

Diet and risk factors for age-related maculopathy¹⁻³

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ABSTRACT

Background: Evidence continues to accumulate that oxidative stress is etiologically important in the pathogenesis of age-related maculopathy (ARM) and that appropriate antioxidants of dietary origin may protect against this condition.

Objective: Risk factors for ARM may be classed as established or putative. We report a study designed to investigate whether such risk factors are associated with a dietary lack of antioxidants relevant to retinal health.

Design: Dietary, anthropometric, and sociodemographic details relating to 828 healthy Irish subjects aged 20–60 y were recorded in a cross-sectional fashion and analyzed for associations between risk factors for ARM and dietary intake of relevant nutrients.

Results: Of the established risk factors for ARM, increasing age was associated with a relative lack of dietary zeaxanthin ($P < 0.05$) and tobacco use with a relative lack of dietary vitamin C ($P < 0.05$). Of the putative risk factors for ARM, alcohol consumption was associated with a relative lack of dietary ω -linoleic acid ($P < 0.05$), and female sex was associated with a relative lack of dietary zinc ($P < 0.05$).

Conclusions: We showed that several variables related to risk for ARM are associated with a relative dietary lack of key nutrients. Our finding that age, the most important and universal risk factor for ARM, is associated with a relative lack of dietary zeaxanthin, is an important finding that warrants further investigation.

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