

# Supplements to help manage Blood Sugar Health

## Magnesium

COMMON NAME: Magnesium

SCIENTIFIC NAME: Magnesium glycinate, magnesium oxide, magnesium citrate

### NOT RECOMMENDED - EVIDENCE

#### LEVELS OF EVIDENCE



##### **Recommended:**

Several well-designed studies in humans have shown positive benefit. Our team is confident about its therapeutic potential.



##### **Recommended with Caution:**

Preliminary studies suggest some benefit. Future trials are needed before we can make a stronger recommendation.



##### **Not Recommended - Evidence:**

Our team does not recommend this product because clinical trials to date suggest little or no benefit.



##### **Not Recommended – High Risk:**

Our team recommends against using this product because clinical trials to date suggest substantial risk greater than the benefit.

#### Evaluated Benefits

No evidence of efficacy or not indicated

## Source

Water accounts for ~10% of daily magnesium intake.

Chlorophyll (and thus green vegetables such as spinach) is the major source of magnesium. Nuts, seeds (especially pumpkin), and unprocessed cereals are also rich in magnesium.

## Indications/Population

Lowering of blood sugar in patients with diabetes and metabolic syndrome

## Mechanism of Action

Magnesium is involved in more than 300 essential metabolic reactions. Low magnesium levels are associated with an increased risk of diabetes.

## Side Effects

Diarrhea

## Dosing

400 mg daily

## Drug Interactions/Cautions

Magnesium can interfere with quinolone and tetracycline antibiotics. Magnesium can interfere with calcium channel blockers and can cause hypotension. Magnesium can accumulate in patients with reduced kidney function.

## Notes

Oral supplements appear to be useful in persons with type 2 diabetes to restore magnesium deficiencies, to improve insulin resistance, oxidative stress, and systemic inflammation. However, there is no evidence from clinical trials that magnesium helps to manage diabetes.

## References

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