Does Magnesium Help with Depression?

by KRYSTINA OSTERMEYER

Magnesium for Depression

Ask anyone with a mental health condition what they find most annoying about their condition, and undoubtedly, they'll say "unsolicited advice."

As someone with my own struggles, this is a pet peeve of mine. I've heard it all.

"If you ate better, you'd feel better."

"You know, exercise may improve your mood."

"You should try to wean off that medication after a while."

But when a friend texted me an article about magnesium and its possible impact on depression, anxiety, and migraine, I took notice.

The Link Between Magnesium and Depression

Various studies indicate a link between magnesium and depression.

The National Health and Nutrition Examination Survey evaluated 8894 adults between 2007 and 2010. The study was able to find that those who consumed a diet low in magnesium were more likely to suffer from depression, especially young adults.

According to the Journal of the American Board of Family Medicine, "…the effect is very strong, with a >50% higher rate of depression in the lowest quintile of intake compared with those consuming greater amounts." The effect of magnesium and depression seems to have a lesser effect as adults age, however.

This study also found that over half of U.S. adults do not consume enough magnesium.

Can Low or High Magnesium Levels Impact Depression?

Magnesium is a bit tricky. A lab draw may not give the entire picture.

According to Emily Deans, MD, "Blood levels remain fairly stable, because without magnesium in a narrow range, the heart can stop beating … every ICU doctor checks magnesium levels on patients pretty much every day, and repletes magnesium levels by the bag full to keep up with a patients' needs under such intense stress as a critical illness."

So, if a slight reduction in magnesium, called hypomagnesemia, can wreak havoc on the entire body, even

stopping the heart, depression doesn't seem like such a big deal, right?

Well, a low serum magnesium level doesn't necessarily mean that you're consuming enough magnesium or that a supplement wouldn't help symptoms.

Dr. Deans writes in Psychology Today that there are various reasons that we're not getting enough magnesium.

For example, caffeine, alcohol, diuretics, antacids, and food processing can impact our magnesium levels. Plants are also rich sources of magnesium, but environmental influences can impact magnesium levels, such as pesticides and potassium-based fertilizers. So, even when consuming a supposedly magnesium-rich diet, we may not be taking in the proper amount of magnesium.

Also, stress depletes the body of magnesium. Unfortunately, magnesium is also crucial to stress response, recovery, and repair. This is possibly why a reduction in magnesium may be linked to depression.

There is always such a thing as too much magnesium too; high levels of magnesium are called hypermagnesemia. It is difficult to take in too much magnesium, and it is most likely to occur in someone who has an underlying health condition such as kidney failure or who takes in an excessive overdose of a supplement.

In general, if a person intakes too much magnesium through their diet or through supplementation, the kidneys are able to excrete the excess. It is only when the kidneys are having a difficult time, such as renal failure, or when excessive doses are ingested, that a hypermagnesemia is likely to occur.

Should You Take Magnesium for Depression?

There are various magnesium supplements available, and if you would like to try one as an adjunct treatment for depression, you should discuss the best fit with your healthcare provider.

It is important to note that most magnesium supplements do not truly provide the full amount of magnesium as labeled.

For example, magnesium oxide is probably about 60% elemental magnesium, according to Dr. Deans. It is also very stable, so it may not dissolve completely to provide the compounds required to provide free magnesium. Another example is magnesium malate – it is approximately 6.5% magnesium but is highly absorbable.

So, should you take a magnesium supplement? The answer is "maybe" – you should research the options and discuss with your healthcare provider. Each supplement has pros and cons, as well as various side effects.

However, we could all improve our dietary intake of magnesium-rich foods. Foods to include, unless contraindicated for another reason, include:

- Pumpkin seeds
- Almonds
- Spinach
- Cashews
- Peanuts
- Cereal
- Soymilk
- Black beans
- Edamame
- Dark chocolate
- Peanut butter
- Whole wheat bread
- Avocadoes
- Rice

The Bottom Line…

Magnesium may be a viable choice as an adjunct therapy for depression, as well as a myriad of other health conditions. You should speak with your physician about the best formulation, as well as the appropriate dose.