

In a new study, healthy drivers that were supplemented with lutein over one year experienced a significant improvement in visual performance in low-light conditions, such as driving at night.

Lutein supplementation improves visual performance at night

Previous research has shown that the carotenoid lutein supports the health of the eyes and can positively affect visual performance. In a new study published in the journal *Nutrition*, researchers examined the potential benefit of lutein supplementation on visual function in healthy drivers who are exposed to long-term light exposure.

The randomized, double-blind, placebo-controlled study involved 120 normally healthy drivers. Over the course of 1 year, the active group was supplemented with 20 mg of lutein daily. Participants were analyzed for visual acuity, serum lutein concentrations, visual performance, and macular pigment optical density (MPOD). Low MPOD is a key risk factor for age-related macular degeneration while a high MPOD not only reduces one's risk for macular degeneration but also helps to improve visual performance.

Analyses were conducted at the beginning of the study, and after month 1, 3, 6, and 12. Dietary intakes and visual-related quality of life were also measured at the beginning and at the completion of the study.

Serum lutein and central MPOD in the supplemented group were increased significantly, while there was no change observed in the placebo group. The active group experienced a trend toward improved best spectacle-corrected visual acuity measured. Significant improvements in contrast and glare sensitivity, especially in low light conditions, were observed in the supplemented group. The active group also saw significant improvements in the score of the National Eye Institute 25- Item Visual Functioning Questionnaire.

This study showed that supplementation with 20 mg/day of lutein increases MPOD levels, and that lutein may benefit visual performance in low-light conditions, such as driving at night.

Yao Y, Qiu QH, Wu XW, Cai ZY, Xu S, Liang XQ. Lutein supplementation improves visual performance in Chinese drivers: 1-year randomized, double-blind, placebo-controlled study. *Nutrition* 2013 Jan 26. pii: S0899-9007(12)00428-5. doi: 10.1016/j.nut.2012.10.017.