


[About Us](#)
[Professional Products](#)
[Practice Development](#)
[Library](#)
[Research & Education](#)
[Blog](#)

Science Update Forum

Antacid medications cause an increased risk of hospitalization for low blood magnesium

Posted on Fri, Oct 03, 2014 @ 09:29 AM

[Tweet](#) < 1

[Share](#)

8

[Like](#)
[Share](#) < 54

[G+1](#) < 1

Proton pump inhibitors (PPI) are associated with hospitalization for hypomagnesemia, specifically among patients also receiving diuretics, according to research recently published in *PLOS Medicine*. The study suggests that doctors should reconsider long-term PPI therapy for patients with a diagnosis of hypomagnesemia or the concurrent use of diuretics.

More than 50% of Americans are magnesium deficient, and this applies to half the population on proton pump inhibitors. Magnesium plays a key role in more than 350 enzymes and is involved in virtually every metabolic process occurring in the body.

How do you determine if a patient is magnesium deficient? Serum magnesium is not the answer. Serum magnesium represents only 1% of magnesium stores. Magnesium is homeostatically controlled in the serum, so measuring serum magnesium levels provides many false negatives. By the time serum magnesium tests low, a person is already very deficient, as the body is in a state where it cannot maintain normal serum levels. RBC magnesium is definitely a better indicator and the most accurate test we have. This test can be done by most labs and all functional medicine labs.

There are approximately 145 million prescriptions for PPI dispensed in the US each year for acid-related disorders such as dyspepsia and GERD. These medications are widely regarded as safe, yet many adverse effects have been noted. Since 2006 there have been thirty case studies linking the long-term use of PPIs to hypomagnesemia, and the theory is that this is caused by impaired intestinal absorption of magnesium. When severe, hypomagnesemia is dangerous and can be associated with arrhythmias, muscle dysfunction and seizures.



Follow DFH

Latest Science Updates

- [Antacid medications cause an increased risk of hospitalization for low blood magnesium](#)
- [The environment plays a much bigger role than genetics in eosinophilic esophagitis.](#)
- [Vitamin E is an essential nutrient, but how important is it?](#)
- [Are you allergic to the fruits and vegetables you eat? You may actually be reacting to the antibiotic residues in the food.](#)

Proton pump inhibitors may not be the solution. Natural treatments offer a more effective approach than what is provided by proton pump inhibitors.

Some nutritional options to consider that improve digestive function are [probiotics](#) and [glutamine](#). In addition, deglycyrrhizinated licorice (DGL) helps relax the esophageal sphincter; it is soothing and protecting to the gastric mucosa and mucous membranes lining the digestive tract.

These natural solutions offer a more effective approach than what is provided by proton pump inhibitors. Proton pump inhibitors can induce several nutrient deficiencies in calcium, potassium and magnesium. In addition, they can cause serious neuromuscular and cardiovascular problems and may increase the chance of hip fracture in people over 50 years of age.

Read More in a Related Blog: [Is it Really Acid Reflux?](#)

Sources:

Medicine, PLOS. "Patients prescribed proton pump inhibitors in combination with diuretics face increased risk of hospitalization for low blood magnesium."

Too Hard to Stomach: The risks associated with antacids might outweigh the potential benefits they offer by Joseph Esposito, DC. Chiropractic Economics: Issue 18- November 13, 2012. p. 17-19.

Tags: [magnesium](#)

First Name *

Last Name

Email *

- [Green tea polyphenols protect spinal cord neurons against oxidative stress](#)
- [A New Weapon Against Superbugs](#)
- [Can probiotics help prevent obesity?](#)
- [Is niacin safe?](#)
- [Understanding How DHA Makes its Way into the Brain](#)
- [Is there a correlation between red meat consumption and cardiovascular health?](#)

Most Popular Updates

- [The environment plays a much bigger role than genetics in eosinophilic esophagitis.](#)
- [Antacid medications cause an increased risk of hospitalization for low blood magnesium](#)
- [A New Weapon Against](#)

cheikinm@msn.com

Website

Comment *

☐

Subscribe to follow-up comments for this post

Submit Comment

Superbugs

- Is niacin safe?
- Are you allergic to the fruits and vegetables you eat? You may actually be reacting to the antibiotic residues in the food.
- Is there a correlation between red meat consumption and cardiovascular health?
- Vitamin E is an essential nutrient, but how important is it?
- Can probiotics help prevent obesity?
- Examining immune-related disorders and microbial balance
- Understanding How DHA Makes its Way into the Brain

THIS INFORMATION IS PROVIDED FOR THE USE OF PHYSICIANS AND OTHER LICENSED HEALTH CARE PRACTITIONERS ONLY. THIS INFORMATION IS INTENDED FOR PHYSICIANS AND OTHER LICENSED HEALTH CARE PROVIDERS TO USE AS A BASIS FOR DETERMINING WHETHER OR NOT TO RECOMMEND THESE PRODUCTS TO THEIR PATIENTS. THIS MEDICAL AND SCIENTIFIC INFORMATION IS NOT FOR USE BY CONSUMERS. THE DIETARY SUPPLEMENT PRODUCTS OFFERED BY DESIGNS FOR HEALTH ARE NOT INTENDED FOR USE BY CONSUMERS AS A MEANS TO CURE, TREAT, PREVENT, DIAGNOSE, OR MITIGATE ANY DISEASE OR OTHER MEDICAL CONDITION.

Practice Development

Patient Work Shops
Testing
dfhealth-e-store

Professional Products

What's New
Monthly Specials
A to Z
Product Category Index
Nutrient Classification Index
Accessories

Library

Partner Login

Research & Education

Events
Clinical Rounds
Nutrient Roundtable
Educational Webinars

Quality & Manufacturing

Quality and Efficacy
Warehousing & Fulfillment
Manufacturing

Need Help?

Call **1.800.847.830**
2
Submit your
question/comment
for a member of our team

© 2014 Designs for Health. All Rights Reserved.