

Magnesium Timing & Dosage Guide

An evidence-based reference for choosing the right form, dose, and time of day to take magnesium.

SLEEP · ANXIETY · MUSCLE FUNCTION · HEALTH

01 — Choosing a Form

Magnesium supplements are bound to different carrier molecules. Bioavailability and side-effect profile vary substantially between forms. Match the form to your primary goal below.

Form	Bioavailability	Best for	Notes
Glycinate	High	Sleep, anxiety	Gentle on digestion
L-Threonate	High (brain)	Cognition, focus	Crosses blood-brain barrier
Citrate	Moderate	Constipation relief	Can cause loose stools
Malate	Moderate	Fatigue, muscle pain	Paired with malic acid
Oxide	Low (~4%)	Budget option	Poorly absorbed
Taurate	Moderate-high	Cardiovascular	Paired with taurine

02 — Dosing by Goal

Sleep support

200–400mg elemental magnesium as glycinate, 30–60 minutes before bed. Glycine itself has mild sedative properties, compounding the effect.

Anxiety / stress

200–350mg as glycinate or taurate, split morning and evening. Magnesium acts as a natural NMDA receptor antagonist, tempering glutamate overactivation.

Muscle cramps / soreness

300–400mg as malate or citrate, taken with a meal. Malate supports ATP production in muscle tissue.

Cognitive focus

1,000–2,000mg magnesium L-threonate (a much higher compound dose, delivering ~144mg elemental magnesium) taken in the morning or early afternoon.

General deficiency correction

310–420mg elemental magnesium daily from any well-absorbed form, matched to the RDA for your age and sex.

03 — Timing & Label Reading

When to take it

- Sleep or anxiety goals — 30 to 60 minutes before bed.
- Cognitive or focus goals — morning, since L-threonate is non-sedating for most people.
- General deficiency correction — with a meal, any time of day, for consistency.
- Splitting a high dose (400mg+) across morning and evening reduces GI discomfort.

Reading the label

- Elemental magnesium is the number that matters, not total compound weight.
- A 400mg capsule of magnesium glycinate typically contains only 50–70mg elemental magnesium.
- Look for third-party testing: NSF, Informed Sport, or USP verified.
- Avoid proprietary blends that obscure the exact elemental dose.

This guide is for educational purposes and is not medical advice. Consult a healthcare provider before starting any new supplement, particularly if you take medication or have kidney impairment.