

[Center for Integrative Medicine](#)

Dietary Supplements: Magnesium

Magnesium is an essential mineral. Magnesium is essential for optimal function of muscles, metabolism and nerves. Magnesium deficiency is associated with irritability, muscle weakness, fatigue, poor appetite, muscle twitching, rapid heart beat, and increased risk of asthma, constipation, migraine headaches and menstrual pain. Magnesium laxatives are used to treat constipation. Magnesium is sometimes given intravenously to help patients with asthma, seizures or pre-eclampsia.

Needs for magnesium may be increased in patients with diabetes, digestive/malabsorption problems (ulcerative colitis, Crohn's disease, celiac disease), and large burns. Alcohol use may also increase needs for magnesium.

Certain medications can deplete magnesium: diuretic medications and the chemotherapy drug, cisplatin.

Dietary sources of magnesium include: dark green leafy vegetables, beans and bean products (such as soybeans, black beans, and tofu), seeds, soybeans, nuts, whole grains (such as brown rice and millet), shellfish, and citrus fruits. In general, human beings absorb nutrients more easily from food than from supplements. See the US National Library of Medicine site for more information: <http://www.nlm.nih.gov/medlineplus/ency/article/002423.htm>

US Recommended Daily Allowance (RDA) or Adequate Intake (AI for infants) for magnesium for

Children 1-3 years: 80 milligrams	Children 4-8 years: 130 milligrams
Children ages 9-13 years; 240 milligrams	Males ages 14-18: 410 milligrams
Females ages 14-18 years: 360 milligrams	
Adults: 400 milligrams daily for males and 310 milligrams daily for females	
Pregnant or breastfeeding women: 320 - 400 milligrams daily.	

Milligram = mg

Magnesium is generally considered safe, but it can cause diarrhea and cramping. Patients with kidney disease and severe heart disease should be cautious in taking magnesium supplements because they may have trouble managing balance of salts, minerals and electrolytes.

Magnesium may interfere with absorption of tetracycline and related antibiotics.

Magnesium supplements come in many different forms. These include magnesium oxide, magnesium hydroxide (Milk of Magnesia), magnesium gluconate, and magnesium citrate.

The products listed below are a *selection* of some that have met quality testing standards set by ConsumerLab. For more information, see <http://www.consumerlab.com/results/magnesium.asp>. Different types vary in ease of absorption. Magnesium oxide is not as well absorbed as the citrate or L-lactate dihydrate forms.

Product Name/Distributor - Magnesium	Capsule/Tablet Strength	Manufacturer
Floradix® Magnesium Liquid Mineral Supplement	250 mg per capful	Salus- Haus
KAL® Magnesium Glycinate 400	200 mg	Nutraceutical Corp
Nature's Bounty High Potency Magnesium 500	500 mg	Nature's Bounty
NOW® Magnesium Caps	400 mg	Now Foods
Puritan's Pride Chelated Magnesium 30	30 mg	Puritan's Pride
Rexall® Super Magnesium Oxide 250 mg	250 mg	Rexall, Inc.
Sundown® Essential Magnesium 250 mg	250 mg	Sundown, Inc
Vitamin World® Naturally Inspired™ Mag Citrate	100 mg	Vitamin World, Inc
Whole Foods™ Chelated Magnesium 200 mg	200 mg	Distributed by Whole Foods Markets

www.wakehealth.edu/CIM - See Quick Link to Dietary Supplements