## Breaking News on Supplements & Nutrition -Europe

## Magnesium supplements may boost lung health for asthmatics

By Stephen Daniells, 15-Feb-2010

Related topics: Minerals, Respiratory health

Daily supplements of magnesium may improve lung function in asthmatics, and improve their quality of life, says a new study from America.

Measures of lung capacity increased by about 6 per cent during six months of magnesium supplementation, and improvements were also observed in the bronchial response to methacholine, a chemical that produces constriction of 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 State.

According to the European Federation of Allergy and Airway Diseases Patients Association (EFA), over 30m Europeans suffer from asthma, costing Europe €17.7bn every year. The cost due to lost productivity is estimated to be around €9.8bn.

Epidemiological studies have reported beneficial effects of magnesium on asthma occurrence and management, but less than half of adults in the US 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 the a daily dose of 340 milligrams of magnesium or placebo for 6.5 months.

At the end of the study, a 6 per cent 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 per cent 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 offer the ability of the lungs to expand. The mineral may also offer anti-inflammatory properties, which could improve asthma control, they said.

Source: Journal of Asthma

February 2010, Volume 47, Issue 1, Pages 83-92

"Effect of oral magnesium supplementation on measures of airway resistance and subjective assessment of asthma control and quality of life in men and women with mild to moderate asthma: a randomized placebo controlled trial"

Authors: A.G. Kazaks, J.Y. Uriu-Adams, T.E. Albertson, S.F. Shenoy, J.S. Stern

**Copyright** - Unless otherwise stated all contents of this web site are © 2000/2010 - Decision News Media SAS - All Rights Reserved - For permission to reproduce any contents of this web site, please email our Syndication department: Administration & Finance - Full details for the use of materials on this site can be found in the Terms & Conditions

© 2000/2010 - Decision News Media SAS - All right reserved.

Laura Brainin-Rodriguez MPH, MS, RD Coordinator Feeling Good Project S.F. Department of Public Health, Nutrition Services 30 Van Ness Ave., Suite 3500 San Francisco, CA 94102 Tel: (415) 575-5687 Fax: (415) 575-5798 email: laura.brainin-rodriguez@sfdph.org