



LEARNING FACTORS® DAILY NUTRIENT BOOST

A factor in the maintenance of good health

ADHD AND THE BRAIN CONNECTION

There has been a tremendous increase over the past 20 years in learning and behavioural problems amongst North Americans – especially children and teens. Although there are many contributing factors such as oxidative stress, exposure to toxins, and psychosocial influences, the most widespread cause is poor nutrition. Nutritional deficiencies, too much junk food, and food allergies or sensitivities negatively impact brain function. Since the brain reigns supreme in the body, damage to this vital organ can have devastating consequences.

Attention deficit hyperactivity disorder (ADHD) is the most common learning and behavioural problem in adults and children. However, it is more pervasive in children and teens, affecting 5-10% of the population, and occurs three to four times more often in boys than in girls. It has been shown repeatedly that ADHD is often accompanied by other brain-related problems: major depression, bipolar disorder (manic depression), anxiety disorders, oppositional defiant disorder (ODD), and Tourette's syndrome. People with ADHD often suffer from an assortment of physical complaints; abdominal pain, recurrent headaches, muscular aches and pains, severe fatigue, and a general sense of "un-wellness" much of the time.

Studies show that daily supplementation with key nutrients can, over time, boost brain power and improve cognitive function, learning, behaviour, and mood, while increasing energy and vitality. Emerging scientific evidence suggests that nutritional supplementation can effectively control numerous mental and related disorders, including ADHD, attention deficit disorder (ADD), autism, schizophrenia, and addiction (Lakhan, *et al*). Studies have shown that even supplementing with a multivitamin and mineral formula can increase intelligence scores in children and teens (Benton, *et al*).

Learning Factors Daily Nutrient Boost combines optimal levels of 40 carefully selected brain-supportive nutrients in a great tasting smoothie mix. These vital nutrients help the brain and nervous system transmit signals for learning and cognition, and help maintain a positive outlook and mood. Numerous studies have shown they improve learning and behavioural problems and ADHD (Curtis, *et al*). Daily supplementation can enhance cognitive activity and preserve brain function and plasticity – essential for learning new behaviours, adapting to life's changing circumstances, and optimizing motor function.

THE MANY BENEFITS OF LEARNING FACTORS DAILY NUTRIENT BOOST

- Enhances brain health and function
- Improves learning and behaviour

- Nourishes and rejuvenates gastrointestinal function
- Promotes healthy detoxification
- Supports immune function

SATISFYING A HUNGRY BRAIN

The brain is clearly the hungriest organ in the body. Not only does the brain have a voracious appetite for basic fuel (glucose) and oxygen, but it is the organ that is the most sensitive to the adequacy of numerous other nutrients such as vitamins and minerals. Learning Factors Daily Nutrient Boost provides a complete range of vitamins and minerals that boost brain power and nourish a growing body. The brains of children and teens with cognitive and behavioural problems are often under oxidative stress; vitamins C, E and beta carotene are key antioxidants that quench free radicals and support the immune system. B vitamins are essential for numerous biochemical functions, particularly energy production. The brain consumes about 20% of the body's energy, so adequate intake of B vitamins is vital for optimal brain performance and to help reduce stress. Vitamin D is important for bone health, immune system regulation and preventing degenerative nerve disorders. Vitamin E is a potent fat-soluble antioxidant that helps protect nerve and brain tissues. The key minerals required for optimal brain function and healthy growth include iron, magnesium, zinc, and calcium, as well as trace minerals such as chromium, selenium, manganese, molybdenum, copper, iodine, phosphorus, and potassium.

PROTEIN AND THE BRAIN

It has been well documented that children who consume inadequate protein early in life will suffer from a permanent reduction in brain size and a significant loss of intelligence. Kids who skip breakfast, for example, or whose breakfasts contain inadequate protein, will tend to be more irritable, easily distracted and hyperactive. Protein provides the amino acids needed to make neurotransmitters and it helps smooth out rising and falling blood sugar levels, which can have an adverse impact on brain function. Learning Factors Daily Nutrient Boost is available in two options; one made with pea protein and the other with whey protein. For those with extreme food sensitivities or digestive conditions, the original formula is still the ultimate choice for anyone with severe food allergies or intolerances. It has been modified to contain extremely low-allergy-potential, non-GMO pea protein instead of rice protein, for improved texture and mouth feel. The whey protein version has a taste kids will love. It is made from the highest quality, ultra-purified, undenatured whey, and is still a low-allergy-potential formula. Both versions provide an excellent protein source for anyone looking to boost their intake of this vital macronutrient. The important amino acids

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provided by these proteins support brain function and improve the action of neurotransmitters for better mood, behaviour and cognition. Learning Factors Daily Nutrient Boost also contains taurine, L-Lysine, and glycine – key amino acids known to improve cognition, physical performance and mood.

THE GUT-BRAIN CONNECTION

Research has shown that the majority of children and teens with ADHD suffer from considerable gastrointestinal dysfunction, which may contribute significantly to their behavioural and cognitive problems. Increased intestinal permeability (“leaky gut”) is by far the most common gastro-intestinal disorder amongst those with ADHD. A leaky gut allows the passage of undigested or partially-digested food proteins and microbial debris into the blood stream, which can provoke an inflammatory response by the immune system and cause food sensitivities or allergies.

Learning Factors Daily Nutrient Boost has digestion-repairing and immune-supportive ingredients, including Pepzyme® enzyme blend, L-Glutamine, N-Acetyl Cysteine (NAC), inulin (a prebiotic) and guar gum, an excellent source of dietary fibre. These ingredients boost healing, enhance immunity and increase the digestibility of life-giving nutrients, ensuring that individuals with cognitive, learning and behavioural problems can adequately digest and absorb the nutrients they so badly need. They also help bind and eliminate toxins that can otherwise contribute to allergies and sensitivities, as well as overall ill-health.

THE PERILS OF TOXINS

Toxic chemicals accumulate in our bodies every day – resulting in lowered mental performance, impaired digestive function and immune deficiency. These chemicals are everywhere – in the air we breathe, the water we drink, and in our homes, work places, and schools. However, the greatest toxic threat comes from the foods we eat. Apart from pesticides, our food supply has been significantly altered through a wide range of food additives and the byproducts of food processing. Thousands of chemicals are used to increase the shelf life of food, and to change or enhance its flavour or physical properties. Those with ADHD may be particularly susceptible to adverse

reactions from various food additives. Food sensitivities and allergies develop because of the diminished capacity of the liver or other systems of the body to neutralize these common toxic substances. Brain function is also compromised because of increased oxidative stress and immune suppression. The natural detoxifiers found in Learning Factors Daily Nutrient Boost include milk thistle, lecithin, L-Glutamine, and NAC. Milk thistle, with silymarin flavonoids, protects liver and kidney cells from the toxic overload often caused by poor diet and overuse of antibiotics. Lecithin contains phospholipids, which are key components in cell membranes and are especially important for maintaining healthy brain cells. Lecithin also supports liver and gall bladder function. L-Glutamine and NAC play a significant role in the detoxification process, but they are also the primary gut-healing nutrients that nourish and repair the damaged or weakened gastrointestinal tissues that manifest in a toxic body.

Antioxidants, in addition to preventing and reducing oxidative stress, are essential to proper detoxification. Only Learning Factors Daily Nutrient Boost contains BerryRich™, which has an exceptionally high antioxidant capacity, with an ORAC value of 6,000. (ORAC – oxygen radical absorbance capacity – is a measurement used to compare the antioxidant capacity of different foods.) BerryRich is a proprietary whole fruit blend of grape, pomegranate, strawberry, cranberry, blueberry, raspberry and bilberry. In addition to BerryRich, grapeseed and green tea extracts are included in the formulas because of their well-researched antioxidant capabilities.

DOSAGE

Begin by using 1 scoop (20.15 g) of powder mixed with 1½ cups of water, rice milk, almond milk, soy milk, or juice in a blender. Add ice cubes and blend until smooth. Increase dosage to 2 scoops (40.3 g) of powder for optimum results. Drink a Learning Factors smoothie daily or as recommended by a health care practitioner. Customize your smoothie by adding 1 cup of fresh or frozen fruit (e.g. bananas, berries), yogurt, nuts, or Learning Factors Advanced School-Aid™. As a smoothie alternative, you can also add Learning Factors powder to cooked or cold cereal, or yogurt. To further enhance your nutritional intake for

optimum learning, behaviour and brain function, you can also add 1-3 scoops of Enriching Greens, and ½ teaspoon of Children’s Multi Probiotic powder to your smoothie.

SAFETY

All the ingredients in Learning Factors Daily Nutrient Boost are naturally sourced. It contains no additives, preservatives, or artificial colours, and is sweetened with natural wild berry flavours and stevia (a healthy sugar alternative, derived from the leaves of the stevia plant, that doesn’t negatively impact blood sugar).

Individuals may experience minor gastrointestinal upset such as gas or diarrhea. This normal side effect diminishes with use and can be minimized by starting with a half serving and increasing the dose gradually over 1-2 weeks.

Pregnancy and lactation: Not recommended during pregnancy or lactation unless recommended by a health care practitioner.

Children: Suitable for children; you may want to begin at half the recommended dose and work up to the full dose.

Drug interactions: None known.

Contraindications: None known.

Learning Factors Daily Nutrient Boost is an ideal supplement for individuals of all ages, but it is the ONLY supplement of its kind for any child or teen with learning or behavioural difficulties. It is an advanced and comprehensive daily nutritional supplement to optimize brain function, to improve learning and behaviour, and for overall vitality.

KEY REFERENCES

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