How to Overcome Fatigue and Burnout by Recharging Your Electrical System

If your body feels overloaded and heavy with fatigue, sleep seems elusive, or if depression sets in, it may mean your electrical system needs a recharge.

ADVANCETOWN, QLD, AUSTRALIA, January 19, 2023 /EINPresswire.com/ -- If a treadmill of frenetic activity has led to burn out and energy crisis, you have most likely become magnesium deficient. This usually happens as a result of excessive and prolonged stress, trauma, sleep deprivation, toxic exposures, or gruelling workloads – all of which can cause excessive magnesium loss and depletion of reserves.

Overworked, fatigued and exhausted? This is what magnesium deficiency looks like.

Electrolyte regulation relies on kidney function and magnesium availability.

As magnesium is an essential component of the electrical nervous system, magnesium deficiency can feel like running out of spark plugs or unplugging from our biological battery power. If metabolism slows due to electrolyte deficiency or imbalance, the resulting shortage of electrical energy would cause system wide energy rationing.

ELECTROLYTE POWER

The main electrolytes involved in our cells' electrical charge and conductivity are sodium, calcium, potassium and

magnesium. Of these, magnesium acts more like the master mineral controller that the others are dependent on for optimum effectiveness. Even though you may have enough of the other electrolytes present, they don't work as well without enough magnesium.

Natural magnesium chloride to remineralise filtered drinking water.

Excessive stress can cause increasing loss of magnesium via the kidneys. If there is not enough magnesium for stress recovery and stabilisation, the charge of the cell membrane can depolarise and loosen up, causing potassium loss, which causes heart arrhythmia. Depolarisation can also cause excess sodium and calcium ions to enter cells, which over-stimulate or dehydrate them, causing involuntary muscle movements.

Electrolytes may also be excessively lost in the urine due to kidney problems. In the case of Renal Tubular Acidosis (RTA) the kidneys do not recycle enough electrolytes to rebalance pH. This greatly increases the need for mineral supplementation.

We can see how the electrolytes perform when muscles contract and relax. When adrenalin surges during stress, it changes the cell membrane charge potential, depolarising and loosening the channels so that magnesium temporarily drops out and calcium moves in for the muscle contraction phase, or for neuronal firing in the brain.

After the calcium 'squeeze', the recovery phase involves magnesium and water moving back in via the channels to displace the calcium so that muscle fibres can expand and relax again, restoring blood circulation and energy balance in the para-sympathetic 'rest and digest' mode. Magnesium has an extremely important role to dampen down adrenalin and control calcium, thereby helping to regulate the central nervous system, cardiovascular system and energy supply.

Magnesium is stored in all the body's muscle and bone tissue cells, which hold 99% of the body's magnesium. To keep the blood supply of magnesium in the normal range the body can take magnesium from muscle and bone. This is why blood tests are not accurate indicators of total body magnesium reserves.

OSTEOPOROSIS AND METABOLIC SYNDROME ARE ELECTROLYTE PROBLEMS

Calcium overload (hypercalcemia) causes excessive cramping, muscle spasms, and tremors. It is a common sign of magnesium deficiency. Magnesium controls how calcium is used in the body, such as for the strengthening of bones and teeth via parathyroid hormone. Without enough magnesium too much calcium leeches out of bones and becomes free calcium, which can settle in arterial walls, mucosal linings, kidney tubules, or it can form stones in kidneys or gall bladder. Calcium deposits cause hardening and loss of tissue flexibility.

Magnesium is also essential for mitochondrial production of the electrical energy currency called ATP (adenosine triphosphate). Magnesium deficiency is the hallmark of metabolic syndrome, diabetes and cardiovascular disease. Low magnesium means that metabolism suffers, resulting in chronic fatigue states, brain fog and lack of concentration, circulation issues and not enough oxygen delivery to cells. Sugar sensitivity increases as a direct consequence of magnesium deficiency, triggering states of acidosis and hypoxia (low oxygen).

WATER RETENTION IS AN ELECTROLYTE PROBLEM

Water retention (oedema) in ankles can be a sign of dehydration and electrolyte deficiencies. As tissue cells become overloaded with waste toxins causing acidosis, and there is not enough water available for flushing, the brain signals to the kidneys to hold back sodium which holds back water in the interstitial tissues, pooling and causing swelling generally in the ankles.

Caution is advised with diuretic therapies which can cause the kidneys to excrete too much water and too many alkalising minerals such as magnesium and potassium. It is recommended by practitioners in this case to cleanse, alkalise and rehydrate, to encourage better blood circulation, as well as to excrete wastes via skin perspiration. Increasing hydration capacity in cells requires more water and electrolytes, particularly magnesium.

THE KING OF THE MAGNESIUMS

Natural magnesium chloride is the type of magnesium mostly found inside cells, which is why we can take it up in solution without requiring digestion. Oral magnesium supplements, other than magnesium chloride, need to be first digested in the stomach with stomach acid so the body can extract magnesium and join it with chloride. This is necessary for cellular access.

Elektra Magnesium flakes (magnesium chloride hexahydrate), because they are certified food grade, are ideal to remineralise filtered drinking water to mimic natural spring water. It enhances the hydration capacity of water and makes magnesium easy for the gut to absorb, unlike high magnesium concentrations which act as a laxative. Magnesium drinking water tastes great too.

Transdermal magnesium absorption is dependent on the condition and hydration of the skin. Soaking in a comfortably hot magnesium bath helps open skin pores and channels for

magnesium absorption. When applying a strong magnesium chloride solution (magnesium oil) directly to skin however, it can feel sticky or irritating. Absorption of magnesium is enhanced when natural lipids (fats) and plant extracts are present, because the skin is lipophilic and holds the fats and nutrients in its reservoir to supply the body as needed.

This is why the Elektra Magnesium skin and muscle care range incorporates a proprietary fusion of magnesium chloride with natural plant oils and extracts, without petrochemicals, synthetic emulsifiers and preservatives. Whether for muscle relaxation massage or luxurious skin care and antiaging benefits, Elektra Magnesium can cater for a variety of needs and skin types from babies to elderly. See more at www.elektramagnesium.com.au

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