

NURSES' HEALTH STUDY 3

VITAMIN C...SUBSTANTIALLY REDUCE...AGE-RELATE LENS OPACITIES



Researchers designed a study²² to examine the cross-sectional relation between age-related lens opacities and vitamin C supplement use over a 10-12-y period before assessment of lens status in women without diagnosed cataract or diabetes. This design avoids biased measurement of nutrient intake that results when knowledge of lens opacities influences nutrition-related behavior or its reporting. The participants were 247 Boston-area women aged 56-71 years selected from the Nurses' Health Study cohort with oversampling of women with high or low vitamin C intakes. Lens opacities were graded with the Lens Opacification Classification System II. Use of vitamin C supplements for $>$ or $=$ 10 y ($n = 26$) was associated with a 77% lower prevalence of early lens opacities (odds ratio: 0.23; 95% CI: 0.09, 0.60) at any lens site and a 83% lower prevalence of moderate lens opacities (odds ratio: 0.17; 95% CI: 0.03, 0.85) at any lens site compared with women who did not use vitamin C supplements ($n = 141$) after adjustment for age and other potentially confounding variables. Women who consumed vitamin C supplements for $<$ 10 y showed no evidence of a reduced prevalence of early opacities. These data, together with data from earlier experimental and epidemiologic studies, suggest that long-term consumption of vitamin C supplements may substantially reduce the development of age-related lens opacities.

²²Jacques 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.