

A new study shows that higher intake of B vitamins (B2, B12, B6 and niacin) may be associated with a lower incidence of mild and moderate nuclear and cortical cataracts.

Higher B vitamin intake is associated with a lower incidence of mild and moderate cataracts

It has been shown in previous studies that several nutrients, including vitamin C, E, beta-carotene, zinc, and lutein/zeaxanthin have beneficial effects in the macula of the eyes and in lowering the risk of age-related macular degeneration. In the same studies, however, the vitamin C, E, beta-carotene and zinc showed no apparent benefit with regard to lens opacities or cataract progression.

In a new study published in *Ophthalmology*, researchers evaluated a potential link between dietary intake of lutein/zeaxanthin and select B vitamins and cataract prevalence and incidence.

The participants were 3,115 patients enrolled in the Age-Related Eye Disease Study. Subjects were 55 to 80 years of age and were followed for an average of 9.6 years. Photographs and evaluation of the lens were conducted at baseline and annually. Food frequency questionnaires were completed to evaluate dietary nutrient intakes.

At baseline, higher dietary intake of riboflavin (B2) and B12 were both inversely associated with lens opacity. In comparison to those with the lowest intakes, subjects with the highest average intakes of B2 had a 22% lower incidence of mild nuclear cataracts and a 38% lower risk of moderate nuclear cataracts (clouding of the lens only in the nucleus). High B2 intake also resulted in a 20% reduction in mild cortical cataracts (clouding in the area surrounding the nucleus). People with the highest B12 intake had a 22% and 38% reduction in mild and moderate nuclear cataracts, respectively. Cortical cataract incidence was 23% lower in the group with the highest B12 intake. Compared to the group with the lowest intake, the group with the highest intake of vitamin B6 had a 33% lower incidence of moderate nuclear lens opacity. Intake of lutein and zeaxanthin had no significant effect on any of the cataract measures. Highest dietary intake levels of niacin and B12 were associated with a decreased risk of development of mild nuclear or mild cortical cataracts in participants not taking multivitamins.

The results of this study support the conclusions of earlier studies showing that dietary intake of B vitamins may be related to the development of age-related lens opacities.

Tanya S. Glaser, MD et al. The Association of Dietary Lutein plus Zeaxanthin and B Vitamins with Cataracts in the Age-Related Eye Disease Study. *Ophthalmology* July 2015 Volume 122, Issue 7, Pages 1471–1479.