

What an expert says about taking magnesium for sleep

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When people struggle to fall asleep, it's no surprise they seek solutions.

Options can range from [prescription medications](#) to sleep therapy, [good habits](#) and an abundance of supplements.

Taking [magnesium](#) for sleep is something some say has real benefits, but does it really?

It's not entirely certain, but the mineral serves a variety of other important functions, so it just might actually work.

"The science on whether taking magnesium helps improve the length or quality of sleep has been mixed," said [Dr. Indira Gurubhagavatula](#), an associate professor of medicine in the Veteran's Administration Medical Center at the University of Pennsylvania, in Philadelphia.

Past research has had various design limitations and has not been of high enough quality to support a general recommendation for magnesium supplementation in insomnia sufferers, Gurubhagavatula said.

"We don't have definitive, large, randomized trials across healthy populations, or those with specific diseases, over long periods of time," she said.

What is magnesium?

Magnesium is a mineral found in a range of foods and in [dietary supplements](#), according to the [Sleep Foundation](#).

It produces protein, bone and DNA; maintains [blood sugar](#) and pressure; and regulates the muscles, nerves and the cardiovascular system, according to the foundation.

This nutrient is needed for more than 300 [biochemical reactions](#) in the body, according to the [National Library of Medicine](#).

"It is used by hundreds of enzymes in the body to complete important functions at the [cellular level](#)," Gurubhagavatula said.

People with type 2 diabetes, a gastrointestinal disorder, [alcohol use disorder](#) or who are seniors may be more at risk for [magnesium deficiency](#), according to a Cleveland Clinic [story](#) on magnesium for sleep.

Is magnesium good for sleep?

A [preliminary study](#) presented recently at the American College of Cardiology [annual meeting](#) found that getting enough sleep was associated with greater protection of death from all causes.

If magnesium does work to help someone get a little shuteye, that may be because it is acting on certain receptors on the surface of brain cells to quiet down brain cell activity, Gurubhagavatula said.

The nutrient acts on the benzodiazepine receptor, which is the same receptor used by Valium-type drugs and the sleep medication Ambien, she said.

"Magnesium is also thought to affect levels of melatonin, the hormone associated with when we fall asleep and when we wake up, known as our circadian rhythm," Gurubhagavatula added.

Magnesium can relax muscles and may help improve symptoms of restless legs in some people, she said. About 5% to 15% of people have that condition and should see a doctor for diagnosis.

How much magnesium should you take?

So, exactly how much magnesium for sleep? Your doctor can answer that after taking into account your health conditions and medications.

Still, the U.S. National Library of Medicine said taking magnesium supplements isn't advised and that it's better if people consume the nutrient through their diet.

Those still planning to take a magnesium supplement should know that the best magnesium for sleep is magnesium glycinate or magnesium citrate at 200 milligrams, according to the Cleveland Clinic. Avoid the stool-softening magnesium oxide, it suggested.

When to take magnesium for sleep? About 30 minutes before bedtime, according to the Cleveland Clinic.

A [systematic review](#) and meta-analysis published recently in the journal [BMC Complementary Medicine and Therapies](#) looked at three randomized, controlled trials on magnesium for sleeping in older adults.

The quality of research wasn't strong enough to make a recommendation, the researchers concluded, but the supplement is cheap and widely available so evidence may support its use.

Side effects of magnesium

Taking magnesium supplements can bring a range of side effects, such as drowsiness or fatigue during the day, muscle weakness, nausea, vomiting, skin flushing or diarrhea, Gurubhagavatula said.

Some risks are even more serious.

"With very high levels of magnesium in the blood, dangerous heart rhythm abnormalities can happen, including cardiac arrest,"

Gurubhagavatula added.

Can you overdose on magnesium?

The short answer is yes.

While people with healthy kidneys can dispose of excess magnesium through the urine, some with [kidney disease](#) may not be able to get rid of quickly building levels of the mineral, Gurubhagavatula said.

Other medical conditions can also lead to high blood levels of magnesium, she said. That may happen with cancer treatment or in very uncontrolled diabetes.

Is it OK to take magnesium every night?

You really shouldn't.

Insomnia can be a sign of an unidentified sleep disorder, Gurubhagavatula said. You may find you have sleep apnea, restless legs, narcolepsy or a circadian rhythm sleep disorder.

"A comprehensive evaluation can help identify the root cause, so that potentially serious conditions are not missed, and so that appropriate treatment can be given," she said.

You may also be experiencing depression, anxiety, chronic pain, lung disease or heart disease.

If you're not able to fall asleep without requiring medications for weeks or months, see an expert, Gurubhagavatula advised.

Foods high in magnesium

While it might be easiest to turn to a supplement to boost your magnesium, the nutrient is readily available in certain foods.

According to the Sleep Foundation, they include:

- Fish
- Soy and soy milk
- Legumes
- Fortified breakfast cereal and various whole grains
- Green leafy vegetables
- Pumpkin and chia seeds
- Almonds and cashews

SOURCE: Indira Gurubhagavatula, MD, associate professor, medicine, Veteran's Administration Medical Center, University of Pennsylvania, Philadelphia

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