

A recent study has shown a benefit of supplemental magnesium for improving physical performance in healthy older women.

Supplemental magnesium improves physical performance in healthy older women

Magnesium (Mg) is an essential mineral important in the structure and the function of the human body and also as a cofactor for hundreds of enzyme systems that regulate diverse biochemical reactions in the body. Unfortunately, dietary surveys in the US continue to show that older people are particularly susceptible to magnesium deficiency for various reasons, including an inadequate dietary intake, reduced absorption, and greater losses in stools and urine. A poor magnesium status has been associated with reduced physical performance, but to date no trials have established a link between magnesium supplementation and physical performance in the elderly.

In a new study published in the American Journal of Clinical Nutrition, investigators sought to determine whether oral magnesium supplementation could improve physical performance in healthy older women. The research group included 139 healthy women with an average age of 71.5 years that were attending a mild fitness program. The study group included 77 controls and 62 women who were given 300 mg/day of magnesium oxide for 12 weeks. The researchers were blinded to the grouping.

The primary outcome analyzed was a change in the Short Physical Performance Battery (SPPB). The scores for the SPPB did not differ between the two groups at baseline. After 12 weeks of supplementation, the group taking magnesium had a significantly better total SPPB score than the controls. The treatment group also had a significantly better test score for chair stand times and 4 minute walking speeds. The improvements even were more evident in women with dietary magnesium intakes below the RDA.

The findings of this study indicate that magnesium supplementation may play a role in delaying age-related decline in physical performance in healthy older women, especially if dietary intake is below recommended levels.

Nicola Veronese et al. Effect of oral magnesium supplementation on physical performance in healthy elderly women involved in a weekly exercise program: a randomized controlled trial. Sep 2014. Am J Clin Nutr.