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Magnesium

The Body's Demand for Magnesium

Magnesium is an essential mineral used in over 300 biochemical processes in your body. Magnesium can improve your vitality and wellbeing, help you function well in times of stress and support healthy moods. It also relaxes your muscles and plays a key role in energy production. This important mineral also helps your heart by supporting healthy blood pressure and blood sugar levels, as well as maintaining a steady heartbeat.

Demands of Modern Lifestyles

The reality is that many Australians are magnesium deficient. Common conditions such as stress, cardiovascular disease and diabetes increase the body's demand for magnesium. This increased requirement is often not met due to our reduced dietary intake of magnesium rich foods. Hundreds of years ago, our foods were naturally rich in magnesium and deficiency in this mineral was rare. However, with our modern day lifestyles increasing the need for food processing and the refinement of grains, these once magnesium abundant foods are now containing significantly less magnesium. For example, the refined wheat flour often eaten today contains only 16% of the magnesium found in whole wheat grain.

Risk factors for magnesium depletion

- Excessive intake of alcohol, salt, phosphoric acid (soft drinks) and caffeine
- Hyperaldosteronism, hyperparathyroidism with hypercalcaemia, hyperthyroidism, diabetes mellitus
- Profuse sweating
- Intense, prolonged stress
- Coeliac disease, inflammatory bowel diseases, malabsorption syndromes, partial bowel obstruction, vomiting/diarrhoea, pancreatitis, infections, parasitic infection
- Hyperthermia, phosphate depletion, potassium depletion, hyper catabolic states such as burns
- Pregnancy, lactation, excessive menstruation

Minimise consumption of refined and processed foods, sugar, tea, coffee, carbonated drinks and alcohol, as they all deplete your magnesium stores.

Need a Magnesium Boost?

A surprising number of people have low magnesium levels and early detection may assist in the prevention and improved management of certain health conditions. Magnesium deficiency may be associated with:

- Stress, anxiety, and nervousness.
- Insomnia.
- Muscle tension, twitches, cramping and spasms.
- Tension headaches and migraines.
- Reduced pain threshold.
- Tiredness, lethargy and fatigue.
- Chronic fatigue.
- High blood pressure.
- Premenstrual syndrome (PMS).
- Diabetes.
- Asthma.
- Fibromyalgia.
- Chocolate cravings
- Palpitations
- Hyper irritability and excitability

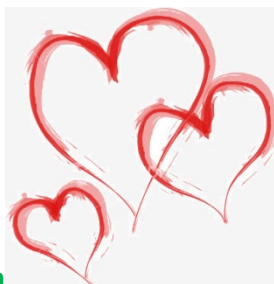
Stressed Out?



If you are stressed, you actually need more magnesium than usual to keep your muscles relaxed and keep your nervous system going. The irony is that during times of stress, you excrete more magnesium, leaving your stores of magnesium depleted. This depletion of magnesium can leave you feeling anxious, uptight and can even affect your sleep. This results in a vicious cycle, whereby stress lowers your magnesium levels and low magnesium levels increase your stress!

Stop the Vicious Stress Cycle

In the 21st century we are all too familiar with stress, be it related to work, relationships, finances or traffic jams. Many of us are stressed on a daily basis which means our body's demand for magnesium is increased. Stress hormones are increasingly released when magnesium levels are low. When you are stressed, your body excretes more magnesium, at a time when you need it the most. This may lead you to feel uptight, anxious and even more stressed, thus perpetuating the cycle of ongoing stress and magnesium depletion. Magnesium and taurine combined with specific B vitamins and glutamine can help rapidly reduce these negative effects of stress and help break the stress cycle.



The Heart Loves Magnesium

Magnesium can be of great benefit in supporting cardiovascular health. Low magnesium levels can place stress on the cardiovascular system, leading to hypertension and arrhythmias. Magnesium and taurine supplementation have been shown to decrease both systolic and diastolic blood pressure and support healthy heart function. Magnesium orotate is another form of magnesium which has been shown to be very helpful for cardiovascular health as it targets heart muscles.

Cramps and Restless Legs

Muscular cramps and tension are commonly associated with magnesium deficiency. Magnesium has long been recognised for its important therapeutic applications in enhancing muscle relaxation and relieving spasms.

Athletes are in high need of magnesium as it is used up so much in exercise. It's important for muscle recovery, muscle relaxation and for energy synthesis. If you do a lot of exercise and you feel especially sore and tired afterwards and your stamina is reduced you might have a magnesium deficiency.



Choosing the Right Magnesium

Not all forms of magnesium are the same. When you want to increase your body's magnesium stores, it is important to choose the right form. Magnesium diglycinate is a specific type of magnesium chelate that has an increased absorption rate. It has been shown to have over eight times greater absorption than magnesium oxide, without the digestive upset that can occur with other forms of magnesium.

Most Diets Are Deficient in Magnesium

Magnesium is found in a wide range of foods (see above). However, the bad news is that it can be difficult to get an adequate supply of magnesium from your diet. In fact, a recent scientific study found that the daily intake of magnesium was below the Recommended Daily Intake (RDI) for 76% of men and 86% of women tested! Compounding this is the fact that modern lifestyles actually increase your daily magnesium requirements significantly. For example, stress can deplete magnesium levels, as can a high consumption of tea, coffee and alcohol. Exercise can also increase your magnesium requirements.

Munch on Magnesium Foods

Magnesium is found in a wide range of foods. Include the following fresh, nutrient-rich foods in your diet each day:

- Green leafy vegetables; spinach, kale and silver beet.
- Nuts and seeds; raw almonds, cashews, brazil nuts, pumpkin seeds and sunflower seeds.
- Whole grains; rye, quinoa, oats, wheat and buckwheat.



Food Sources of Magnesium

Animal Sources	mg/100g	Grains	mg/100g	Beans & Vegetables	mg/100g	Fruits	mg/100g	Other	mg/100g
Shrimp	51	Wheat germ	336	Tofu	111	Figs, dried	71	Brewers yeast	231
Cheddar cheese	45	Wheat bran	490	Beet greens	106	Apricots dried	62	Almonds	270
Crab	34	Buckwheat	229	Spinach	88	Dates	58	Cashews	267
Lean Beef	21	Millet	162	Swiss chard	65	Avocado	45	Brazil nuts	225
		Wheat grain	160	Collard leaves	57	Prunes, dried	40	Peanuts	175
		Brown rice	88	Sweet corn	48	Raisins	35	Pecan	142
Chicken	19	Barley	35	Parsley	41	Banana	33	Walnuts	131
				Beans	37	Blackberry	30		

Here's a recipe for a snack high in magnesium:

Magnesium Balls

Makes approximately 12

Ingredients

- 1 cup raw/fermented nuts and seeds (I used about 3/4 cup of a mixed nuts pack and added a few handfuls of seeds such as pepitas, sunflower seeds, sesame seeds and pumpkin seeds.)
- 2-3 tbsp wheat bran (you can alternatively use oat bran)
- 5 dates
- 2 tbsp unhulled tahini
- 2 tbsp blackstrap molasses
- 2 tbsp raw cocoa powder
- Optional – freshly ground flax seeds, chia seeds or wheat germ

Method

In a food processor blend the nuts and seeds until they become a coarse powder. Finely chop the dates or blend as well (if they're too dried you'll have trouble blending them).

Mix the nuts, dates, tahini and blackstrap molasses and stir well.

Roll them into balls with your hands, then roll in the cocoa powder. Lightly tap to get rid of the excess powder. From here you can mould them into different shapes (I made a heart because I love magnesium, haha). You can refrigerate them or freeze them (let them defrost for about half an hour before eating).

**Tips**

These are very rich in magnesium and calcium so are great for people who need some extra of these minerals. They also contain a nice amount of zinc, protein and good fats. Have 1-2 a day.

While the molasses is high in sugar, it is a great source of vitamins and minerals. Having it combined with the nuts and seeds helps to reduce the GI.

Each ball would roughly contain about 100mg magnesium, 37mg of calcium and 1mg of zinc (I know it doesn't sound like much zinc but remember that minerals are needed in different amounts.)

RDI

- 400mg/day (men 19-30 years); 420mg/day (men >30 years)
- 310mg/day (woman 19-30 years); 320mg/day (women >30 years)
- 400mg/day (pregnancy \leq 18 years); 350mg/day (pregnancy >18 years)
- 360mg/day (lactation \leq 18 years); 310mg/day (lactation > 18 years).

Replenish Your Reserves

If you are low in magnesium it is important to replenish your reserves with a supplement, as well as eating magnesium rich foods. Different magnesium formulas are available with different combinations of ingredients and doses for different conditions such as cardiovascular health, exercise support, fatigue, anxiety, or cramps.

Although magnesium supplementation is traditionally used to correct or avoid a deficiency research has shown that supplementation can play a role in the management of several health conditions when given in the right form and dose.

Nutritional supplementation is not just for preventing deficiencies, it can actually be used to treat conditions by correcting chemical pathways that are out of sync. Some of the most common conditions magnesium has been used to treat include headaches and migraines, PMS, stress, heart problems, fatigue, asthma, depression, anxiety, restless legs syndrome and period pain.

If you think you need magnesium supplementation, make an appointment today to get a high quality supplement that's right for you.

Call us on **0415 517 445** or book online on www.nnhealth.com.au

We look forward to seeing you soon,

Paula