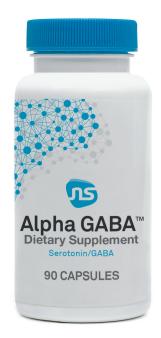


# Alpha GABA™

Ingredients to promote calm during times of anxiousness while supporting a healthy response to stress, day or night\*

#### Patient Profile†

- □ Need to "downshift" from feeling mentally engaged\*
- ☐ Feelings of anxiousness, seeking support for relaxation and calm\*
- ☐ Desire for help handling stress\*



# Key Ingredients

#### L-theanine

- Amino acid that acts as a glutamate receptor antagonist<sup>1</sup>\*
- L-theanine has been linked to the generation of alpha brain waves, indicating a state of relaxation<sup>2\*</sup>

### Ashwagandha (Withania somnifera)

- Patented ashwagandha leaf and root extract that provides the highest amount of withanolides on the market (>10% withanolides)
- Sensoril is backed by 12 clinical studies and has been shown to significantly reduce stress and anxiousness<sup>3\*</sup>

### Passionflower (Passiflora incarnata)

- Botanical shown to bind to the GABA site of GABA-A receptors<sup>4\*</sup>
- Activation of GABA-A receptors are essential for downregulating the hypothalamic-pituitary-adrenal (HPA) axis<sup>5\*</sup>

# Lemon balm (Melissa officinalis)

 Botanical shown to inhibit the enzyme GABA transaminase in vitro, which may increase levels of GABA in the brain<sup>6\*</sup>

### L-taurine

- Neuroprotective amino acid that provides antioxidant protection<sup>7,8\*</sup>
- Demonstrates GABA-A agonist activity<sup>9\*</sup>

# The Science

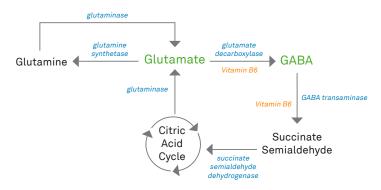
GABA is the primary inhibitory neurotransmitter in the brain<sup>10</sup>

■ GABA is important for calm and sleep<sup>11,12</sup>

**Glutamate** is the primary excitatory neurotransmitter in the brain<sup>13</sup>

 Glutamatergic signaling underlies mechanisms related to anxiousness and stress<sup>14</sup>

### **GABA Pathway**



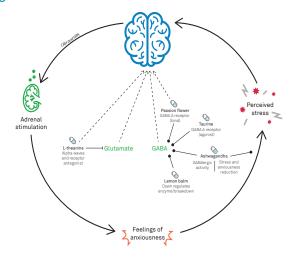
Green = Biomarker Blue = Enzyme Orange = Cofactor

<sup>†</sup> Symptom depictions represent a possible presentation based on scientific information and claims found on this sheet, references provided on reverse.

<sup>\*</sup>These statements have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure or prevent any disease.

# MORE SCIENCE BEHIND ALPHA GABA

Figure 1. Stress and Anxiousness



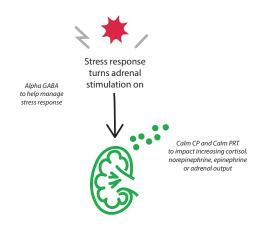
### Stress processing and the symptom cycle

#### Stress, GABA, and the HPA axis

- GABA signaling inhibits corticotropin-releasing hormone (CRH) and glutamate signaling stimulates CRH15
- Stress increases CRH secretion, stimulating the hypothalamic pituitary adrenal (HPA) axis and adrenal gland production of cortisol and the catecholamines<sup>15</sup>
- Chronic stress causes neuroplastic changes in the paraventricular nucleus, decreasing GABA receptor expression and increasing glutamate receptor expression, perpetuating the stress response<sup>5</sup>

Alpha GABA provides a multi-faceted approach to stress management with ingredients to reduce symptoms of anxiousness while supporting a healthy stress response<sup>3,5</sup>\*

Figure 2. Stressed Induced Adrenal Output



### Complete stress support

#### Alpha GABA contains ingredients to:

- Induce relaxing alpha brain waves and feelings of calm with a targeted neurotransmitter approach<sup>1,2\*</sup>
- Provide comprehensive HPA axis support for optimal stress management<sup>3,5</sup>\*

Support the circadian rhythm for patients already feeling the "fight or flight" response by adding:

### Calm CP

# Cortisol reducing blend16\*

Elevated bedtime levels can disrupt sleep and is associated with increased abdominal fat17\*

#### Calm PRT

Manage norepinephrine activity<sup>18\*</sup> Elevated norepinephrine can perpetuate stress, anxiousness, and fatique 19,20\*









## Stress disrupting sleep?

Consider Alpha GABA PM with a similar blend targeted for bedtime instead.

All NeuroScience products undergo rigorous third-party testing to guarantee label claims of each ingredient and the absence of heavy metals, pesticides, residual solvents, and microbes

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