

Magnesium

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Pharmaceutical agents can never satisfy a nutritional deficiency. Let me say that again, pharmaceutical agents can never satisfy a nutritional deficiency. This is a profound concept. Prescription drugs can be life saving, but it's important to know that they may manage symptoms temporarily, but eventually drugs will create secondary side effects. Most people are not aware that prescription drugs, by their very nature, create nutrient deficiencies, and when you add two or more drugs together, something called polypharmacy nutrient deficiencies are intensified.

So, it behooves us to consider the major deficiencies, while we consume an anti-inflammatory diet. Anti-inflammatory diets

increase vitamin mineral density and reduce processed foods and toxins. By the way, processed foods and toxins also deplete valuable nutrients as they detoxify them. One of biggest nutrient deficiencies we experience is magnesium. Conservative estimates suggest 50% of the world's population is magnesium deficient. And since magnesium is responsible for over 600 cellular processes, a deficiency can have a full spectrum of negative effects in ALL the body.

Let's start with energy. Not only do our mitochondria need magnesium, but we need it to make CoEnzymeQ10. We need magnesium for protein synthesis, carbohydrate metabolism, and synthesis of nucleic acid for DNA production.

Magnesium is also critical for maintaining DNA stability. "Magnesium is the body's primary protectant against uncontrolled inflammation." Severe magnesium depletion occurs under conditions of chronic inflammation such as: autoimmune diseases, diabetes, unrelieved stress, chronic infections, and trauma. The loss of magnesium in cases of severe stress, extensive trauma, intense inflammatory bowel disease, and prolonged or overwhelming infections makes the inflammation and damage it causes even worse. So, if you are suffering from one of these, you are probably deficient in magnesium.

Another aspect of magnesium we do not think of is the way it

enhances the effectiveness or activates vitamin D. Research has shown that the higher incidence of cardiovascular disease and colorectal cancer associated with low vitamin D levels can be improved by supplementing with magnesium.

We know the primary cause of death in COVID -19 patients that suffer major lung infections is called a cytokine storm. Cytokine storms creates excitotoxicity, a process Dr. Russell Blaylock coined immuno-excitotoxicity. We know vitamin D reduces the effects of the cytokine storm. Magnesium plays a complimentary role by significantly reducing excitotoxicity.

Dr. Mildred Seelig, formerly one of the world's authorities on magnesium, stated that both physical and emotional stress create magnesium deficiencies. So how much magnesium do we need? Dr. Seelig suggests a sliding scale based on sex, weight, and stress. Her opinion was that it is better to give more than less.

For maintenance in the adult female, she suggests 6 mg/kg/day. For a woman weighing 160 pounds, we divide 160 by 2.2 to get the number of kilos and multiply by 6. That gives us 436 mg. For men the level increases to 7-10 mg/kg/ day. This translates to 509 to 731 mg per day. However, for "new tissue formation and repair," in other words, when we are trying to heal, higher intakes are desirable. For a male 160 lbs, Dr. Seelig suggests 15 mg/kg/day and possibly more. 15 mg/ kg is 1,090 mg.

Your wellness clinician can suggest a dosage and a magnesium supplement that is best for you. Acti-Mag Plus by Biotics Research has become my favorite form of magnesium for several reasons. It comes as a powder with a

refreshing berry flavor and can easily be mixed in water. Acti-Mag Plus provides 400 mg of elemental magnesium as glycerophosphate, which does not cause loose stools. The glycerophosphate part of magnesium contains phosphate to make ATP, which is important for energy production. In Acti-Mag Plus, B-vitamins are added in their bioavailable phosphorylated forms to support the Krebs cycle, again to support energy production. Also, 200 mcg of folate as MTHF is added to support methylation.

The formula was further enhanced by adding 425 mg of Organic Beet Juice, 200 mg Bamboo Shoot Extract, and 200 mg of Taurine. The nitrites in organic beet juice are converted to nitric oxide supporting vascular function. Beet Juice also is important to support the microbiome. Bamboo Shoot Extract is the best form of organic silica, which is important for calciummagnesium balance. But many people are not aware that silica will displace aluminum that accumulates in the brain. Taurine has a plethora of benefits. Taurine is especially important for healthy neurotransmitters, particularly GABA. It is also important to pull magnesium and potassium inside cells.

As a reminder, magnesium and B6 are needed to convert the excitatory neurotransmitter glutamate into GABA, the body's main relaxing neurotransmitter. Thus, magnesium is not only needed for energy production, but it's also essential for healthy relaxation and sleep.

I opened our conversation with the statement that pharmaceutical agents can never satisfy a nutritional deficiency. Based on our conversation, I think we can agree that many, many people are taking drugs when their body is really deficient in magnesium.