

# Research team finds link between zinc and macular degeneration

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A team of scientists, including three researchers at George Mason University, found that the mineral zinc could play a role in the development of macular degeneration. In studying eye tissue samples, the researches found that deposits, that are hallmarks of age-related macular degeneration (AMD), contain large amounts of zinc.

This finding, published in the journal *Experimental Eye Research*, might be particularly important because zinc supplements are widely given to patients to help boost weak immune systems. In addition, a 2001 study from the National Eye Institute found that high doses of zinc supplements, combined with antioxidants, may postpone the progression to blindness.

AMD is a medical condition in which the macula, the place of central vision in the eye, experiences atrophy and in some cases bleeding. It is the primary cause of blindness in the elderly in Western society and approximately 13 million Americans suffer from the disease according to AMD Alliance International.

“Because earlier findings have shown that that zinc contributes to deposit formation in neurodegenerative diseases such as Alzheimer’s disease and Parkinson’s disease, we were prompted to test the theory that zinc might be involved in deposit formation in AMD,” said Mason professor of psychology, Jane Flinn.

“The double-edged sword is that zinc has been found to enhance the

immune system, but also could play a role in the advancement of macular degeneration,” said Imre Lengyel of the UCL Institute of Ophthalmology in London, who led the collaborative study.

“We now know that we need to take a closer look at the role zinc plays in the development of AMD,” said Mason graduate psychology student Katherine Cano. “We believe this finding will help us unlock other answers to the mystery of treating this disease.”

The team hopes their findings can be useful in the development of new treatments as well as a more informed approach to zinc intake recommendations.

The study was supported by the Moorfields Eye Hospital Special Trustees and Mercer Fund, a U.S. Department of Energy grant and a Wilkins AMD fund grant.

Source: George Mason University

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