

EMF, Calcium, and Electrosensitivity

You may have asked, why do I need to consider products like the [Ion-Card®](#), [Ion-Pendant®](#) or [Ion-Phone®](#)? The simple fact is that our atmosphere is becoming increasingly more electromagnetically polluted. This radiation is causing symptoms for which people are being misdiagnosed and mistreated.

The Secret

The secret is to protect ourselves from the radiation that didn't exist prior to cellular phones, cellular phone towers, microwaves, microwave towers, computers, computer screens, flat-screen TV's, cordless phones, wireless networks, etc.

If you are experiencing strange symptoms that no one seems to be able to fix, try protecting yourself with our Ion products. Wear the Ion-Pendant. Put an Ion-Card in your pocket. Put the Ion-Phone on every cellular phone. Attach an Ion-Card to every TV, computer, computer screen. Put a Ion-Card in the refrigerator and on your microwave.

Get Serious About Radiation

Get serious about this radiation pollution stuff and you will quickly see the difference, most likely first in your energy levels and ability to concentrate.

Some people who are sensitive to electromagnetic radiation (EMR) may have low-normal ionized calcium levels, says plant physiologist and biochemist Andrew Goldsworthy, PhD. Goldsworthy is a scientific advisor to the European Space Agency and to several European charities concerned with the environment and electromagnetic fields.

It Messes With Your Calcium

Weak electromagnetic fields cause calcium ions to detach from cell membranes, a well-documented effect that has significant consequences. That "highly conductive salty fluid" that we call blood makes the human body an efficient antenna for picking up electromagnetic radiation, says Goldsworthy. "If an alternating electrical field is applied across the membrane, the negatively charged membrane and the positively charged [calcium and potassium] ions move in opposite directions so that the ions tend to bounce on and off the membrane."

Calcium ions with a double charge are more easily removed from the membrane than the single-charge potassium ions. Because potassium is more abundant in living cells than calcium, potassium ions are more likely to replace

calcium, however, calcium ions give cell membranes a stability that potassium ions cannot. Weakened cell membranes tear more easily.

The body has mechanisms for repairing torn membranes, but, before healing occurs, weakened membranes allow cell contents to escape, causing inflammation and free calcium to enter the cell. Calcium triggers metabolic changes in cells, including enzyme activity and gene expression. Its effects depend upon the cells involved.

“Leakage in the hair cells of the cochlea give false sensations of sound (tinnitus),” explains Goldsworthy, “and those in the vestibular system (which sense rotation, linear acceleration and gravity) give false sensations of motions, which result in dizziness and symptoms of motion sickness, including nausea.” Too much calcium in brain neurons causes the cells to release neurotransmitters more easily.

Goldsworthy hypothesizes, “It is possible that at least some forms of electrosensitivity could be due to the victims having their natural blood calcium levels bordering on hypocalcaemia.”

Hypocalcaemia is a medical condition, usually caused by a hormone imbalance, in which the concentration of ionized calcium in the blood and in extracellular fluid is abnormally low. People with hypocalcaemia have fewer ions to compete with the potassium ions rushing to cell membranes disrupted by electromagnetic currents.

Hypocalcaemia and electrosensitivity share many of the same symptoms: skin disorders, paresthesias (pins and needles, numbness, sensations of burning, etc.), fatigue, muscle cramps, cardiac arrhythmia, and gastrointestinal problems. Goldsworthy says, “If this [hypothesis] is correct, conventional treatment for hypocalcaemia may relieve some if not all of these symptoms.”

Get Wise - Protect Yourself

So, get wise and protect yourself before you find yourself being diagnosed with some crazy disease for which you cannot figure out why it happened to you. Better safe than sorry. [Shop Healthy Habits!](#)

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