

# ODS Update: AREDS Supplements Continue to Have Benefits

National Institutes of Health (NIH) Office of Dietary Supplements (ODS) sent this bulletin at 09/18/2024 10:00 AM EDT



## ODS Update A NEWSLETTER FOR HEALTH PROFESSIONALS

Strengthening Knowledge and Understanding of Dietary Supplements

September 18, 2024

### Recent Developments in Dietary Supplement Science



#### AREDS supplements continue to have benefits for age-related macular degeneration

The Age-Related Eye Disease Studies (AREDS and AREDS2) were landmark clinical trials sponsored by the NIH National Eye Institute and co-funded by ODS and other NIH institutes and centers. The studies evaluated whether taking specific dietary supplements for five years could prevent the onset of age-related macular degeneration (AMD) in older adults or slow the progression of AMD in people who have it.

The [original AREDS study](#) found that a dietary supplement formula containing the antioxidants vitamin C, vitamin E, and beta-carotene, plus zinc and copper, did not prevent the onset of AMD, but did reduce the risk of progression from intermediate to advanced AMD by 25%. Because high doses of beta-carotene supplements can increase the risk of lung cancer in people who smoke, the [AREDS2](#) study examined the effectiveness of the same supplement but with lutein and zeaxanthin in place of beta-carotene. This AREDS2 supplement reduced the risk of AMD progression even more than the original AREDS supplement. Beta-carotene was then removed from the formula because it doubled the risk of lung cancer, mostly in AREDS2 participants who were former smokers.

A [10-year follow-up assessment](#) of the AREDS2 study confirmed the benefits of replacing beta-carotene with lutein and zeaxanthin. While the AREDS2 supplement containing vitamin C, vitamin E, lutein, zeaxanthin, zinc, and copper does not prevent or cure AMD, it can help preserve vision in people who have intermediate AMD.

Now, researchers have discovered that the AREDS2 supplement can also slow progression of late-stage dry AMD. In this new analysis, published in the July 2024 issue of [Ophthalmology](#), Keenan and colleagues reviewed the retinal scans of 318 participants from the AREDS study and 891 participants from the AREDS2 study. They focused on the progression of geographic atrophy, an advanced form of dry AMD that affects more than 5 million people worldwide. Geographic atrophy is characterized by lesions that typically develop away from the central macula and gradually expand to cover most of the macula, including the central foveal region. The researchers found that for people with geographic atrophy that developed away from the central foveal region, the antioxidant and lutein/zeaxanthin supplements slowed the progression of the geographic atrophy toward the fovea, helping to preserve this critical area of central vision.

The results of this analysis indicate that in addition to slowing the progression from intermediate to advanced AMD, the AREDS2 supplement may help preserve central vision in people with late-stage dry AMD. "We are excited that these post-hoc analyses demonstrate a potential for the use of AREDS2 supplements in patients who have developed the late form of dry AMD, geographic atrophy," said Dr. Emily Chew, Director of the Division of Epidemiology and Clinical Applications at the National Eye Institute. "These are exploratory analyses and we anticipate conducting a prospective study to test this potential new indication for AREDS2 supplements."

Learn more about the [Age-Related Eye Disease Studies](#).

## Upcoming ODS Seminars (virtual meetings)



Wednesday, October 16, 2024, 11:00 a.m. ET

### **Protein and Amino Acid Supplements and Sarcopenia in Aging: An Update**

Stuart Phillips, Ph.D., FACSM, FCAHS—McMaster University, Hamilton, Ontario, Canada

Wednesday, November 20, 2024, 11:00 a.m. ET

### **Military Supplement Use, Reasons for Use and Adverse Events: A Public Health Surveillance Opportunity**

Harris Lieberman, Ph.D.—U.S. Army Research Institute of Environmental Medicine, Natick, MA

## ODS Co-Funding Opportunities

ODS provides funding support to the NIH ICOs through its co-funding program. Co-funding allows ODS to share the costs of NIH extramural dietary supplement-related research project grants, training and career development grants, and scientific conferences with primary ICOs. See the [list of active ODS co-funding opportunities](#).

---

**ODS Update: Recent Developments in Dietary Supplement Science** is a monthly newsletter produced by ODS to raise awareness of significant advances in the scientific field of dietary supplements. [Current and past issues](#) are posted on the ODS website.

**How are we doing?** If you have questions or comments about this publication, please let us know. Your feedback is always welcome—write to us at [ODS@nih.gov](mailto:ODS@nih.gov).



**Like us today**  
on Facebook



**Follow our posts on**  
**X**  
at @NIH\_ODS



**Connect with us**  
on LinkedIn

---

## About ODS

The [Office of Dietary Supplements \(ODS\)](#) is part of the National Institutes of Health (NIH), the nation's medical research agency—supporting scientific studies that turn discovery into health.

## Contact Us

Office of Dietary Supplements  
National Institutes of Health  
6705 Rockledge Drive (Rockledge I)  
Room 730, MSC 7991  
Bethesda, MD 20817

Email: [ods@nih.gov](mailto:ods@nih.gov)  
Website: <https://ods.od.nih.gov>