

# The wonders of Magnesium



**Magnesium is a dominant intracellular ion and the *second most important mineral for proper metabolic functionality*** (iodine ranks first). A great alkalinizer, it neutralizes metabolic acids and is vital for enzymatic activity. To do their work correctly, our organs depend on the right extracellular pH (translation: *how acidic is the blood?*). If there is too much acid in the bloodstream, magnesium is pulled from the inside of our cells to correct the balance.

**We are faced with a host of acidic challenges today** – caused by diet, nutrient deficiency and the effects of external toxins. Our body is willing to forsake the internal environment of the cells to keep the extracellular matrix at a manageable pH so the vital organs can function (brain, heart, lungs, kidneys). This, however, leads to acidosis of the cells themselves and premature cell death, until our entire system and/or individual organs become compromised by too many dying cells.

**Measuring blood levels of magnesium, however, is not a reliable way of knowing magnesium status.** What is crucial to good health is *intracellular* magnesium, which cannot be determined from what shows up in the blood. (Remember, the body deploys magnesium from inside the cells to offset acidity outside the cell.)

**Optimal magnesium supplementation is through the skin** (transdermally), not by way of pills or oral preparations. Magnesium relaxes tissues, so large doses taken orally will act on gastrointestinal cells, creating hypermotility and resulting in diarrhea. Because your skin is your largest organ, applying magnesium cream or oil (actually a saturated magnesium-chloride brine) not only elevates magnesium levels without unwanted side effects, it's a wonderful natural way of relieving muscle and joint pain exactly where you need it, as often as necessary!

**Magnesium is essential for bones and muscles**, especially where smooth muscle function (e.g., heart, blood vessels, GI tract) is concerned. Deficient levels of this crucial electrolyte may lead to heart arrhythmia, constipation, muscle cramping and/or excessive calcification of tissues. Calcium supplementation is over-encouraged today, creating an out-of-balance calcium-to-magnesium ratio in many people's bodies. Calcium is a hardener, rigidifying and constricting tissues, whereas magnesium promotes motility, relaxing them (translation: pain relief). Calcium also binds with fluoride, creating tiny burrs in the body's calcium-rich tissues (bones and joint cartilage). Therefore, too much calcium exacerbates pain.

Do your body a favor: Give it lots of magnesium, delivered through the skin, and it will thank you!

**AvatarProducts.com Mg2+ Magnesium Cream**



*Magnesium chloride crystals*