# SOME HEALTH BENEFITS OF NUTRITIONAL LITHIUM

Low-dose **lithium orotate** is a mineral supplement that provides **lithium**, a naturally occurring trace element. While lithium is well-known as a high-dose prescription medication for bipolar disorder (e.g., lithium carbonate), **low-dose lithium orotate** (typically 1-10 mg elemental lithium per dose) has been explored for various **neuroprotective and mood-supportive benefits**. Some potential health benefits include:

### 1. Neuroprotection & Brain Health

- **Promotes Neurogenesis** Stimulates the growth of new neurons and synaptic connections, which may support cognitive function and brain plasticity.
- **Reduces Neuroinflammation** Helps reduce inflammation linked to neurodegenerative diseases like Alzheimer's and Parkinson's.
- **Protects Against Dementia & Alzheimer's** Low-dose lithium has been associated with **reduced beta-amyloid plaque accumulation**, a hallmark of Alzheimer's disease.
- May Help with Traumatic Brain Injury (TBI) Recovery Research suggests lithium may aid in brain repair post-injury.

# 2. Mood Stabilization & Mental Health

- **Supports Emotional Resilience** Some people report reduced mood swings, anxiety, and irritability with low-dose lithium.
- **May Help with Depression** Acts on serotonin, dopamine, and glutamate pathways to enhance mood and reduce symptoms of depression.
- Anti-Suicidal Effects Epidemiological studies suggest regions with higher natural lithium in water have lower suicide rates.

### 3. Cognitive Function & Memory Support

- Improves Learning & Memory Enhances BDNF (Brain-Derived Neurotrophic Factor), which is crucial for memory formation and cognitive function.
- **May Help with ADHD & Focus** Some anecdotal evidence suggests lithium orotate may improve focus and impulsivity control.

# 4. Stress & Anxiety Reduction

- **Reduces Cortisol (Stress Hormone)** Helps modulate the stress response, potentially reducing anxiety and emotional reactivity.
- **Balances GABA & Glutamate** By stabilizing neurotransmitter activity, it may promote calmness and relaxation.

### 5. Longevity & Anti-Aging Potential

- **Supports Mitochondrial Health** Helps improve energy production in cells, potentially reducing oxidative stress.
- **May Extend Lifespan** Some research on **lithium in drinking water** suggests links to longevity and reduced all-cause mortality.

### 6. Heart & Metabolic Benefits

- **Supports Cardiovascular Health** Some evidence suggests lithium may reduce oxidative stress in blood vessels.
- **Regulates Blood Sugar & Metabolism** Early research hints at possible benefits in insulin sensitivity.

### **Safety & Considerations**

- **Dosing:** Typically **1-10 mg of elemental lithium per day** (higher doses should be medically supervised).
- Side Effects: Can include mild nausea, fatigue, or headaches in some individuals.
- Not for Everyone: People with kidney disease, thyroid issues (this is only because it uses the same absorption pathway as iodine, so take your iodine in the morning and your lithium in the evening), or those on lithium medication should consult a doctor before use.