## **Types of Magnesium Supplements**

Magnesium <u>supplements</u> are available in a variety of forms. The absorption rate and bioavailability of magnesium supplements differs depending on the kind — usually types that dissolve in liquid are better absorbed in the gut than less soluble forms.

\*\*\*When choosing magnesium supplements, make sure it indicates the amount of "elemental" magnesium on the bottle, e.g. "1,000 mg. of magnesium citrate has only 125 mg. of elemental magnesium", the other 775 mg. is the citrate component. The amount of elemental magnesium is what you are looking for in determining the required magnesium dosage.\*\*\*

It is believed that magnesium in citrate, chelate and chloride forms are absorbed better than magnesium supplements in oxide and magnesium sulfate form. Here's a bit about the different types of magnesium supplements that you'll likely come across:

- Magnesium Chelate highly absorbable by the body and the kind found in foods naturally. This type is bound to multiple amino acids (proteins) and used to restore magnesium levels.
- **Magnesium Citrate** magnesium combined with citric acid. This may have a laxative effect in some cases when taken in high doses but is otherwise safe to use for improving digestion and preventing constipation.
- Magnesium Chloride Oil an oil form of magnesium that can be applied to skin. It's also given to people who have digestive disorders that prevent normal absorption of magnesium from their food. Athletes sometimes use magnesium oil to increase energy and endurance, to dull muscle pain, and to heal wounds or skin irritation.
- Magnesium Glycinate highly absorbable, this is recommended for anyone with a
  known magnesium deficiency and less likely to cause laxative effects than some other
  magnesium supplements.
- Magnesium Threonate has a high level of absorbability/bioavailability since it can
  penetrate the mitochondrial membrane. This type is not as readily available, but as more
  research is conducted, it may become more widely used.
- **Magnesium Orotate** these supplements have orotic acid, and magnesium orotate is beneficial to the heart.
- Magnesium Taurate it is beneficial to the heart and brain.

## **Recommended Daily Allowance of Magnesium**

These are the current RDAs for magnesium depending on your age and gender — intakes vary on different individual factors — according to the NIH:

Infants-6 months: 30 milligrams
7-12 months: 75 milligrams
1-3 years: 80 milligrams
4-8 years: 130 milligrams
9-13 years: 240 milligrams

- 14–18 years: 410 milligrams for men; 360 milligrams for women
- 19–30 years: 400 milligrams for men; 310 milligrams for women
- Adults 31 years and older: 420 milligrams for men; 320 milligrams for women
- Pregnant women: 350–360 milligrams
- Women who are breastfeeding: 310–320 milligrams

Magnesium is connected to other nutrients within the body, including calcium, <u>vitamin K</u> and vitamin D. Experts believe that one of the reasons magnesium supplements are so beneficial is because they help counterbalance high levels of calcium that can accumulate in the body when people take **calcium supplements** regularly. Similarly, taking <u>vitamin D</u> in high levels, or being deficient in vitamin K2, can lower magnesium stores in the body and contribute to a deficiency.

In the case of deficiency, a person may need to take a supplement for a certain period of time. However, if possible, try to use food-based supplements in these cases, or be aware of how nutrients — such as calcium and magnesium — work together and how certain dosages and intakes can interact with one another.

## **Final Thoughts on Magnesium Supplements**

- Magnesium deficiency is one of the most common nutrient deficiencies in the world, and while I recommend getting as much as you can from magnesium-rich food sources, magnesium supplements can help some people.
- Coming from the root word magnes, magnesium is one of the most crucial minerals for the body. It's involved in over 300 biochemical functions in the body.
- Some of the most common magnesium supplements include magnesium chelate, citrate, chloride oil, glycinate, threonate and orotate. You can take magnesium supplements orally or even get intravenous magnesium. It's much more common to find and use oral magnesium supplements vs. intravenous supplements.
- There are few risks associated with magnesium supplementation, but if you experience a laxative effect or symptoms like diarrhea, nausea or cramping, you may be taking too much magnesium.