

We have complied cancer information from some of our most trusted sources. This article on hypomagnesium or low magnesium is from **ChemoCare.com** and addresses the concerns patients may feel during or after chemotherapy.

# Hypomagnesium

Hypomagnesemia is an <u>electrolyte imbalance</u> and is indicated by a low level of magnesium in the blood. The normal adult value for magnesium is 1.5-2.5 mEq/L.

Magnesium is one of many electrolytes in your body and normal levels of magnesium are important for the maintenance of heart and nervous system function.

## **Causes of Hypomagnesium:**

Your body regulates magnesium levels by shifting magnesium into and out of cells. A shift of potassium into the cells causes hypomagnesemia.

Magnesium can be excreted by your kidneys. Any damage to your kidneys, when they are not working properly, may cause a decrease in magnesium levels.

## There are other causes of hypomagnesemia. These include:

- You may be taking in too little magnesium in your diet.
- If you have stomach or bowel problems, you may not be able to absorb the magnesium you take in.
- Magnesium may not be absorbed properly due to alcohol use, diarrhea, or laxative use.
- Increased excretion of magnesium from your body
- Renal (kidney) damage Losses of magnesium from the kidneys are a common cause of magnesium deficit.
- Certain drugs, including Cisplatin, Amphotericin B, or certain antibiotics may affect your kidneys.
- Endocrine disorders such as Aldosteronism, or dysfunction with the thyroid and parathyroid glands or diabetes.
- Pregnancy

## Symptoms of Hypomagnesium:

You may not have any symptoms, unless your blood test results show that your magnesium levels are significantly decreased.



Muscle weakness, confusion, and decreased reflexes with severely low blood magnesium levels. You may also notice "jerky" movements, high blood pressure, and irregular heart rhythms with severely low blood magnesium levels.

### Things You Can Do for Hypomagnesium:

- Follow your healthcare provider's instructions for increasing your blood magnesium level. If your blood levels are severely lowered, he or she may prescribe medications to lower the levels to a safe range.
- Take all of your medications as directed.
- Drink 2 to 3 liters of fluid every 24 hours, unless you were told to restrict your fluid intake.
- Follow all of your healthcare provider's recommendations for follow up blood work and laboratory tests if blood test results indicate hypomagnesemia.

## **Drugs That May Be Prescribed by Your Doctor:**

- Magnesium supplements This medication is given usually intravenously, to increase your blood magnesium level, if you have severely low blood magnesium levels. You may also take magnesium oxide in a pill form.
- Calcium and potassium supplements If you have severely low blood magnesium levels, you may also have low calcium and potassium electrolyte levels. Your healthcare provider may order supplements in an IV or a pill form. Magnesium, potassium and calcium levels will not return to normal, unless all of these electrolytes are corrected.

## When to Contact Your Doctor or Health Care Provider:

- Feeling your heart beat rapidly (palpitations).
- Nausea that interferes with your ability to eat, and is unrelieved by any prescribed medications.
- Vomiting (vomiting more than 4-5 times in a 24 hour period).
- Diarrhea (greater than 5 stools per day).
- Muscle weakness, or twitching.
- Shortness of breath, chest pain or discomfort; swelling of your lips or throat should be evaluated immediately.

Note: We strongly encourage you to talk with your health care professional about your specific medical condition and treatments. The information contained in this website is meant to be helpful and educational, but is not a substitute for medical advice.

Source: http://www.chemocare.com/chemotherapy/side-effects/hypomagnesemia-low-magnesium.aspx