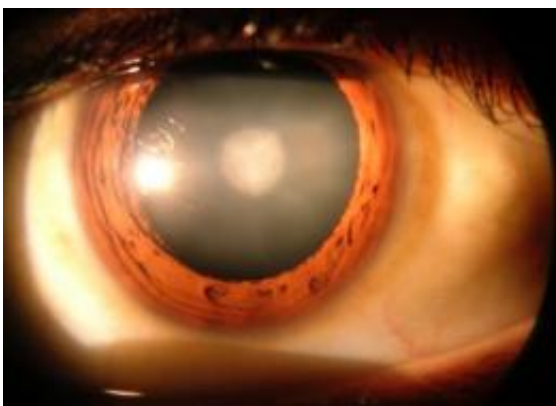


New evidence that popular dietary supplement may help prevent, treat cataracts

July 15 2009



Researchers are reporting new evidence that carnosine, a popular dietary supplement, may help prevent and treat cataracts. Shown is a magnified image of a cataract. Credit: Wikimedia Commons

Researchers are reporting evidence from tissue culture experiments that the popular dietary supplement carnosine may help to prevent and treat cataracts, a clouding of the lens of the eye that is a leading cause of vision loss worldwide. The study is scheduled for the July 28 edition of *ACS' Biochemistry*.

In the new study, Enrico Rizzarelli and colleagues note that the only effective treatment for cataracts is surgical replacement of the lens, the clear disc-like structure inside the eye that focuses light on the nerve tissue in the back of the eye. Cataracts develop when the main structural

[protein](#) in the lens, alpha-crystallin, forms abnormal clumps. The clumps make the lens cloudy and impair vision. Previous studies hinted that carnosine may help block the formation of these clumps.

The scientists exposed tissue cultures of healthy rat lenses to either guanidine — a substance known to form cataracts — or a combination of guanidine and carnosine. The guanidine lenses became completely cloudy, while the guanidine/carnosine lenses developed 50 to 60 percent less cloudiness. Carnosine also restored most of the clarity to clouded lenses. The results demonstrate the potential of using carnosine for preventing and treating cataracts, the scientists say.

More information: "Protective Effects of L- and D-Carnosine on alpha-Crystallin Amyloid Fibril Formation: Implications for [Cataract](#) Disease," [Biochemistry](#)

Source: American Chemical Society ([news](#) : [web](#))

Citation: New evidence that popular dietary supplement may help prevent, treat cataracts (2009, July 15) retrieved 25 April 2024 from <https://phys.org/news/2009-07-evidence-popular-dietary-supplement-cataracts.html>

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