



orthoplex®

MIGHTY MAGNESIUM



MAGNESIUM

This mighty mineral found abundantly in the human body, performs hundreds of biochemical reactions.

Every single cell in your body contains it and needs it to function! Most of your magnesium is stored in your bones, with the rest in your muscles, soft tissue and fluids.

Since magnesium is intrinsically involved in a vast array of physiological processes, maintaining healthy levels of this mineral is important for health. Habitually low intake of magnesium and general deficiency can reduce your body's ability to deal with stress and increase the risk of illness.

Low levels of magnesium are associated with a range of chronic health conditions, including diabetes, osteoporosis, asthma, fibromyalgia, migraine, cardiovascular disease, fatigue and electrolyte imbalance.^{1,2,3} Supporting magnesium levels can play an important therapeutic and preventative role in illness and impaired protein synthesis and cell division.

Magnesium regulates many fundamental bodily functions, including:



Contraction and relaxation of your muscles



Calming your nervous system



Sending and receiving nerve signals



Regulating your blood pressure



Keeping your immune system strong



Aiding blood sugar regulation



Healthy bones and teeth



Energy production



Maintaining a steady heartbeat



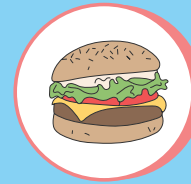
Reproduction and hormonal balance

MISSING MAGNESIUM

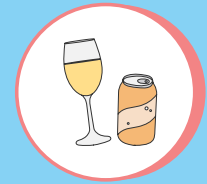
A typical Western lifestyle increases the need for magnesium. Much of the population in Western countries consume less than the recommended amount due to the low magnesium content in the modern diet. However, even if you eat a healthy diet, you may not be getting enough of this necessary nutrient.

Certain health conditions or circumstances can increase the risk of magnesium deficiency in some people, including digestive disorders such as coeliac disease and chronic diarrhoea, which can inhibit sufficient uptake and increase excretion of this nutrient.

Lifestyle factors can deplete magnesium stores in the body. These include:



A diet high in processed foods



Alcohol, soft drinks and coffee



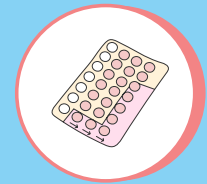
Stress, which consumes more magnesium



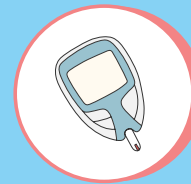
Proton pump inhibitors (PPIs) such as antacids



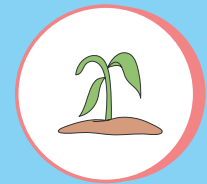
Heavy metal exposure



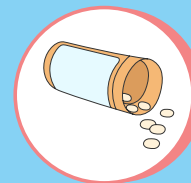
The contraceptive pill



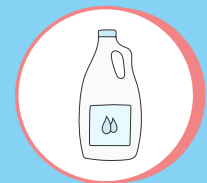
Blood sugar regulation increases metabolic demand for the mineral as more is excreted



Agricultural practices with poor quality soil, depleted of nutrients



Anti-depressants

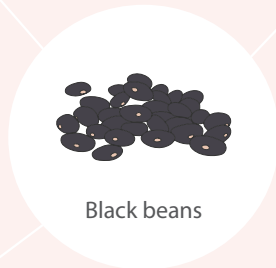
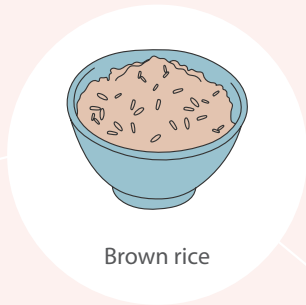
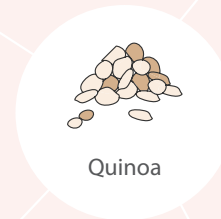
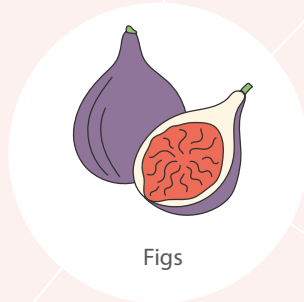
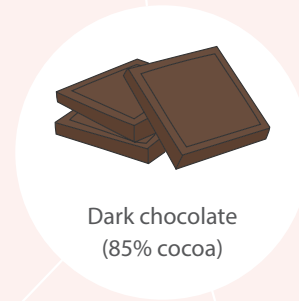


Demineralised water

MUNCH ON MAGNESIUM

In general, rich nutritional sources of magnesium include green vegetables, nuts, seeds, beans and whole grains. Some magnesium is also found in fruits, fish, meat and milk products.

For those seeking more magnesium, these are 10 foods to include in your diet:



MATES WITH MAGNESIUM

Some nutrients can assist the uptake of magnesium in your body. Vitamin D is magnesium's closest companion, stimulating its intestinal absorption. At the same time, vitamin D requires magnesium to be converted into its active form.⁵

Other complementary nutrients include:

Vitamin B6:

Increases the accumulation of magnesium in your cells. Vitamin B6 deficiency can lead to a negative magnesium balance by increasing its elimination.³

Fermentable fibre:

Such as inulin and resistant starch can enhance magnesium intake.³

MASTER MAGNESIUM

Know your daily doses.

The Australian Government has a specific set of recommendations known as NRVs (Nutrient Reference Values) for nutritional intake based on currently available scientific knowledge. The recommended dietary intakes (RDI) set by the NRVs are supported by the Australian National Health and Medical Research Council (NHMRC) and are widely used by practitioners as clinical practice guidelines.⁴

Magnesium RDI for little ones and adolescents:

Age	RDI
1-3 yrs	80 mg/day
4-8 yrs	130 mg/day
9-13 yrs	240 mg/day
14-18 yrs	410 mg/day

Magnesium RDI for adults:

	Age	RDI
Men	19-30 yrs	400 mg/day
	31-50 yrs	420 mg/day
	51-70 yrs	420 mg/day
	<70 yrs	420 mg/day
Women	19-30 yrs	310 mg/day
	31-50 yrs	320 mg/day
	51-70 yrs	320 mg/day
	<70 yrs	320 mg/day

Oftentimes, some people have higher demands for magnesium. The general supplementary range is 300-800mg/day.⁷ Magnesium is usually well tolerated by most people; however, unabsorbed magnesium can result in temporary gastrointestinal symptoms such as diarrhoea.

Dosage recommendations may depend on an individual's gastrointestinal tolerance. Some people may require doses below 400mg daily if they experience symptoms. Doses above 400mg should be taken in divided doses and under the guidance of your qualified healthcare practitioner.

MAINTAIN YOUR MAGIC WITH MAGNESIUM

While magnesium is essential for maintaining good health in all individuals, studies have highlighted its therapeutic benefits in several specific areas, including:



Sports

Magnesium supplementation reduces muscle soreness and improves recovery.⁸ In sports, performance studies have suggested that the consumption of 400mg of magnesium per day can protect against muscle damage.⁹



Sleep

Studies have shown that magnesium supplementation can help people fall and stay asleep, reduce restless legs syndrome, and improve concentration in older people.¹⁰



Headaches

Studies have found that migraine sufferers tend to have lower levels of magnesium than those who don't get headaches. Regular magnesium supplementation has shown to be effective in headache prevention, including menstrual migraine.



PMS

Magnesium has been shown to help in the management of PMS symptoms. Research shows a strong correlation between PMS and low levels of magnesium in the blood.¹³



Fertility

Magnesium is essential for women's preconception health. It is well known that the levels of magnesium in the blood is altered during a woman's menstrual cycle, suggesting a correlation between hormones and magnesium levels not only in women, but also in men.¹²



Pregnancy and lactation

Magnesium requirement is increased during pregnancy and lactation due to greater nutritional demand to support both mother and baby. Supplementation during pregnancy may decrease the potential for complications such as gestational diabetes, pregnancy-induced hypertension, leg cramps, and preeclampsia.¹¹

RDI's for magnesium during pregnancy and lactation:

Age	Pregnancy	Lactation
14-18 yrs	400 mg/day	360 mg/day
19-30 yrs	350 mg/day	310 mg/day
31-50 yrs	360 mg/day	320 mg/day

Disclaimer

The information in this booklet is generic in nature. Please consult your healthcare practitioner for guidance regarding your individual condition and specific symptoms, and before making any diet or lifestyle changes. Vitamin and nutrient supplementation should not replace a balanced diet. For any questions, please talk to your healthcare professional.

References available on request.



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Your next appointment is: