

# Magnesium Appears to Boost Lung Function in Asthmatics

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A new study from the United States shows that daily supplementation with magnesium may improve lung function in asthmatics and improve their quality of life.

Measures of lung capacity increased by about six percent during six months of magnesium supplementation, and improvements were also observed in the bronchial response to methacholine, a chemical that produces constriction in the lungs, according to findings published in the *Journal of Asthma*.

"Although there is conflicting research regarding magnesium supplementation and asthma outcomes, this study adds to the body of research that shows a beneficial response to magnesium supplementation in people who have mild to moderate asthma," wrote researchers, led by Alexandra Kazaks from Bastyr University in Kenmore, Washington.

Epidemiological studies have reported beneficial effects of magnesium on asthma occurrence and management, but less than half of adults in the U.S. consume the recommended levels of the mineral, according to the National Health and Nutrition Examination Survey (NHANES) for 1999-2000.

In order to test the hypothesis that magnesium supplements could improve lung function, Dr. Kazaks and her co-workers recruited 55 mild-to-moderate asthmatics aged between 21 and 55 to participate in their randomized placebo-controlled, double-blind trial. The participants were randomly assigned to receive either a daily dose of 340 mg of magnesium or placebo for 6.5 months.

At the end of the study, a six percent improvement in lung function, measured as the peak expiratory flow rate (PEFR), was observed in the magnesium group and not in the placebo group.

Furthermore, 20% more methacholine was needed in the magnesium group to produce bronchoconstriction to the same degree as seen in the placebo group.

Quality of life, a subjective measure obtained by questionnaire, only improved in the magnesium group, added the researchers.

Commenting on the potential mechanism, Dr. Kazaks and her co-workers noted that magnesium may influence the properties of cell membranes, thereby improving the ability of the lungs to expand. The mineral may also offer anti-inflammatory properties, which could improve asthma control, they said.

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