

# TRIPLE MAGNESIUM

## PROFESSIONAL RECOVERY



Magnesium is one of the most abundant minerals, essential for over 300 biochemical processes within the body.

Muscle contraction and relaxation, energy production, nerve function, cardiac activity, blood pressure regulation, hormonal interactions, immunity, bone health; and the synthesis of proteins, fats and nucleic acids – all require magnesium.

Magnesium activates enzymes known as ATPases, which in turn are needed to generate ATP (adenosine triphosphate). When ATP is broken down, energy is released for muscle contraction. When intensity is high, or workouts are long and arduous, ATP needs to be synthesised quickly. A deficiency in magnesium can then slow or limit energy production.

### MAGNESIUM CITRATE

Magnesium citrate, as the name suggests, is magnesium bound to citrate. Citrate is a large molecule that is easily transported into the GI tract, where it dissociates (breaks apart), allowing for the most effective and efficient absorption of magnesium into the bloodstream. Its great bioavailability and solubility make it a wonderful and preferred base for any supplementation protocol.

### MAGNESIUM AMINO ACID CHELATE

Chelated magnesium has an excellent bioavailability status where the magnesium is bound to various amino acids. Chelated magnesium is expensive to make but is favoured because it can be delivered to parts of the body that other forms are unable to penetrate due to the absence of an amino acid binding complex. Magnesium acid chelates have a range of benefits, including increased energy levels, improved mood, cognition and cardiovascular health.

### MAGNESIUM GLYCINATE

Similar to chelated magnesium, however in this case, the magnesium is bound to an amino acid called glycine. Considered one of the more tolerated and gentle formulations, magnesium glycinate is another highly bioavailable option. It is typically well absorbed in the GI tract, and is often associated with the 'calming effects' seen with magnesium supplementation. It works synergistically alongside many neurotransmitters, like GABA, to promote calm and help relieve sleeplessness.



“ **Magnesium is one of the most abundant minerals and essential for over three hundred biochemical processes within the body. These processes range from assisting in getting a good night's sleep, to processes involved in the synthesis of DNA.**

For athletes particularly, magnesium is vital due to its involvement in glycolysis and creatine phosphate production. In simple terms, this translates to the creation of energy for your muscles upon exertion, as well as supporting available energy in the body to sustain endurance.”

### **READ BLOG**

#### **WHEN TO TAKE FOR BEST PERFORMANCE OUTCOMES?**

Thanks to the inclusion of magnesium glycinate dihydrate in TRIPLE MAGNESIUM, in addition to the other highly bioavailable forms, it acts on the nervous system and helps with sleep, muscle relaxation and overall recovery. This makes it best suited to take in the evening, about an hour or so before bed for most people.



Pip Taylor  
Performance Dietician

TRIPLE MAGNESIUM is Informed Sport certified.

Informed Sport is a quality assurance and certification programme for sports supplements globally. The presence of the Informed Sport certification symbol means that every batch of a product has been tested for more than 250 prohibited substances as per World Anti-Doping Agency (WADA) guidelines.



To access your relevant batch certificate, [head to our Batch Testing Library](#)

## **RELEVANT STUDIES**

“ **Aiming to test the hypothesis that magnesium supplementation influences the physical performance of volleyball players, this study saw significant decreases in lactate production and significant increases (of up to 3cm) in countermovement jump were detected in the experimental group following magnesium supplementation.**”

### **READ STUDY**

**Update on the relationship between magnesium and exercise...**

This research has shown that exercise induces a redistribution of magnesium in the body to accommodate metabolic needs.

### **READ STUDY**

**The effect of acute vs chronic magnesium supplementation on exercise and recovery on resistance exercise, blood pressure and total peripheral resistance...**

The study showed a positive effect with A Mg2+ supplementation in relation to net strength and force gains with bench press.

### **READ STUDY**

