

Guillermou

Great report. As Dr. Mercola has reported, magnesium is known to be an activator of over 300 enzymatic reactions in the human body and a cofactor for another 600. Hypomagnesemia can be related to many factors, causing alterations in energy metabolism, ion channel exchanges, action potential alteration, and myocardial cell instability, all of which lead primarily to ventricular arrhythmia. Magnesium has many physiological functions in the body, including important functions in maintaining cardiovascular function, where it contributes to the regulation of cardiac excitation-contraction coupling, endothelial function, and hemostasis.

The hemostatic functions of Mg affect both the protein and cellular branches of coagulation. The benefit of magnesium for reducing cardiac arrhythmias appears to depend on several mechanisms: regulation of intracellular ion pumps of K⁺, Na⁺, and Ca²⁺, reduction of early late afterdepolarization that triggers life-threatening ventricular arrhythmias, decreased inflammatory cardiac response related to arrhythmias, prevention of shortening of action potential duration, increased atrioventricular nodal conduction time, and atrial and ventricular refractoriness.

Mg plays a role in cells that respond to electrical activity. "Magnesium is a key electrolyte in the body and is necessary for proper homeostasis, especially in cells that are electrically excitable, such as those in the heart," explains Dr. De Simone. Magnesium is critical for a healthy heart rhythm because it is involved in transporting other electrolytes, such as calcium and potassium, into cells. Electrolytes are important for nerve signals and muscle contractions of a normal heartbeat. Campbell adds that magnesium also helps with muscle contraction or heart pumping.

Posted On 08/31/2024

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Research showed that magnesium deficiency has clinical features including severe muscle cramps and increased irregular heartbeats known as arrhythmias . Campbell says low magnesium levels are commonly found in patients with atrial fibrillation , premature or skipped beats, and even serious, life-threatening arrhythmias. DeSimone adds that low magnesium levels can also put patients at risk of developing irregular heart rhythms in the lower chambers of the heart, known as ventricles, which could be life-threatening. In a review published in May 2019 in *Cardiology Research and Practice* , researchers found that a low level of magnesium in the blood can increase the risk of developing cardiovascular disease .

Additionally, the review showed that a low level of magnesium is associated with atrial fibrillation , the most common heart rhythm disorder. AF occurs when a malfunction in the heart's electrical system causes the upper chambers of the heart to quiver. Serum Mg concentration is inversely associated with the risk of developing heart failure, atrial fibrillation, and microvascular complications in type 2 diabetes, diabetic retinopathy, and foot complications in type 2 diabetes.

Glycemic control partially mediates the association of serum Mg 2+ with HF and microvascular complications. www.mdpi.com/.../1136 (2021).--

diabetesjournals.org/care/article/44/8/1757/138826/Serum-Magnesium-Is-.. (2021).--

onlinelibrary.wiley.com/.../4874921 (2019).-- www.mdpi.com/.../2356 (2022).--

www.mdpi.com/.../236 (2022).-- www.mdpi.com/.../2355 (2023).-- apcz.umk.pl/.../51691 (2024).--

www.frontiersin.org/journals/nutrition/articles/10.3389/fnut.2024.1387.. (2024).--

Posted On 08/31/2024

The absence and/or reduction of so many vital minerals for a solid foundation of health is reversible should we invest in true Regenerative, Sustainable, Organic Agriculture. A revival encouraging Home Cooked Meals. With this, if possible, a change in Processed Food Industry Products. This at the same time improves the diversity of Microbes in our world, holds and cleans our waters, stops erosion - loss of topsoil's, reduces Healthcare costs, improves the quality of our lives and communities. Magnesium, just one of many minerals necessary for our best health. One of many minerals necessary for our Plants, Food Sources to develop properly to not only provide us those minerals we need, but to also create their health enhancing compounds.

Also, noticing at the Local News level when Big Ag, or Big Pharma are being brought up as creating negatives such as mineral loss, negative health drivers, the sound is cut off, dampened down. When Glyphosate binds up minerals and this is an enormous health offender all by itself, it shows how Corporate Monopoly Dictators have taken over to lock in their profits, power & control at our health, income and social health at a major negative cost for We, the People.

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Aspects of great relevance Just. We must consider that modern foods are low in minerals and nutrients. This statement is based on experiences developed at the Rothamsted Experimental Farm in the UK, revered by most soil science experts. There, agronomists, soil scientists and food science experts came to the conclusion that the food we currently eat (enjoy/suffer) today, both in the global north and south, has fewer nutrients than those consumed before the green revolution of the sixties of the last century. In 1843, John Bennet Lawes, the owner of the farm at that time, began a series of long-term field trials on the land, which became known as the Broadbalk long-term experiments.

Their aim was to test the effects of different mineral fertilizers and organic manures on the yield and quality of major British crops, such as wheat and barley. Lawes and his colleagues preserved crop and soil samples, and successive generations of Rothamsted scientists have continued to expand the collection. In several papers, researchers have used food tables – country-specific compendia of historical information on the mineral composition of foods – to report an apparent decline in micronutrients such as iron, vitamins, and zinc in fruits and vegetables over time.

In 2004, a team in the U.S. conducted a similar analysis, comparing nutrients in 43 raw vegetables commonly grown in home gardens in 1950 and 1999. They found an apparent decline in six nutrients – protein, calcium, phosphorus, iron, riboflavin, and vitamin C – in the later batch. In 2022, Mayer published another study comparing foods in the UK to data in the tables, this time using three data points: 1940, 1991 and 2019. Her findings suggest a striking decline in nutrients since 1940, with the largest overall reductions in sodium, iron, copper and magnesium.

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Agricultural practices such as tillage alter soil structure, while monoculture (growing the same type of crop in the same field year after year) reduces the amount of bacteria, fungi, nutrients and other microbes in the soil. In fact, more than 60% of soils in the European Union are in poor condition. Soil health is the most important foundation of a healthy agricultural ecosystem. However, most of the common agricultural techniques used in industrial agricultural production, such as the application of synthetic fertilizers and monoculture, can degrade soil over time, causing a range of problems that make the use of more artificial inputs necessary.

Sustainable and regenerative agriculture seeks to improve soil health by sequestering carbon, storing water and creating healthier agricultural ecosystems. In agriculture, soil erosion generally refers to the wearing away of topsoil particles by wind, water and farming activities such as tillage. Erosion is caused by many different factors, but poor soil management, including tillage, can cause significant erosion over time, as can practices such as not planting cover crops in winter and not applying mulch.

"Most people don't eat as many servings of fruit and vegetables as they should. In the EU, barely 10% eat more than five servings. And we're talking about a very privileged continent, so that's a problem in itself," says Trigueiro. In the UK, vegetables make up a meager 6.3% of the average shopping basket.

foodprint.org/issues/how-industrial-agriculture-affects-our-soil/ .----

pubmed.ncbi.nlm.nih.gov/15637215 .--- pubmed.ncbi.nlm.nih.gov/34651542 .---

www.chemistryworld.com/features/is-modern-food-lower-in-nutrients/4018..

Posted On 08/31/2024

juststeve

Good to see your voice Gui, great additions. So important to realize, Carbon is the Foundation Fertilizer, the First Fertilizer and when it is put back into the soil where it belongs, it is the catalyst to create the conditions to allow the minerals to be absorbed in the plants, but in ways we can use them too. Just this morning the ridiculous headline releasing wild bison back into the wild maybe an 'excess carbon solution.' Wild alright, prevent the use of properly rose livestock, beef in particular, cull - kill them off, then replace them with bison running wild.

Posted On 08/31/2024

len6116

I still don't understand why there are so many forms of magnesium and how to discern which one is best for overall health, so I've been using a highly rated magnesium chloride spray every night. It absorbs well into my skin. Not sure if my entire body benefits but I assume it has to be of some value. My concerns are osteoporosis and heart health.

Posted On 08/31/2024

hellbent

Different forms of Mag - some are good for constipation, some for avoiding loose bowels, some good for brain / mood / neurological, some for heart health, some for muscle cramps. Dr Jockers has a list of the different forms, explaining pros and cons. Dr Berg short video on YouTube is also easily understood. Some are well-absorbed, some poorly like Mag Oxide. Now, what isn't clear is - is the % of Elemental Mag important - some forms have eg 9%, some have 30%.

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: 10 TYPES OF MAGNESIUM & THEIR BENEFITS healthnile.com/10-types-of-magnesium-and-their-benefits/?utm_source=go..

Posted On 08/31/2024

Antisandman

Skin absorption is probably better than intestinal absorption. Our digestive system in this toxic world is generally compromised by glyphosate, micro plastics, antibiotics etc, Stephanie Seneff takes Epsom salt ($MgSO_4$) baths as do I. The body also need the sulfate to make collagen and stabilize cholesterol among other things. I imagine the Mg cannot be overdosed transdermally because the skin is a better moderator than the gut. To my knowledge no one gets diarrhea form lying on a bed of supersaturated $MgSO_4$ in an isolation tank. Glyphosate, an analogue of glycine, is a chelator that will latch onto Mg^{++} , Ca^{++} , Zn^{++} and other cations and carry them out of the body or make them unavailable. After Fukushima, I was taking potassium iodide regularly, but I still tested deficient in iodine, using the skin patch test.

After being in La Paz, Baja MX, for a month and swimming in the ocean, I no longer tested deficient, hence the idea of transdermal absorption being better than oral consumption. Besides getting the 60+ essential minerals through my skin, I was also absorbing, at least some of them through sea breeze in my lungs. These and a few other things leads me to think that humanity evolved seaside. Physical evidence is almost unobtainable because sea levels are 400+/- ft. higher now than during early human development. So go to the ocean as often as possible and/or take baths in Epsom salts and sea salt and do not worry about oral consumption.

Posted On 08/31/2024

MichaelrBuley

Been taking magnesium for many years, along with a host of other vitamins. Vegetable and fruit diet mostly. Steamed with butter, olive oil, some sea salt. The comment below on glyphosate being harmful to our absorption of magnesium was eye opening. Thanks for that. yet another example of the RDA being total b.s. The system has frightened so many people into taking minimal amounts of vitamins, if they take any at all. So many helpful vitamins and minerals, but they're dose-dependent. Selenium is another one which few people take, and if they do, in minimal amounts. I take upwards of a gram a day, based on research I've come across on this little talked about supplement.

Whatever the system tells us to avoid, dive into it. Whatever we're told to be very careful about taking 'too much' of something, take more of it. We must continue to do our own research, study, sharing. The system is out to sicken and kill us -- but death only after years and years of being on their drugs which sicken us, etc. What a bizarre world, but if we accept the utter criminality of the medical system, we know what to turn away from, and to look elsewhere for actual information on health.

Posted On 08/31/2024

Lis8333

Just & Gui Wow ! What a rotation schedule ! Sounds like you will accomplish an excellent soil foundation Here in AR we actually send off soil samples to determine breakdown to help with what you are doing already My Dad has a 3/4 area of near lake level property that utilized a lot of the processes you have discussed after he got his sampling results back His only crop that didn't do well was summer corn - but his spinach squash tomatoes cantaloupes blueberries blackberries and an apple and pear tree flourished Thank you for the info And how to do what you're doing Lks

Posted On 08/31/2024

juststeve

Best of luck with your Dad's efforts! I should have mentioned, Doc ran articles on Eden Gardening. My take is when a forest is allowed to maintain itself leaf and litter buildup on the forest floor. This helps in either dry or wet conditions and as the trees reach deep into the earth they bring up minerals from below and restore them to the topsoil. This was being experimented with just before where I am now. It too had outstanding results, however the Eden method in a sense feeds the soil from the top down while No Till, Little Till leaves the roots intact and the change to the soil structure from top to bottom and is amazing.

So what was described as currently with the No Til - raking the oat/pea litter into the walkways with shredded bark is with the Eden shreds continues the Eden Gardening methods feeding top down, keeping the soil from being compacted when walked on and a food source for worms and microbes to migrate into the No Till beds. A hybrid of the two. As the soil continues to improve the plan is to make raised beds so there is a larger volume of good soil for the plants, and the methods act with a flywheel effect to counter extreme dry or wet spells.

Posted On 09/01/2024

juststeve

Good stuff; www.youtube.com/watch

Posted On 09/01/2024

Lis8333

GUI & Just Have been utilizing food products that Dr Mercola referenced from a Co Op in MI that used regenerative farming - non crop dusting etc No abx, no vaxxs Food taste and quality is excellent Shipped to door My question is Would allowing the crops to lay fallow for one year - and continuing to use regenerative farming help to restore nutrients ? This process was used many years ago to determine if this system created a greater and better harvest/ yield I do not have the resource with the data but the individual proved it actually allowed greater yield without stripping the soil Your thoughts ?? So appreciate all the chemistry (organic was one of my better classes in college)background - and straight forward opinion - Many thanks and blessings to you

Posted On 08/31/2024

juststeve

Hey Lis8333, just my take on things. Over decades because the soil on my little postage stamp lot is so poor it has been a journey with lots of adding & subtracting many different things. At the beginning, the standard 5-10-10, maybe some peat moss. The soil was so bad radishes, onions & peas wouldn't grow. Then good old mature cow manure was put in & there was improvement. A big jump came when finding Organic Gardening information & began to use as much compost & adding leaves when possible. Later years was the use of Buckwheat for Green Manure to smother weeds & improve the soil. Up until recently it was planted on a third of the garden space, getting two to three crops in a season & tilled it into the soil with a yearly rotational basis.

This allowed rest & give room for the microbes to feast. This also improved things, however, as the Permaculture No Till, Little Till practices became better known, the practice has moved to half the garden is planted in the spring with a mixed cover crop to fix nitrogen, & smother weeds, then around the middle of August here, this is lightly tilled, just an inch or two & replaced with a cover crop of Oats & Field Peas. When frost kills these back, they will be punched down with a steel tee bar being stepped on & with a rope harness to advance.

Next year the litter protecting the soil microbes from UV sun radiation, soil erosion will be raked back onto the walkways, so the open spot is ready to plant. Next year this will be repeated on the other side. Then the third year the garden will be broke down in halves so instead of the sides, it will be the top & bottom used for resting & enhancements. Also in the mix is biochar, compost, left over bark from the years firewood shredded, put in with the Oat and Field Pea litter in the walkways. Also, if possible, I have made trenches to put in rotten forearm sized tree stems to feed the soil too. Volcanic ash for minerals, fish emulsion with kelp for fertilizer spray.

Posted On 08/31/2024

juststeve

If I had more land I would experiment with the cow rotation on paddocks for turbo soil improvements. I can't decide for the world and recognize One Size Does Not Fit All and can only do the best I can with what I have to work with, but if any of these practices help others, so much the better.

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Just, as a good farmer, has answered you appropriately. This article may also be of interest to you. Soil regeneration is simply the process of improving the quality of your soil by adding organic matter, which helps to improve drainage, water retention, and nutrition for your plants. Soil regeneration farming involves returning nutrients and organic matter to the soil to restore the soil's fertility and productivity. And this can be done by using cover crops, green manures, and composts. These are all plants that are grown specifically for their ability to increase the fertility of the soil they grow in.

1)What is soil regeneration farming and why is it important? ----- 2)Causes of soil degradation-----
---- 3)What is the benefit of regenerating soil?----- 4)How to regenerate soil: 5 core principles-----
5)What can farmers do for soil regeneration?----- 6)Conclusion----- 7)Frequently Asked Questions-
----- geopard.tech/.../what-is-soil-regeneration

Posted On 08/31/2024

yauboo

Is magnesium sourced from petroleum ?

Posted On 08/31/2024

irenevroom

There's more to this story. My husband gets infusions for a genetic disease, and he sees people who get infusions for magnesium 3x per week. He has become friends with one of them. Her diet is pristine. Organic, no alcohol, no gluten, lots of vegetables. Still needs magnesium infusions 3x per week. My husband takes a daily supplement of magnesium glycinate and still low on magnesium. (Pure Encapsulations) Do we have a problem with absorption/retention of magnesium? How can someone have a deficiency when they get so much magnesium? It doesn't make sense unless there is some other factor.

Posted On 08/31/2024

hellbent

There is a big driver in whether you get enough Mag or not. The culprit is Glyphosate which is universally sprayed upon crops and also used as a wekiller and plantkiller. Councils use it to kill weeds, farmers use it to clear land of vegetation, ordinary people use it to kill weeds too. For the domestic market, G is in products such as Roundup. It is infernal. Dr Stephanie Senef and Dr Anthony Samsel have researched greatly on the harmful biological effects. This comes to your question "do we have a problem with the absorption/retention of magnesium?" Yes, we do, thanks to Monsanto and their filthy associates. A major problem is that when G is sprayed on land and crops, those crops are prevented from uptaking Magnesium and other minerals from the soil.

When people have G in their bodies, it then prevents those people from absorbing any Mag and other minerals that they've supplemented with. Don't think that "organic" crops are a cure-all: here in the UK, G is allowed to be used on eg org potatoes as a defoliator, to assist in harvesting. And so it gets into the soil, where it destroys eg earthworm populations and it's dispersed into the air to the detriment of insects including bees. Our animals, who get close to pavements and lawns, are especially harmed by G. It is suspected of being involved in FORL that pets increasingly suffer from. Dr M has had previous articles on G and supplementing with Glycine so check the archives.

Posted On 08/31/2024
