

Neuro Superfood

Prebiotic for Cognitive Support

Alimentum Labs

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Neuro Superfood Prebiotic for Cognitive Support

Prebiotic blend containing mushrooms, fruits, oligosaccharides, and phytonutrients for cognitive and microbiome support.



Individual needs may vary; please consult your practitioner before altering the prescribed doses or protocols.

Product Description

Alimentum Labs leads in precision microbiome care by tailoring probiotics and prebiotics to specific health needs. Extensive research underscores the profound impact of diet on the microbiome's diversity, highlighting the crucial role of diverse prebiotic fibers and superfoods. Our studies affirm the potent influence of unique phytochemicals like flavonoids, flavanols, cyanidins, procyanidins, terpenes, and alkaloids on the microbiome's health.

In today's fast-paced world, the importance of mental health and stress management is increasingly evident. A myriad of factors, including diet, gut dysbiosis, and sedentary lifestyles, compound this challenge. Processed foods high in sugar and unhealthy fats disrupt gut bacteria balance, while the stressful American lifestyle triggers the "fight or flight" response, affecting digestion. Antibiotic overuse further disrupts the gut microbiome, leading to enduring complications like diarrhea, IBS, and neurological disorders.





Most current commercial prebiotic approaches consist of ultra-small doses of 1 or 2 fibers or ingredients that most bacteria can utilize, including many harmful microbes. Meanwhile, Neuro Superfood transforms prebiotic approaches with its targeted blend of 17 powerful fruits, fibers, and mushrooms, supporting neuroprotective probiotics and the gut-brain microbiome. Designed to deliver essential phytonutrients, it enhances neuropsychological health and overall well-being. As part of our patent-pending system, Neuro Superfood stands as a versatile solution for daily wellness, free from artificial additives, and crafted for effectiveness.





Product Description

Key Elements & Features of Neuro Superfood

Complementary Prebiotic to Neuro µBiomic Probiotic

Neuro Superfood was designed to be taken alongside Neuro μ Biomic. By nourishing and helping to colonize the keystone probiotics in Neuro μ Biomic, this product promotes a thriving diverse microbiome, ensuring optimal neurological health and cognitive function.

Supports Restful Sleep

INeuro Superfood is ideal for supporting natural circadian rhythms through a multifaceted approach. Nutrient rich plant fibers are metabolized by specific gut bacteria, such as those provided in Neuro µ Biomic, and produce neuromodulating compounds. Other compounds provided in Neuro Superfood, like lion's mane mushroom, directly calm and stabilize the nervous system.

Enhances Mood

Neuro Superfood provides a precise blend of nutrients that boost mood by promoting balanced neurotransmitter levels, improving stress response, and enhancing energy levels. The premium combination of plant fibers, mushrooms, and neurodevelopmental proteins protects both the nervous system and the gut microbiome, while defending the complex relationship between them known as the gut-brain axis.

Ideal for Daily Wellness as a High Fiber Prebiotic

Neuro Superfood contains eight grams of high-quality unique fibers, including both soluble and insoluble fiber, each with specialized functions. These functions include supporting neurological health, cognitive function, and positive mood, as well as promoting a healthy gut microbiome. Consuming a variety of fibers is essential for full-body wellness, as the gut microbiome serves as the connection to numerous body systems and functions. By consuming Neuro Superfood, the health of the gut positively reinforces the gut-brain axis and overall wellness.



Prebiotic and Superfoods Spotlight

Brain Enhancing Blend

Rich in a variety of plant fibers, this blend of prebiotics and superfoods was designed using quality, research-backed components. The fruits, such as gold kiwi which significantly increases levels of neuroprotective keystone bacteria in the gut, and raspberry which enhances cognitive performance and reduces the risk of neurodegeneration while also supporting important symbiotic bacteria in the gut microbiome, were selected for their neuroprotective properties. The potent mushroom blend, a component typically acquired separately and at a much higher cost, was included here for full spectrum support and offers powerful effects in optimizing neurotransmitter levels, balancing mood, and improving memory and learning ability. Improving neurocognitive health through the gut microbiome and inherent neural pathways sets Neuro Superfood apart as a critical component of a comprehensive nutritional regimen.

Immune Balance Blend

The *CFH* gene encodes a protein that works in conjunction with other proteins and cells in the immune system to ensure that they work properly. It helps to distinguish between damaged cells, cellular debris, invading organisms, and foreign matter from healthy functioning cells. When this protein doesn't function correctly, it can cause the immune system to over-respond, leading to an attack on healthy tissues. It is a known partner to the *ARMS2* gene involved in age-related eye diseases.^{4,5}

Superfoods Spotlight

How Neuro Superfood Works

Neuro Superfood supports neurological wellness with its nutrient-dense and diverse formula of plant fibers, polyphenols, flavonoids, mushroom-based neurocognitive enhancers, and neuroprotective proteins. A portion of these ingredients, such as the plant fibers, inherently support the growth of exclusive probiotics found in Alimentum Labs' complimentary Neuro µBiomic product and the gut microbiome as a whole. The other portion of ingredients enhance neurocognitive function, mood stability, and proper nervous system recovery through direct neuromodulation. With Neuro Superfood, you are not only supporting a healthy and diverse gut microbiome, you are also enhancing your overall well-being.



Key Ingredients

Prebiotic Oligosaccharide Blend

Pomegranate Ext. (Ellagitannin)	The ellagitannins in pomegranate are dietary polyphenols that are poorly absorbed but used extensively as prebiotics by the human gut microbiome to produce urolithins. ¹ It has been suggested that Urolithin A may exhibit a neuroprotective effect by inhibiting DYRK1A activity. ² Pomegranate also raises <i>Lactobacillus</i> levels in the gut, including <i>L. acidophilus</i> and <i>L. plantarum</i> found in Neuro µBiomic. ³
Raspberry Pwd. (Gallic & Ellagic Acid)	Raspberries are a natural powerhouse of dietary fiber and many beneficial antioxidants and compounds, including several flavonoids and polyphenols, such as gallic acid and ellagic acid. ^{4,5} Gallic acid is a natural polyphenolic flavonoid that has demonstrated many neuroprotective properties. ⁶ Ellagic acid has been shown to enhance cognitive function by increasing brain-derived neurotrophic factor (BDNF) levels in plasma, reducing saliva cortisol levels, and improving blood lipid metabolism. ⁷
Gold Kiwi (Livaux®)	Gold kiwifruit is clinically proven to specifically increase <i>Faecalibacterium prausnitzii</i> , one of Alimentum Labs' exclusive keystone probiotics found in Neuro µBiomic. ⁸ Gold kiwifruit has high levels of polyphenols including cinnamic acids (E-caffeoyl-3-glucoside and neochlorogenic acid) and flavanols (procyanidin B2 and epicatechin). ⁹ Gold kiwi also provides both soluble and insoluble fibers to support microbiome balance while being one of the most nutrient-dense fruits in the world. ¹⁰

Green Kiwi (Actazin®)

Actazin[®] may help prevent or relieve constipation and has been proven to benefit bowel regularity and stool softness in two clinical trials.^{11,12} Green kiwifruit contains a unique digestive enzyme, actinidin, which greatly enhances protein digestion, reducing gastric discomfort and bloating associated with poorly digested protein.^{13–15} The complex dietary fiber of kiwifruit has superior water retention capacity (twice as much as apples and four times as much as wheat bran), which contributes to smooth bowel movements.¹⁶ The complexity of kiwifruit fiber also ferments slowly, preventing excess gas and bloating associated with many prebiotics.¹⁶

P. niruri, also known as Chanca Piedra, is a tropical plant long used in Ayurvedic medicine.¹⁷ *P. niruri* contains numerous flavonoids such as gallocatechin, quercetin and kaempferol.¹⁷ It is also a good source of rare ellagitannins such as geraniin and furosin.¹⁷ Geraniin has shown great potential as a prebiotic to combat high-fat diet induced metabolic syndrome.¹⁸ Additionally, geraniin may exert a neuroprotective effect by suppressing oxidative stress and neuronal apoptosis.¹⁹ Another study showed geraniin targeting TLR4-mediated signaling to decrease proinflammatory cytokines and mitigates lipopolysaccharide-elicited neurodegeneration and cognitive impairment.²⁰ Furosin also exhibits anti-inflammatory and neuroprotective effects.²¹

Sorghum grain is a highly nutritious cereal that contains mixed polyphenols and is one of the highest food sources of proanthocyanidins.²² One study reported that sorghum polyphenols worked with fructo-oligosaccharides (FOS) to enhance *Bifidobacterium* and *Lactobacillus* genera, such as those found in Neuro µBiomic, and independently increased the beneficial Roseburia and Prevotella genera as well.²³

Phyllanthus niruri (Geraniin & Furosin)

Sorghum

Fructooligosaccharides (FOS)

Fructo-oligosaccharides (FOS) are oligosaccharides that occur naturally in plants such as onion, chicory, garlic, asparagus, banana, artichoke, among many others.²⁴ Diets enriched with FOS increase the levels of Alimentum Labs' exclusive keystone probiotics F. prausnitzii and Parabacteroides distasonis.^{25,26} Supplementation of FOS along with Alimentum Labs' exclusive keystone probiotic Agathobaculum butyriciproducens (found in Neuro µBiomic) has been shown to increase microbiome diversity and improve healthy microbiome composition.²⁷

GoS are a type of plant fiber that are not digestible by the human gut. Instead, they are specifically intended for consumption by symbiotic gut bacteria. Consuming GOS significantly increases populations of neuroprotective bacteria like *P. distasonis*²⁸ and *Bifidobacterium* species.²⁹ Additionally, GOS are particularly useful because they cannot be consumed by pathogenic bacteria, which helps prevent these populations from taking root in the gut microbiome.³⁰

Isomalto-IMOs are one of the most promising prebiotics among all
oligosaccharides (IMO)IMOs are one of the most promising prebiotics among all
oligosaccharides.³¹ IMOs have the demonstrated ability to
significantly raise beneficial *Bifidobacterium*,
Lactobacillus, and *Bacteroides* counts while decreasing
harmful *Clostridium* levels.³²

Pectin (Apple)F. prausnitzii strains possess some ability to utilize apple
pectin.33 Pectin has also shown the ability to increase the
relative abundance of Bacteroides, Parabacteroides, and
Bifidobacterium.34 Moreover, many studies have found that
apple pectin can help suppress weight gain, modify gut
microbiota, protect gut barriers, and reduce oxidative
stress.35-37

Blueberry

Blueberries are well known for their health benefits, among which include the antioxidant neuroprotective powers of blueberry polyphenols.³⁸ Blueberries contain high levels of polyphenols that include anthocyanins, flavanol glycosides and proanthocyanidins.³⁹ Blueberry polyphenols have been proven to increase beneficial bacteria in the microbiome, including F. prausnitzii.³⁹ Furthermore, it has been reported that the benefits of blueberry polyphenols are boosted by Lactiplantibacillus plantarum and Bifidobacterium bifidum.^{40,41}

BlackcurrantThe flavonoid- and anthocyanin-rich blackcurrant (*Ribes nigrum*) has shown neuroprotective effects.⁴² Blackcurrant has also clinically shown the ability to improve cognition through the inhibition of MAO-A and MAO-B (monoamine oxidase).⁴³ *L. plantarum* and other lactobacilli possess the ability to amplify the antioxidant and polyphenolic benefits of blackcurrants.⁴⁴

DeoxynojirimycinDeoxynojirimycin polysaccharides are complexPolysaccharides (DPM)Carbohydrates found in mulberry leaves. They are most(from Morus alba)well-known for their ability to inhibit α-glucosidase, aiding
in blood sugar regulation.45,46 Additionally, recent studies
have suggested DMP may play a neuroprotective role.47,48

Derived from trees of the Sterculia genus and used in African and Ayurvedic medicine, karaya gum easily absorbs water, swelling up to 60 times the original volume, and functions like an insoluble fiber, supporting regular bowel movements.^{49,50}

An Ayurvedic prebiotic with a long history of supporting neurological balance, normal cholesterol synthesis activities, and healthy skin.⁵¹

Karaya Gum

Guggul Ext.

(Guggulipids)

Functional Mushroom Blend

Lion's Mane Mushroom (Hericium erinaceus) Hericium erinaceus, also known as lion's mane mushroom, enhances peripheral nerve regeneration by targeting nerve growth factor (NGF) activity.⁵² Compounds found in lion's mane mushroom, such as N-de phenylethyl isohericerin (NDPIH) and hericene A, demonstrate potent neurotrophic effects, promoting axon outgrowth and neurite branching independently of tropomyosin receptor kinase B (TrkB) and through a complementary ERK1/2 activation pathway, leading to enhanced cognitive performance. Studies have shown that oral supplementation of *H. erinaceus* reduces symptoms of depression, anxiety, and sleep disorders, improves mood and quality of sleep, and increases levels of circulating pro-BDNF (brain-derived neurotrophic factor), potentially benefiting overall mental health and cognitive function in both healthy individuals and those with mood disorders.53,54

Cordyceps militarisC. militaris is a species of fungus that has recently
received attention for its wide variety of health benefits,
including boosting longevity, exercise performance, and
mood. It produces a compound known as cordycepin,
which is believed to play a role in its ability to modulate
serotonin and dopamine levels. C. militaris enhances
Lactobacillus (beneficial bacteria) and reduces Rothia and
Actinomyces (harmful bacteria), suggesting that its
peptides and polysaccharides have the ability to regulate
gut microbiota.55 Some studies have also shown C.
militaris to have neuroprotective effects and enhance
learning and memory.56

Neuro Balance Blend

Immunoglobulin Y (IgY)

IgY, or immunoglobulin Y, is a type of antibody found in the yolks of bird eggs, typically chicken or duck eggs. Studies have shown that IgY supplementation improves memory and overall cognitive performance. The proposed mechanism through which these benefits occur is the activation of the (cAMP/PKA) and (PI3K/Akt) pathways, which protect neurons and their activity levels. It has been proposed as a safe addition or alternative to cognition–enhancing pharmaceutical medications.⁵⁷

Lactoferrin Lactoferrin, a protein present abundantly in milk and especially in human breast milk, plays vital roles in both brain and immune system development. Recent studies have explored its protective potential against neurodegeneration. Lactoferrin binds iron atoms, which protects the brain and nervous system from oxidative damage.^{58,59} Additionally, lactoferrin can easily cross the blood-brain barrier, and when bound to other pharmaceuticals, it may allow these pharmaceuticals to achieve greater access to the brain, offering an improved therapeutic effect.⁶⁰



Warnings/Contraindications

When used as directed there are no known contraindications for Neuro Superfood.

It is always recommended that you consult your practitioner prior to adding any new supplement to your regimen if you are pregnant, breastfeeding, experiencing renal failure, undergoing an organ transplant(s), managing diabetes with insulin, or are taking medication(s) for any pre-existing conditions.

Safety

All ingredients are tested before use for:

- Pathogenic microbial contaminants
- · Heavy metals and/or chemical contaminants
- · Correct genus and species of probiotic microbes
- Purity

Additional Information

- Gluten Free
- No Sugar
- Non-GMO
- cGMP Facility
- Vegetarian



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