ACTIVATED MAGNESIUM

Sleep, Mood & Musculoskeletal Support*

InfiniWell

Magnesium is involved in over 200 essential biochemical reactions within the human body. It serves as a cofactor for numerous enzymes, facilitating various metabolic processes. These reactions include energy production as magnesium is crucial for the synthesis of adenosine triphosphate (ATP), the primary energ currency of cells. Magnesium also plays a key role in protein synthesis, DNA and RNA synthesis, and cellular replication. Additionally, it is involved in maintaining proper nerve and muscle function; regulating blood pressure; supporting cardiovascular health; participating in the metabolism of carbohydrates, fats, and proteins; and aiding in the synthesis of neuro-transmitters. Moreover, magnesium contributes to the activation of vitamin D and helps maintain bone health. Its extensive involvement in such a wide array of physiological processes underscores its indispensability for overall well-being and optimal bodily function.

DEMOGRAPHIC & CLINICAL APPLICATIONS

MEN & WOMEN

PATIENTS REQUIRING

- Magnesium Absorption Support
- Neurological and/or Mood Protocols
- Cardiometabolic Intervention
- Stress Management & Sleep Support

GLUTEN FREE

SOY FREE

DAIRY FREE

NON GMO

DIRECTIONS:
Take 2 capsules daily or as directed by your healthcare practitioner.

BENEFITS

Supports Healthy Neurotransmitter Metabolism

Promotes Vascular Relaxation & Pliability

Maintains Healthy Levels of Melatonin

Aids in Healthy Levels of ATP Production

SUPPLEMENT FACTS

Serving Size: 2 Capsules | Servings Per Container: 60

	Amount Per Serving	%DV
Magnesium *(as Albion Di-Magnesium Malate and TRAACS® Magnesium Lysinate Glyciante Chelate)*	250 mg	59%
Malic Acid *(as Albion Di-Magnesium Malate)*	828 mg	*

* Daily Value Not Established

Other Ingredients: Rice Powder, Hydroxypropyl Methycellulose, Magnesium Stearate, Silicon Dioxide, Vegetable Capsule (Hypromellose, Titanium Dioxide)

CHALLENGES WITH ABSORPTION

Tied to the gastrointestinal system, especially as it relates to the use of PPIs, is a factor in mineral malabsorption called hypochlorhydria, or the lack of adequate stomach acid. Here is specifically how hypochlorhydria can lead to malabsorption of magnesium and how malic acid might help:

Hypochlorhydria and Magnesium Absorption

Stomach acid, specifically hydrochloric acid (HCl), plays a crucial role in the breakdown of magnesium salts present in food and supplements into an absorbable form. Adequate stomach acid is required to convert magnesium into its ionic form (Mg2+), which is readily absorbed in the small intestine. In cases of hypochlorhydria, the reduced stomach acid levels can impair the efficient release of magnesium from its salts, leading to decreased absorption.

Malic Acid and Magnesium Absorption

Malic acid, a naturally occurring organic acid found in certain fruits and vegetables, has been suggested to enhance magnesium absorption, particularly in individuals with hypochlorhydria. Malic acid has a chelating effect, which means it can form complexes with magnesium ions, increasing their solubility and bioavailability. By chelating with magnesium, malic acid may facilitate the absorption of magnesium even in the presence of low stomach acid levels.

The Potential Role of Malic Acid

Malic acid supplementation, particularly in the form of di-magnesium malate (magnesium bound to malic acid), may provide additional benefits for individuals with hypochlorhydria-related magnesium malabsorption. Malic acid in di-magnesium malate not only serves as a source of bioavailable magnesium but also offers potential advantages related to malic acid itself, such as supporting energy production and muscle function. The combination of magnesium and malic acid may help bypass the reliance on adequate stomach acid for magnesium absorption, making it a potentially useful option for individuals with hypochlorhydria.

NEUROLOGICAL

When it comes to neurological function, magnesium is critical specifically in relation to neurotransmitter function and synaptic plasticity.

Neurotransmitter function: magnesium plays a vital role in neurotransmitter release and activity. It supports the release of neurotransmitters such as serotonin, dopamine, and GABA, which are essential for mood regulation, memory, and overall brain function. Magnesium influences the availability of neurotransmitters by acting as a cofactor for enzymes involved in their synthesis and breakdown.[1]

Synaptic plasticity: magnesium is vital for maintaining synaptic plasticity, which refers to the ability of synapses to change and adapt in response to learning and memory processes. It modulates the activity of NMDA receptors, which are involved in synaptic plasticity and long-term potentiation.[2]

CARDIOVASCULAR

Cardiovascular health is also an area where magnesium is greatly utilized. First, the heart rhythm is highly regulated by magnesium; it helps maintain normal heart rhythm by regulating the electrical impulses that control heart muscle contraction and relaxation. Magnesium is also involved in the proper functioning of ion channels and pumps within cardiac cells.[3]

Additionally, magnesium plays a key role in blood pressure regulation via its involvement in the relaxation and dilation of blood vessels. It modulates the activity of endothelial cells and supports the functioning of enzymes involved in vascular tone control.[4]

SLEEP

Often, magnesium is recommended at bedtime; this is because of its role in supporting a healthy sleep cycle. The first manner in which it accomplishes this is via the regulation of melatonin: magnesium is involved in the synthesis and regulation of melatonin, a hormone that regulates the sleep-wake cycle. It influences the activity of enzymes involved in melatonin synthesis and may enhance its production, promoting better sleep quality and maintenance of a healthy sleep pattern.[5] It also possesses muscle-relaxing properties and contributes to muscle relaxation throughout the body, including the muscles involved in sleep promotion. This relaxation effect can contribute to a deeper and more restful sleep.[6]

REFERENCES

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