

Active Folate & B12 for Anxiety: A Quick Overview

Anxiety is often linked to neurotransmitter imbalances, methylation inefficiencies, and elevated homocysteine levels—areas where **active folate** and **active B12** play crucial roles.

Active Folate (Methylfolate & Calcium Folinate)

- Bypasses the conversion step required for folic acid, making it immediately available for **methylation** and neurotransmitter synthesis.
- Supports **serotonin, dopamine, and norepinephrine** production, which helps regulate mood and reduce anxiety.
- Low folate levels are associated with higher **homocysteine**, which can impair brain function and increase stress reactivity.

Active B12 (Methylcobalamin, Adenosylcobalamin, Hydroxocobalamin)

- Methylcobalamin directly supports methylation and neurotransmitter balance, aiding in mood regulation.
- Adenosylcobalamin is essential for mitochondrial function, reducing fatiguerelated anxiety.
- **Hydroxocobalamin** helps detoxify **nitric oxide**, which, in excess, contributes to neuroinflammation and anxiety.
- B12 deficiency can lead to **poor nerve function**, **brain fog**, **and increased excitability**, all of which exacerbate anxiety.

Synergistic Effect

- Folate and B12 work together to convert **homocysteine to methionine**, supporting **SAMe production**, which is critical for neurotransmitter regulation and mood stabilization.
- Methylation dysfunction is common in individuals with **MTHFR mutations**, making active forms of these vitamins essential for proper neurological function.

Clinical Considerations

- Some individuals with **overmethylation sensitivity** may need **hydroxycobalamin or calcium folinate** instead of highly methylated forms.
- Lab testing for **MTHFR**, **homocysteine**, **and B12 levels** can help personalize supplementation.

By ensuring adequate levels of **methylfolate** and **active B12**, individuals with anxiety may experience improved neurotransmitter balance, reduced oxidative stress, and better stress resilience.