

NATURAL SUPPORT FOR Muscle Cramps



Get Your Life Back!™



Most people have had a muscle cramp or “charley horse” at some time in their lives. Muscle cramps can be a simple annoyance or a debilitating episode. Most times, these cramps can be prevented. Minerals are heavily involved in proper muscle function. It just so happens that two of the most abundant minerals in the body, potassium and magnesium, also have the highest deficiency rates in Americans.¹ Using a combination of both minerals and herbs can help promote normal muscle function.

Minerals and Muscle Function

Has anyone ever told you to eat more bananas if you get muscle cramps? There is some benefit to that advice, because bananas are very high in potassium. Potassium, an electrolyte mineral, is one of the most abundant minerals found within the cells of the body. Over 95 percent of the body’s potassium is found in the cells. **Potassium works closely with sodium in muscle function.** During a muscle contraction, sodium enters the cell and potassium leaves the cell. The potassium that has left the cell doesn’t wait outside the cell; it travels elsewhere in the body. The problem with many people is that they have far more sodium than potassium. **If there is a deficiency in potassium, the muscle will not relax as quickly or efficiently.** A potassium deficiency first presents itself in muscle and nerve function. A constant deficiency in potassium causes the smooth muscle tissue of the veins to be constricted, which explains the correlation between low potassium levels and high blood pressure. This deficiency will also constrict other muscle tissue in the body.²



Magnesium is another electrolyte mineral that is involved in proper muscle function, plus over 300 other reactions in the body. It works along with potassium to support proper muscle function. **Magnesium is essential to muscle relaxation. It activates the sodium-potassium pump to bring potassium back into the cells.** The Recommended Dietary Allowance (RDA) of magnesium is 350 mg for men and 280 mg for women. The daily average intake is between 143 and 266 mg, resulting in a deficiency in most people.³ Without magnesium, potassium will not re-enter the cells and the muscles cannot relax. Magnesium has been shown in many clinical studies to positively impact diseases of the



heart muscle, like cardiomyopathy and congestive heart failure, which both involve a decreased efficiency in the pumping action of the heart muscle.⁴

Magnesium absorption is difficult. For magnesium supplementation to be beneficial in the muscle tissue, the forms of magnesium must be absorbable. While magnesium oxide is relatively inexpensive, it is not very absorbable. **Forms of magnesium such as magnesium glycinate, citrate and aspartate are highly absorbable regardless of stomach pH.** Positive studies in patients with muscle pain utilized magnesium aspartate.⁵ Aspartate helps to transport magnesium into the muscle cells. Magnesium glycinate is an amino acid chelate form of the mineral. Amino acid chelates have been shown to ease absorption of minerals. This form of magnesium decreases digestive upset that is commonly seen with magnesium oxide.

Supportive Herbs

Jamaica dogwood is an herbal medicine with a strong history of

traditional use in the West Indies and South America. **Scientific studies show that constituents of the bark of the Jamaica dogwood tree promote normal muscle contraction and relaxation.**⁶ Traditionally, it has been used as a powerful remedy for various types of pain, such as severe, stabbing pain in the legs and labor pain.⁷

Nutrient-Dense Foods Rich in Minerals & Trace Minerals

Good plant sources of food are nearly devoid in the Standard American Diet. Surveys show that only twelve percent of the population consumes the five or more recommended servings of vegetables daily.⁸ **Dulse and alfalfa are nutrient dense foods that supply an array of minerals and other micronutrients that are important to muscle function.** Dulse is a red seaweed that is high in several minerals, which include magnesium and potassium.⁹ Alfalfa is small in calories, but enormous in nutrition. Adding these nutrient dense foods to a good mineral blend will provide the body with sound nutritional insurance.

Redd Remedies®

Get Your Life Back!™



Magnesium and Potassium are essential for proper muscle relaxation.*

Jamaica Dogwood promotes normal muscle relaxation.*

Alfalfa and Dulse are nutrient-dense foods rich in minerals essential to muscle function.*

References:

1. Murray, Michael. *Encyclopedia of Nutritional Supplements*. Rocklin, CA: Prima Publishing, 1996.
2. "Potassium." PDR Health. Thomson Health. 13 Feb. 2006. <<http://www.pdrhealth.com>>.
3. Murray, Michael. *Encyclopedia of Nutritional Supplements*. Rocklin, CA: Prima Publishing, 1996.
4. "Focus on Magnesium." *Dr. Murray's Natural Facts*. Dr. Murray Natural Living. 13 Feb. 2006. <<http://www.doctormurray.com/newsletter/3-03-2005.htm>>.
5. Gaby, Alan. "Effective Magnesium Regimens for Fatigue/Fibromyalgia." *The Townsend Letter for Doctors and Patients*. BNET 21 Mar. 2008. http://www.findarticles.com/p/articles/mi_m0ISW/is_247-248/ai_113806998>.
6. "Jamaica Dogwood." *University of Maryland Medical Center Complimentary and Alternative Medicine Index*. University of Maryland Medical Center. 13 Feb. 2006. <<http://www.umm.edu/altmed/ConsHerbs/JamaicaDogwood.html>>.
7. Hoffmann, David L. "Jamaica Dogwood." *Healthworld Online*. Healthworld Online. 13 Feb. 2006. <<http://www.healthy.net/scr/Article.asp?id=1877>>.
8. Warner, Jennifer. "Few Follow '5-a-Day Fruit and Vegetable' Rule." 24 Aug. 2004. WebMD. 22 Mar. 2006. <<http://www.webmd.com/content/article/93/102158.htm>>.
9. Murray, Michael, Joseph Pizzorno and Lara Pizzorno. *The Encyclopedia of Healing Foods*. New York: Atria Books, 2005.

*These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, prevent or cure disease.