

Dietary carotenoids, vitamins C and E, and risk of cataract in women: a prospective study.

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OBJECTIVE: To examine in prospective data the relation between dietary intake of carotenoids and vitamins C and E and the risk of cataract in women.

DESIGN: Dietary intake was assessed at baseline in 39,876 female health professionals by using a detailed food frequency questionnaire. A total of 35,551 women provided detailed information on antioxidant nutrient intake from food and supplements and were free of a diagnosis of cataract. The main outcome measure was cataract, defined as an incident, age-related lens opacity responsible for a reduction in best-corrected visual acuity in the worse eye to 20/30 or worse based on self-report confirmed by medical record review.

RESULTS: A total of 2031 cases of incident cataract were confirmed during a mean of 10 years of follow-up. Comparing women in the extreme quintiles, the multivariate relative risk of cataract was 0.82 (95% confidence interval, 0.71-0.95; test for trend, $P = .04$) for lutein/zeaxanthin and 0.86 (95% confidence interval, 0.74-1.00; test for trend, $P = .03$) for vitamin E from food and supplements.

CONCLUSION: In these prospective observational data from a large cohort of female health professionals, higher dietary intakes of lutein/zeaxanthin and vitamin E from food and supplements were associated with significantly decreased risks of cataract.

