



Getting Ahead of the Curve: Magnesium

By Dr. A. Elizabeth Sloan

The next wave in mineral-mania appears to be magnesium. Magnesium was the fastest-growing mineral supplement in the \$2.3 billion mineral category over the past three years, posting sales of \$340 million in 2009, according to *Nutrition Business Journal*. SymphonyIRI reported that magnesium supplement sales were up nearly 25% in 2010 in mass channels excluding Walmart.

According to an Office of Dietary Supplements' (ODS) Fact Sheet, magnesium is a key element in more than 300 biological functions; it helps maintain normal muscle/nerve function, keeps the heart's rhythm steady, supports a healthy immune system and keeps bones strong.

Magnesium also helps regulate blood sugar levels, promotes normal blood pressure and is involved in energy metabolism and protein synthesis. There is increasing interest in magnesium in preventing/managing hypertension, cardiovascular disease and diabetes.

According to the Council for Responsible Nutrition's 2011 Consumer Survey on Dietary Supplements, 8% of

supplement users take a magnesium supplement, ranking seventh overall—just after vitamin E and before iron. Among supplement users aged 50+, 12% take a magnesium supplement, ranking ninth, just behind glucosamine. One in 10 (13%) adults are making a strong effort to consume more magnesium, per the 2010 Gallup Study of Nutrient Knowledge and Consumption.

Fifty million U.S. households have a member trying to manage blood pressure. The estimated annual potential for over-the-counter drugs and dietary supplements is \$7.8 billion; 27 million heart problems/stroke (estimated at \$4.2 billion), 23 million diabetes (\$3.4 billion) and 18 million with other heart problems (\$2.8 billion), according to SymphonyIRI's November 2010 OTC Medication Report.

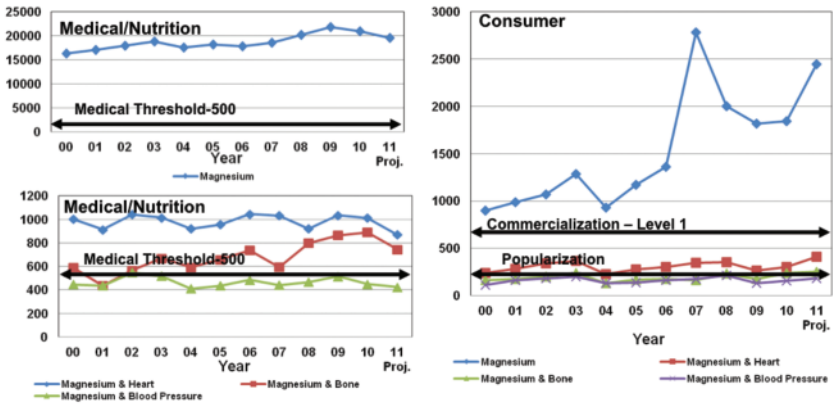
Globally, magnesium is the third most used ingredient in healthy foods/drinks, according to Innova Market Insights.

Market Potential

According to Sloan Trends' TrendSense model, magnesium is a strong and stable Level 2 mass market opportunity on par with omega 3s and vitamin D. Medical Counts have slowly accelerated throughout the decade and at this very high level will continue to support a strong market condition for the foreseeable future. The spike in 2006-2007 is likely due to media attention of the World Health Organization's symposium in 2006 on calcium and magnesium in Baltimore, MD.

Interestingly, the linkages of magnesium to heart and bone health crossed over the Medical Threshold early in the decade. Magnesium/blood pressure is currently flirting with crossing the Medical Threshold and is not far behind.

TrendSense™ Predictive Model: Magnesium & Health Linkages



* Although there are many factors that go into determining consumer trends, measuring how medical/nutrition activity levels have risen over the past decade, as well as some of the key milestones that have occurred and how these issues have been understood and embraced by the public are essential in predicting the sustainability of the Consumer trend line.

Magnesium linked to bone, heart and blood pressure has crossed into the Popularization Phase indicating timing is perfect for introducing products in the specialty/health food channel and for very health conscious and condition-specific consumers. Specialty marketers should not have products on the shelf.

According to Natural Standard's peer-reviewed and medically ranked clinical analyses, clinical evidence is strongest for magnesium's role in managing pre-eclampsia in pregnancy; reducing irregular heartbeat, risk of type 2 diabetes, hearing loss due to noise and severity of acute asthma; and helping to provide neuro-protection for premature infants.

Growth Opportunities

- 80% of men meet the recommended intake for magnesium, 70% of women; intake is lower among older adults across all ethnic groups (National Academy of Sciences).
- Bone health/strength was the top health concern (63% of consumers were extremely/very concerned about it in 2010); cardiovascular disease was third (61%); and muscle health/tone was eighth (53%) (HealthFocus).
- Some commonly used Rx medications (e.g., diuretics, antibiotics) can cause significant loss of magnesium (ODS).
- Looking to stay physically strong and healthy, muscle strength is consumers' biggest priority as they age (CNN Poll, 2010).
- 1 in 3 Americans have high blood pressure—40% of Gen Yers are very concerned about high blood pressure; 48% Gen X; and 66% Baby Boomers (Hartman, 2010).
- 64% of diabetics take Rx medication for blood pressure. Moreover, 50-70% has mild/severe nervous system damage; the risk of stroke is 2-4 times higher in diabetics (National Diabetes Association).
- Globally, 70% of consumers are interested in foods/beverages that promote healthy/strong bones, 69% boosting the immune system and 69% health heart and circulatory system (HealthFocus, 2010).

Functional Foods

Delivering naturally functional products high in magnesium will clearly get the attention of consumers concerned about heart health and bone health. Green vegetables, especially spinach, some legumes (beans, peas, pulses), nuts and seeds and whole unrefined grains are all good sources of magnesium. With refined

grains generally low in magnesium, promoting naturally functional sources of magnesium will be attractive. Tart cherry and pulses (e.g. chickpeas) are trendy and also good sources of magnesium.

Dietary Supplements

With 75% of shoppers dealing with multiple symptoms, and thus looking for multi-functional supplements and OTC drugs, the opportunities to interest athletes, pregnant women, those with diabetes, etc. are significant. Bioavailability is a key issue for magnesium supplements and can be a big sales advantage depending on the form; an enteric-coated form would be best.

References furnished upon request.

About the author: Dr. A. Elizabeth Sloan is president of Sloan Trends, Inc., Escondido, CA, which is a consulting firm that offers trend-tracking and predictions, strategic counsel and business-building ideas for food, supplement and pharmaceutical marketers. Each month she will provide analysis and discuss opportunities of a particular market being covered in a given issue.

SLOAN TRENDS' TRENDSENSE is a 15-year-old trend tracking system, which identifies and quantifies trends as well as predicts the optimal timing, sustainability and life-cycle stage of ingredients, terms, product opportunities and related market issues.

The model displays medical and consumer "activity levels" based on a comprehensive analysis of five critical sources of information—consumer, trade and competitive, legal and regulatory and media coverage. The resulting charts give insight into the market's changing health issues and concerns, the ingredients that are up-and-coming and those that have just about run their course, as well as what health claims, marketing messages and products will bring your company the most success.

• **Emerging Phase** = Trends begin to appear on the radar screen. Companies should begin to collect literature and market details for those that exhibit continual growth and that might be of interest.

• **Popularization Phase** = Medical/Nutrition crossover to consumer media and marketplace; opportunity for niche or specialty markets. Marketers/manufacturers should begin a detailed evaluation of the supporting marketing and scientific data and determine if this term/trend offers a good strategic fit and is appropriate to pursue. Appropriate product development procedures should be undertaken.

• **Commercialization Phase** = Mass-market ready. Mainstream consumers have a significant degree of familiarity with the term/trend and there is opportunity for competitive advantage by getting out ahead of the competition or by providing a unique and highly innovative product positioning for success.