Diet, vegetarianism, and cataract risk

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Abstract

Background: Age-related cataract is a major cause of morbidity. Previous studies of diet and cataract risk have focused on specific nutrients or healthy eating indexes but not on identifiable dietary groups such as vegetarians.

Objective: We investigated the association between diet and cataract risk in a population that has a wide range of diets and includes a high proportion of vegetarians.

Design: We used Cox proportional hazards regression to study cataract risk in relation to baseline dietary and lifestyle characteristics of 27,670 self-reported nondiabetic participants aged ≥40 y at recruitment in the Oxford (United Kingdom) arm of the European Prospective Investigation into Cancer and Nutrition (EPIC-Oxford) by using data from the Hospital Episode Statistics in England and Scottish Morbidity Records.

Results: There was a strong relation between cataract risk and diet group, with a progressive decrease in risk of cataract in high meat eaters to low meat eaters, fish eaters (participants who ate fish but not meat), vegetarians, and vegans. After multivariable adjustment, incidence rate ratios (95% CIs) for moderate meat eaters (50–99 g meat/d), low meat eaters (<50 g meat/d), fish eaters, vegetarians, and vegans compared with high-meat eaters (≥100 g meat/d) were 0.96 (0.84, 1.11), 0.85 (0.72, 0.99), 0.79 (0.65, 0.97), 0.70 (0.58, 0.84), and 0.60 (0.38, 0.96), respectively (P < 0.001 for heterogeneity). Associations between cataract risk and intakes of selected nutrients and foods generally reflected the strong association with diet group.

Conclusion: Vegetarians were at lower risk of cataract than were meat eaters in this cohort of health-conscious British residents.

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