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Much of the existing lutein and zeaxanthin research has focused on a role in reducing risk of AMD (age-related macular degeneration). New research shows that lutein and zeaxanthin may also play a protective role against cataracts.

HIGH LUTEIN AND ZEAXANTHIN INTAKE ASSOCIATED WITH DECREASED RISK OF CATARACTS

According to the World Health Organization, age-related cataracts affect some 18 million people worldwide. Cataracts can be caused by a number of factors, including trauma, disease, diabetes, genetics, and others. Over time, the breakdown of proteins in the lens of the eye results in increasingly poor vision (including reductions in visual clarity, visual acuity, and contrast sensitivity). Once developed, cataracts must be surgically removed.

Fortunately, new research from the *Archives of Ophthalmology* provides evidence of a good correlation between high lutein and zeaxanthin intakes and decreased incidence of nuclear cataracts. A total of 1802 women (aged 50-79) initially recruited for the Women's Health Initiative Observational Study (1994-1998) were re-recruited 4 to 7 years later as part of the Carotenoids in Age-Related Eye Disease Study.

Researchers selected participants based on whether they could be classified as having high dietary levels of lutein and zeaxanthin (78th percentile and above) or low dietary levels (28th percentile and below). Analyses revealed that women in the high dietary levels group had a 23% lower prevalence of nuclear cataracts than women in the low-level group. Dividing the participants into quintiles revealed that women in the highest quintile were 32% less likely to have nuclear cataracts when compared to women in the lowest quintile (adjusted odds ratio 0.68; P=0.04; adjusted odds ratio 0.68; P=0.01, respectively).

The researchers concluded that diets rich in lutein and zeaxanthin correlate moderately well with decreased prevalence of nuclear cataracts in older women, although additional research will be needed in order to confirm a specific mechanism for this protective effect.

< Moeller SM, Volland R, Tinker L, Blodi BA, Klein ML, Gehrs KM, Johnson EJ, Snodderly DM, Wallace RB, Chappell RJ, Parekh N, Ritenbaugh C, Mares JA. 2008. Associations Between Age-Related Nuclear Cataract and Lutein and Zeaxanthin in the Diet and Serum in the Carotenoids in the Age-Related Eye Disease Study (CAREDS), an Ancillary Study of the Women's Health Initiative. Arch Ophthalmology 126(3):354-64 >