



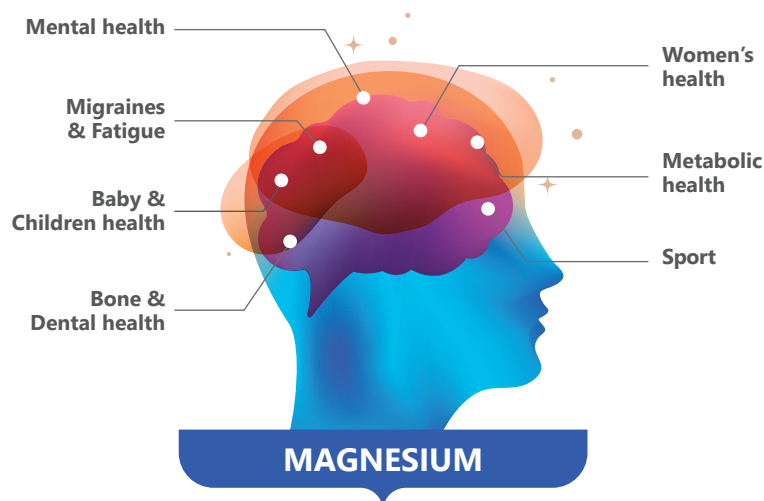
# Getting the most out of your magnesium salt

## MAGNESIUM BIOLOGICAL INTEREST

Dietary surveys consistently indicate that magnesium intake falls below the recommended RDA, with **women obtaining only 77%** and **men 72%** of the recommended amount through their diets. Magnesium is essential **for over 300 enzymatic reactions crucial for maintaining optimal health.**

Among the various types of magnesium salts available today, **GivoMag** stands out by not only supplying magnesium to the body but also ensuring superior absorption, which helps prevent side effects often associated with other forms of magnesium, such as a laxative effect.

Glycerophosphate anions **encompass the alpha and beta isomers of mono-glycerophosphoric acid.** As an organic vector, it is among the most well-tolerated and bioavailable carriers for boosting magnesium retention.



### PHOSPHORUS

- Bone and teeth health/ osteoporosis
- Energetic metabolism
- Growth and development of bones in children



### GLYCEROL

- Fuel of energy  
1 molecule of glycerol = 19 ATP
- Phospholipids synthesis
- Cell membranes and metabolism improvement

## ADVANTAGES TO USE GIVOMAG

- A "3 IN 1" SALT WITH DOUBLE INTEREST**  
The magnesium, glycerol and phosphorus are supplied simultaneously. This type of magnesium salt has a **physiologic and a metabolic interest** due to the glycerophosphate, which is absent in inorganic magnesium salts.
- TOLERANCE**  
Glycerophosphate anion creates a buckler preventing magnesium from causing antacid effects or laxation. It demonstrates **improved digestive tolerance** and the lowest incidence of diarrhea among magnesium formulations.
- A SUPERIOR ABSORPTION**  
With the better survival of the metal ion, this lipophile chelate provides **superior absorption** throughout the epithelial cells into the bloodstream.
- A UNIQUE CHELATE**  
This last generation of chelated magnesium is **fully-reacted**. Unlike other available organic magnesium, it provides an elevated accessibility of magnesium due to its **unique mono-chelated** ring structure : it requires less energy for metabolization.
- BIOAVAILABILITY**  
Phosphorus, Glycerol & magnesium work synergistically : the phosphorus **boosts the storage of magnesium**, whereas the glycerol diffuses it across the body and throughout the **blood brain barrier**.
- SCIENTIFIC EVIDENCES**  
Magnesium Glycerophosphate is extensively explored in scientific literature, with **numerous clinical studies** affirming its efficacy in comparison to other magnesium sources. Furthermore, it holds recognition from various health certification bodies.

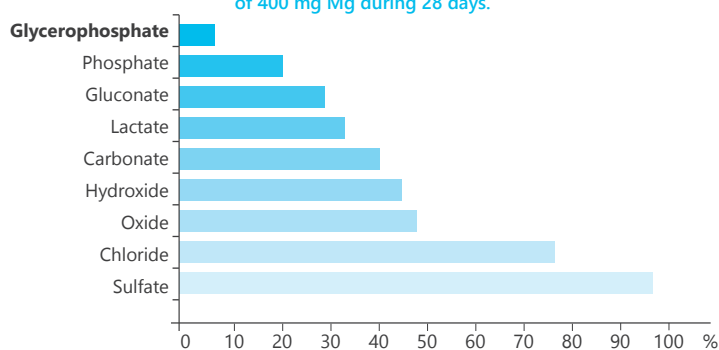


## MAKING THE DIFFERENCE

Among all commercially available organic magnesium salts, magnesium glycerophosphate stands out with the highest elemental magnesium content and **exceptional solubility across a broad pH range**.

Unlike other organic and inorganic magnesium salts, GivoMag is notable for its **gastrointestinal friendliness** – free from any discomfort like flatulence and nausea. Due to its superior absorption, there is no residual magnesium left in the intestinal tract, thereby eliminating the laxative effect associated with it.

**Incidence of diarrhea in 20 volunteers upon the oral use of different magnesium compounds in the amount of 400 mg Mg during 28 days.**



Source: "On Formulas for Daily Oral Magnesium Supplementation and Some of their Side Effects"; F.C.M. Driessens, M.G. Boltong, J. A. Planell *Magnesium-Bulletin* 15, 1 (1993).

## AVAILABLE GRADES

- **GivoMag**: Time-trusted fine powder
- **GivoMag DC**: Optimized grade for direct compression
- **GivoMag +**: High elemental magnesium content
- **LIQ GivoMag 50%**: Liquid form of Magnesium Glycerophosphate

## CHARACTERISTICS



**Appearance:**  
White powder



**Solubility:**  
Highly water soluble



**Taste & Odour:**  
Neutral/slightly sweet



**Composition:**  
12.5% Mg content  
15.9% P content

## References

Mettey. Severe selective magnesium malabsorption: tests of tolerance of oral magnesium supplements, *Magnes Res*; 291-5. 1990 • Lewis, Oral magnesium reduces ventricular ectopy in digitalised patients with chronic atrial fibrillation, *Eur J. Clin Pharmacol*; 38. 1990 • Rossier. The effect of magnesium oral therapy on spasticity in a patient with multiple sclerosis, *European Journal of Neurology*; 7, 2000 • Gassling. Magnesium-enhanced enzymatically mineralized platelet-rich fibrin for bone regeneration applications ; 8(5). 2013.

## APPLICATIONS



Tablets & capsules



Beverages



Medical nutrition



Functional food



Gummies



Sachet Powder form

## ABOUT ISALTIS

### High purity organic mineral salts manufacturer

- Produced in France, Worldwide supply
- Nutrition & Cosmetic ingredients
- FSSC Certification
- Kosher & Halal Certifications
- GRAS self-asserted
- Gluten & Allergen free
- GMO free & natural origin



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