

## Magnesium Supplements

### What is Magnesium?

Magnesium is a mineral needed by every cell of your body and is required for every major biological process. This includes the production of cellular energy and synthesis of nucleic acids and proteins. It helps maintain normal muscle and nerve function, keeps heart rhythm steady and bones strong.



Magnesium has a positive effect on treatment of disorders such as cardiovascular disease, hypertension, and diabetes. About half of your body's magnesium stores are found inside cells of body tissues and organs, and half are combined with calcium and phosphorus in bone. Only 1 percent of the magnesium in your body is found in blood. Your body works very hard to keep blood levels of magnesium constant.

### Benefits of Magnesium

- Magnesium is essential for proper muscle function and acts to relieve tight, sore and cramped muscles. It controls muscle contraction and acts as a muscle relaxant. It can therefore be used to **treat back pain and cramps** by relaxing back muscles, kidney stress and muscular tension. Proper intake of magnesium supplements act as a cure for **leg and feet cramps**.
- Magnesium relaxes the entire nervous system and **improves sleeping habits**.
- It is vital for sustaining the normal heart beat and is used by doctors to treat irregularity heart rhythm. It can be used preventively to **reduce the risk of heart disease and heart attacks**
- Magnesium is an essential mineral that aids the human body to **absorb calcium** and vitamin D and plays an important role in the formation and strengthening of teeth and bones. It can also help **prevent osteoporosis** in later years.

- **Prevents Asthma** - Chronic asthma patients may be able to normalize their breathing with help of magnesium supplements which aids in relaxing bronchial muscles and normalize breathing.
- **Essential during pregnancy** - Magnesium is one of the vital elements during pregnancy. Proper intake of magnesium supplements during pregnancy is extremely beneficial for reducing osteoporosis risk and increasing the pain tolerance level, thereby resulting in a smooth delivery process and in optimization of blood pressure. Magnesium sulphate is the best treatment for preventing seizures in expectant mothers who have hypertension.
- **Prevents constipation** - Magnesium provides quick relief from a constipated condition. The laxative property of magnesium relaxes the intestinal muscles, thereby helping to establish a smoother rhythm while passing bowel movements. Magnesium also has another property of attracting water, which in turn softens the stool and helps it to pass easily. This relaxation of the nervous system can also assist with preventing problems such as vomiting, cramps, indigestion, abdominal pain, and flatulence.
- **Prevents diabetes and regulates sugar level** - The health benefits of magnesium are contributed towards diabetic patients also as this mineral helps to improve insulin reaction to blood sugar level. Magnesium supplements are vital for all diabetic patients as many suffer from magnesium deficiency. Magnesium aids in regulating blood sugar status, thus **promoting normal blood pressure**. This in turn also helps prevent heart disease.
- **Cures psychiatric disorders** - Magnesium is known to cure panic attacks, stress, anxiety and undue agitations.
- **Cures migraine**- Magnesium supplements considerably reduces the severity of headaches and migraines and may also help in reducing the rate of recurrence.
- **Controls bladder functions** – Many individuals who have bladder problems and frequent urge to urinate may find relief by taking magnesium supplements.
- **Absorb minerals** - Magnesium helps to absorb vital minerals and vitamins like sodium, calcium, potassium and phosphorus.
- **Activates enzymes** - Magnesium also helps in boosting the energy production in the body and the activation of enzymes to create cellular energy.

#### **So what foods provide Magnesium?**

Green vegetables such as spinach, broccoli, beans and peas provide magnesium as do nuts,

lentils, beetroot, pumpkin, carrot, celery, potatoes, paw paw, pineapple, avocado, peach, banana, seeds, brown rice, and some whole grains.

Although magnesium is present in many foods, it usually occurs in small amounts. As with most nutrients the daily needs for magnesium cannot be met from a single food. Eating a wide variety of foods, including five servings of fruits and vegetables daily and plenty of whole grains, helps to increase magnesium intake.



Magnesium content of refined foods is usually low, and due to the change in western diet in the past 60 years many people are not receiving enough Magnesium in their daily diets. The importance of magnesium is not yet widespread and thus most people ignore magnesium consumption when choosing foods.

Australia actually has a very poor amount of Magnesium in the soil and therefore Australians suffer from high deficiencies.

Food	Magnesium Content (mg)	Serving size
Almonds	80	1 oz
Spinach	78	½ c cooked
Cashews	74	1 oz
Mixed Nuts	64	1 oz
Peanuts	50	1 oz
Peanut Butter	49	2 Tbsp
Kidney beans	35	½ c
Halibut	24	3 oz
Avocado	22	½ c
Cocoa powder	125	25g

If you have low levels of magnesium or think that you would benefit from extra Magnesium in your diet, supplements may be required. Most dieticians recommend 250-350 mg per day of magnesium supplement for adults.

### Signs of Magnesium deficiency

Muscle cramps especially in the legs or feet, muscle twitches, aching or tight muscles, headaches, general muscle tightness, anxiety, restless legs, confusion, disorientation, loss of appetite, depression, tingling, numbness, abnormal heart rhythms, coronary spasm, and seizures.



### Prescription

Most supermarket brands do not have a sufficient amount of the right magnesium to increase levels in the body. High Quality Magnesium with high

absorption levels are usually “Practitioner only” supplements, meaning that you are unable to get them over the counter. If you believe that you have a deficiency, or would like to know more, please talk to a Bodysmart Practitioner. Please do not take without medical prescription and do not recommend to others.

#### **So what types of conditions is Magnesium beneficial for?**

- Muscular aches and pains
- Back and neck pain
- Headaches and migraines
- Shoulder, arm or leg pains
- Muscle spasm or muscle cramps
- Individuals with general muscle tightness
- Individuals who exercise regularly
- Stressed or fatigued individuals
- Individuals who work outdoors and sweat
- During pregnancy – ensuring it is a controlled amount
- Asthmatics
- Individuals suffering from constipation
- Individuals with diabetes
- Individuals at risk of osteoporosis in later life (family history)
- Individuals with bladder issues
- Individuals with an increased risk of heart disease
- High blood pressure

#### **Precautions**

- Single doses of magnesium greater than 1000mg may cause diarrhea
- Only take Magnesium if recommended by your health care professional

#### **Contraindications**

1. If you take **Cellulose sodium phosphate** – Used with magnesium supplements may prevent cellulose sodium phosphate from working properly. Magnesium tablets should be taken at least 1 hour before or after cellulose sodium phosphate
2. If you take **Sodium polystyrene sulfonate**—Used with magnesium supplements may cause the magnesium supplement to be less effective

3. **Tetracyclines, Oral**—Used with magnesium supplements may prevent the tetracycline from working properly; magnesium supplements should be taken at least 1 to 3 hours before or after oral tetracycline
4. If suffering from **kidney disorders**—Magnesium supplements may increase the risk of hyper-magnesemia (too much magnesium in the blood) which is dangerous with people with abnormal kidney function
5. **Renal impairment** - Use Magnesium supplements with caution (see your Doctor to discuss)
6. If you are taking any **heart medication** - Do not use High Quality Magnesium supplements without seeing your Doctor