

# Abstract

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## Age-related cataract in a randomized trial of vitamins E and C in men.

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**OBJECTIVE:** To test whether supplementation with alternate-day vitamin E or daily vitamin C affects the incidence of age-related cataract in a large cohort of men.

**METHODS:** In a randomized, double-masked, placebo-controlled trial, 11,545 apparently healthy US male physicians 50 years or older without a diagnosis of cataract at baseline were randomly assigned to receive 400 IU of vitamin E or placebo on alternate days and 500 mg of vitamin C or placebo daily.

**MAIN OUTCOME MEASURE:** Incident cataract responsible for a reduction in best-corrected visual acuity to 20/30 or worse based on self-report confirmed by medical record review.

**APPLICATION TO CLINICAL PRACTICE:** Long-term use of vitamin E and C supplements has no appreciable effect on cataract.

**RESULTS:** After 8 years of treatment and follow-up, 1174 incident cataracts were confirmed. There were 579 cataracts in the vitamin E-treated group and 595 in the vitamin E placebo group (hazard ratio, 0.99; 95% confidence interval, 0.88-1.11). For vitamin C, there were 593 cataracts in the treated group and 581 in the placebo group (hazard ratio, 1.02; 95% confidence interval, 0.91-1.14).

**CONCLUSION:** Long-term alternate-day use of 400 IU of vitamin E and daily use of 500 mg of vitamin C had no notable beneficial or harmful effect on the risk of cataract.

**TRIAL REGISTRATION:** clinicaltrials.gov Identifier: NCT00270647.

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