

**SEROCYBIN™** is a therapeutic microdosing botanical stack developed to modulate our serotonergic, dopaminergic, glutamatergic & ECS systems, re-establishing the Microbiota-Gut-Brain Axis (MGBA) & having an ultimate outcome of homeostasis.

PRIMARY INDICATIONS: Mood & Major Depressive Disorder

PROTOCOL: Cycle - 4 Days On/ 3 Days Off

**DOSING**: 2 - 550mg Capsules

**SCHEDULE**: Pre-Clinical Trials Q1 2024

SEROCYBIN™ COMPOUND SC002.1 - Thai Golden Teacher & Enigma Psilocybin Cubensis, Psychobiotic Lacticaseibacillus (Lactobacillus) Paracasei PS23™, Saffron (Crocus Sativus) Extract, Shilajit Fulvic & Humic Acid Mineral Complex, Cannabis Sativa (Hemp) CBGA Extract, Organic Lemon Balm Extract (Melissa Officinalis), Organic Griffonia Simplicifolia Baill Seed Extract - 5-hydroxy-l-tryptophan (5-HTP), Mucuna Pruriens Seed Extract (15% L-DOPA), Organic PEA (Phenylethylamine), NADH (A Biologically Active Form Of Vitamin B3 (Niacin), Organic Bamboo Silica.



**Thai Golden Teacher & Enigma Psilocybin Cubensis** - Psilocybin (with Psilocin as its major constituent, also known as 4-hydroxy DMT, a tryptamine alkaloid), a psychedelic & serotonin 2A receptor (5-HT2A) agonist, may be associated with antidepressant effects. Psychedelic stimulation of 5-HT2A, a G-protein-coupled receptor (GPCR), has shown potential as an anxiolytic & antidepressant therapy.

\*A large study recently published in the journal Scientific Reports that microdosing psilocybin resulted in greater improvements in mental health and mood than in individuals who did not engage in microdosing.

Psychobiotic Lacticaseibacillus (Lactobacillus) Paracasei PS23™ - Lactobacillus Paracasei PS23™ may improve cognitive function by re-establishing the microbiota-gut-brain axis (MGBA). PS23™ supports the two-way connection between our enteric (intestinal) and central nervous systems. Resulting health benefits include:

- Balances dopamine (motivation) and serotonin (mood).
- Replenishes BDNF (brain-derived neurotrophic factor) for memory and cognition.
- Boosts mitochondria function to fight adverse effects of aging.
- Helps maintain muscle strength and increases protein uptake.
- Reduces cortisol (stress) levels throughout the body.
- Lowers inflammation, raises antioxidants and strengthens immune function.
- Improves GI function and healthy gut microbiota.

**Saffron (Crocus Sativus) Extract** - Saffron extract might inhibit serotonin reuptake in synapses. Inhibiting synaptic serotonin reuptake keeps serotonin in the brain longer, thereby enhancing its positive effects while combating depression. The possible anti-depressant activity of saffron bioactive compounds (crocin & safranal) could be mainly through inhibiting serotonin reuptake & the inhibition of dopamine & norepinephrine reuptake.

Shilajit Fulvic & Humic Acid Mineral Complex - Shilajit is a blackish-brown powder/resin obtained from the high mountain rocks of the Himalayan mountains between India & Nepal. It is a natural phytocomplex with potential procognitive support with its more than 84 minerals, humins, humic acid & fulvic acid. Fulvic acid is the major chemical component that accounts for 60 to 80% of its nutraceutical content. Other components present in Shilajit are fatty acids, resins, albumins, polyphenols, phenolic lipids, triterpenes, sterols, aromatic carboxylic acids, coumarins, latex, gums & amino acids.

**Cannabis Sativa (Hemp) CBGA Extract** - Cannabigerolic Acid (the "mother of all phytocannabinoids.") is one of over 100 cannabinoids present in the hemp plant. CBGA is a foundational compound of the cannabis plant, one of the very basic building blocks that all cannabinoids come from. Therapeutic benefits of CBGA based on current research, include:

- Stress management.
- Alleviating anxiety and depression.
- Better sleep.
- Epilepsy relief.
- Enhanced cognitive function.
- Diabetes complications reduction.
- Anti-inflammation.

**Organic Lemon Balm Extract (Melissa Officinalis)** - Lemon Balm, a member of the mint family, is considered a calming herb. It was used as far back as the Middle Ages to reduce stress and anxiety, promote sleep, improve appetite, and ease pain and discomfort from indigestion.

- Lemon Balm is a potent antioxidant that protects your brain cells from free-radical damage & acts as a neuroprotectant.
- It affects brain levels of acetylcholine (ACh), improving memory & cognition.
- Reduces stress. One-way lemon balm does this is to promote GABA, a glutamate inhibitor in your brain. It raises brain levels of the neurotransmitter GABA by inhibiting the enzyme GABA transaminase this has a major effect on mood regulation.

Organic Griffonia Simplicifolia Baill Seed Extract - 5-hydroxy-l-tryptophan (5-HTP) - Griffonia Simplicifolia is a shrub native to West Africa. Its seeds contain a chemical called 5-hydroxytryptophan (5-HTP). 5-HTP works in the brain & central nervous system by increasing the production of the chemical serotonin. Serotonin can affect sleep, appetite, pain, and mood.

**Mucuna Pruriens Seed Extract (15% L-DOPA)** - is a popular Indian medicinal plant & powerful aphrodisiac which has long been used in traditional Ayurvedic medicine. Mucuna Pruriens contains a high concentration of L-DOPA - Dopamine itself has very low bioavailability & can not cross the blood-brain barrier, L-DOPA is readily transported into the central nervous system (CNS) and is converted into dopamine in the brain by the enzyme DOPA decarboxylase. \*Excess production/ conversion of dopamine can suppress serotonin production.

**Organic PEA** (**Phenylethylamine**) - PEA also known as beta-phenylethylamine or 2-phenylethylamine, is a central nervous system stimulant. Normal amounts of PEA produced in the body support healthy energy levels as well as focus, well-being, happiness, & high-level cognitive function. Studies suggest that depression is associated with lower levels of phenethylamine & that a deficit of PEA may be one cause of depression.

**NADH** (A Biologically Active Form Of Vitamin B3 (Niacin) - NADH is a dietary supplement that is an active form of vitamin B3 that increases energy levels, improves mental clarity, & supports healthy brain function, enhances cognitive performance & promotes neurogenesis.

**Organic Bamboo Silica** - Silica can strengthen the connective tissues surrounding the brain & spinal cord, it can also help protect our cognitive health & may raise levels of the brain chemical serotonin. Silica from Organic Bamboo extract has been shown to improve memory performance in animal studies.