

# Nano Magnesium extra strong

Available in bottles of 200 ml and 1 liter

- Relief in stress situations, fatigue and (mental) exhaustion
- Relaxing and unraveling for muscles and nerves
- Increasing energy
- Supports mental balance, concentration and psychological functions
- Relieves headaches and migraines
- Contributes to healthy bones and teeth
- Helps prevent heart rhythm disorders and increased blood pressure
- Contributes to the improvement of hormone-related complaints such as PMS.

#### Composition:

Nano magnesium sensitive: purified water, nano magnesium 35 ppm Nano magnesium extra strong: purified water, nano magnesium 70 ppm

**Excipients: None** 

### Suggested use:

The nano magnesium sensitive is intended for people with a sensitive constitution, the elderly, sensitive children and babies. For the other groups, the nano magnesium extra strong is preferred.

Note: Always start with a low dose and build up. Required quantity varies per individual.

Preferably keep in the mouth for 1 minute before swallowing for a direct absorption through the mucous membrane. Do not put the bottle on the mouth, but use the supplied measuring cup, your own cup or a spoon. This may also be a metal spoon.

### Dosage:

Adults:

5 to 30 ml per day, this corresponds to 1 teaspoon to 3 tablespoons. If desired during the day and / or at bedtime.

Babies and children:

- 0 2 years: 5 ml / one teaspoon per day
- 2 6 years: 10 ml / 1 tablespoon to 20 ml / 2 tablespoons per day
- 6 12 years 20 ml / 2 tablespoons to 30 ml / 3 tablespoons per day.

In case of severe pain, cramps, migraine, or anxiety attacks, the dose may be increased to 60 or 90 ml per day.

In case of uncertainties, use of medication or pregnancy: consult your health advisor, doctor or pharmacist.

**Particulars:** due to the rapid absorption, approximately 60% of the users of nano magnesium experience an effect within 1 to 20 minutes after ingestion. For example, the removal of cramp, tension headache or a vibrant eyelid.

**Note:** if someone has a (large) deficiency of magnesium in the nerves, that person may experience a severe feeling of fatigue or suffocation for the first time. This is because the nerve channels completely relax in one go by the supplied nano magnesium, creating a feeling of "slack". However, the shortage will soon be supplemented with the nano magnesium and already at the 2nd or 3rd intake a feeling of renewed energy and serenity will arise.

Nano minerals are generally transparent, odorless and tasteless. Sometimes very subtle color, odor and taste changes can occur.

**Shelf life:** The dark violet glass protects against oxidation. The bottles therefore do not have to be stored in the refrigerator. After opening, they can be kept for at least 12 months. If the product is oxidized with noticeable color, taste or odor changes, we advise you not to use it anymore.

#### Indications for use

- Alcohol abuse
- Anxiety and panic attacks
- Burn-out
- Concentration problems
- Depression
- Diabetes type 1 and 2
- Eating disorders
- Hearing problems and tinnitus
- Sensitivity to light and sound
- Sensitivity to radiation
- Heart complaints, such as arrhythmias
- High blood pressure
- High coffee and sugar intake
- Headache and migraine
- Intensive dreaming
- Intensive sports practice
- Liver disorders
- Leaky gut and intestinal complaints

- Gastric acid inhibitors
- Metabolic syndrome
- Osteoporosis
- Excessive perspiration
- PMS and menopausal symptoms
- Irritability
- Back problems
- Sleep problems
- Muscle cramps
- Stress
- Raynaud's syndrome
- Tooth decay
- Vibrating eyelids or mouth corners
- Fatigue, physical and mental
- Disturbed hormone regulation
- Nerve pain
- Pregnancy

**Diarrhea or nausea**. Magnesium compounds are known to cause some diarrhea or nausea in large quantities. With nano magnesium this has not been observed to date. The lower dose with higher bioavailability prevents this side effect.

**Potassium sparing diuretics** may reduce magnesium excretion. Some caution with magnesium compounds may be desirable. No side effects of nano magnesium have been reported to date.

**Muscle relaxants such as diazepam and baclofen**. Magnesium can strengthen the functioning of muscle relaxants. In addition to muscle pains, these drugs are often used for anxiety, tension and insomnia. Oral antidiabetics can also be strengthened by magnesium. Magnesium can thus reduce the need for oral antidiabetics, as well as by improving the glycemic control.

**Magnesium as a detoxifier**. Magnesium can reduce the effectiveness of medicines such as antibiotics (tetracyclines, fluoroquinolones), bisphosphonates, chlorpromazine, digoxin and thyroid hormone by its detoxifying effect. Take one magnesium supplement preferably at least two hours before or after taking medication.

Cardiovascular agents: Calcium antagonists, such as diltiazem, verapamil, amlodipine and nifedipine. Used for high blood pressure, cardiac arrhythmia and angina pectoris.

Magnesium is an antagonist of calcium and can further reduce the bioavailability of calcium and thereby enhance the function of calcium antagonists (and increase the risk of side effects). Be extremely careful.

**Beta blockers.** Magnesium can potentiate the action of beta-blockers such as atenolol, metoprolol, propranolol and sotalol that are used against, among other things, high blood pressure and cardiac arrhythmia. Concomitant intake can also lead to reduced absorption of these medicines. Therefore, it is wise to leave at least 2 hours between intake of the beta blocker and magnesium.

**Anticoagulants.** Magnesium can bind to coumarin derivatives in the intestines and therefore reduce its absorption in the body. It is recommended to keep at least 2 hours between intake of both substances.

### Benefits of nano magnesium

Nano magnesium is a revolutionary form of magnesium that can be absorbed directly into the bloodstream through the skin and mucous membranes. The particles are elemental, so not bound to a salt or chelate such as a citrate or oxide. They do not therefore have to be dissected before they can be taken up. They therefore do not burden other organs and do not need auxiliary substances. They are extremely small, namely 0.3 to 5 nm. A nanometer is one billionth of a meter and 7,000 times smaller than a blood cell. Because of this miniscule size, they can pass through the skin and mucous membrane, where they can directly enter the bloodstream and even pass through the blood-brain barrier. They can also penetrate into the very finest vessels, nerve tissue and deep organs. The digestive system is completely bypassed. The bioavailability of nano magnesium is 100%. With pills and powders, 40 to 60% of the magnesium is often lost in the stool. With nano magnesium you therefore need less magnesium for the same effect. The nanoparticles also work energetically. They have a very large electromagnetic field. This means that they exert a strong stimulus on cells and thus positively influence the energy in the body. They also increase the interaction between cells. Colloidal minerals (minerals between 1 and 1000 nm, floating in a liquid) attract and remove damaged and dead cells through their powerful energy field. In this way they contribute to a balanced metabolism.

## More about the effect of (nano) magnesium

Magnesium is an essential macro-mineral: the body needs relatively large amounts of it, just like calcium, potassium, sodium and phosphate, and cannot be made by the body itself. It also belongs to the electrolytes category: minerals that help the body regulate nerve and muscle function and the acid base balance.

The mineral acts as a cofactor in more than 300 metabolic processes in the body, including protein synthesis, cellular energy production, cell growth and reproduction, DNA and RNA synthesis, fat and protein metabolism and stabilization of mitochondrial membranes. Magnesium is also important for bone metabolism, nerve stimulus transfer, mental and physical relaxation, muscle contraction, detoxification, clearing of lactic acid, regulating heart rhythm, blood pressure and blood sugar levels.

#### Stress

It is known that a lot of magnesium is consumed during stress. Stress and social pressure are responsible for urinary magnesium loss due to the effect of magnesium on certain hormones such as adrenalin. The lower the level of magnesium in the cells, the more sensitive one becomes for stress. As a result, more magnesium is lost and this creates a vicious circle.

#### Metabolism

In the event of a major and long-term deficiency of magnesium, the muscles, nerves and energy metabolism, among other things, come under pressure, with palpitations, heart rhythm disorders, spasms, digestive problems, a spastic intestine, chronic fatigue, anxiety, post-natal depression, hypersensitivity, asthmatic complaints and allergies, depression, insomnia and accelerated bone loss, (in women after the menopause).

**Headache and migraine** are caused by, among other things, a magnesium deficiency. Nano Magnesium in particular can quickly provide relief through rapid absorption in the head.

Perspiration, intensive exercise, stress, medication use and inadequate food allow the magnesium level to drop rapidly with the complaints mentioned.

During **pregnancy**, magnesium contributes to a good development of the child and sufficient relaxation for the mother. It helps to prevent (pre-) eclampsia, premature labor and preterm birth. Magnesium also helps prevent muscle weakness in babies and young children, and is of great importance for healthy working muscles, including heart and vessels. The digestive organs and the pancreas need magnesium for the functioning of all enzymes. As a result, magnesium contributes to proper digestion and the maintenance of a stable blood sugar level. Magnesium is also known to be necessary for the conversion of sound stimuli into the ear canal. Magnesium can help prevent hearing damage when exposed to excessive noise.

#### **Bones and muscles**

60% of our magnesium is in our bones and teeth. Calcium provides the hardness and magnesium provides the flexibility, this prevents fractures. In case of a magnesium deficiency, the body will draw stock from the bone structure, causing the deficiency to increase, which can lead to **osteoporosis**.

20% of our magnesium is in our muscles. Approximately 19% in liver and other soft tissues and only **1% circulates in our bloodstream**. However, this 1% is of great importance for our heart, blood pressure, brain function, nervous system, blood sugar level, body temperature, muscle contraction, electrolyte balance, immune response and hormonal system. In all these processes, magnesium is required as a cofactor. In the absence of magnesium, many processes can be disrupted or stopped.

There is therefore a long list of health complaints that can be related to a magnesium deficiency. The most common are: muscle cramps, (calves, shoulders or neck) tense muscles, back pain, muscle weakness, trembling eyelids or mouth corners, lethargy, menstruation pain, PMS, reduced libido, migraine, cold hands and feet, nervousness and lack of focus and energy. Because stress contributes significantly to a shortage, it is wise to supplement magnesium in this situation in addition to changing diet and lifestyle.

#### Magnesium robbers

**Coffee, sugar and alcohol**, like stress, increase the release of magnesium in the urine. Supplementation with **vitamin D** (which happens frequently nowadays) can lead to magnesium deficiency because vit D can only be converted into magnesium with its active form: 1,25-dihydroxy-vitamin D.

**Pesticides**, GMOs, heavy metals and other pollutants rob us of magnesium by trying to rid the body of magnesium with the aid of magnesium.

**Calcium** (often still prescribed for osteoporosis) and potassium supplementation can lead to magnesium deficiency because they need magnesium for their absorption and function (accelerated osteoporosis).

Certain medications such as **antibiotics and antidepressants** may lower magnesium levels.

Digestive problems can lead to severe magnesium deficiencies. In case of insufficient or too much stomach acid, inflammation of the (small) intestine, deficient intestinal flora or celiac disease, for example, the absorption of nutrients is greatly reduced.

In addition, too many dairy and sugars are often eaten, such as white bread, cheese, pasta, crackers, meat products, biscuits, custards, yoghurt, etc. that rob the body of magnesium for processing purposes.

## Magnesium in food

**Good sources of magnesium are**: wholegrain cereals such as spelled and buckwheat, green leafy vegetables, nuts, seeds, dark chocolate and legumes. Unfortunately, the majority of the Western population does not consume enough of these foods. More dairy products and fast sugars are used, which can lead to further over-construction, because the body needs magnesium in its processing. Moreover, the nutrient through soil degradation no longer contains the quantities that we as humans need. According to a Ciba-Geigy study, roots contain, for example, 59% less magnesium in 1996 compared to 1985. How was that in 1900, for example? And now, in 2017?

Only calcium, phosphorus and sulfur are added to fertilizer. The other minerals (more than 73!) Are not added and these are largely missing in our diet. Supplementation via a mineral supplement is therefore more often necessary than wish.

## Reference

Reference: (mostly Dutch)

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Publication: vitamines en Zelfzorg, Ruud Nieuwenhuis Publication: The Magnesium miracle, Dr. Carolyn Dean

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7

## Nano Magnesium versus other types of magnesium

There are many questions about the differences between magnesium. Below is a little explanation about nano magnesium versus other types of magnesium. Magnesium in a tablet, powder or as "magnesium oil" occurs as a compound, which is called a magnesium salt. There are many types of compounds such as magnesium citrate, magnesium bis-glycinate or magnesium oxide. The different bonds have different effects. All bonds also have their own advantages and disadvantages. A commonly used bond is magnesium oxide, a white powder that is insoluble in water. Magnesium oxide is produced by burning magnesium compounds such as magnesium hydroxide Mg (OH) 2 or magnesium carbonate MgCO3 from seawater. Magnesium oxide is used inter alia as filler in paper, as fertilizer, for water purification, as starting material for chemical reactions, in the purification of sugar, in rubber and plastic and in the production of glass. It can also be used as a catalyst. For the preparation of coatings, it is used as a thickener and dispersant (oil-dissolving agent).

Although magnesium oxide can be safely used as a dietary supplement and often works well with muscle cramps, the question is whether this is the most appropriate way to supplement magnesium deficiencies in the body. Magnesium oxide is unstable, it reacts fairly easily with acids and water and thereby forms salts and magnesium hydroxide. It is easily broken down in the stomach, where most of the magnesium then passes into the stool via the intestine. For this reason, magnesium oxide in medicine is also used as a laxative and with heartburn. It stimulates the intestinal wall and neutralizes the stomach acid by reacting with it. This means that there is not much left for our body cells and for many people these effects are undesirable. An advantage is that it is cheap and relatively small, so that a lot fits in a tablet. In this way, with a sufficiently functioning digestive system, you still get enough to provide larger tissues such as muscle groups with their needs.

There are also other magnesium compounds such as magnesium bis-glycinate. These are more stable and friendly to the gastrointestinal tract. Also, the binding agents often have an isolated effect that can be beneficial to the body. The disadvantage is that the tablets are often very large and binding and fillers still have to be used to make the tablets or capsules. The body also has to break down the tablets or capsules through various processes to absorb the magnesium. A lot of magnesium is often lost in this process. Especially if the digestion is not optimal.

#### Elemental magnesium

The elemental part of magnesium is that part that actually enters the bloodstream and then into our cells, tissues and bones. We then speak of the mineral, not of the mineral salt. In elemental form, the magnesium can directly enter the bloodstream and then be absorbed into the cells where it is needed. Also in other tissues than muscles, such as brain, nerves and organs. It does not have to go through the digestive tract to be decomposed before absorption can take place. This makes it much faster and because nano magnesium is also miniscule, it can directly enter the deeper tissues and nerve bundles.

There is also the possibility to lubricate "magnesium oil" on the skin. This also circumvents any digestive problems. This oil, which is not actually oil, but magnesium chloride dissolved in water that gives an oily feeling, must still be decomposed before it can enter all the cells. The advantage is that it works more locally and faster than a tablet. The disadvantage is that it feels sticky and pricks on sensitive and damaged skin

## Nano Magnesium versus other types of magnesium

**Nano magnesium** is a revolutionary form that is not loaded and is absorbed super fast. With pills and powders, unfortunately fillers and aids must always be used to keep the product stable and / or make a nice tablet. These fillers are not necessarily toxic, but they always burden the liver and kidneys to a greater or lesser extent, they can cause diarrhea and sometimes even be toxic. And if you have eczema or other skin complaints, magnesium oil can cause irritation/burning.

Nano magnesium contains only purified water and minuscule elementary particles of magnesium. These particles are so small that they are completely dissolved in the water. This process is unique and costly, but produces a product that is 100% pure and 100% absorbable in the body. It is tasteless, odorless and easy to take. Also suitable for children and people with swallowing problems.

Nano magnesium is stored in a dark violet bottle, which gives the product a considerably longer shelf life. Dark violet glass leaves only UVA and infrared light through, so no oxidation can occur in the bottle. There have been tests with this glass, where herbs and tomatoes, after several months in a dark glass jar in the sun, still came out fresh! This glass is very expensive and, in addition to the unique production process, contributes to the price of our products, but The Health Factory goes for the best quality and not the lowest possible price. Nano magnesium is for everyone who wants the purest magnesium product, for people with swallowing problems, and especially for people with nerve pains, migraines, PMS and long-term stress. In that case, nano magnesium can give a faster effect and penetrate deeper into the cell, where it can supplement the shortages and help the body to come into balance.

Experience for yourself what nano magnesium can do for you and decide which form suits you best. There are also two variants of nano magnesium: sensitive and extra strong. As the name indicates: sensitive for sensitive people and children. The extra strong for those who can use a more powerful strenght.