**Magnesium**

Magnesium chloride, or magnesium, is a mineral that is important in maintaining the function of our nerves, cells, bones, muscles, and heart.

**Overview**

Magnesium chloride provides magnesium, a mineral that is important in maintaining the function of our nerves, cells, bones, muscles, and heart. It plays an integral role in the synthesis of energy within cells, creating DNA, and supporting bone density. Most people get enough magnesium through their diet, but sometimes supplementation is necessary. Foods that are high in fiber generally contain high amounts of magnesium as well. These foods include nuts, dark chocolate, avocados, fatty fish, seeds, and whole grains. Magnesium salts are administered in the case of magnesium deficiency; Magnesium chloride is one of the most commonly magnesium salts used medically. Magnesium deficiency is most common in women, African Americans, and the elderly. Conditions such as osteoporosis, high blood pressure, arteriosclerosis, diabetes, and stroke have been linked to low blood levels of magnesium. Other situations, such as alcoholism, poor diet, poorly controlled diabetes, diuretic medications also contribute to magnesium deficiency requiring treatment.

**What Is Magnesium Chloride Prescribed For?**

Magnesium chloride can be prescribed for a variety of health conditions and for preventive health measures. Among its uses is addressing magnesium deficiency by restoring normal magnesium levels in individuals who might be deficient due to inadequate dietary intake, malabsorption or excessive loss. It can also be of benefit in diabetes management, as supplementing with magnesium chloride may improve insulin sensitivity and glucose control in patients with type 2 diabetes. For heart health, magnesium chloride can help regulate heart rhythms and may play a role in reducing the risk of heart disease. High blood pressure is another area where magnesium supplementation can be beneficial by contributing to lowering blood pressure levels. In the case of osteoporosis, magnesium is vital for bone health and can be instrumental in preventing bone loss. Furthermore, individuals with migraines sometimes have low levels of magnesium, and supplementation with magnesium chloride can reduce the frequency of migraines. As an osmotic laxative, magnesium chloride is also effective in relieving constipation.

**Benefits of Magnesium Chloride**

Magnesium chloride, known as “the relaxation mineral,” boasts a range of benefits beyond merely correcting a deficiency. It plays a role in reducing stress and anxiety by regulating neurotransmitters. Another significant benefit of magnesium chloride is the improvement of sleep quality; by calming the nervous system and maintaining healthy levels of the neurotransmitter GABA, it promotes sleep. Additionally, it aids in the relaxation of muscle fibers, which in turn can lead to a reduction in cramps and muscle tension. Magnesium is also essential for calcium absorption and plays a critical role in the formation and maintenance of healthy bones, thereby contributing to bone health.

**Concentration:** 300mg/mL

**Route of Administration:** IV

**Precautions/Side Effects**

Magnesium chloride has many drugs it interacts with, which is why it is always important to speak with your doctor before taking.

**Magnesium chloride is contraindicated in people with:**

– Kidney disease or impairment

– Myasthenia gravis

– A skeletal muscle disorder

– Low calcium blood levels

– High magnesium blood levels

– Progressive muscle weakness with carcinoma

**Some common side effects include:**

– Sweating

– Stomach upset

– Flushing

– Respiratory depression

– Significant drop in blood pressure

– Hypothermia

– Allergic reaction (rash, itching, swelling, severe dizziness, trouble breathing)