Awakenings Mental Health

Magnesium

What is Magnesium and Why is it Important?

Magnesium is a mineral that acts as a calming agent for the nervous system. It is involved in over 300 enzymatic reactions in the body and plays a key role in muscle function, nerve transmission, and psychological processes. In the brain, magnesium helps regulate neurotransmitter systems, including those that control hyperactivity and anxiety.

The Link Between Magnesium and ADHD

Studies have shown that a significant number of children with ADHD have low intracellular magnesium levels. This deficiency can lead to increased nerve excitability, which may manifest as hyperactivity, restlessness, poor sleep, and agitation—all common features of ADHD.

Uses & Benefits in ADHD

Magnesium supplementation is used to correct a potential deficiency and help calm the nervous system.

Reduces Hyperactivity:

By promoting a state of calm, magnesium can directly address the hyperactive component of ADHD. Research by Starobrat-Hermelin & Kozielec (1997) found that magnesium supplementation led to a significant reduction in hyperactivity scores in children.

Improves Sleep and Mood:

Adequate magnesium levels can help improve sleep quality and reduce feelings of agitation or anxiety.

Dosage:

A typical weight-based dose is 6 mg/kg/day of elemental magnesium, assessed over an 8-week period. It may be combined with Vitamin D to enhance its effects.

Safety:

Magnesium is generally safe and well-tolerated. The most common side effect of high doses is loose stools or diarrhea. If this occurs, the dose should be reduced.

Important Note:

While lab testing can be helpful, serum magnesium levels do not always reflect intracellular stores, so supplementation may be considered based on symptoms under a provider's guidance.

Conclusion

For individuals with ADHD, particularly those with signs of hyperactivity and restlessness, magnesium can be a safe and valuable adjunctive therapy. Restoring adequate levels of this calming mineral can lead to noticeable improvements in symptoms and overall well-being.