Health & Healing Your definitive Guide to Wellness Medicine

PERIODIC TABLE OF ELEMENTS

MARCH 2018 - VOL. 28, NO. 3

Boost Brain Function With Low-Dose Lithium

an the water you drink every day affect your mood, memory, and risk of dementia, suicide, and antisocial behavior? A growing body of research suggests it can and does. It all depends on the level of lithium in your local groundwater.

You may be thinking, "But lithium is a psychiatric drug." You're right. Approved by the FDA in 1970, it is prescribed in average doses of 900–1,800 mg per day to smooth out manic and depressive episodes

and prevent suicide in patients with bipolar disorder, major depression, and other mental illnesses.

However, lithium is also a natural element, #3 on the periodic table, and is found in varying concentrations in soil and groundwater throughout the world. This essential trace mineral is present in vegetables and grains, but

the most abundant source is tap water—and here's where your local water supply comes in. Lithium levels vary considerably, ranging from virtually undetectable in some areas to .170 mg per liter in others.

Although the total daily dose you might get in your water is less than one-thousandth of the drug dosage used to treat mental illness, even minute amounts of lithium have remarkable benefits for the brain.

Guards Against Alzheimer's

In a study published in JAMA Psychiatry in November, Danish researchers examined the patient registries of 800,000 people, aged 50–90, and found distinct relationships between diagnoses of dementia and exposure to lithium in drinking water. People living in areas with the highest lithium levels in their water were significantly less likely to have developed Alzheimer's disease or vascular dementia, compared to those with the lowest levels.

These results were bolstered by a 2018 study comparing death rates from Alzheimer's with average lithium levels in 234 counties in Texas. Counties with the highest levels recorded the lowest increases in deaths attributed to Alzheimer's over time, while coun-

ties with low lithium levels had higher increases. Interestingly, the frequency of obesity and type 2 diabetes was also lower in the high-lithium areas.

Low-dose lithium appears to benefit patients who are already dealing with Alzheimer's disease as well. In a small clinical trial, taking just 300 mcg of supplemental lithium daily for

15 months reduced disease progression and resulted in improvements in cognitive testing. Patients in a control group continued to decline.

This is big news, folks. All of the recent clinical trials of new drugs for Alzheimer's have been dismal failures—but an inexpensive natural therapy has the potential of reducing the heartbreak and suffering of this most dreaded disease.

Reduces Risk of Suicide and Violence

Higher levels of lithium in drinking water are also associated with reduced risk of suicide, drug abuse, homicide, and other violent crimes.

Pioneering researcher Gerhard Schrauzer, PhD, obtained hair analyses from 2,600 adults and found continued on page 3

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that lithium levels were exceptionally low in inmates imprisoned for violent crimes. He also tracked the rates of suicide, murder, and rape in 27 Texas counties and discovered that suicide and violent, antisocial behavior were significantly more common in areas with low levels of lithium in the water. Compared to areas with the lowest concentrations, those with the highest levels had 40 percent fewer suicides!

Similar relationships between lithium exposure and suicide rates have been observed in studies conducted in Japan, Austria, Greece, and Lithuania. Additional research also suggests benefits for drug and alcohol abuse, ADHD, and obsessive-compulsive disorder. In fact, a majority of pertinent studies

reveal clear links between higher levels of lithium in drinking water and positive behavioral, legal, and medical outcomes.

A Mood Boost

Low-dose lithium also boosts mood and sense of well-being. When 7-UP was introduced as a patented medicine in 1929, it was called Lithiated Lemon-Lime Soda, and its slogan was, "It takes the ouch out of the grouch." The active ingredient until 1950 was lithium. In the

1800s, Lithia Springs in Georgia gained a reputation for improving depression and alcohol and opioid addiction. To this day, lithium-rich Lithia Water and Crazy Water from natural springs in Texas enjoy brisk sales.

James Greenblatt, MD, an integrative psychiatrist with years of clinical experience treating patients with low-dose lithium, believes that deficiencies in this trace element underlie a broad range of common psychiatric symptoms. In his recent book *Nutritional Lithium*: A Cinderella Story, he shares a number of patient cases.

Gary, who complained of "never feeling happy" and was often angry and irritable, had profound changes in his mood with 10 mg of lithium daily. Eight-year-old Sam's ADHD failed to improve on the usual medications, but he had a complete turnaround after starting on low-dose lithium. Patricia, who struggled with sobriety and irritability, had dramatic improvements in overall well-being within six weeks of starting on supplemental lithium.

Protects and Grows New Brain Cells

There is no doubt that low-dose lithium is exceptionally neuroprotective. It stimulates the release of brain-derived neurotropic factor (BDNF) and other growth factors that enhance the repair and growth of neurons. Scans of patients treated with higher lithium doses actually reveal increases in gray matter!

Lithium also regulates GSK-3, an important enzyme for brain health that has adverse effects when overly activated—including the development of amyloid plaques associated with Alzheimer's. Many of lithium's positive effects appear to be related to GSK-3 inhibition in the hippocampus and frontal cortex, areas of the brain involved in memory and behavior.

These broad effects make low-dose lithium a promising adjunct therapy for other neurodegenerative disorders such as Parkinson's and Huntington's disease, as well.

My Recommendations

- ▶ Look for lithium orotate or citrate online or in your health food store. Suggested dosages are 1–20 mg per day, with an average of 2–5 mg for younger adults and 5–10 mg over age 40. High-dose lithium is a prescription drug and must be closely monitored by a physician.
- To learn more, read Nutritional Lithium: A Cinderella Story by James Greenblatt, MD, available at Amazon.

A Little Dab'll Do Ya

The amount of lithium you get in a typical day is 0.6–3.1 mg, but depending on location it could be higher or lower. Daily supplementation with low-dose lithium orotate or lithium citrate simply ensures you're getting protective amounts of this vital element.

Many doctors are wary of lithium because of its perceived dangers and association with mental illness. High therapeutic dosages do have numerous side effects and require close monitoring. But at the amounts we're discussing, lithium is safe and nontoxic. In fact, some researchers have suggested adding trace amounts of lithium to municipal water supplies as a public health measure for reducing rates of Alzheimer's, suicide, substance abuse, and criminal behavior. This isn't as crazy as it sounds. After all, they add fluoride to protect our teeth. Why not lithium to protect our brains?

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