

Do vitamin supplements prevent macular degeneration?

October 31 2017, by Clare Collins



Credit: Thesis from Pexels

Vitamin and mineral supplements [won't prevent the development of age-related macular degeneration](#). But there is some evidence taking supplements containing vitamin C, vitamin E and zinc may [slow the](#)

[progression of age-related macular degeneration](#) in those who already have it. This evidence comes from two major systematic reviews published this year, conducted by the [Cochrane collaboration](#).

The reason researchers thought about testing dietary supplements for eye disease relates to [how the eyes convert light into sight](#). Light gets absorbed into pigments in the retina at the back of the eye. This process produces byproducts called [free radicals](#). [Free radicals are oxygen atoms that have unpaired electrons](#), which makes them highly reactive and unstable. As these atoms hunt around to find another electron so they can become more stable, they trigger damage to other molecules, the walls of cells and to DNA. In the eyes, this contributes to gradual loss of vision.

[Anti-oxidants are nutrients that absorb free radicals](#) and include vitamin A, C and E, the minerals zinc and selenium, and many phytonutrients found in edible plants including vegetables and fruit. Theoretically if more anti-oxidant nutrients were present in the eye, less damage should be done to the eye. Lets look at what the scientific evidence says.

The [first review](#) looked at people who already had [age-related macular degeneration](#) and includes research published up until March 2017. They found 19 trials in adults who already had early or moderate macular degeneration. Nine studies compared people taking [vitamin supplements](#) to those either not taking them or being given a placebo (dummy) capsule for periods of time from nine months to six years.

They found the vitamin supplements were associated with 28% lower odds of progressing to late stage macular degeneration. The studies that compared zinc supplements to a placebo found a 17% lower risk of progressing to late stage macular degeneration.

The authors final conclusion cautiously suggested use of antioxidant vitamin and [mineral supplements](#) may help delay disease progression in

people with existing age-related macular degeneration, with a reminder that while vitamin supplements are generally safe they can have harmful effects in some, [such as smokers](#).

The second review looked at [prevention of age-related macular degeneration](#). There were four trials that compared taking Vitamin E to a placebo which found vitamin E had no effect on prevention of age-related macular degeneration. And one trial found a side-effect of an increase in risk of haemorrhagic stroke in those taking vitamin E.

Two studies used beta-carotene (an organic compound found in plants that the body converts into Vitamin A) and found no reduction in risk of new onset macular degeneration with one study confirming [an increased risk of lung cancer in the smokers](#).

One study in men compared vitamin C or multivitamins with a placebo and found no effect for vitamin C and a slightly higher risk for age-related macular degeneration in the group taking the multivitamins. There was no evidence related to other antioxidants such as lutein or zeaxanthin.

Loss of vision due to age-related macular degeneration is associated with a loss of ability to do the things that help to improve your nutrition related health and well-being as you age. Compared to adults of a similar age and sex who did not have age-related macular degeneration, those with it have a [higher risk of death from heart disease and all other causes](#).

It's wise to trying and boost your [diet quality for a host of reasons](#), by eating more healthily as you age and trying to [quit smoking](#). You can use our free [Healthy Eating Quiz](#) to check your score.

Meanwhile, try to increase you intake of foods rich in phytonutrients.

Oysters, meat, eggs, seafood, nuts, tofu, legumes, wheat germ and wholegrain foods contain zinc. Oranges, mandarins, lemons, limes, strawberries, kiwifruits, tomato, capsicum, spinach, broccoli, cabbage and green vegetables contain vitamin C. Nuts, seeds, wheatgerm and eggs contain vitamin E. Egg yolk, corn, spinach, pumpkin, cucumber, kiwifruit, red grapes, zucchini, capsicum, oranges and mangoes contain the antioxidants lutein and zeaxanthin.

If you've been told you have age-related macular degeneration then you should discuss the risks and benefits of supplementation with your doctor. Keep in mind [vitamin](#) supplements that include beta-carotene are not recommended if you are a smoker. Remember to talk to your GP about your eye health as you age.

This article was originally published on [The Conversation](#). Read the [original article](#).

Provided by The Conversation

Citation: Do vitamin supplements prevent macular degeneration? (2017, October 31) retrieved 21 May 2024 from <https://medicalxpress.com/news/2017-10-vitamin-supplements-macular-degeneration.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--