

Revitalise With Magnesium

(Following references are from article: Magnesium – The Lamp of Life, by Mark Sircus Ac., OMD, Director of International Medical Veritas Association. See www.imva.org)

“There are medical reasons why we love the beach and ocean. Intensive magnesium baths, aerosolized iodine, natural vitamin D from the sun and grounding to the earth through the sand. Hidden in each cubic mile of ocean water is enough healing power to put the pharmaceutical companies out of business. Medical science and the pharmaceutical companies will eventually have to deal with the fact that the most powerful and universal medicine on earth is a basic nutrient from the sea and can be purchased by anyone at low cost.”
~ Dr Mark Sircus

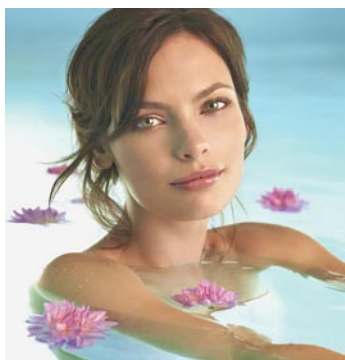
Magnesium serves hundreds of important functions in the body and for that reason it has virtually no side effects. Magnesium chloride treatments address systemic nutritional deficiencies, act to improve the function of our cells and immune system, and help protect cells from oxidative damage. It's a systemic medicine as well as a local one, bringing new life and energy to the cells wherever it is applied topically.

Anti-Ageing, Alkalinity & Detoxing:

When the body's tissues and cells become too acidic in conjunction with mitochondrial deficiency we set the stage for tissue inflammation and degeneration as we become breeding grounds for anaerobic pathogens.

Increased oxidative stress, which correlates almost exponentially with pH changes into the acidic, is especially dangerous to the mitochondria, which suffer the greatest under oxidative duress.

The most powerful alkalizing foods on the planet are the ones that are highest in chlorophyll. Magnesium is also the central atom in the chlorophyll



molecule. Without magnesium, without chlorophyll, life simply does not exist.

Without sufficient magnesium, the body accumulates toxins and acid residues, and thus degenerates more rapidly and ages prematurely.

Skin and Hair:

Dr Pierre Delbet obtained good results using magnesium chloride with: muscle cramps and nervous system, acne, eczema, psoriasis, warts, itch of various origins and chilblains in the skin. There was a strengthening of hair and nails, a good effect on diseases typical of the ages (impotency, prostatic hypertrophy, cerebral and circulatory troubles) and on diseases of allergic origin (hay-fever, asthma, urticaria and anaphylactic reactions).

Energy & Metabolism:

Controlling the level of blood sugars is only one of the many functions of insulin. Insulin plays a central role in storing magnesium but if our cells become resistant to insulin, or if we do not produce enough insulin, then we have a difficult time storing magnesium in the cells where it belongs. When insulin processing becomes problematic magnesium gets excreted through our urine instead and this is the basis of what is called magnesium wasting disease.

There is a strong relationship between magnesium and insulin action. Magnesium is important for the effectiveness of insulin. A reduction of magnesium in the cells strengthens insulin resistance.

Low serum and intracellular magnesium concentrations are associated with insulin resistance, impaired glucose tolerance, and decreased insulin secretion. Magnesium improves insulin sensitivity thus lowering insulin resistance. Magnesium and insulin need each other. Without magnesium, our pancreas won't

secrete enough insulin--or the insulin it secretes won't be efficient enough--to control our blood sugar.



Elektra Magnesium

Magnesium in our cells helps the muscles to relax, but if we can't store magnesium because the cells are resistant then we lose magnesium, which makes the blood vessels constrict, affects our energy levels, and causes an increase in blood pressure. We begin to understand the intimate connection between diabetes and heart disease when we look at the closed loop between declining magnesium levels and declining insulin efficiency.

DNA Repair:

Magnesium ions help guide polymerase selection for the correct nucleotide extends descriptions of polymerase pathways.

Dr. Paul Ellis informs us that, "Magnesium ions are central to the function of the DNA repair proteins, apurinic/aprimidic endonuclease (Ape1) and polymerase A (Pol A). These proteins are key constituents of the base excision repair (BER) pathway, a process that plays a critical role in preventing the cytotoxic and mutagenic effects of most spontaneous, alkylation, and oxidative DNA damage." DNA polymerase is considered to be a holoenzyme since it requires a magnesium ion as a co-factor to function properly. DNA-Polymerase initiates DNA replication by binding to a piece of single-stranded DNA. This process corrects mistakes in newly-synthesized DNA.

DHEA, Hormones & Cholesterol:

Low levels of DHEA are associated with loss of "pathology preventing" signaling between immune system cell.

Dr. James Michael Howard says, "Cancer and infections are both in-

creasing and one of the basic reasons is reduced availability of DHEA, which stems from magnesium deficiency.” Also known as “mother of all steroid hormones” DHEA is converted in the body into several different hormones, including estrogen and testosterone. DHEA appears to restore immune balance and stimulate monocyte production (the cells that attack tumors), B-cell activity (the cells that fight disease-causing organisms), T-cell mobilization (infection fighting T-cells have DHEA binding sites), and protection of the thymus gland (which produces T-cells). The data suggest that DHEA has a role in the neuro-endocrine regulation of the antibacterial immune resistance.

All steroid hormones are created from cholesterol in a hormonal cascade. Cholesterol, that most maligned compound, is actually crucial for health and is the mother of hormones from the adrenal cortex, including cortisone, hydrocortisone, aldosterone, and DHEA. Cholesterol cannot be synthesized without magnesium and cholesterol is a vital component of many hormones. These hormones are interrelated, each performing a unique biological function with them all depending on magnesium for their function. Aldosterone interestingly needs magnesium to be produced and it also regulates magnesium’s balance.

DHEA is produced by the adrenal gland and ovaries and converted to testosterone and estrogen. After being secreted by the adrenal glands, it circulates in the bloodstream as DHEA-sulfate (DHEAS) and is converted as needed into other hormones. Magnesium chloride, when applied transdermally, is reported by Dr. Norman Shealy to increase DHEA. Dr. Shealy has determined that when the body is presented with adequate levels of magnesium at the cellular level, the body will begin to naturally produce DHEA and also DHEA-S.

Transdermal is the ultimate way to replenish cellular magnesium levels. Every cell in the body bathes and feeds in

it and even DHEA levels are increased naturally, according to Dr. Norman Shealy

This effect is not seen in oral or intravenous magnesium administration and Dr. Shealy has a patent pending in this area. It is thought that transdermal application interacts in some way with the fatty tissues of the skin to create the affect. Studies link low levels of DHEA to chronic inflammation, immune dysfunction, depression, rheumatoid arthritis, Type-II diabetic complications, greater risk for certain cancers, heart disease and osteoporosis.

Another factor that contributes significantly in DHEA loss is chronic stress.

Mental Health and Wellbeing:

Magnesium deficiency or imbalance plays a crucial role in the symptoms of mood disorders. Observational and experimental studies have shown an association between magnesium and aggression, anxiety, ADHD, bipolar disorder, depression and schizophrenia. Even a mild deficiency of magnesium can cause sensitiveness to noise, nervousness, irritability, mental depression, confusion, twitching, trembling, apprehension and insomnia.



Magnesium protects cells from aluminium, mercury, lead, cadmium, beryllium and nickel, which explains why re-mineralisation is so essential for heavy metal detoxification and chelation. Magnesium is also a fluoride antagonist. If you have low magnesium then fluoride will bind with the magnesium and cause you to excrete it in the urine. If you have a plentiful supply of magnesium it will protect you from toxic accumulation of fluorides. It is highly likely that low total body mag-

nesium contributes to heavy metal toxicity in children and is a strong participant in the etiology of learning disorders and autism.

Dr Leo Galland: “Magnesium deficiency increases susceptibility to the physiologic damage produced by stress. The adrenergic effects of psychological stress induce a shift of magnesium from the intracellular to the extracellular space, increasing urinary excretion and eventually depleting body stores.”

Dr Linus Pauling: “Nutrients like ascorbic acid, thiamine, niacinamide (vitamin B3), pyridoxine, vitamin B12, folic acid, magnesium, glutamic acid and tryptophane are intimately linked to brain function and mental health.”

Dr Carolyn Dean: “Magnesium permits calcium to enter a nerve cell to allow electrical transmission along the nerves to and from the brain. Even our thoughts, via brain neurons, are dependent on magnesium.”

Dr Mildred S Selig, MD, MPH, Master CAN: “Stress, whether physical (ie. exertion, heat, cold, trauma – accidental or surgical burns), or emotional (ie. pain, anxiety, excitement or depression) and dyspnea as in asthma, increases the need for magnesium.” Dr Selig also found in her studies that

Magnesium Enhances Athletic Performance and Endurance.

Glutathione:

Without sufficient magnesium, the body accumulates toxins and acid residues, degenerates rapidly, and ages prematurely.

According to Dr. Russell Blaylock, low magnesium is associated with dramatic increases in free radical generation as well as glutathione depletion and this is vital since glutathione is one of the few antioxidant molecules known to neutralize mercury.[xv] Glutathione requires magnesium for its synthesis. Glutathione synthetase requires γ-



glutamyl cysteine, glycine, ATP, and magnesium ions to form glutathione.

In magnesium deficiency, the enzyme γ -glutamyl transpeptidase is lowered. Data demonstrates a direct action of glutathione both in vivo and in vitro to enhance intracellular magnesium and a clinical linkage between cellular magnesium, GSH/GSSG ratios, and tissue glucose metabolism. Magnesium deficiency causes glutathione loss, which is not affordable because glutathione helps to defend the body against damage from cigarette smoking, exposure to radiation, cancer chemotherapy, and toxins such as alcohol and just about everything else.

Endocrine System:

(from the book by Mark Sircus: Transdermal Magnesium Therapy)

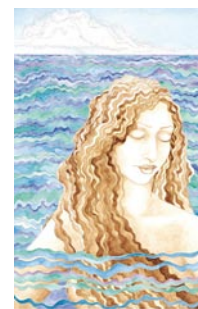
Magnesium is super critical to endocrine function. Gonadotropin Releasing Hormone (GnRH) is a master hormone from the hypothalamus in the brain. It sparks the release of follicle stimulating hormone and luteinising hormone from the pituitary gland, which in turn prompt production of oestrogen and progesterone in the ovaries. Magnesium is involved in melatonin production and the circadian clocks in the human body.

In particular, a deficiency in magnesium can impair the suprachiasmatic nucleus of the hypothalamus. And balanced magnesium status is required to obtain efficiency of suprachiasmatic nuclei and the pineal gland.

Examinations of the sleep electroencephalogram (EEG) and of the endocrine system points to the involvement of the limbic-hypothalamus-pituitary-adrenocortical axis because magnesium affects all elements of this system.

Magnesium has the property to reduce the release of adrenocorticotrophic hormone (ACTH) and to affect adrenocortical sensitivity to ACTH.

Magnesium Chloride for Health and Rejuvenation



Elektra Magnesium

(Following is an excerpt from full article with references in Nexus Magazine Oct-Nov 2008, by Barbara Bourke with Walter Last – available for download from www.elektralife.com)

Rejuvenation:

Magnesium can reverse the age-related degenerative calcification of our body structure and, with this, help us to rejuvenate. Young women, children and, most of all, babies have soft body structures and smooth skin, with low calcium and high magnesium levels in their cells and soft tissues. They generally need high calcium intakes. This is the biochemistry of youth.

As we age, we become more and more inflexible; this is most pronounced in old men and post-menopausal women. The arteries harden to cause arteriosclerosis; the skeletal system calcifies to cause rigidity, with fusion of the spine and joints; kidneys and other organs and glands increasingly calcify and harden, with stone formation; calcification in the eyes causes cataracts; and even the skin hardens, becoming tough and wrinkled. In this way, calcium is in the same league as oxygen and free radicals, while magnesium works together with hydrogen and the antioxidants to keep the body structure soft.

Prevent Degenerative Diseases : Improve Heart Health

Pathologies associated with magnesium deficiency are staggering: hypertension and other cardiovascular diseases, kidney and liver damage, migraine, multiple sclerosis, glaucoma, Alzheimer's disease, recurrent bacterial infections, fungal infections, premenstrual syndrome, calcium

and potassium deficiency, diabetes, cramps, muscle weakness, impotence, aggression, fibromas, hearing loss and iron accumulation.

Increased magnesium intake helps to prevent or dissolve kidney stones and gall bladder stones. Activation of digestive enzymes and bile production as well as improvement of intestinal flora health are factors that make magnesium chloride beneficial in normalising digestive processes and reducing digestive discomfort, bloating and offensive stool odours. It actually reduces all offensive body odours, including underarm and foot odour. This may explain why chlorophyll is generally very effective in reducing body odour, as it is high in magnesium.

Calm Nerves:

Magnesium has a calming effect on the nervous system, so it is frequently used to promote good sleep. It can also be used to calm irritated and overexcited nerves. This is especially useful with epileptic seizures, convulsions in pregnant women and the "shakes" in alcoholics.

If magnesium levels are low, the nerves lose control over muscle activity, respiration and mental processes. Nervous fatigue, tics and twitches, tremors, irritability, hypersensitivity, muscle spasms, restlessness, anxiety, confusion, disorientation and irregular heartbeat all respond to increased magnesium intake.

In a study of more than 200 patients, Dr W. Davis used magnesium chloride as a possible means of combating insomnia. The researcher reported that



sleep was induced rapidly and was uninterrupted, and that waking tiredness disappeared in 99 per cent of the patients. In addition, anxiety and tension diminished during the day.

Healthy Bones and Teeth:

Calcium, magnesium and phosphorus levels are kept in a seesaw balance by the parathyroid hormones. If calcium goes up, magnesium goes down and vice versa. With a low magnesium intake, calcium goes out of the bones to increase the calcium levels in tissues, while a high magnesium intake causes calcium to go out of the tissues and into the bones. A high phosphorus intake without a high calcium or magnesium intake causes calcium to leach from the bones and then leave the body with the urine.

Immune System:

The first prominent researcher to investigate and promote the antibiotic effects of magnesium was a French surgeon, Professor Pierre Delbet, MD. In 1915, In all his tests, magnesium chloride solution was by far the best. He found that not only was it harmless for tissues, but it also greatly increased leukocyte activity and phagocytosis, the destruction of pathogenic microbes.

Another French doctor, Dr A. Neveu, cured several diphtheria patients with magnesium chloride within two days. He also published 15 cases of poliomyelitis that was cured within days if treatment was started immediately or within months if paralysis had already progressed. Dr Neveu found magnesium chloride effective against asthma, bronchitis, pneumonia, emphysema, pharyngitis, tonsillitis, hoarseness, common cold, influenza, whooping cough, measles, rubella, mumps, scarlet fever, poisoning, gastroenteritis, boils, abscesses, whitlow, infected wounds and osteomyelitis.

In more recent years, Raul Vergini, MD and others confirmed these earlier results and added more illnesses and conditions to the list of successful uses of magnesium chloride: acute

asthma attack, shock, tetanus, herpes zoster, acute and chronic conjunctivitis, optic neuritis, rheumatic diseases, many allergic diseases and chronic fatigue syndrome. They also found it to have beneficial effects in cancer therapy. In all of these cases, magnesium chloride gave much better results than other magnesium compounds.

Topical Application of Magnesium Chloride:

Elektra Magnesium is produced by the natural evaporation of sea water from a remote lake 3,200m above sea level in the Tibetan Plateau. Elektra Magnesium however still contains the natural balance of trace elements and minerals found in sea water. The sodium is skimmed off during the evaporation process and what is left is magnesium chloride plus sea minerals and trace elements. It has been independently laboratory tested to show no mercury and no lead.

Sensitive skin may feel an initial slight tingling sensation similar to swimming in ocean water. This is temporary. If too uncomfortable simply dilute further. You may need to start with a more diluted solution and then build up over time. Consult your health practitioner if you have an illness. Depleted reserves of magnesium may take three months or more to replenish.

Your body requires magnesium every day, but with transdermal application you don't have to guess about dosage. Just make magnesium available on your skin and your body will absorb what it needs at that time. When it reaches saturation it stops absorbing any more. Bypasses the digestive system and avoids intestinal irritation.

Enjoy a 20-30 minute foot soak with a tablespoon of Elektra Magnesium in a bucket of hot water after your shower at the end of the day and save for the next day too. Just re-heat. When you have used a couple of time, you can also sprinkle on your garden because plants use magnesium to make chlorophyll.

Indulge in a luxurious bath with Elektra Magnesium. Please note there

are no additives or fragrances, so you may want to add some extra essential oils to your bath. You can also use it in a body spray or mouth wash, a compress, or mixed with pure water and slowly stirred into your favourite natural body butter.

DIRECTIONS:

- Hot Bath (from 1/2 to 1 cup per average bath)
- Foot Soak (from 1 tablespoon per bucket)
- Body Spray (from 1 heaped teaspoon to 250ml)
- Mouthwash (from 1 heaped teaspoon per 250ml)
- Compresses - Relieves localised aches/pains, arthritis, wounds etc.

Notes: Use pure water to dissolve the flakes. For therapeutic use, higher concentrations may be required. Please refer to your health practitioner. pH = 7.0 in solution (neutral). Transdermal absorption of magnesium minerals is safe, effective and bypasses the digestive system. Highly recommended in cases of magnesium deficiency. Excellent for relaxation, detox/cleansing and systemic health benefits. **Caution:** Avoid direct contact with eyes and sensitive areas when undiluted. It is derived from sea salt. If you experience slight stinging sensation, just dilute further.

Disclaimer: This information is for educational purposes only and is not to be deemed as medical advice. If you have an illness please consult your health care professional.

Elektra Magnesium™

**Mineral Bath Salts
for Transdermal
Magnesium Therapy**

**4kg
Economy Bucket
\$132 (incl GST)**

**500g jar
\$30.80
(incl GST)**



**Ask about our magnesium
body butter and body spritz!**

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