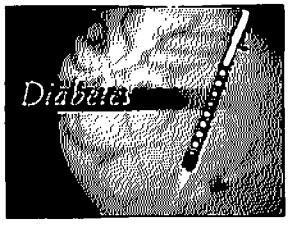
Magnesium For Life

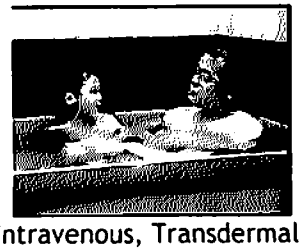


Diabetes is disabling, deadly and on the rise and in certain places has reached fifty percent of local populations.

Intravenous, Transdermal, and Oral Magnesium Mineral Therapy

"Magnesium is poorly absorbed orally. That is why I start off with injections. injecting magnesium I can guarantee 100% to bring the levels up. I cannot guarante do this with or oral magnesium," says Dr. Sarah Mayhill who continues with, "Trea magnesium deficiency is the most difficult deficiency to correct. In evolutionary te magnesium was abundant in the diet and therefore no good mechanisms to cons magnesium evolved. It appears to be poorly absorbed and easily excreted even by no people."

The problem with oral magnesium is that all magnesium compounds are potenti laxative. And there is good evidence that magnesium absorption depends upon mineral remaining in the intestine at least 12 hours. If intestinal transit time is less tha hours, magnesium absorption is impaired, and this is the case when high does of magnesium are administered. Thus it is very difficult to administer what woul considered medicinal does orally.



Intravenous, Transdermal, and Oral Magnesium Mineral Therapy

Research suggests that shortfalls in magnesium

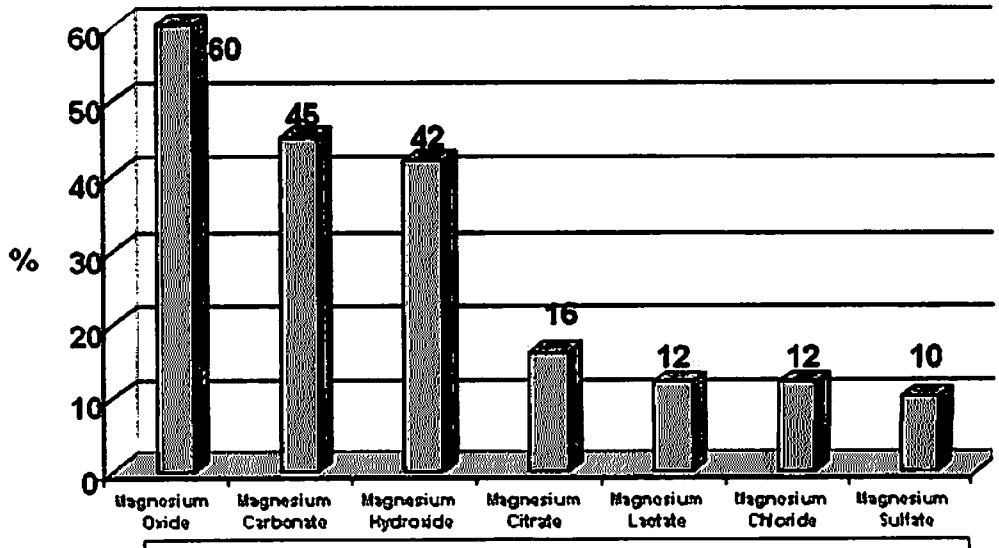


Figure 1: Percent Magnesium content of oral supplements

intake can seriously impair athletic performance.

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There are many forms of oral magnesium and perhaps one is more easily utilized ther other. Oral magnesium chloride is well tolerated and gets absorbed very quickly an inexpensive. Magnesium chloride hexahydrate can be purchased chemically pure f most chemical supply houses without a prescription. One of the major disadvantage oral magnesium compositions that are currently available is that they do not control release of magnesium, but instead immediately release magnesium in the stomach a they are ingested. These products are inefficient because they release magnesium in upper gastrointestinal tract where it reacts with other substances such as calcium. Tl reactions reduce the absorption of magnesium.

Many things affect magnesium absorption from the gut. Most drugs will adversely af how magnesium taken orally is absorbed or how quickly it will be excreted. When think about the drugs used for children on the autism spectrum, we should be concer about antipsychotics used for behavior control. Zyprexa, Risperdal, and others can ca hyperglycemia, which in turn causes increased excretion of magnesium taken or: Many drugs bind with magnesium diminishing its availability in the body. Two can soda per day (all of which contain phosphates) also bind up a lot of magnesium preventing absorption of magnesium ions in the GI tract. Magnesium also binds ' aspartame so drinking diet sodas is not a good idea for any reason.

Magnesium supplementation is actually crucial for everyone today but we have to especial attention to the method of supplementation because this is critical in term effective body utilization. Magnesium is absorbed primarily in the distal small intest or colon. Active uptake is required involving various transport systems such as vitamin D-sensitive transport system. Since magnesium is not passively absorbe demonstrates saturable absorption resulting in variable bioavailability averaging 35-4 of administered dose even under the best conditions of intestinal health. Magnes levels in the body, presence of calcium, phosphate, phytate and protein can affect rat absorption. These and other conditions make oral magnesium supplements intake cha and inefficient compared to the new transdermal magnesium chloride mineral therapy this book introduces.

The health status of the digestive system and the kidneys significantly influe magnesium status. Magnesium is absorbed in the intestines and then transported thro the blood to cells and tissues. Approximately one-third to one-half of dietary magnes is absorbed into the body. Gastrointestinal disorders that impair absorption such Crohn's disease can limit the body's ability to absorb magnesium.

One of the major disadvantages of oral magnesium compositions that are curre available is that they do not control the release of magnesium, but instead immedia release magnesium in the stomach after they are ingested. These products are ineffic because they release magnesium in the upper gastrointestinal tract where it reacts ' other substances such as calcium. These reactions reduce the absorption of magnesi "When people are ill, faced with magnesium deficiency and poor digestion, what do think the odds are of fixing that problem with oral magnesium supplementation digestive enzymes alone?" asks Dr. Ronald Hoffman.

In his clinic Dr. Hoffman carefully measures magnesium and found that many pati with low magnesium who take just oral supplements do not normalize. Dr. Mil Seelig, renowned researcher of magnesium, predicts it would take 6 months to norma magnesium levels in a woman who is magnesium deficient with oral supplementat The bottom line is that transdermal magnesium therapy speeds up the process of nutr repletion in much the same way as intravenous methods.

For children with neurological disorders or asthma transdermal magnesium is like an oxygen mask.

Dr. Mayhill tells us, "One injection of 2mls of 50% magnesium sulphate (1gm MgS or 100mgs elemental Mg or 4 millimols) will usually keep levels up for two w

(however, some people need them more often). By the third week, levels will usu have fallen again. For some people this is the only method that has worked, but tedious to have to keep injecting. But the injection is painful because one is injecti concentrated solution. It is best given at room temperature or blood heat, intramuscul either into triceps or deltoid, slowly over one to two minutes. I usually use an or needle, at least 1" long to get deep into the muscle. Magnesium is a powerful vasodil Even if one takes care to check the tip of the needle is not in a vein, sometimes the such a powerful local vasodilatation that the vessels open up and an i.v. injectio inadvertently given. This does not matter much, except that the patient develo generalised vasodilatation, feels hot and alarmed, goes red and may faint (if upright)."

Intravenous Magnesium

According to Dr. Norman Shealy the most rapid restoration of intracellular magnesiu accomplished with intravenous replacement. For most patients 10 shots, given over a week period, are adequate. Depending upon the patient's weight and general status, Shealy gives either 1 or 2 grams of magnesium chloride IV over a 30 to 60 minute per

Magnesium I

- 250 cc of 0.9% Sodium Chloride
- 1 gram Magnesium Chloride
- 500 mg Calcium Chloride
- 100 mg. Pyridoxine (B-6)
- 1 gram DexPanthenol (B-5)
- 1000 mcg Cyanocobalamin (B-12
- 6 grams Vitamin C

Magnesium II

- 250 cc of 0.9% Sodium Chloride
- 2 grams Magnesium Chloride
- 1 gram Calcium Chloride
- 100 mg. Pyridoxine (B-6)
- 1 gram DexPanthenol (B-5)
- 1000 mcg Cyanocobalamin (B-12
- 6 grams Vitamin C

Therapy with magnesium is rapid acting, has a safe toxic-therapeutic ratio, is eas administer and titrate. Magnesium has minimal side effects in usual therapeutic doses has a large therapeutic index. Meaning it is so useful that it is just negligent to not us In reality there is no medicine like magnesium chloride when it comes to the effect it on the life of cells.
Though giving magnesium by injection is the quickest way of restoring normal blood tissue levels of magnesium, however for some patients the injections, while gi benefit, are just too painful to be considered for children and for long term use in ad They are also realitively expensive because they have to be administered by a do Transdermal magnesium chloride therapy is inexpensive, safe, a do-it-yourself at h technique that can easily replace uncomfortable injections in anything other emergency room situations.

Transdermal application of magnesium is far superior to oral supplements and is in re the best practical way magnesium can be used as a medicine besides by direct inject Used transdermally or intravenously we have a potent natural substance that penetr the cells with stunning result on cell biochemistry. Healing, overall energy produc (ATP), skin integrity, cardiac health, diabetes prevention, pain management, caln effect on the nervous system, sleep improvement, lowering of blood pressure are am the general uses magnesium chloride can be put to. The studies coming out every provide more evidence of the need to supply adequate magnesium to people of all a and in a form that will be easily absorbed.

What a few can do with intravenous magnesium injections everyone can do with transdermal magnesium.

Dr. Norman Shealy has done studies on transdermal magnesium chloride mineral the where individuals sprayed a solution of magnesium chloride over the entire body daily for a month and did a 20 minute foot soak in magnesium chloride also once d Dr. Shealy recruited 16 individuals with low intracellular magnesium levels; subjects a baseline Intracellular Magnesium Test documenting their deficiency and another Intracellular Magnesium Test after 1 month of daily soaks and spraying were analy The results: Twelve of sixteen patients, 75%, had significant improvements intracellular magnesium levels after only four weeks of foot soaking and skin spraying

Typical Results:

Test results before and after 4 weeks of foot soaks:

	Foot Soaking		
Electrolyte Name	**Before Soaking**	**After Soaking**	**Reference Range**
	(mEq/l)	**(mEq/l)**	**(mEq/l)**
Magnesium	31.4	41.2	33.9 - 41.9
Calcium	7.5	4.8	3.2 - 5.0
Potassium	132.2	124.5	80.0 - 240.0
Sodium	3.4	4.1	3.8 - 5.8
Chloride	3.2	3.4	3.4 - 6.0
Phosphorus	22.2	17.6	14.2 - 17.0
Phosphorus/Calcium	3.0	3.7	3.5 - 4.3
Magnesium/Calcium	4.2	8.6	7.8 - 10.9
Magnesium/Phosphorus	1.4	2.3	1.8 - 3.0
Potassium/Calcium	17.6	26.1	25.8 - 52.4
Potassium/Magnesium	4.2	3.0	2.4 - 4.6
Potassium/Sodium	39.1	30.5	21.5 - 44.6

Intravenous as well as transdermal administration of magnesium bypass processin the liver. Both transdermal and intravenous therapy create "tissue saturation", the ab to get the nutrients where we want them, directly in the circulation, where they can r body tissues at high doses, without loss.

Magnesium Oil delivers high levels of magnesium directly through the skin to the cell level, bypassing common intestinal and kidney symptoms associated with oral Magnesium chloride has a major advantage over magnesium sulfate because i hygroscopic and will attract water to it, thus keeping it wet on the skin and vastly n likely to be absorbed, while magnesium sulfate simply "dries" and becomes "powd Magnesium Oil feels "oily" on the skin. The biggest benefit of topical/transde magnesium chloride administration is that the intestines are not adversely impacte large doses of oral magnesium.

The correction of magnesium deficit is a top priority for clinicians. When magnes chloride is understood properly (as the basic medicine it is) it will be prescribed t patients as a foundation and support for all other therapeutic and pharmaceu interventions. The same medicine that can be used as a treatment to limit myoca damage in myocardial infarction can be used safely for a broad range of probl healthcare practitioners see everyday.

Dr. Walt Stoll says, "Magnesium deficiency inhibits the body's ability to ab magnesium. This is an idiosyncracy of magnesium. Once the intracellular level gets enough to cause symptoms, in some people, the intestinal lining loses its ability to ab magnesium efficiently. The magnesium IVs are to get the body over that hump so th can be absorbed orally again." The same could be said about magnesium applied thr transdermal/topical means.

In summary, magnesium is a safe and simple intervention and should be the first t doctors recommend to their patients. Transdermal mineral therapy with magnes chloride is the most powerful, relatively safe medical intervention we have to care many of our patients needs. With the simple application of an oily solution on the ski used in baths we can easily have our patients take up their magnesium to healthier le With patients who are deficient in magnesium (the great majority of patients magnesium deficient) expect dramatic improvements in a broad range of conditions.

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[1] Oral Magnesium Chloride, Magnesium Citrate Magnesium Gluceptate, Magnesium Gluco Magnesium Hydroxide, Magnesium Lactate, Magnesium Oxide, Magnesium Pidolate, Magnesium Sul

[1] There are a number of factors that can prevent the uptake of minerals, even when they available in our food. The glandular system that regulates the messages sent to the intestinal mu require plentiful fat-soluble vitamins in the diet to work properly. Likewise, the intestinal mu requires fat-soluble vitamins and adequate dietary cholesterol to maintain proper integrity so th passes only those nutrients the body needs, while at the same time keeping out toxins and l undigested proteins that can cause allergic reactions. Minerals may "compete" for receptor sites. E calcium may impede the absorption of manganese, for example. Lack of hydrochloric acid in stomach, an over-alkaline environment in the upper intestine or deficiencies in certain enzy vitamin C and other nutrients may prevent chelates from releasing their minerals. Finally, st chelating substances, such as phytic acid in grains, oxalic acid in green leafy vegetables and tanni tea may bind with ionized minerals in the digestive tract and prevent them from being absorbed

[1] http://ods.od.nih.gov/factsheets/magnesium.asp#en9#en9

[1] Crippa G, Sverzellati E, Giorgi-Pierfranceschi M, et al. Magnesium and cardiovascular d interactions and therapeutic role. *Ann Ital Med Int.* 1999 Jan; 14(1):40-5.

[1] Experimentally Magnesium has been shown to have a role in myocardial salvage, possibly by inhibiting calcium influx to ischaemic myocytes and/or by reducing coronary tone. It has also been shown to increase the threshold for depolarisation of cardiac myocytes, theoretically reducing the ri malignant arrhythmia. In healthy humans it can reduce peripheral vascular resistance and increase cardiac output with no effect on cardiac work.

More on this subject is available in the book Transdermal Magnesium Therapy. F More...

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