn M.D., F.A.C.S. • Nathan Klein, O.D.

KNOWN STEPS TO MAINTAIN MACULAR HEALTH (Thereby preventing / minimizing macular degeneration)

- 1. Refrain from smoking
 - Smoking provokes hypoxia and reduces choroidal blood flow
 - Smoking reduces the density of crucial macular pigments
 - Smoking decreases the absorption and effectiveness of Vitamin E, and caretonoids, such as Lutein and Zeaxanthin
- 2. Use of sunglasses with UV-400 blocker and polarization (both lens surfaces), at all times when outdoors, during daylight hours, including when in a vehicle.
- 3. Take AREDS 2 Vitamin supplementations, such as Ocuvite 50+ or Preservision. Six key active ingredients:

LUTEIN and ZEAXANTHIN

Two of the carotenoids, Lutein, and Zeaxanthin, are pigments contained in the cell body of the photoreceptors, therefore called "macular pigment." The macular pigments protect the eye from oxidative damage and improve visual function.

Dietary Source: spinach, egg yolks, and red bell peppers

VITAMIN C and VITAMIN E

Protect against oxidative damages to macular pigments

Dietary Sources of Vitamin C: Citrus fruits, apples, bananas, and berries

Dietary Source of Vitamin E: Whole wheat, soy, beans, nuts, and broccoli

ZINC and COPPER

Zinc plays multiple important roles in our ocular health. Zinc should be consumed with appropriate quantities of copper, which negates or minimizes toxicity from excessive zinc. Dietary source of Zinc: Wheat germ, pumpkin seeds, eggs, liver, and beef Dietary sources of Copper: Beans, Nuts, chocolate, meat, and whole grain wheat

4. Increase consumption of alpha omega-3 fatty acid:

Fish: <u>Salmon</u> >> Mackerel > Herring > Snapper > Tilapia Other sources: Hazelnuts, Walnuts, Linseed Oil, Flaxseed Oil

5. Utilizing ophthalmic lenses with <u>"blue blocker"</u> to mitigate against development of drusen and macular degeneration. "Blue blocker" minimizes transmission of Blue Light from digital devices including computers, tablets, smartphones, fluorescent bulbs, and sun exposure. 95% of Americans spend 2 or more hours every day on digital devices.