



Magnesium

A MULTI-PURPOSE MINERAL

Magnesium is one of the most versatile and essential minerals for overall health. It is necessary for over 300 chemical reactions in the body—name a system, magnesium is involved! You can think of it as the "anti-stress" mineral because it relaxes muscles, including those in the gut, heart, and blood vessels.

You can obtain adequate magnesium through a nutrient-dense diet. Herbs, nuts, seeds, legumes, leafy greens, green vegetables, and dark chocolate are great sources. Some people may benefit from supplemental magnesium, including those who experience migraines, muscle or menstrual cramping, trouble sleeping, alcoholism, impaired digestion, blood sugar issues, fatigue, high blood pressure, or who take birth control.

Just as you need iron to make hemoglobin (turns blood red), plants need magnesium to make chlorophyll (turns leaves green).

SUPPLEMENTAL FORMS

AMINO ACID CHELATES (*key-lates*)

- glycinate, aspartate
- best absorption

ORGANIC ACID CHELATES

- citrate, lactate, carbonate, malate
- moderate absorption

THREONATE

- cognitive benefits
- can cross blood-brain barrier

NON-CHELATED FORMS

- oxide, sulfate, hydroxide
- poor absorption, used as laxative

ROLES

- nerve conduction
- muscle contraction
- blood sugar regulation
- bone strength
- protein synthesis
- cell regeneration
- energy production
- cardiovascular health
- blood pressure regulation
- sleep support
- digestive regularity



SUPPLEMENTATION TIPS

- *balance magnesium with calcium 2:1*
- *increase magnesium if taking more vitamin D, phosphorus, or protein*
- *best taken on empty stomach before bed*
- *DEFICIENCY: common*
- *TOXICITY: rare (kidneys excrete)*
- *work with your provider to identify potential medication interactions*