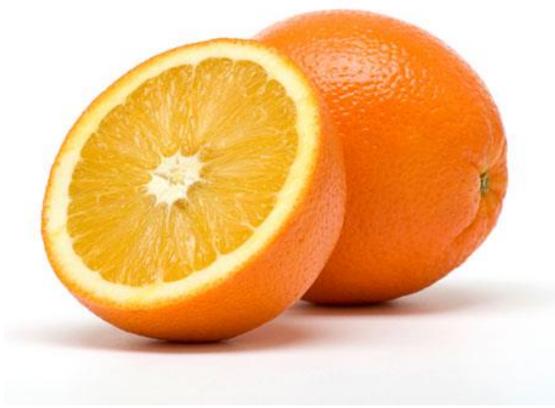




An Orange a Day Keeps AMD Away

You know how the saying goes, *'an apple a day keeps the doctor away'*? Well, you might need to change that. Scientists from Australia published results of a multi-year study suggesting that oranges have a protective property against age-related macular degeneration (AMD).

Residents living in the Blue Mountains section outside Sydney have participated in a long-term study involving various eye diseases for the past 25 years. More than 2,000 adults over the age of 50 were followed from 1992-2009. Detailed retinal photographs were taken at five year increments to identify changes resulting from AMD, and the subjects answered detailed questions about their diet.



Previous studies have confirmed the link between eye health and leafy green vegetables containing lutein, and fish with high levels of omega-3 fatty acids. The doctors here were looking for a connection between AMD and flavonoids, a chemical that gives fruits and vegetables their distinctive colors.

Flavonoids are bioactive compounds found in foods such as tea, chocolate, red wine, fruit and vegetables. Flavonoids have already been shown to improve cardiovascular function. The researchers hypothesized that they may also provide antioxidant and anti-inflammatory properties that delay or reduce AMD.

The subjects detailed their diets and researchers assigned levels based on the amount of flavonoids consumed. The data showed that participants in the highest quartile for consumption of oranges had a 57% reduced risk of early AMD, compared to those in the lowest quartile: those who ate at least one-to-two oranges every day showed a significant eye health advantage of over those who did not include oranges in their diet. The authors suggested that even those who ate a single orange a week showed reduced odds of retinal changes resulting from AMD. Study subjects who consumed orange juice also had a reduced likelihood of having signs of early AMD. Other flavonoid rich diets, such as those that included red peppers or chocolate, did not show the same significant gap in AMD progression between subjects who consumed more or less of those foods.

This study concluded there was an inverse association between consumption of oranges and the prevalence and incidence of AMD. It is difficult to say what exact properties were responsible for the low rate of AMD among regular orange-eaters, since they likely had other healthy habits.

So, eat your apple a day, but keep in mind the benefits that you might also gain if you also add an orange to your diet.

*Gopinath B, Liew G, et al, "Dietary flavonoids and the prevalence and 15-y incidence of age-related macular degeneration, **Am J Clin Nutr** 108:381-387, 2018.*