Magnesium Sourced from Nutrient-Dense Plants



Signs of Low Magnesium May Include[^]:



^E-Z Mg™ may not address these concerns and is not intended to diagnose, treat, cure, or prevent any disease.



DiNicolantonio J.J., Keefe J.H., Wilson W., Subclinical magnesium deficiency: a principal driver of cardiovascular disease and a public health crisis. Open Heart. 2018, 5(1).
 Supplements, N. I. o. H. O. o. D. Magnesium: Fact Sheet for Health Professionals https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/ (accessed 8/18/17).

i. o. H. O. o. D. magnesium: Fact Sneet for Health Professionals https://oas.oa.nin.gov/jactsneets/magnesium-HealthProfessional/(accessed 6/16/1/

Magnesium Plays an Essential Role in Your Body

- Catalyst for many intracellular processes
- Co-factor in more than 300 enzymes in the body
 - Supports protein, DNA and RNA synthesis
 - Deoxyribonucleic Acid (DNA)
 - Ribonucleic Acid (RNA) Synthesis
 - Cell Growth and Reproduction
 - Energy Storage and Production
 - Stabilization of the Cell Membrane
- Maintain normal nerve and muscle function
- Muscle contraction
- Helps bone remain strong

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50% of adults do not get enough Mg for good health.



Dietary Mg Intake in the U.S.*

Recommended	Actual	Gap
400-420 mg (male)	350 mg	50-70 mg
310-320 mg (female)	260 mg	50-60 mg

[.] Moshfegh, A.G., Joseph; Ahuja, Jaspreet; Rhodes, Donna; LaCombe, Randy, What We Eat In America, NHANES 2005-2006: Usual Nutrient Intakes from Food and Water Compared to 1997 Dietary Reference Intakes for Vitamin D, Calcium, Phosphorus, and Magnesium. U.S Department of Agriculture, Agriculture Research Service 2009

Zhang, W., Point of care testing of ionized magnesium in blood with potentiometric sensors - opportunities and challenges. Am. J. Biomed. Sci. 2011, 3 (4), 301-312.



^{2.} Rosanoff, A., Weaver, C., Rude, R. Suboptimal magnesium status in the United States: are the health consequences underestimated?, Nutrition Reviews, Vol. 70(3): 153-164.
3. DiNicolantonio J.J., Keefe J.H., Wilson W., Subclinical magnesium deficiency: a principal driver of cardiovascular disease and a public health crisis. Open Heart. 2018, 5(1).

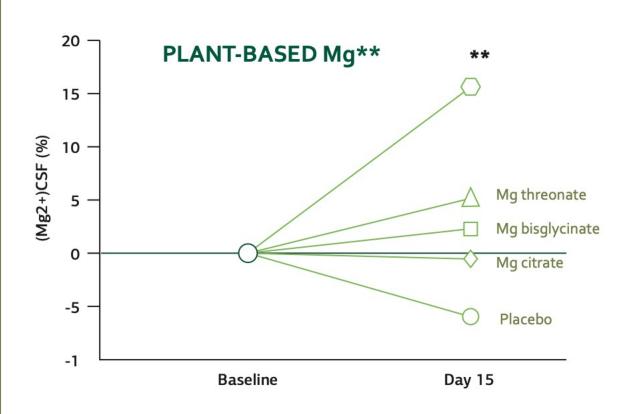
Supplements, N. I. o. H. O. o. D. Magnesium: Fact Sheet for Health Professionals https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/ (accessed 8/18/17).

Elin, R. J., Assessment of magnesium status for diagnosis and therapy. Magnes Res 2010,23 (4), S194-8.

Elevation of Ionized Mg Level[†]

Percent change in CSFMg level from baseline after 14 days of administration with various Mg forms.

** Indicates a significant difference from control on day 15, p < 0.05 (fisher LSD).





[†] Data on file.

A Case of Soil Deficiency

- Magnesium is considered a "shortfall nutrient" in the U.S. with a high prevalence of inadequate dietary intake.
- Issues that impact the consumption of dietary magnesium include, the prevalence of processed food over fruits and vegetables, as well as low magnesium levels in soil, and therefore in the plants we eat.

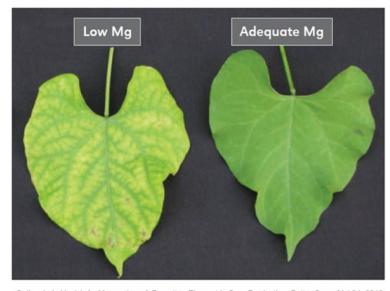


1. Scientific Report of the 2015 Dietary Guidelines Advisory Committee; Guo et. al., The Crop Journal; 2016



Magnesium Deficiency in Plants is a Growing Problem

- Soil depletion occurs through lack of plant rotation, overproduction and pesticide use.
- Data suggests that vegetable produce has experienced up to a 40 percent or more decline in mineral, vitamin and protein content over the last century.
- "Green revolution" refers to heavy application of NPK (Nitrogen-Phosphorus-Potassium) fertilizer. K⁺ is an antagonist for magnesium uptake in plants.



Calkmak, I., Yazici, A., Magnesium: A Forgotten Element in Crop Production. Better Crops/Vol 94, 2010.



Davis, D. R., Declining Fruit and Vegetable Nutrient Composition: What is the Evidence?. HortScience 2009, 44 (1).

Calkmak, I., Yazici, A., Magnesium: A Forgotten Element in Crop Production. Better Crops/Vol 94, 2010.

Regenerative Agriculture for Increased Nutrient Density in the Soil

- Standard Process leverages scientific methods of regenerative farming:
 - To cultivate our nutrient-rich soil
 - To build soil health, crop resilience and nutrient density.
 - To increase biodiversity of soil
- For more than three decades, our farm experts have worked hard to increase the level of organic matter in our soil.
 - Thus increasing the quality and quantity of natural phytonutrients found in our plants





Maximizing Nutrition

- Freshly harvested crops are juiced, cooled, and low-heat dried, often within hours of harvest, in our state-of-the-art manufacturing facility.
- We use proprietary technology designed to maintain the vital nutrients in our products, allowing us to strictly control their quality from soil to supplement.





Taking the Guess Work out of Magnesium

- Various forms of magnesium make use of different uptake sites in the gut with magnesium absorption taking place throughout the intestines.
- Depending on the desired clinical outcome, the selection of different Magnesium forms could be challenging.

Form of Magnesium	Ligan (Biding Molecule)
Magnesium oxide	Oxide
Magnesium lactate	Lactic acid
Magnesium glutamate	Glutamic acid
Magnesium maleate	Malic acid
Magnesium citrate	Citric acid
Magnesium glycinate	Glycine
Magnesium Orotate	Orotic acid

Coudray C et al. Magnesium Research 2005;18(4:215-23) Classen HG.. Rom J Intern Med.2004;42(3)491-501.



^{1.} Schuette, S.A.L.M., Bret A.; Janhorbani PhD, Morteza, Bioavailability of Magnesium Diglycinate vs Magnesium Oxide in Patients with Ileal Resection, Journal of Parenternal and Entereal Nutrition, 1994, 18(5). 2. McCarthy, J.T.K., R., Divalent Cation Metabolism. 2004; Vol. 1, p4.

Magnesium – the Way Nature Intended

- The ideal source of Mg is obtained from the diet.
- Mg in plants is bound to a myriad of organic and inorganic compounds.
- Consists of a collection of various magnesium forms (i.e. multiform) that is considered the ideal source of magnesium for the body.
- Takes the guess work out of which form of Magnesium to select as a supplement.





VEGAN E-Z Mg[™] Central Nervous System Health** DIETARY SUPPLEMENT GF 3940 Suggested Use: Six tablets per day, or as directed. 180 TABLETS WHOLE FOOD SLIPE

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E-Z MqTM Plant-based, organic, multiform magnesium

- Essential for central nervous system health*
- Helps to bridge the gap in dietary magnesium intake*
- Plant-based and considered ideal as a naturally-occurring magnesium, as it consists of a collection of various magnesium forms (i.e., multiform)
- Excellent source of vitamin K1 and iron
- Good source of magnesium
- USDA Organic, Vegan, Gluten-Free
- Made from Swiss chard and buckwheat — both grown on our certified organic farm



Swiss Chard

This product contains naturally occurring Vitamin K1. All forms of vitamin K may interact with blood-thinning medications. If you are taking such medicines, please consult with your health care professional before taking this product. If you have been directed to eat a diet low in oxalates (found in leafy green vegetables), please consult with your health care professional before taking this product. If you are pregnant or lactating, please consult with your health care professional before taking this product.



Buckwheat

E-Z Mg[™]



180 Tablets

Product #: 3940

SLP: \$54.50

Quantity: _____

ACCOUNT INFORMATION ACCOUNT NAME	ACCOUNT NUMBER		
PHONE NUMBER	EMAIL ADDRESS		
PAYMENT LAST 4 DIGITS OF CREDIT CARD ON FILE	EXPIRATION DATE	NAME ON CARD	

