

TRANSDERMAL MAGNESIUM CHLORIDE

"Magnesium chloride is one of the most potent minerals that exists and is incredibly fast acting and safe... 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." Mark Sircus, Ac., O.M.D. (Author of Transdermal Magnesium Therapy)

"The form of magnesium which the human metabolic system recognises and assimilates most readily is magnesium chloride, the same form contained in sea water." Daniel Reid (Author of The Tao of Detox)

ORAL COMPARED TO TRANSDERMAL: The problem many people have with oral tablets and powders is that all magnesium compounds must be broken apart in the stomach using hydrochloric acid (stomach acid) in order to extract the pure magnesium ions, and the older we get the less stomach acid we produce. The next obstacle is the bowel wall which may be compromised through ill health and lifestyle choices. Magnesium also has a potentially laxative effect. Transdermal magnesium absorption however, delivers high levels of magnesium directly through the skin to the tissue cells, bypassing the digestive system. According to a study by Dr Noman Shealy 75% of patients experienced significant improvements in intracellular magnesium levels after only four weeks of foot soaking and skin spraying.

TRANSDERMAL MAGNESIUM IS SAFE: With transdermal absorption the body will not 'overdose' itself. You can experiment with concentrations and frequency of application to find the right amount for your individual needs. There are no contraindications with transdermal absorption because no digestion is involved. When the body has absorbed enough magnesium ions it reaches an equilibrium and stops absorbing any more at that time. However, daily application is important as the body cannot absorb a whole week's worth of magnesium all on one day.

PURE SOURCE

Food Grade Magnesium Chloride Hexahydrate 98% MgCl₂·6H₂O (min 46% MgCl₂) **Naturally evaporated from salt water located 3,200m above sea level in the Tibetan Plateau. Salts contain magnesium chloride plus other natural sea trace minerals. They have been lab tested and show NO mercury or lead.**

ELEMENTAL MAGNESIUM CONTENT: Approx 15.5%

1) Elektra Magnesium Salt Flakes : In one 500g jar of flakes there is approx 78 grams (78,000mg) of elemental magnesium, ie. 15.6mg elemental magnesium per one gram of flakes.

2) Elektra Magnesium Cream. In a 400g jar there is approx 9,300mg of elemental magnesium (23.25mg elemental magnesium per one gram of cream). If you use a dessertspoon full to cover the whole body, say 13gm of cream, that would contain about 300mg of elemental magnesium.

3) Elektra Magnesium Oil Spritz. Each 125ml bottle of spritz contains 77 grams of magnesium chloride hexahydrate in solution of purified water (61.8%), plus essential oils of mandarin, juniperberry and rosalina for fragrance. 7 sprays contains approx. 400mg of elemental magnesium.

Note: People with high-end magnesium needs may need double the average application of transdermal magnesium. The amount of magnesium required will vary from day to day and from person to person, depending on stress levels, lack of sleep, physical exertion, medical interventions (operations, drugs, chemo & radiation etc), toxic body burden, recovering from illness etc.

DETOX: Some individuals may experience temporary detox reactions (usually within first 48 hours) as magnesium can displace toxins. Make sure to hydrate well with pure water and consult a health practitioner experienced with detox if symptoms persist.



*My heart restored, my waters cleansed,
the power surges in love to mend...*

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Your Local Distributor is:

FLAKES... How to use



Dissolve flakes in water in suggested concentrations:



- **Bath** (1 cup per bath half full with hot water)
- **Foot Soak** (1 heaped tablespoon per bucket half full with hot water)
- **Light Body Spray** (1 or 2 heaped teaspoons per 300ml)
- **Mouthwash** (1 heaped teaspoon per 300ml)
- **Compress** Soak bandage for aches/pains & inflammation.
- **Magnesium Oil (for massage)** Medium strength = 50g or 60g flakes / 100ml water. Adjust solution to skin sensitivity. You can also add an extra carrier oil whilst massaging in for soothing effect.
- **Mineral Water** Remineralise drinking water after distillation, reverse osmosis or filtering rain water by adding about 3-5 flakes to 1.25 litres.

THERAPEUTIC For therapeutic use, higher concentrations may be required. The body absorbs what it needs if made available on a daily basis. Please refer to your health practitioner. The higher the concentration, the faster the absorption rate, however higher concentrations can give a prickly sensation. Adjust concentration to suit individual needs.

CAUTION Avoid direct contact with eyes and sensitive areas when undiluted. If you experience stinging sensation, dilute further.

Magnesium Cream Moisturiser "Herbal"

Luxurious Anti-Ageing Cream:

Blend of natural plant butters and oils infused with magnesium to keep your skin supple and hydrated. Use all over except eye area. A dessertspoonful massaged in all over the body provides about 300mg of elemental magnesium.



CONTAINS: Aqua, 15% Elektra Magnesium Chloride Aqueous, Butyrospermum Parkii (Shea) Butter, Cetearyl Alcohol, Ceteareth-20, Prunus Amygdalus Dulcis (Sweet Almond) Oil, Macadamia Integrefolia Seed Oil, Prunus Armeniaca (Apricot) Kernel Oil, Cocos Nucifera (Coconut) Oil, Lecithin, Hemp Seed Oil, Mangifera Indica (Mango) Seed Butter, Theobroma Cacao (Cocoa) Seed Butter, Tocopherol (Vitamin E), Neem Oil, Suprapain*, Xanthan Gum, Potassium Sorbate, Pelargonium Capitatum (Rose Geranium) Oil, Cananga Odorata (Ylang Ylang) Flower Oil, Pogostemon Cablin (Patchouli) Oil, Alpha Lipoic Acid, Lactic Acid. *Note: Suprapain comprises extracts of: oregano leaf, thyme, cinnamon bark, rosemary leaf, lavender flower, lemon peel, peppermint leaf, golden seal root and olive leaf.

Magnesium Cream Moisturiser "Zest Citrus"

TGA Listing AUST L 183096

ACTIVE INGREDIENTS: Magnesium Chloride 150mg/g, Castor Oil 15mg/g, Lecithin 10mg/g, Evening Primrose Oil 10 mg/g, Alpha Tocopherol 9mg/g, R-alpha Lipoic Acid 1mg/g

Use for... • dry skin • eczema • psoriasis • dermatitis
• itchy bites • after sun recovery • muscle cramp • joint pain
• swelling • restless legs • stress & tension

Nutrition Via Skin

TRANSDERMAL MAGNESIUM

Relieve Stress

Repair Cells

Balance Electrolytes

Remove Excess Calcium from
soft tissue and joints with
LIFE SUPPORTING MAGNESIUM

Excessive magnesium loss is caused by stress, and our modern food supply has become depleted in magnesium. This leads to chronic magnesium deficit. Studies have shown that magnesium deficiency is carcinogenic. Magnesium is required to repair DNA. In fact, researchers have found Mg has 350 jobs in the body directly, and thousands of tasks synergistically with enzymes. Magnesium is the MASTER MINERAL - the coordinator and conductor of our orchestra of nutrients.

Relax, Sit Back and Replenish...



Based on the traditional practice of Balneotherapy where magnesium-rich mineral soaks were used to treat skin conditions, arthritis and rheumatism, and to maintain overall health and wellbeing.

May help with • Restless Leg, Cramp, Seizure, Spasm, Insomnia • Hormones • Tight Muscles • Skin Disorders • Diabetes • Swelling / Inflammation • Itchiness • Pain • Nerves • Stress • Bone Mineralisation • Pregnancy • Hypertension • Heart Rhythm

from
**PURE
SEA WATER**
in the
Tibetan Plateau

Elektra™ MAGNESIUM



Ph: (07) 55331088 www.elektralife.com

The Master Mineral... Magnesium

The electrolyte CONDUCTOR of an orchestra of nutrients



"Magnesium is bound as the central atom of the porphyrin ring of the green plant pigment chlorophyll.

The whole basis of life and the food chain is seen in the sunlight-chlorophyll-magnesium connection. Without chlorophyll, plants are unable to convert sunlight and carbon dioxide. Magnesium is a necessary element for all living organisms both animal and plant. Chlorophyll is structured around a magnesium atom, while in animals, magnesium is a key component of cells, bones, tissues and just about every physiological process you can think of." Mark Sircus Ac., O.M.D.

Magnesium is Essential for Life

Magnesium is the single most important mineral for maintaining proper electrical balance, facilitating smooth cell metabolism and stabilising membranes. According to Dr. Carolyn Dean, author of *The Miracle of Magnesium*, "Magnesium is very important in health and medicine. It is extremely important for the metabolism of calcium, potassium, phosphorus, zinc, copper, iron, sodium, lead, cadmium, hydrochloric acid (HCl), acetylcholine and nitric oxide (NO), for many enzymes, for the intracellular homeostasis and for activation of thiamine and therefore, for a very wide gamut of critical body functions.

"Magnesium is a particular crucial element for mediating the vital functions of the nervous and endocrine systems: It helps maintain normal muscle and nerve functions, keeps heart rhythm steady, supports a healthy immune system and keeps bones strong. Magnesium also helps regulate blood sugar levels, promotes normal blood pressure, and is known to be involved in energy metabolism and protein synthesis.

"In the nucleus, more than half the magnesium is closely associated with nucleic acids and mononucleotides. Magnesium is necessary for the physical integrity of the double helix of DNA, which carries genetic information and the code for specific proteins. Enzymes are protein molecules that stimulate every chemical reaction in the body. Magnesium is required to make hundreds of these enzymes work."

Cancer Study: "Magnesium deficiency causes renal complications. The appearance of several diseases is related to its depletion in the human body. In radiotherapy, as well as in chemotherapy, especially in treatment of cancers with Cis-platinum, hypomagnesaemia is observed. The side effects of chemotherapy that are due to hypomagnesaemia are decreased using Mg supplements. The role of magnesium in DNA stabilization is concentration dependent. At high concentrations there is an accumulation of Mg binding, which induces conformational changes leading to Z-DNA, while at low concentrations there is deficiency and destabilization of DNA. The biological and clinical consequences of abnormal concentrations are DNA cleavage leading to diseases and cancer. Carcinogenesis and cell growth are also magnesium-ion concentration dependent." (Extract from *Critical Reviews in Oncology/Hematology* 42 (2002) 79-91, National Technical University of Athens, 'Magnesium-DNA Interactions and the Possible Relation of Magnesium to Carcinogenesis, Irradiation and Free Radicals' Authors: J. Anastasopoulou, T. Theophanides)

Magnesium acts as a general cell tonic while it REDUCES INFLAMMATION and SYSTEMIC STRESS.

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MAGNESIUM DEFICIENCY can occur because of:

- **Depleted soil and food supply** • **Food processing**
- **STRESS of any kind** (emotional/psychological, physical exertion, drugs/chemicals, alcohol binging, temperature extremes, sleep deprivation, loud noise, injury, pain, surgery, burns)
- **Mal-absorption/Excess elimination:** Magnesium absorption is decreased after burns, serious injuries or surgery, and in patients with diabetes, liver disease or intestinal mal-absorption problems. Deficiencies also develop when magnesium elimination is increased, which it is in people who use alcohol, caffeine or excess sugar, take diuretics or birth control pills, whose body has been traumatised by vaccination, or who have gastro-intestinal disorders such as Crohn's disease.
- **Fluoride Chemicals and Heavy Metals:** The toxic effect of fluoride ions plays a key role in acute magnesium deficiency. Fluoride ions clearly interfere with the biological activity of magnesium ions. In general, fluoride-magnesium interactions decrease enzymatic activity. Medical science has discovered how sensitive the insulin receptor sites are to chemical poisoning. Cadmium, mercury, arsenic, lead, fluoride and possibly aluminium may play a role in the actual destruction of beta cells through stimulating an auto-immune reaction to them after they have bonded to these cells in the pancreas.

(The following is an extracted from *The Magnesium Factor* by Mildred Seelig, M.D., MPH, Master American College Nutrition, available at www.elektralife.com)

Energy Production: In addition to the more than 350 enzymes for which magnesium is directly necessary, it is indirectly required for thousands of others - one especially important one being the one that controls the molecule adenosine triphosphate, or ATP. ATP is present in all the living world. You can think of it as life's batteries - a substance that can store and release energy back and forth, like a switch. But to do so, it needs magnesium. Literally, every energy-consuming reaction in life involves ATP and thus needs magnesium to proceed.

Heart-Cardiovascular Disease and Diabetes: If the level of magnesium within the cell becomes too low there are three dire results:

1. **There is not enough ATP available for the cell's necessary energy reactions and to maintain the 'enzymatic pump' that moves potassium into and sodium out of the cells.**
2. **Potassium leaves the cell and cannot reenter, and there is a temporary increase in the plasma potassium level, which creates a risk of arrhythmia.**
3. **Calcium rushes into the cell, where it does not belong, and creates its excitatory and hardening havoc.**

In this low magnesium state cells begin to malfunction in predictable ways:

- Blood tends to clot even if there is no wound, cut or hemorrhaging. When this clotting occurs between blood vessels, it can cause thrombi or emboli, creating the risk of heart attack or stroke.
- The secretion of adrenaline increases abnormally.
- Cells begin to overrespond to the stimulation of adrenaline stimulation.
- Cholesterol production and metabolism become abnormal.
- All muscle cells, including those in the heart and blood vessels, tend to contract and become unable to relax.
- Increased production of free radicals and susceptibility to oxidative stress.
- Arteries stiffen and develop a build-up of plaques as a result of too much low-density lipoprotein (LDL or 'bad') cholesterol and too much calcium.
- Glucose is not properly processed as a result of insulin resistance, which can lead to type II diabetes and a whole spectrum of other disorders, all leading to heart disease... **Magnesium is needed for insulin to bring glucose into the cells, and to utilize the glucose.**

(The following is extracted from *Transdermal Magnesium Therapy* by Mark Sircus Ac., O.M.D. available at www.elektralife.com)

Calcium-Magnesium & Bone Mineralisation: The ratio of calcium to magnesium is vital for cell membranes and the Blood-Brain Barrier. In properly balanced proportions magnesium and calcium have complementary effects on many of the body's chemical pathways. Calcium causes muscles to contract, while magnesium helps them relax. Studies have reported that increasing calcium in the diet significantly reduces the absorption of magnesium.

Note: Those with chronic diseases should consult their health practitioner. This information is for educational purposes only.

Elevated calcium levels are associated with arthritic/joint and vascular degeneration, calcification of the soft tissue, hypertension and stroke, and increase in VLDL triglycerides, gastrointestinal disturbances, mood and depressive disorders, chronic fatigue, and general mineral imbalances, including magnesium, zinc, iron and phosphorus. High calcium levels interfere with vitamin D and subsequently inhibit the vitamin's cancer protective effect unless extra amounts of vitamin D are supplemented. However high magnesium intake causes calcium to move from tissues into bones. Thus high magnesium levels lead to bone mineralisation.

Oxygen-Carrying Capacity in the Blood: Magnesium ions regulate the stability of the red cell membrane, which is crucial. Magnesium enhances the binding of oxygen to haem proteins and abnormal magnesium deprived red blood cells lack flexibility that allows them to enter tiny capillaries. Red blood cell (RBC) deformability is an important factor in determining movement of red blood cells through the microcirculation and appropriate magnesium levels help to ensure the microcirculation does not contract and calcify.

Infection Fighting: Magnesium has a special effect on the efficiency and phagocytic (germ killing) power of the body's white corpuscles.

Digestion: Chloride is required to produce a large quantity of gastric acid each day and is also needed to stimulate starch-digesting enzymes.

Athletic Performance and Muscle Recovery: Magnesium helps to relax muscles and dissipate lactic acid after workout. It is the single most important mineral to sports nutrition. Heavy exercise causes magnesium loss and explains why long distance runners may suddenly drop dead with heart arrhythmias.

Pain: The combination of heat and magnesium chloride increases circulation and waste removal. The therapeutic effect of magnesium baths is to draw inflammation out of the muscles and joints.

Brain, Nerves and Endocrine System: Magnesium helps regulate a key brain receptor important for learning and memory. It is also crucial in preventing enzyme degradation for Blood-Brain Barrier integrity. Magnesium is super critical to endocrine function, including thyroid. Gonadotropin Releasing Hormone (GnRH) is a master hormone from the hypothalamus in the brain. It sparks the release of follicle stimulating hormone and luteinizing hormone from the pituitary gland, which in turn prompts production of oestrogen and progesterone. When the pituitary gland is not getting enough magnesium it allows the adrenals to overproduce adrenaline. Magnesium is involved in melatonin production and the circadian rhythms. A balanced magnesium status is required to obtain efficiency of suprachiasmatic nuclei and the pineal gland. Magnesium is also required to make glutathione. Dr. Norman Shealy reports transdermal magnesium chloride gradually increases DHEA naturally. DHEA is often termed 'the fountain of youth hormone' and is produced by the adrenal glands.

Depression: Magnesium deficiency, even when mild, increases susceptibility to various types of neurological and psychological stressors. Insufficient magnesium (and zinc) causes serotonin-deficiency with possible resultant aberrant behaviours, including depression, suicide or irrational violence. Magnesium baths have a soothing and calming effect.

Toxins, Oxidative Stress and Acidosis: Magnesium is a crucial factor in the natural self-cleansing and detoxification responses of the body. It stimulates the sodium-potassium pump on the cell wall and this initiates the cleansing process... Without sufficient magnesium the body accumulates toxins and acid residues, and thusly degenerates more rapidly and ages prematurely. GLUTATHIONE requires magnesium for its synthesis... Magnesium deficiency [also] causes glutathione loss, which is not affordable because glutathione helps to defend the body against damage from cigarette smoking, exposure to radiation, cancer chemotherapy, toxins, alcohol and just about everything else... 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.

Pregnancy and Fertility: When pregnant, magnesium helps build and repair body tissue in both mother and fetus. A severe deficiency during pregnancy may lead to pre-eclampsia, birth defects and infant mortality. Magnesium relaxes muscles and research suggests that proper levels during pregnancy can help keep the uterus from contracting until week thirty-five.... In animal studies it has been shown that magnesium plays a role in ovule maturation, sperm viability and fecundation.