

Natural Treatment for Bipolar Disorder and Alzheimer's Ignored! - Natural Health Blog | Holistic Health Blog



Why Lithium Orotate is Superior and SAFER than Lithium Carbonate (Revised from July, 2014)

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You may find references to a [1979 study](#) on the internet comparing [lithium](#) carbonate and lithium orotate regarding kidney function and safety.

There have been many studies since, but pro-pharmaceutical advocates love to spew out faulty data arguing its validity.

So let's be very clear once and for all, regarding the truth behind this highly quoted study.

It's all about Bioavailability. Lithium whether prescription or non-prescription is in the form of a salt. The lithium ion is attached to salts, like carbonate from carbonic acid, citrate from citric acid, or orotate from orotic acid. So, the idea when taking any form of lithium, is getting the elemental lithium, which is what is effective, to be absorbed by the body.

Is Elemental Lithium Toxic?

Lithium, being a trace mineral, is only tolerated in small amounts. In fact, we need small amounts of all [trace minerals](#) for our health. However, just like with any substance, including water, too much can be toxic.

So the trick is to give the body what it needs, thus improving health, but without giving too much so as to be toxic.

Lithium has been long known for its healing properties regarding mental conditions such as **bi-polar and manic disorders**. In the 1940's lithium chloride was used as a [substitute for table salt](#), but after some reported deaths due to toxic effects, it was promptly prohibited. This has led many to "logically" believe that lithium chloride is toxic, but this is not necessarily true. People aware of the effect of lithium on mood, *actually used the salt in excess*; of course, at the time it was unknown that the salt was, in fact, toxic in large amounts. Lithium chloride seems to have been toxic due to the **poor bioavailability of the carrier salt** that the lithium was attached to; in this case chloride.

Lithium chloride, just as with sodium chloride (table salt), is a necessary element we need for health. However, as we all are well aware, table salt when used in excess can have extremely harmful effects on our health. So the balance is what we need to find.

Just as with lithium chloride, lithium carbonate can become toxic for the same reason – **poor bioavailability**.

Trying to achieve the amount of lithium needed for the desired health effects without damaging the body in the process is a major concern, and is why those who take this version of lithium must have their kidney function tested often.

This is where lithium orotate comes in.

Safe, yet Ignored, Lithium Orotate

Orotates, discovered by [Dr. Hans Nieper](#), were found to be a component of natural electrolyte carriers designed for distributing minerals throughout the body.

Based on Dr. Nieper's observations of cells, he concluded that **molecules of minerals attached to an orotate carrier can pass through cell membranes intact without breaking apart into their component ions**. This was a ground breaking discovery, because it was found that the respective ions of the mineral could be released at specific membrane sites within the cell. This is what is known as the bioavailability of the orotate carrier of minerals and it has since been applied to calcium, magnesium, zinc, and lithium.

Why that 1979 Study was Flawed

The study was simple:

There were 3 groups of rats; one group of rats was injected with *lithium carbonate*, one group was injected with *lithium orotate*, and the third group (the control group) was injected with *sodium chloride (salt)*.

All injections were of equal amounts.

Now remember that the premise of ***lithium orotate is that less amounts of elemental lithium is required to achieve the same effects of lithium carbonate.***

The results of the study concluded that kidney function was lowered in the rats that were given lithium orotate than those that were given lithium carbonate. Based on this study, they advised against the use of lithium orotate for treatment in patients.

Well, yikes for lithium orotate lovers, as well as for 'natural is better' advocates...

...or is it?

There was a major flaw in the study, and the flaw was that ***all the injections were of equal amounts.*** Again, the whole idea of lithium orotate is that ***less is needed to achieve the effect of the lithium carbonate,*** making it a safer, and more effective option.

Again, it's all about the elemental absorbability of the lithium.

Briefly: Let's take a look at typical lithium dosages of both lithium carbonate and lithium orotate that is required to achieve the *same health effect:*

- 300 mg of **Lithium carbonate** contains ~ 60 mg of elemental lithium
- 1 – 2 capsules TIB (3 times per day)
- Equals 180 – 360 mg of elemental lithium

- 100 mg of **lithium orotate** contains ~ 5 mg of elemental lithium
- 1 – 2 tablets TIB
- Equals 15 – 30 mg of elemental lithium

Can you see the tremendous flaw of the study unfolding?

If equal amounts of the lithium orotate and lithium carbonate were used in the study, using the amount of lithium carbonate as the standard amount, then ***an equal amount of lithium orotate would be an incredible overdose in comparison.***

In simple terms, ***lithium orotate is absorbed faster than lithium carbonate so lower doses of lithium orotate are need to achieve the same effect of lithium carbonate.***

So actually, this study proved the effectiveness of lithium orotate over lithium carbonate by the very result of the lower renal function at the same dosage.

Real scientists (*a real scientists is a person in the search of knowledge and truth, not for special interest*) would have realized this obvious result, which in comparison, the lithium orotate was ***700% in excess to that of lithium carbonate!***

Then finally! The flaw did become apparent to other scientists who stepped-up and preformed a follow-up study. Kling, Manowitz and Pollack concluded:

“This data suggest the possibility that **lower doses of lithium orotate** than lithium carbonate may achieve therapeutic brain lithium concentrations and relatively stable serum concentrations.”

Dr. Ward Dean, M.D said it best,

“Prescription lithium is poorly absorbed by the cells, where it needs to be to do its job. Because it is so poorly absorbed, blood levels need to be fairly high to “drive it into the cells.” Unfortunately, these “therapeutic” blood levels are **dangerously close to the toxic level**. That’s why patients on prescription lithium need to be **carefully monitored**. The level needs to be high enough to push the lithium into the cells, but not too high to pickle the kidneys.

However, with lithium orotate, it is not necessary to reach “therapeutic” blood levels, because it seems to go right into the cells where it belongs, and where it can do its intended job. I think a more effective way to determine whether lithium orotate is working, and whether an adequate dose has been prescribed, is to monitor the patient. Usually, asking them how they feel is enough. **The effects are evident to the patient, as well as to the people around him. I think doing a blood test when taking lithium orotate is a waste of blood.**”

Well thank you Dr. Dean! Maybe now we are getting somewhere...

... deep sigh...think again!

Despite the Research, the Blinders Stay On!

Despite the research and potential applications of this impressive mineral, the conventional medical establishment won't open their eyes to anything that sways them away from their deep dogmatic position. To prove this allegation,

An article from the *National Institute on Aging* entitled, “[Lithium Shows Promise Against Alzheimer’s in Mouse Model](#)” found that **lithium blocked an enzyme crucial to the formation of Alzheimer’s plaques**.

“In mouse neurons expressing amyloid precursor protein, **lithium significantly reduced production of beta amyloid. A therapeutic dose of lithium also markedly reduced beta amyloid production in an animal model of Alzheimer’s disease** — mice carrying mutations that are known to cause inherited Alzheimer’s disease in humans.”

This is exciting news in the fight against this debilitating disease, right? Yet these same scientists “determined” the following:

“Although widely used to treat bipolar disorder, **lithium’s propensity to cause side-effects may limit its use in older people, who are more susceptible to Alzheimer’s disease**,” cautioned Peter Klein, M.D., University of Pennsylvania School of Medicine, who led the research team, which was funded by the National Institute of Mental Health (NIMH) and the National Institute on Aging (NIA).

But they did shed some perceived light:

“Lithium also protects neurons from stimuli that trigger programmed neuronal cell death in Alzheimer’s disease. Pending development of new medications that target the enzyme, the researchers suggest that lithium “might be considered for the prevention of Alzheimer’s disease, especially in younger patients with an inherited form of Alzheimer’s disease or Down’s syndrome.”

Why are so many “scientists” blind to the obvious time and time again?



I agree, wholeheartedly, that *lithium carbonate* can indeed cause problems in older patients, especially when using at therapeutic dosages. However, why not use *lithium orotate* instead, which has **no side-effects at therapeutic levels?**

Contradiction in Terms!

[The National Institute on Aging](#) tag line is, **“Leading the federal effort on aging research.”**

Really? When did their research become so selective and inclusive?

There are those who feel there is a conspiracy against finding cures of major diseases and health conditions, because if cures were really found, the billions of dollars lost to the endless assembly line of pharmaceuticals would be unthinkable.

After all the hours of research I have done regarding supplements, deficiencies, and our ever-increasing disease statistics, despite the all the pharmaceuticals, if it isn't a conspiracy, then these scientists are truly doing an injustice regarding the search for **knowledge and truth.**

Scientists should be interested in researching **ALL options and possibilities without bias.** After all, isn't that what our scientific method of evidence based medicine was created to accomplish?

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