FLUORIDATED WATER ROBS YOUR MAGNESIUM

"Fluoride seeks out minerals such as magnesium and binds with it, making magnesium unavailable to the body and unable to do its work. The magnesium-fluoride mineral produced is called sellaite; it is almost insoluble and ends up taking the place of magnesium in hard tissues like bone and cartilage, but its brittleness makes the bone susceptible to fracture. The reduction in available magnesium causes a decrease in enzymatic action in the body." (Excerpt from The Magnesium Miracle by Dr Carolyn Dean www.elektralife.com)

...and sets you up for Heart Disease, Stroke, Diabetes, Cancer, Immune System Disorders, Mental Illness, Osteoporosis... and more

FLUORIDE-MAGNESIUM INTERACTION

Review (summary) by A Machoy-Mokrzynska (Institute of Pharmacology and Toxicology, Pomeranian Medical Academy, Szczecin, Poland). Fluoride (J. of the International Society for Fluoride Research), Vol.28 No.4; Nov, 1995, pp175-177

"The toxic effect of fluoride ion plays a key role in acute Mg deficiency. The amount of F- assimilated by living organisms constantly increases, and Mg absorption diminishes as a consequence of progressively advancing industrialization. Marier gives examples of such retention of both elements in plants (e.g. in pine and tomatoes) and in animals, for instance in bone tissue, blood and kidneys, with the last being thought as the most probable place of Mg-F-interaction. Now, further facts have been observed, which throw a new light on the effects of Mg-F- interaction.

The significance and distribution of Mg in living organisms are widely known and described in textbooks. **Fluoride ion clearly interferes with the biological activity of magnesium ion. Present-day Mg deficiencies in humans are the result of intensive expulsion of this element** (e.g. under the influence of extensive drinking of alcoholic beverages) or reduced Mg content in the diet, caused, for example, by inappropriate agricultural practices or effects of ecotoxins."

STRESS DAMAGE TO MAGNESIUM-DEFICIENT CELLS...

Cell membranes are made of fats and proteins that are held together with magnesium ions. The membranes may be weakened, or made unstable, by magnesium deficiency, and may allow for inappropriate entry and exit of magnesium and other minerals. This is especially so in a high stress situation, when adrenaline and other stress hormones are flowing, nerves are firing, and ions such as calcium, potassium, and sodium are flowing rapidly into or out of cells.

Important for cell integrity, the precious magnesium (which is so important to the cell at this time) flows out of the cells through the faulty membranes. Calcium then moves in, replacing the magnesium, causing injury. This comprises the integrity of the cells, just as they must respond at their maximum capacity.

If the magnesium that leaks out of cells even temporarily raises the blood magnesium level above the level that signals the kidneys to excrete it, the body loses it at the very time it is badly needed. This is how, when magnesium is suboptimal, stress can suddenly convert a slight deficiency into a severe one. And this is how stress, coupled with magnesium deficiency, can precipitate a life-threatening heart attack or stroke. (From the book The Magnesium Factor by Drs Mildred Seelig & Andrea Rosanoff www.elektralife.com)

LOW MAGNESIUM & INFLAMMATION

Study: Phagocyte priming by low magnesium status: input to the enhanced inflammatory and oxidative stress responses (summary). Magnesium Research. Volume 23, Number 1, 1-4, March 2010, Recent advances and opinions in magnesium research DOI : 10.1684/mrh.2009.0201. Author(s) : Patrycja Libako, Wojciech Nowacki, Edmond Rock, Yves Rayssiguier, Andrzej Mazur , Wroclaw University of Environmental and Life Sciences, The Faculty of Veterinary Medicine, Wroclaw, Poland, INRA, Human Nutrition Unit UMR 1019, Theix, Saint-Genès Champanelle, France.

SP and cytokines are important priming agents but there is also reason to suppose that the inflammatory response is related to the general stressor effect of magnesium deprivation. Stress leads to the activation of the hypothalamo-pituitary adrenal cortex axis. There is also activation of the rennin-angiotensin system and hyperaldosteronism. Thus, the stressor effect and hyperaldosteronism could contribute to alterations of the immune response during magnesium deficiency. Moreover, stress responses induce the release of large quantities of excitatory amino acids, which are important players in the inflammatory response [40].

Taken together, magnesium status appears to be an important modulator of the phagocyte response to immune stimuli and thus to nonspecific immune responses. Magnesium modulates the priming of phagocytes directly by its calcium antagonism and indirectly by its effect on the immunoinflammatory processes. Because of the wide implications of Ca2+ signaling in these processes, the calcium antagonist effect of extracellular Mg2+ could be considered as the "primum movens" of the relationship between magnesium and inflammation.

FLUORIDE CAUSES THYROID DYSFUNCTION

"Dr. David Brownstein says that fluoride inhibits the ability of the thyroid gland to concentrate iodine and research has shown that fluoride is much more toxic to the body when there is iodine deficiency present. When iodine is supplemented the excretion rate of the toxic halides bromide, fluoride and perchlorate is greatly enhanced. Brownstein says that after only one dose of iodine the excretion of fluoride increased by 78% and this is very important for those who are drinking fluoridated water or are taking medicines with fluoride in them; bromide excretion rates increased by 50%." (From article Iodine & Chelation by Dr Mark Sircus, www.elektralife.com)