# CereVive Jr.





# **CLINICAL APPLICATIONS**

- Supports Mood and Brightens Mental Outlook
- Calms the Mind and Increases Alpha Brain Wave Activity
- Supports the Production of Serotonin, Dopamine, Norepinephrine and Other Neurotransmitters
- Improves Neurotransmitter Signaling Systems

# ENDOCRINE HEALTH

CereVive Jr. is a blend of vitamins, minerals and botanicals formulated for children and adolescents. CereVive Jr. is designed to support a positive mental outlook and a relaxed, focused state. It includes amino acid precursors and bioactive nutrients that support healthy levels of catecholamines and other neurotransmitters, such as gamma-aminobutyric acid (GABA), serotonin, dopamine, norepinephrine and epinephrine. Maintaining adequate neurotransmitter production is vital for regulating mood, appetite, memory, energy levels and focus at school and home, as well as a healthy sleep cycle.

#### **Overview**

Neurotransmitters are the chemical messengers that regulate mood, memory, the sleep cycle and daily stress. Adequate neurotransmitter production depends on an adequate supply of amino acids, vitamins and minerals in the diet. High levels of stress, dietary deficiencies, genetics, epigenetics, medications, toxins and microbiome dysbiosis all play a role in neurotransmitter depletion. CereVive Jr. provides the nutrients required to help kids optimize neurotransmitter production during school and physical activity, such as sports or playing outside, as well as to support proper sleep cycling.<sup>1-5</sup>

# L-Theanine<sup>†</sup>

L-theanine is an amino acid found abundantly in green tea and has been shown to quickly improve stress perception and resilience. Its stress-buffering mechanisms have been connected to its ability to improve serotonin and dopamine production in the brain. L-theanine has also been documented to significantly increase alpha brain wave activity, which

is critical for restoring optimal attention and promoting a sense of relaxation.<sup>7</sup> In a study of healthy volunteers, electroencephalograph (EEG) readings of participants were recorded following the ingestion of 50 mg of L-theanine. The researchers found a greater increase in alpha brain wave activity versus a placebo.<sup>7</sup> In another study, boys with attention deficit ages 8-12 experienced improved sleep quality and sleep index scores after 400 mg daily of Suntheanine® for six weeks.<sup>8</sup> L-theanine has also been shown to have a protective effect on nerve cells that are overstimulated by the excitatory neurotransmitter glutamate.<sup>1</sup>

#### Inositol<sup>†</sup>

Historically identified as vitamin B8, inositol is not actually a vitamin. It's a type of sugar that helps your body process insulin, a hormone essential for blood sugar control. As part of the cellular signaling system of the central nervous system, inositol is crucial for the release of neurotransmitters such as serotonin and dopamine from within nerve cells. In several clinical trials, inositol has been shown to support serotonin levels and improve feelings of low mood, tendency to panic, and obsessive-compulsive behavior. A deficiency of inositol can affect brain signaling has been correlated with inadequate neurotransmitter release, which causes irritability, worry and restlessness. Second

#### 5-HTP<sup>†</sup>

As a dietary supplement, 5-hydroxytryptophan (5-HTP) is naturally sourced from the seeds of the African plant *Griffonia simplicifolia*. 5-HTP is an amino acid intermediate that crosses the blood-brain barrier and increases CNS serotonin levels



similar to traditional approaches that affect the serotonin system. 

11,12 Maintaining healthy serotonin levels is important in regulating appetite and the sleep cycle as well as for supporting a sense of calmness. 

Serotonin is also involved in oxytocin signaling that is critical during child development, relationship building, bonding and trust. 

In a cohort of at-risk adopted children from traumatic backgrounds, supplementation with L-theanine and 5-HTP resulted in significant decreases in reported behavioral issues. 

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# Mucuna pruriens<sup>†</sup>

Mucuna pruriens, commonly known as velvet bean, contains standardized doses of L-dopa, which is the direct precursor to the neurotransmitter dopamine. Proper dopamine levels help maintain a positive mental outlook, motivation and focus. It is also important for supporting cognitive or executive function and has been shown to promote a state of heightened concentration. This can benefit those with scattered thoughts and difficulty focusing. Research has validated the use of Mucuna pruriens supplementation to support the production of key neurotransmitters. It is also known for its neuroprotective benefits, which include lowering oxidative stress and helping to maintain normal inflammatory balance in the brain.<sup>3</sup>

## Micronutrients<sup>†</sup>

CereVive Jr. contains several nutrients that are essential cofactors in synthesis pathways for the neurotransmitters serotonin, GABA, dopamine, norepinephrine and epinephrine. These include zinc, magnesium, and vitamins B6 and C.<sup>15,16</sup> Magnesium is a mineral that calms the nervous system by binding to (and inhibiting) glutamate receptors, which reduces excitatory neurotransmitter activity. Furthermore, in a 12-week observational study of 810 children, supplementation with zinc, magnesium and omega-3 fatty acids led to improvements in hyperactivity, impulsivity, emotional problems and sleep.4 Finally, vitamin B6 has been shown to upregulate glutamate decarboxylase 1 (GAD1), the enzyme responsible for converting glutamate into GABA. 17,18 Elevated brain glutamate levels are associated with numerous common mental health challenges, such as increased nervousness and worry, attention issues, fatigue, cognitive dysfunction, low mood, and obsessive-compulsive tendencies, all of which involve altered levels of neurotransmitters and catecholamines. CereVive Jr. includes clinically studied and efficacious natural nootropic ingredients to reinforce and sustain balanced neurotransmitter levels in growing children and adolescents.

# **Directions**

**Age Range:** Ages 6 and up

40 lbs: Up to 1 serving per day (up to 1½ teaspoons (7.5 mL))

**Above 40 lbs:** Begin with 1 serving per day

(1½ teaspoons (7.5 mL)) and increase up to 1 serving twice per day, or as recommended by your health care professional.

This product is not intended for concurrent use with attention and/or mood disorder medications.

# **Does Not Contain**

Gluten, yeast, artificial colors or flavors.

### **Cautions**

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

# Supplement Facts

Serving Size 1½ Teaspoons (7.5 mL) Servings Per Container About 32

	Amount Per Serving	% Daily Value
Calories	20	
Total Carbohydrate	5 g	2%*
Vitamin C (from Ascorbic Acid)	25 mg	28%
Niacin (as Niacinamide)	5 mg	31%
Vitamin B6 (as Pyridoxine Hydrochloride	) 5 mg	294%
Magnesium (as Trimagnesium Citrate)	25 mg	6%
Zinc (as Zinc Gluconate)	2 mg	18%
Inositol	150 mg	**
L-Theanine (Suntheanine®)	100 mg	**
5-Hydroxytryptophan (5-HTP)	50 mg	**
Mucuna Pruriens Extract (Standardized to contain 40% L-Dopa)	25 mg	**

<sup>\*</sup> Percent Daily Values are based on a 2,000 calorie diet. 
\*\* Daily Value not established.

Other Ingredients: Vegetable Glycerin, Water (Purified), Citric Acid, Natural Flavor, Potassium Sorbate (Preservative) and Xanthan Gum.

ID# 833001 8 fl oz (240 mL)



Suntheanine® is a registered trademark of Taiyo International, Inc.



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