
Dosing Magnesium

Why do we dose to bowel tolerance?

Dr. Madalyn Otto

Magnesium

Magnesium is one essential mineral and happens to be the most commonly deficient and/or insufficient mineral of the modern American body. Without this mineral in abundance, healthy muscle relaxation is challenging, mood is imbalanced, sleep is impaired, detoxification is a great challenge and energy production within our cells is impeded.

To combat these consequences, supplementation with magnesium is often necessary. The body's ability to absorb magnesium from the intestinal tract into the body is determined largely by two factors: 1) the quality/bioavailability of the magnesium and 2) that individual body's need for magnesium.

When ingested magnesium is not absorbed, it causes an osmotic pressure in the intestinal tract driving water into the intestines from the body and resulting in osmotic diarrhea. This means that if we use a poorly-absorbed form of magnesium, it will act primarily as a laxative and will not make it to our cells. This also means that if our bodies don't need much magnesium because our stores are actually sufficient, the excess magnesium will not be absorbed, and this will result in diarrhea.

The solution? We take a well-absorbed form of magnesium like magnesium glycinate and we titrate it "to bowel tolerance". Basically, we are using a good form of magnesium that the body will absorb only up to *its* daily needs and no more than that.

The Dosing Process

Start with a low amount of high-quality magnesium. Your doctor may recommend 200-300mg to start. I often recommend it be taken at night since magnesium gently encourages calm & relaxation. Every 1-2 days, increase the number of capsules in the dose by 1. So, in this case, you start with 2-3 capsules, then increase to 4, then 5 capsules, then 6, etc. You continue this process until you reach a point where the following day you notice loose

stools, abdominal cramping/bloating - symptoms of diarrhea or pre-diarrhea. This indicates that you have reached "bowel tolerance", and that dose was higher than your body's needs. If bowel tolerance was reached at 8 capsules, we can infer that 7 capsules is your daily requirement. Once this daily dose is arrived at, I often recommend patients split this daily dose into two smaller doses taken each day. For example, a patient finds that his/her body reaches bowel tolerance at 8 capsules in the evening. He/she infers that 7 capsules is the ideal daily dose at this time. That dose is then broken up into two smaller doses moving forward: 3 capsules in the morning and 4 capsules = a total of 7 capsules per day.

Over time, the body may require less magnesium and will show that by causing loose stools despite you taking your usual dose. This tells us that you need to lower the dose once again, per the body's instructions. Magnesium happens to be a mineral that we can do this titration process with. This is not the case for all the body's nutrients.