Stress-Out

Clinical Applications

- **Support Relaxed Mood**
- **Support Inhibitory Neurotransmitter Function**
- **Support Neuronal Stabilization**
- **Support Healthy Blood Pressure**
- **Support Intracellular Osmotic Regulation, Important in Neuronal Transmission**

Stress-Out is an innovative formula in the form of a cherry-flavored powdered drink mix. This formula contains a synergistic blend of ingredients known to regulate catecholamines and up-regulate the inhibitory neurotransmitter, GABA. Stress-Out is designed to promote a calm, relaxed physiological and emotional state.

All 3rd Opinion Inc. Formulas Meet or Exceed cGMP quality Standards

Discussion

Inositol (present as myo-inositol, one of nine distinct isomers of inositol) is a six-carbon cyclic polyalcohol that occurs naturally in all living cells. Fruits, beans, grains, and nuts contain some inositol; however, an 1800-2500 calorie daily diet has been shown to provide only 225-1500mg of myo-inositol. Of the nearly 100% of ingested myo-inositol that is absorbed in the gastrointestinal tract, more than half becomes lipid-bound. In contrast to low plasma concentration, the peripheral nerves have an extraordinarily high concentration of myo-inositol. Inositol is a precursor for the second-messenger phosphatidyl-inositol system.[1] Based upon validated scoring procedures, double-blind, controlled, random-order crossover clinical trials using up to 18 grams of myo-inositol per day for a month have demonstrated minimal to no side-effects and impressive efficacy in comparison to placebo or drug.[2,3,4]

GABA (gamma aminobutyric acid) is an amino acid manufactured in brain cells from glutamate. This primary neurotransmitter, abundant in the cerebral cortex, increases the production of alpha waves - which are related to a relaxed, yet mentally focused state - while decreasing beta waves, associated with hyperactivity, nervousness, and fleeting thoughts. Sufficient GABA results in the smooth, calming, regular rhythmic flow of electrical impulses in the brain needed for emotional well-being.[5] The absence of sufficient GABA may be responsible for headaches, palpitations, poorly regulated blood pressure, and poor sex drive, and may even contribute to seizures. Supplementation in humans has shown support for healthy cortisol and sIgA levels, even while under stress.[6]

L-Taurine, a 2-aminoethanesulfonic acid originally isolated from ox bile, exists mainly in free form in the intracellular space of tissues. This conditionally essential amino acid maintains cell volume via osmoregulation and stabilizes cell membranes in the heart and brain, both electrically active tissues. Considered neuroprotective, taurine modulates the ability of mitochondria to buffer intracellular calcium during glutamate depolarization and excitotoxicity, preventing cell death.[7] In addition to its antioxidant and anti-inflammatory functions, taurine is important in neurotransmission, neuroregulation, and cardiac function, including heart rhythm and blood pressure.[8] Taurine supplementation also increases GABA.[9]

Suntheanine® is protected by more than 40 U.S. and international patents for its various physiological efficacies and L-isomer-specific production processes. Suntheanine, an extract from green tea, is L-theanine, a naturally-occuring, biologically active, free-form amino acid that gives green tea its characteristic taste. Although notable for its relaxation support, L-theanine also displays neuroprotective and cognitive enhancing properties. Theanine lowers glutamate levels by preventing transport of glutamate's precursor, glutamine.[10] It may also inhibit excitatory neurotransmission and cause inhibitory neurotransmission via glycine receptors.[11] Theanine's ability to relax the mind without inducing drowsiness has been documented by an increase in alpha wave activity during EEG recording.[12]

Magnesium, sometimes referred to as the relaxation mineral and mainly found in the brain, bones, and muscles, assists in the transmission of nerve impulses and is essential to more than 300 enzymatic reactions in the body. Magnesium supplementation has been shown to improve mood and overall scores on the Menstrual Distress Questionnaire.[13]

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Supplement Facts

Serving Size: 1 Scoop (3.75 g)
Servings Per Container: 60

	Amount Per Serving	%Daily Value
Magnesium (as Dimagnesium malate)	75 mg	19%
Inositol (as *myo*-Inositol)	2000 mg	**
L-Taurine	500 mg	**
GABA	100 mg	**
L-Theanine (Suntheanine®)	50 mg	**
Stevia leaf extract	60 mg	**

** Daily Value not established.

Other Ingredients: Natural flavor, malic acid, citric acid, natural beet color, and silica.

Directions:

Dissolve one scoop of Stress-Out powder into 6 ounces cool, pure water. Drink one to four times daily.

References

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Caution:

Use cautiously if driving, operating machinery, etc. Use under supervision of a licensed healthcare practitioner. Keep out of reach of children.

*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.