

## BEAVER DAM EYE STUDY

### LUTEIN INTAKE...HALF AS LIKELY TO HAVE AN INCIDENT OF CATARACT



The relation of antioxidant nutrients to the incidence of nuclear cataracts was investigated in a cohort of adults aged 43-84 years in the Beaver Dam Eye Study (Beaver Dam, Wisconsin).<sup>24</sup> Nuclear opacity was assessed on a five-point ordinal scale using lens photographs taken at baseline (1988-1990) and at follow-up (1993-1995). Of the 1,354 persons eligible, 246 developed a nuclear cataract (level 4 or 5 opacity) in at least one eye. Antioxidant intakes were assessed using a food frequency questionnaire administered at baseline for time points corresponding to intake during the year preceding baseline and 10 years before baseline (the distant past). Lutein-zeaxanthin was the only carotenoid, out of five examined, that was associated with nuclear cataracts. Persons in the highest quintile of lutein intake in the distant past (about 2.5 mg/day in a diet consisting of approximately 2000 kcal) were half as likely to have an incident cataract as persons in the lowest quintile of intake (95% confidence interval 0.3-0.8). In the overall group, nuclear cataracts were not significantly related to intake of vitamin C or vitamin E. However, vitamins C and E were inversely associated with opacities in persons who had some other risk factors for cataracts. While results of this short term follow-up study are consistent with a possible protective influence of lutein and vitamins E and C on the development of nuclear cataracts, the evidence in the present study provides weak support for these associations.

<sup>22</sup>Jacques PF, et al. Long-term vitamin C supplement use and prevalence of early age-related lens opacities. *Am J Clin Nutr* 1997;66(4):911-6.