



CONTACT US

Have any questions? Feel free to message us via social media or email.

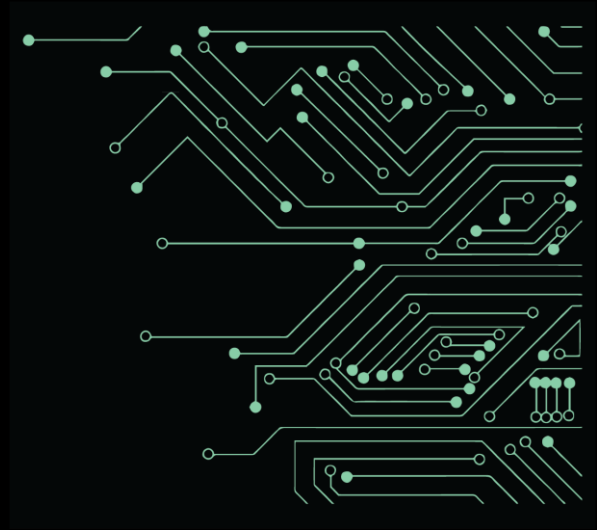
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Enhance User Guide





Who we are

Neuratech (Neural Enhancement Technologies Pty Ltd.) is a Brisbane based neuro-nutrition and nootropics startup.

Our mission is to engineer better brains using the latest advances in nutrition and nutraceuticals.

Our journey started at the iLab accelerator at the University of Queensland in mid-2017, where we developed our first product, received mentorship and a \$5000 grant.

Advancing brain health, performance and longevity is our core thesis.

If you look closely, you can notice the following trends:

- We have an aging population
- Neurodegenerative disease is on the rise
- Productivity and innovation are being rewarded more than ever
- Stress, anxiety and depression are rampant
- The rise of social media, the internet and information technology has made it harder to be focused and feel good (acting on dopamine pathway)

This is why we feel that brain health is the most important problem to be solving right now.

There is a dire lack of products on the market which address this using high quality, patented ingredients which show clinical efficacy.

This is where we come in.

What is Enhance?

Enhance is our daily nootropic, or what we like to call our daily neurovitamin.

It is a capsule based product with 30 serves per unit (60 capsules total).

The purpose of Enhance is to support long term brain health and memory.

Enhance represents the next frontier of nutrition and supplements. Supplements which support our most important asset, our brains.

If you're having troubles with long term memory formation, retaining information or suffer from 'brain fog', this might be a solution for you. A small piece of the puzzle to help you take back control of your neurochemistry.

Enhance has been specifically formulated to target a variety of brain health pathways:

1. Promote the production of neurotrophins (NGF and BDNF). These are proteins which aid in the repair, function and growth of neurons.
2. Micronutrient support: We use B-Vitamins and Fulvic minerals to plug any nutritional holes and support cellular processes for improved energy.
3. Support essential neurotransmitters: Acetylcholine for memory, learning and preventing mental fatigue. Dopamine for motivation.
4. Increase neural signalling: Supply nutrients to support the myelin sheath surrounding neurons. This is the insulation that allows electrical impulses to travel through them.
5. Reduce β -amyloid peptide ($A\beta$) accumulation



How best to take Enhance?

Enhance contains several ingredients, primarily herbal extracts and other natural compounds. A lot of these herbal extracts are fat soluble, so they should be consumed with food or a fat source to help increase absorption.

Ingredients such as Bacopa Monnieri (a potent herbal nootropic) are fat soluble and have a very small chance of causing stomach upset. For those who experience this side effect, then consuming Enhance with food would be a smart move. You could also try splitting the dosage up, and having 1 capsule in the morning, and 1 at night rather than both at the same time.

Enhance is designed to be taken consistently as a daily supplement. We recommend a 5 days on, 2 days off usage split. The research on most of our ingredients suggest that the effects should accumulate over a period of time e.g. 4-6 weeks or more. This means the effect is cumulative, and the longer you use it consistently, the higher the chance you will see positive effects.

Besides this, the ball is in your court. When it comes to improving brain function, then finding the ingredients and compounds that work best for you is key! Time to start experimenting and following the path towards optimisation.

Everyone has different genetic predispositions and neurochemistry, and thus compounds may affect individuals differently.

Enhance was made to be a premium stack that will suit the majority of people and forms the basis of great brain health. Stack this with good food, plenty of exercise, enough sleep and meditation and you will give your brain a great chance to perform at its peak.

1) We recommend 2 capsules per day, 5 days per week.

2) Take it consistently every day, ideally with on the following:



With your morning greens



With your upgraded or bulletproof coffee



With a healthy, fatty breakfast.

***Note:** Taking Enhance with a fat source or food will increase absorption and reduce any chances of stomach upset.

3) Best results such as memory improvements should be seen after 6+ weeks of consistent use. The herbal nootropics take time to build up in your system.



The ingredients

Bacopa Monnieri (Synapsa™) – 300mg

Bacopa or Brahmi is a herb native to the wetlands of southern and Eastern India, Australia, Europe, Africa, Asia and America.

Bacopa contains numerous compounds called Bacosides which contribute to its potent, memory and brain enhancing effects.

There are studies that show that supplementing 150mg of standardized extract of Bacopa called Bacognize, twice daily, over a period of six weeks provided statistically significant improvements in cognitive function.

Bacopa is proven specifically to improve memory in multiple studies and is a very well-known and respected cognitive enhancer.

Bacopa acts through a variety of potential mechanisms that contribute to its neuropharmacology, such as:

- anti-oxidant neuroprotection (via redox and enzyme induction)
- acetylcholinesterase inhibition and/or choline acetyltransferase activation
- β -amyloid reduction
- increased cerebral blood flow
- neurotransmitter modulation (acetylcholine [ACh], 5-hydroxytryptamine [5-HT], dopamine [DA])

Bacopa is one of few very well studied nootropic compounds. For this reason, it is one of our flagship ingredients in our daily neurovitamin, Enhance.

Anecdotally, some users report to have reduced feelings of motivation after consuming Bacopa. This may be due to the fact that some standardized extracts contain higher amounts of Serotonin Active Bacopa Glycosides (SABG's) which may contribute to higher serotonin and thus give a more calming effect.

We are controlling/countering this in our Enhance Nootropic by utilising the Synapsa brand of standardised Bacopa extract and suggesting that the dosage be split to morning/night.

CDP Choline (Citicholine) – 300mg

CDP-choline or Citicholine is a highly bioavailable form of dietary choline.

Supplemental Citicooline/CDP-Choline is broken down into choline, the precursor to Acetylcholine (the learning neurotransmitter) and cytidine in the intestines so that is able to cross the blood-brain barrier. Once these cross the Blood-brain barrier the body uses them to reform citicoline where it can be used by the brain.

CDP-Choline is a water-soluble molecule, with more than 90% oral bioavailability. Peak plasma levels occur one hour after oral ingestion. Doses of up to 2000mg have been observed in humans and animals without causing any toxicity.

Supplementation with citicoline can increase the amount of choline available for acetylcholine synthesis and aid in rebuilding membrane phospholipid stores after depletion.

Both in animals and in human beings, citicoline has been shown to possess proved neuroprotective properties.

In clinical practice, a number of different studies have clearly shown that citicoline is "effective in cognitive impairment of diverse etiology, cerebrovascular disease, head trauma, glaucoma, amblyopia, and Parkinson's disease (PD)".

The usual daily therapeutic dosage of citicoline in humans is 500–2,000 mg. We have opted in for 300mg per serve to ensure that no negative side effects become largely present which can occur with higher doses. High doses of choline sources are known to cause headaches.

CDP-choline has a lot of promising clinical data to back its efficacy, particularly for those suffering from brain impairments. We think this is an essential nutrient to supplement with if you really want to preserve your brain over the long term and minimise neurodegeneration due to aging or disease.



Lions Mane Mushroom – 500mg

Lions mane mushroom (*Hericium Erinaceus*) is a medicinal mushroom native to North America, Europe and Asia. It is the mushroom most associated with improving brain function.

Lions mane contains a number of natural compounds called polysaccharides such as Beta Glucans and Heteroglucans which have very beneficial effects.

There is clinical research showing that Lions Mane is able to promote the synthesis of neurotrophins such as Nerve Growth Factor (NGF) in cell models. This protein helps neuronal growth and repair.

Also, rodent models show that Lions mane mycelium “enriched with its active compounds is capable of delaying neuronal cell death in rats with neurodegenerative diseases, such as ischemic stroke, Parkinson’s disease, Alzheimer’s disease, and depression”.

Lions mane shows quite some promise for those suffering from mild cognitive impairment, with one study showing significant improvements in cognitive scores over a 16 week period. The participants all took 3g of Lions mane per day.

Lions mane has some really promising initial clinical data, but we would love to see more studies on healthy humans.

Phosphatidylserine (Sharp PS™) -100mg

Phosphatidylserine is a phospholipid and key component of cell membranes.

It plays an important role in cell signalling and is required for healthy nerve cell membranes and myelin (the fatty sheath that surrounds and protects neurons, providing insulation and allowing electrical impulses to travel between them).

Phosphatidylserine can be found both in animal products (meat, fish etc.) as well as vegetables (white beans and soy lecithin). Most supplements containing Phosphatidylserine are derived from soy due to possible infectious disease from animal based products.

Sharp-PS is a patented form of Phosphatidylserine that has achieved GRAS status from the FDS and is derived from soybean lecithin. This is the form of Phosphatidylserine used in Enhance at a dose of 100mg/serve.

Sharp PS has also recently been approved by FSANZ to make brain health claims in Australia and New Zealand. This is a massive feat and few ingredients can say they’ve got this backing.

Clinical evidence shows Phosphatidylserine has efficacy in improving memory scores in the elderly over a 6 week period (at a dose of 100-300mg/day).

Phosphatidylserine may play a big role in staving off neurodegeneration and supporting short term and long term memory formation. This nutrient is essential to our cells and it would be wise to supplement with if you're not taking in enough from your diet.



Whole Coffee Fruit Extract (Neurofactor™) – 100mg

Neurofactor™ is a really unique ingredient we are so excited to include in our formulation for Enhance. We are one of few companies in Australia supplying this within our products, yippee!

Neurofactor™ is a patented extract of whole fruit from the *Coffea arabica* plant.

Neurofactor™ contains a unique profile of polyphenols that have been clinically proven to stimulate the production of Brain-Derived Neurotrophic factor (BDNF).

BDNF is a type of neurotrophin, which is a class of proteins responsible for the repair, maintenance and growth of neurons, as well as protection from neurodegeneration (due to aging or disease).

In a double-blind, placebo-controlled pilot human clinical study, NeuroFactor™ increased plasma levels of Brain-Derived Neurotrophic Factor (BDNF) by 143% on average. No significant increases in BDNF were seen from green coffee bean extract, grape seed extract and green coffee caffeine powder.

This study was performed using 100mg of Neurofactor™ (Whole coffee fruit extract), and this is the exact dose we are mimicking in our formula for Enhance.

Neurofactor™ shows some really great promise in increasing plasma levels of BDNF and would love to see more clinical data in a larger cohort of participants and to see if the increased BDNF leads to greater memory outcomes.

Osmanthus Fragrans Extract (Acteolin™) – 200mg

Acteolin by Nulivscience is a proprietary acteoside extracted from *Osmanthus fragrans* flower.

Studies have shown that this extract is able to support cognitive function by reducing β -amyloid peptide ($A\beta$) accumulation and abnormal tau protein phosphorylation and by protecting the central cholinergic system in the brain.

The buildup or accumulation of β -amyloid is implicated in impaired cognitive and memory functions. Evidence suggests this may be a strong marker for Alzheimer's Disease.

A recent study showed that *Osmanthus Fragrans* Extract, high in acteosides successfully protected against galactose-induced aging in rodents.

We can't wait to see more human trials for Acteoside based compounds to explicitly determine its neuroprotective effect and potential to benefit and support healthy aging.

The current evidence however points to this being a very promising compound and pathway to prevent neurodegeneration over time.



Fulvic Minerals (Cellcharge™) – 10mg

Cellcharge is a plant based liquid suspension extremely rich in concentrated polyphenols, flavonoids, organic acids, amino acids, electrolytes and fulvic mineral complexes.

This is a super potent formula used to enrich your body with essential micronutrients and plant based compounds that a lot of us might not be getting from our regular diets and food sources.

Fulvic acids/minerals are compounds that can be found in and extracted from natural earth deposits and plants or produced via microorganisms in soil.

These compounds may help to improve gut health, reduce inflammation and improve brain function & overall energy levels.

A 2018 review article titled "Therapeutic Potential of Fulvic Acid in Chronic Inflammatory Diseases and Diabetes" concluded that "FvA can act as an immune modulator, influence the redox state, and potentially affect gut health. FvA is shown to decrease proinflammatory markers but also activate the immune system to kill bacteria."

The review continues to say that evidence seems strong despite minimal research being conducted and some confusion existing around correct dosages.

This is a really exciting new ingredient that we welcome in Enhance Daily Neurovitamin. The biggest benefits in brain performance and overall health can be seen when we first fix up our nutritional deficiencies before adding other extra compounds.

BioPerine™ – 10mg

BioPerine is a patented extract obtained from black pepper fruits standardized minimum to 95% Piperine.

BioPerine is commonly used as an absorption enhancer when utilised with other various compounds.

BioPerine may be co-administered with various nutrients to enhance their bioavailability in both human and animal models.

In general, BioPerine is found to enhance absorption of nutrients by at least 30%.

One particular study, regularly cited, showed that BioPerine when administered with Curcumin, a component of turmeric, increased its bioavailability by 2000%

A huge problem for most herbal compounds, micronutrients and nootropics is bioavailability. BioPerine is one of few compounds clinically shown to aid in absorption of multiple different compounds within the human body. At a low dose of 10mg, you can be sure this is a welcome addition to Enhance Neurovitamin.

Vitamin B Complex (B3, B5, B6, B12)

We have included a B-Vitamin complex within Enhance, as these are essential for hundreds of biological processes throughout the body, including the biosynthesis of neurotransmitters (Serotonin, Norepinephrine, Dopamine) and the overall development of the brain.

B12 is also essential for the development and signalling of nerve cells. B6 & B12 particularly help ensure the optimal environment for basic brain function and neurotransmitter levels which are vital for performance.

Note: All cited clinical research and studies are available on our website or upon request.



Testimonials

Justin Hall (Founder of Supplement snoop)

I used Enhance the last few days and love it! Used Calm last night for the first time and again, had a great experience. Really enjoying them so far!

Louie Cocilovo (Health enthusiast)

Just want to say since I've been using Enhance, my energy and focus has been nonstop all day. I have been able to study, work and exercise all with energy. Being a 50 year old this has changed my life!

Aaron Schulz (Musician)

I've been taking Enhance each day for the last week and I can honestly say that I've really felt "on", focused and clear. Sharp, even. It's been great!

Bek Strachan (Founder, Gym owner)

From what I experienced last week I love it! I am focusing more and feeling more productive which absolutely has me wanting to try Enhance for longer.



Ingredients Panel

DIRECTIONS OF USE:

Take 2 capsules daily with food. We recommend a 5 day on/2 day off usage split for Enhance™ nootropic.

NUTRITION INFORMATION

*Daily Value not established

Serving size: 2 capsules Servings per container: 30	Amount per serving	% DV
Lion's Mane (Hericium Erinaceus) Mushroom 10:1 Extract	500mg	*
Synapsa™ Bacopa Monnieri Extract (Whole Plant) Standardized To 55% Bacosides	300mg	*
CDP-Choline	300mg	*
Acteolin™ (Osmanthus Fragrans)(Flower)	200mg	*
NeuroFactor™ (Coffea Arabica Whole Fruit BDNF Extract)	100mg	*
Phosphatidylserine (As Sharp PS from soy lecithin)	100mg	*
Fulvic Mineral (Cell Charge™)	10mg	*
BioPerine® (Black Pepper Extract 95%)	10mg	*
Vitamin B Complex		
- Vitamin B6 (Pyridoxine Hydrochloride)	5mg	294%
- Vitamin B5 (Pantothenic Acid (as Calcium D-Pantothenate)	10mg	200%
- Vitamin B3 (Nicotinamide)	20mg	125%
- Vitamin B12 (Methylcobalamin)	10mcg	416%
Other Ingredients: Vegetable cellulose (capsules)		

DO NOT EXCEED RECOMMENDED DOSAGE.

These statements have not been evaluated by the Therapeutic Goods Administration. This product is not intended to diagnose, treat, cure or prevent any disease. This food is not a sole source of nutrition and should be consumed in conjunction with a nutritious diet, and appropriate physical training or exercise program.

