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# Attention Support

Promotes Focus & Concentration


## Directions:

Ages 6-8 years take 2 capsules daily, 9-13 years take 3 capsules daily, 14+ years take 4 capsules. Take with food.

**Serving Size: 30 day supply for 9-13 year olds**

## Ingredients:

Folate (Folinic Acid) 300.00 mcg, Folate (L-5-methyltetrahydrofolate, calcium salt) 300.00 mcg, Vitamin B-12 (Methylcobalamin) 1000.00 mcg, Riboflavin (Riboflavin 5 Phosphate) 15.00 mg, Vitamin B-6 (Pyridoxal 5 Phosphate) 50.00 mg, Zinc (TRAACS® Zinc Bisglycinate Chelate) 28.00 mg, Magnesium L-Threonate (Magtein®) 72.00 mg, Magnesium (TRAACS® Magnesium Bisglycinate Chelate) 28.00 mg, Passionflower (Passiflora incarnata L.) Aerial Powder 25.00 mg, Saffron Extract (Zaffronel®) 30.00 mg, phosphatidylserine 150mg

## Clinical Applications:

- Supports focus and attention
- Enhances executive function and cognitive processing
- Supports optimal neurotransmission
- Supports a healthy mood
- Supports mental clarity and energy
- Promotes an alert and calm nervous system
- Supports optimizing known nutrient deficiencies in those with attention disorders

**Zaffronel®** is a standardized saffron extract., 2.0% Safranal, 2.5% Crocin, and 3.0% Picrocrocin, is grown and manufactured in Spain, using a proprietary method to ensure the highest quality extraction and standardization, of the the sargol stigmas from the Crocus Sativus L. Plant.

**Magtein®** (Magnesium L-threonate) is a patented compound used in Calming Support. This exclusive type of magnesium can cross through the blood brain barrier and is well known for its therapeutic effects on the brain and nervous system



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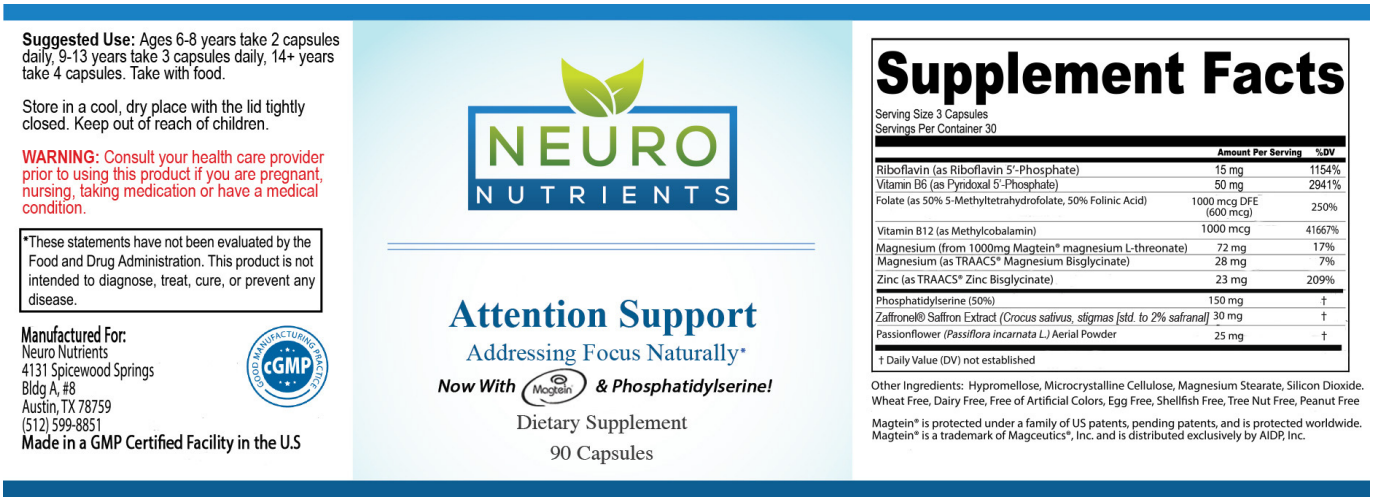
## Description:

Attention Support is a a powerful combination of evidence based nutraceuticals that have demonstrated efficacy in enhancing neurotransmitters that promote attention and focus in children and adults. This blend of bioactive B vitamins, calming minerals, and herbs is a natural choice to enhancing mental clarity, cognitive processing, and assisting in staying on task. **Warning: Contact your physician or medical provider prior to use**




## Formula Ingredient And Peer Reviewed Supportive References:

### Zaffronel® Saffron Extract

Saffron is a spice that has been used in cooking for thousands of years. In some of the highest quality forms of research conducted in clinical nutrition medicine, saffron extract has shown numerous benefits for the brain and body (1). In a randomized, double blinded study, they gave children the stimulant medication, methylphenidate (also known as Daytrana or Quillivant), or saffron to treat ADHD, and after 6 weeks, they demonstrated the same efficacy in treatment (3). Several double-blind, randomized, placebo-controlled clinical trials have shown saffron can improve mild to moderate depression (2,5,7). One study showed the same efficacy using saffron as compared to a prescription antidepressant medication Citalopram (also known as Celexa)(5). Another therapeutic benefit saffron extract has shown is to reduce snacking, improve feelings of satiety, and support weight loss (6). The proposed mechanism of action for this herbal extract is its role in inhibiting serotonin re-uptake. It is plausible this mechanism of action has contributed to research results being consistent in demonstrating reproducible outcomes in the reduction of depressive symptoms (4,8).



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# Passionflower (Passiflora incarnata L.)

Passionflower has been used extensively in plant medicine and is best known for its anxiety reducing and calming effects on the nervous system (4,5). Anxiety disorders are typically treated with controlled medications (categorized as benzodiazepines) that can have unwanted sedative effects and impair the ability to perform job related tasks. Passionflower was studied in a randomized controlled trial with human subjects, and showed to be just as effective in treating anxiety as one of these benzodiazepine medications, called Oxazepam, however it had an advantage because it did not produce unwanted side effects of impaired job function (2). When given by medical providers alone for the treatment of anxiety, in a study with nearly 3,000 patients, passionflower showed very clinically significant improvement in anxiety scores after two weeks, compared to baseline (3). In addition, passionflower showed similar clinical benefit for treating ADHD compared to the stimulant medication, methylphenidate (also known as Quillivant or Daytrana), when given in a clinical trial. However, passionflower again showed an advantage in regards to side effects, as the stimulant medication group reported anxiety and decreased appetite (1). When given with an antidepressant (Sertraline, also known as Zoloft), passionflower was shown to be effective as an add on therapy in reducing anxiety (6).


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## Magnesium (L-threonate and bisglycinate)

Magnesium activates nerve channels in the brain that are fundamental to the process of learning, memory, and function (6). Magnesium helps lower one of the excitatory (or stimulating) neurotransmitters in our brain called glutamate. When glutamate is high, or in excessive levels in the brain, it can contribute to symptoms such as agitation, irritability, treatment resistant depression, headaches, insomnia, anxiety, and inattention (3,7). The supplemental forms of magnesium chosen for this formulation were critical to achieve the type of support intended. Magnesium bisglycinate is a form of magnesium that has been shown to have the highest rates of bioavailability, is more easily absorbed through the gut, and increases blood magnesium levels (1). Magnesium threonate has been found to be more easily absorbed into the brain, supports neurological function, and can even help repair neurological function that has been lost. Magnesium has been shown to improve executive function and cognitive processing, two symptoms in those with inattention disorders that are challenging and hallmarks of the disorder (4). In other compelling research, a study evaluating over 100 children with ADHD, found that 95% of them were magnesium deficient (2). In another study, magnesium was given with B6, and after an eight-week period, a significant reduction was seen in hyperactivity, aggressiveness, and inattention. When the study participants stopped the magnesium and B6 supplementation, the symptoms returned after two weeks (5). Attention Support contains both forms of magnesium (threonate and bisglycinate) and B6.

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## Zinc (bisglycinate)

Zinc is a critical mineral for the brain and body to develop and function optimally. Zinc is prevalent in the brain, where it binds to proteins, and contributes to how the brain is structured, develops, and how it functions (4,5). Studies have demonstrated blood zinc levels in patients with attention disorders are likely to be low (7). In a double-blind, placebo-controlled trial, they replaced zinc in children with ADHD, and it significantly reduced hyperactivity, impulsivity, and impaired socialization compared to placebo (3). Studies have shown zinc can also help ADHD stimulant medication be more effective, and in some cases, help lower the daily dose (1,2). The form of zinc in Attention Support was chosen due to its ability to absorb better in the body than other forms of zinc. The increased bioavailability of zinc bisglycinate increases blood levels of zinc more easily and is also typically better tolerated (6).

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## Vitamin B6 (pyridoxine 5 phosphate)

Vitamin B6 is important for helping us biosynthesize (or create) our neurotransmitters which play an important role in cognitive and brain development and function. B6 helps make one of the brains major inhibitory (or calming) neurotransmitters that have been shown to improve attentional processes (3). Disorders of B6 metabolism (being able to break down B6, so that the brain and body can use it) are more common in attention disorders and seizure disorders (1). Clinical trials have demonstrated supplementing with B6 and magnesium has reduced hyperactivity and aggression in children with ADHD, and improved school attention. When the study participants stopped the magnesium and B6 supplementation, the symptoms returned after two weeks (2).

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# Vitamin B12 (methylcobalamin), folate (5-methytretrahydrofolate and folinic acid), and B2 (riboflavin 5 phosphate)

DNA methylation, a way in which the body regulates gene expression, is supported through B vitamins, in particular vitamins B12, B2, and B9 (folate) (3). Attention disorders have been correlated with poor methylation (6). Attention Support includes the types of bioactive folates known to support growth, development, and mood disorders (1,8,9). Riboflavin supports the breakdown of folate into the active form, and is especially important for those with MTHFR gene mutations, which can impair folate bioavailability (5). Deficiencies in riboflavin can also contribute to headache disorders (2). The body does not make vitamin B12, and it has to be supplemented through the diet with B12 rich foods (7). Despite those eating foods high in B12 (such as animal protein) B12 is still absorbed better in supplemental form (7). Due to the complexity of how B12 is absorbed in the body, transported to the cells, and absorbed into the nervous system, Attention Support included a more bioavailable form of B12, at a higher dose, in the supplement formulation.


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## Phosphatidylserine

Phosphatidylserine (PS) is a structural component of the cellular membrane and accounts for 5-10% of total lipid composition. PS is involved in many biological processes, including activation of enzymes, cellular signaling, neurotransmission, and synaptic refinement (1). A study by Hirayama and associates found that giving 200mg of PS over 2 months (in children ages 4-14) significantly improved ADHD symptoms and short-term auditory memory (2). A meta analysis and systematic review by Bruton and associates showed a statistically significant effect of 200-300 mg/day of phosphatidylserine on symptoms of inattention relative to placebo (3).

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