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ESSENTIALS

SYNERGISTIC MAGNESIUM

Supports muscle health, energy levels and the nervous system

Nutritional Information

One Tablet provides:

		*%NRV
Vitamin B6	5 mg	357
Mineral amino acid blend	880 mg	
providing:		
Magnesium	150 mg	40

*NRV = Nutrient Reference Values

Take one or two tablets daily with food. Swallow with water.



SUMMARY

- Superior absorption with amino acid chelated magnesium
- Combined with vitamin B6
- Medium potency

DESCRIPTION

Synergistic magnesium provides 150mg of magnesium – amino acid chelate and 5mg of vitamin B6 which contributes to a reduction of tiredness and fatigue and to normal energy yielding metabolism. These synergistic nutrients also contribute to the normal functioning of the nervous system including in the production of neurotransmitters and to normal psychological function. Magnesium is needed for production some hormones including sex hormones. Low levels of magnesium may contribute to disturbed sleep, anxiety and symptoms of pre-menstrual syndrome (PMS). Magnesium is the second most abundant mineral in the body and is involved in more than 300 enzymatic reactions. It plays a role in the normal function of muscles and is involved in the maintenance of bones and teeth.

HOW DOES SYNERGISTIC MAGNESIUM SUPPORT THE NERVOUS SYSTEM AND HORMONAL HEALTH?

Production of GABA: Magnesium and vitamin B6 are needed for the production of gamma-Aminobutyric acid (GABA). GABA is an inhibitory neurotransmitter that is required for the relaxation of the nervous system. Magnesium activates GABA receptor sites, and without it, GABA cannot be utilised fully¹.

Production of dopamine: Dopamine production requires adequate magnesium. Although the exact mechanism is not fully understood, studies suggest that magnesium deficiency results in decreased dopamine production^{2,3}, and magnesium supplementation increases dopamine levels and produces an anti-depressive effect³.

Depression: Magnesium deficiency may lead to depression and other mood disorders. Magnesium works in balance with calcium to regulate nerve nitric oxygen balance. An imbalance in this process may result in neurological damage which manifests as depression. Case history studies show a rapid recovery from major depression in just 7 days using magnesium supplementation⁴.

Anxiety: Magnesium deficiency may contribute to anxiety via the dysregulation of the hypothalamus–pituitary–adrenal (HPA) axis. Magnesium deficiency may lead to hyper-emotional response and increase adrenocorticotropic hormone (ACTH)⁵.

Sleep: Relaxation of the nervous system is essential for the onset of sleep. 50% of the population report to suffer from insomnia, and the impact on quality of life and health can be profound. Research shows however that magnesium supplementation can significantly improve sleep efficacy and quality, increase concentrations of the sleep hormone melatonin and decrease concentrations of the stress hormone cortisol⁶. Vitamin B6 is required in the synthesis of melatonin, a hormone necessary to induce sleep.

Myelin sheath: Vitamin B6 is required for the myelin sheath around nerve cells which controls nerve to nerve communication.

Oestrogen regulation: Much like neurotransmitters, magnesium and vitamin B6 is required for the regulation of oestrogen. Magnesium and vitamin B6 contribute to the formation of glutathione⁷. Glutathione is essential for phase 2 liver detoxification, where it prepares oestrogen, so it can be eliminated through the gut. If glutathione is insufficient, the liver may be less able to process oestrogen, leading to oestrogen dominance.

Progesterone regulation: Vitamin B6 is required for the development of the corpus luteum. The corpus luteum cells produce progesterone. Progesterone is responsible to thickening the endometrium and maintaining pregnancy.

PMS: Women who have insufficient magnesium levels are much more likely to suffer from PMS. Magnesium plays an important role in neuro-muscular communication and in the creation of female sex hormones. One study concluded that magnesium supplementation was effective against dysmenorrhoea and reduced the number of days off work due to the condition⁸. Studies show that a combination of vitamin B6 and magnesium is effective for reducing

symptoms of PMS. Improvements were found in depression, insomnia, concentration difficulties, anxiety, irritability, water retention, breast pain, water retention, feeling cold, nausea, increased urine frequency, lower back pain, headaches, acne and muscular pain.⁹

WHAT ELSE IS SYNERGISTIC MAGNESIUM BENEFICIAL FOR?

Energy production: Magnesium is required directly for the kerb cycle (energy production) where it controls glycolysis. Glycolysis is the breaking down of glucose into a useable form known as pyruvate.¹⁰ Magnesium's role in sleep quality also effects day time energy production. For a steady energy supply to be maintained, we require adequately functioning adrenal glands. Our adrenal glands help to control blood sugar balance with the release of cortisol and adrenaline which communicates with our stored sugar (glycogen). The adrenal glands work very closely with the hypothalamus and pituitary glands in something called the HPA axis. This HPA axis is the major controller of hormones in the body. A magnesium deficiency can interfere with the equilibrium of the HPA axis, ultimately decreasing adrenal function and therefore steady energy.

Bone health: Magnesium is found abundantly in the bone and tooth structural matrix. Magnesium works in balance with calcium and facilitates calcium absorption. Unfortunately, most modern diets are low in magnesium and high in calcium warranting, the need for magnesium supplementation to protect bone health. One study increased the magnesium intake of 19 post-menopausal woman on hormone replacement therapy. A significant bone mineral density increase was observed after just 1 year.¹¹

Muscles: Magnesium is an essential mineral in muscle relaxation. Magnesium deficiency may lead to excessive muscle cramping and problems with the cardiac muscle.

WHY IS MAGNESIUM AMINO ACID CHELATE A SUPERIOR FORM?

Magnesium chelated to amino acids are better absorbed in the intestinal tract than other forms. Magnesium stability varies with different types of chelate. Research confirms the superiority of magnesium amino acid chelate. Magnesium chelated to amino acids is also gentler on the gut than other forms.

HOW SHOULD SYNERGISTIC MAGNESIUM BE TAKEN?

As a food supplement, take one or two tablets daily with food. Swallow with water.

ARE THERE ANY PRECAUTIONS BEFORE OR WHILE TAKING SYNERGISTIC MAGNESIUM?

Synergistic magnesium is intended exclusively for adults and is not recommended for children.

Use under the supervision of a health care professional if pregnant or breastfeeding.

FEATURES

- Chelated mineral form for optimum absorption and utilisation.
- Contains synergistic vitamin B6 to aid metabolism of magnesium and the synthesis of neurotransmitters.

HEALTH NEEDS



MENOPAUSE



BONES



ENERGY



JOINTS &
MUSCLES



HEART &
CIRCULATION



WOMEN'S
HEALTH

SCIENTIFIC REFERENCES

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