



Awakenings Mental Health

Iron

What is Iron and Why is it Important?

Iron is an essential mineral responsible for carrying oxygen in the blood. In the brain, it has a critical role as a cofactor in the production of neurotransmitters. This means that without sufficient iron, the brain cannot efficiently synthesize dopamine and norepinephrine, the key chemicals that regulate attention, alertness, and mood.

The Link Between Iron and ADHD

Low iron storage, measured by a blood test for ferritin, is strongly correlated with worsened ADHD symptoms. A ferritin level below 30 ng/mL is often considered a target for intervention. Low iron can also contribute to conditions that mimic or exacerbate ADHD, such as Restless Legs Syndrome (RLS), which disrupts sleep and affects daytime focus.

Uses & Benefits in ADHD

The primary goal of iron supplementation is to correct a diagnosed deficiency, thereby giving the brain the necessary resources to function optimally.

Restores Dopamine Production:

By replenishing iron stores, the brain can properly synthesize dopamine, which can improve focus and motivation.

Reduces Symptom Severity:

As highlighted in research by Sever et al. (1997), raising ferritin levels is associated with a reduction in the severity of ADHD symptoms and restlessness.

Dosage:

Dosing is based on lab results and weight, typically 3–6 mg/kg/day of elemental iron for children with low ferritin.

Monitoring:

It is essential to check ferritin and hemoglobin levels before starting and again after 8–12 weeks of treatment to prevent iron overload, which can be toxic.

Important Note:

Iron supplementation should only be undertaken when a deficiency has been confirmed by lab tests and under strict medical supervision.

Conclusion

For individuals with ADHD and confirmed low iron, medically supervised supplementation is a foundational and effective adjunctive treatment. Restoring iron to healthy levels can significantly improve the brain's ability to produce dopamine, leading to better focus and reduced restlessness.