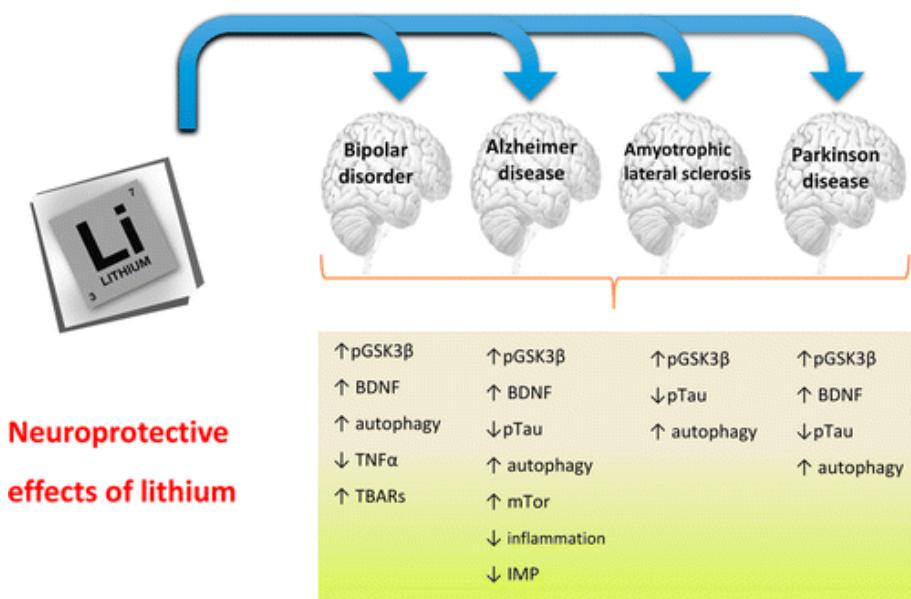


Lithium Protects Your Brain

Lithium has Neuroprotective Effects

“Lithium Treatments may Forestall Alzheimer’s Disease and Reduce Cognitive Impairment”



Neuroprotective effects of lithium

Recent advances in cellular and molecular biology have resulted in the identification of two novel, heretofore largely unexpected targets of lithium’s actions, discoveries that may have a major impact on the future use of this unique cation in biology and medicine. Chronic lithium treatment has been demonstrated

to markedly increase the levels of the major neuroprotective protein.

Lithium has also been demonstrated to inhibit an enzyme known to regulate the levels of phosphorylated tau and β-catenin (both of which may play a role in the neurodegeneration observed in Alzheimer’s disease).

Misunderstood Lithium

The biggest problem with lithium treatment is people’s perception of it. Since its most well known use is for bi-polar disorder, lithium sometimes encounters the same stigma as mental illness itself.

Lithium also has a great brain-boosting 1-2-3 punch:

1. Lithium induces increases in human brain grey matter.
2. Lithium may help to generate entirely new cells in the brain.
3. Lithium protects your brain from the “beating” it gets in the course of everyday life.

Lithium may protect against normal brain shrinkage that would otherwise occur over

the course of our lives. But lithium also protects the brain from other less “normal” problems too, like damage caused by prescription medications and strokes.



Lithium - Implications for Treatment of AD

According to an article in PubMed, “Lithium is a well-established therapeutic option for the acute and long-term management of bipolar disorder and major depression. More recently, lithium has also been regarded as a neuroprotective agent and a candidate drug for disease-modification



in certain neurodegenerative disorders: Alzheimer’s disease; amyotrophic lateral sclerosis (ALS), and Parkinson’s disease. The neuroprotective effects of lithium rely on the fact that it modulates several homeostatic mechanisms involved in neuron growth, autophagy (repair), oxidative stress, inflammation, and mitochondrial function (metabolism).