

Glycine: A Quick Overview for Anxiety, Sleep, and Connective Tissue/Musculoskeletal Health

Glycine is a **non-essential amino acid** with powerful **calming**, **restorative**, and structural benefits for the nervous system, sleep

regulation, and connective tissue integrity.

1. Glycine for Anxiety & Nervous System Calm

- Enhances GABA activity, promoting relaxation and reducing stress-related tension.
- Balances glutamate, preventing overstimulation that contributes to anxiety.
- **Regulates serotonin**, supporting emotional stability and a sense of well-being.
- Lowers cortisol, reducing physiological stress responses.
- Works synergistically with **magnesium glycinate**, **taurine**, **and L-theanine** for deeper calming effects.

2. Glycine for Sleep & Circadian Rhythm Support

- Improves sleep onset and quality by lowering core body temperature.
- Enhances deep sleep (slow-wave sleep), improving memory consolidation and recovery.
- **Increases serotonin production**, which is a precursor to melatonin, regulating the sleep-wake cycle.
- Reduces nighttime cortisol spikes, helping with stress-induced insomnia.
- Works well with **inositol, magnesium, and L-theanine** for deeper, more restorative sleep.

Clinical Use:

- **Dose:** 2-5g before bed for improved sleep quality.
- Best taken with warm water or tea for enhanced absorption.

3. Glycine for Connective Tissue & Musculoskeletal Health

- Essential for collagen synthesis, supporting skin, joints, tendons, ligaments, and bones.
- Strengthens cartilage & reduces joint pain, making it valuable for osteoarthritis and injury recovery.
- Supports muscle repair & growth, reducing post-exercise soreness.
- Works synergistically with **proline**, lysine, and vitamin C for optimal collagen formation.

Clinical Use:

- Joint & connective tissue support: 5-10g daily.
- Combine with collagen peptides or bone broth for enhanced structural benefits.

Bottom Line

Glycine is a **multi-functional amino acid** that supports **calmness**, **sleep quality**, **stress reduction**, **and connective tissue integrity**. Its ability to balance neurotransmitters, regulate cortisol, and enhance collagen synthesis makes it an essential tool for **mental**, **metabolic**, **and musculoskeletal health**.