

The Herb Society of America – November 12, 2020 webinar

“Enhancing Brain Health using Natural Botanicals”

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DESCRIPTION: “Nootropic” is a relatively new term meaning “cognitive-enhancing.” True nootropics should aid with natural cognitive function, support and protect brain function, and also be non-toxic to the user. Properties and constituents of nootropic herbs have been shown to be beneficial in a multitude of ways. Using medicinal herbs to enhance brain health is nothing new; in fact many have been used safely and effectively for thousands of years. In this one-hour webinar, Dr. Prescott will discuss her doctoral research on nine specific herbal nootropics; including her research study so overwhelmingly productive that it led to her leaving her clinical and teaching positions at the hospital and university to start “The Herbal Brain®” as a full-time business. Attendees can expect to gain knowledge of brain cognition, neuroplasticity and neurogenesis, and the most potent cognitive-enhancing herbs as they pertain to improving brain health.

HERB SOCIETY OF AMERICA: It is the policy of The Herb Society of America, Inc. not to advise or recommend herbs for medicinal or health use. This information is intended for educational purposes only and should not be considered as a recommendation or an endorsement of any particular medical or health treatment. Please consult a health care provider before pursuing any herbal treatments.

DOCTORAL THESIS: In my field of medical speech pathology I’ve treated neurodegenerative disorders for 26 years. For my doctoral thesis, I chose to study how botanicals (their constituents and properties) could be used in combination to reduce or even reverse cognitive decline, in comparison with synthetic pharmaceutical interventions.

RESEARCH: A single-subject designed, randomized controlled trial doctoral research study was conducted (2016-17) by then doctoral candidate Emory Prescott under the direction of Dr. Mark Dargan Smith, University of Natural Medicine. The purpose of this study was to measure outcomes in six areas of memory and cognition with and without the daily use of specific nootropic botanicals. The resulting variations in neuroplasticity of the cognitive mechanism were measured using standardized neuropsychological assessment to ascertain whether or not the use of specific herbs and essential oils had an impact on improving memory function. Both normal-aging adults as well as those

diagnosed with a neurogenic condition involving memory were sampled. Since 2018, ongoing studies continue using The Herbal Brain® formula.

COGNITION: knowledge, perception, the mental process of knowing something, being aware, ability to reason, judgment, understanding – Various aspects of COGNITION include attention, processing, problem-solving, executive function, sequencing, working memory, organizing thoughts, reasoning, memory – both short and long term, and working memory

Typical Cognitive Treatments (and why they don't work)

Clinical: rote exercises in memory, problem-solving, lots & lots of repetition
Pharmaceutical: donepezil (Aricept)
rivastigmine (Exelon)
galantamine (Razadine)
memantine (Namenda)
tacrine (Cognex)

POTENTIAL CAUSES OF COGNITIVE DECLINE: chronic inflammation, insulin resistance, stress, dehydration, sugar, refined starches, processed food ingredients, artificial colors, artificial flavors, high fructose corn syrup, multi-tasking, EMFs, environmental toxins, pesticides, volatile compounds in building materials, paints, carpets, insulations (off-gassing), reduction in air quality, solar radiation management techniques

HERBS:

Botanicals are natural healers, and though sometimes stigmatized, herbs have the power to build up life, life force energy, to help rid the body of toxins, inflammation, diseases, parasites, viruses, and to be used for long periods of time in order to stabilize systems of the body and mind.

Herbs have specific properties that allow them to heal:

Adaptogen – build endocrine resistance to stress

Neuroprotective – increases brain longevity

Neurogenerative – improves brain cell function

Anodyne – dull pain

Antispasmodic – relieve muscle tension & cramping

Astringent – tighten/tone tissues

Carminative – for stagnant digestion, bloating & gas

Demulcent – coat mucous membranes & soothe tissues

Depurative – blood purifier

Laxative – to help release intestinal slowness & blocks

Diaphoretic – used for fevers

Diuretic – increase urine output

Alterative – eliminate, clear or release

Anti-thelminthic – rid body of worms, parasites

Antibiotic – heal and cleanse wounds, infection treatment

Antifungal – rid body of fungus

Antimicrobial – clean tiny infections

Antibacterial – combat bacteria

Antiviral – combat viruses

Antihematomous – reduce bruising/inflammation from a hard hit

Vulnerary – heal wounds

Cardio-tonic – improve heart health

SOME HERBS SHOWN TO IMPROVE MEMORY:

Amaranth “*Amaranthus palmeri*”, **Black Pepper** “*Piper nigrum*”, **Brahmi** “*Bacopa monnieri*”, **Sweet Basil** “*Ocimum basilicum*”, **Borage** “*Borago officinalis*”, **Cocoa** “*Theobroma cacao*”, **Curcumin** “*Curcuma longa*”, **Curry** “*Murraya koenigii*”, **Fish Oil** (wild clean waters), **Fo-ti** “*Polygonum multiflorum*”, **Ginseng** “*Panax ginseng*”, **Ginkgo** “*Ginkgo biloba*”, **Gotu Kola** “*Centella asiatica*”, **Green Tea** “*Camellia sinensis*”, **Lemon** “*Citrus x limon*”, **Lemon Balm** “*Melissa officinalis*”, **Lion’s Mane** mushroom “*Hericium erinaceus*”, **Nutmeg** “*Myristicaceae fragrans*”, **Parsley** “*Petroselinum crispum*”, **Passion flowers** “*Passiflora*”, **Phenethylamine** (found in cacao), **Peppermint** “*Mentha x piperita*”, **Periwinkle** “*Vinca minor*”, **Reishi** “*Ganoderma lucidum*”, **Sassafras** “*Sassafras albidum*”, **Rosemary** “*Rosmarinus officinalis*”, **Saffron** “*Crocus sativus*”, **Sage** “*Salvia officinalis*”, **Valerian** “*Valeriana officinalis*”, **Violet** “*Viola odorata*”, **Wood Betony** “*Stachys officinalis*”, **Wormwood** (in moderate amounts) “*Artemisia absinthium*”

NOOTROPIC HERBS:

ATTENTION:

- Peppermint
- Rosemary
- Lemon, Sage

- Lemon Balm
- Ginkgo
- Green Tea

CONCENTRATION:

- Rosemary
- Lemon, Sage
- Peppermint

- Lemon Balm

- Lemon Balm

- Sage

INTELLIGENCE

- Gotu Kola

LEARNING

- Sage
- Gotu Kola

SENSORIMOTOR

- Sage
- Gotu Kola

MEMORY

- Ginkgo, Sage
- Periwinkle
- Rosemary
- Peppermint
- Gotu Kola
- Green Tea

VISUAL PERCEPTION

- Gotu Kola
- Ginkgo

LANGUAGE

- Rosemary
- Sage (word recall)
- Green Tea (verbal fluency)

EXECUTIVE FUNCTION

- Rosemary

BOTANICAL NOOTROPICS BY NAME AND PROPERTIES:

HERBAL PROPERTIES	Peri-winkle	Rose-mary	Sage	Gotu Kola	Gink-go	Green Tea	Pepp-ermint	Lemon	Lemon Balm
adaptogen			x				x	x	
alterative			x	x					
analgesic		x	x			x	x		
antibacterial	x	x	x				x	x	x
anticancer	x	x	x		x	x			
antidepressive		x			x			x	x
antifungal			x				x	x	
anti-inflammatory	x	x	x	x	x	x			x
antimicrobial		x	x	x		x			x
antioxidant		x		x	x	x	x	x	x
antiseptic		x	x				x	x	
antispasmodic	x	x							x
antiviral		x	x			x		x	x
anxiolytic						x			x
aromatic		x					x	x	x
astringent	x	x				x		x	
cardiotonic	x		x		x	x			
carminative	x	x				x	x	x	x
expectorant			x			x			
febrifuge				x					
nervine	x	x	x	x	x	x	x	x	x
neuroprotective				x	x			x	
rejuvenative		x		x	x			x	x
stomachic		x	x			x	x	x	
tonic		x	x	x	x	x	x	x	x
vulnerary			x	x					

NOOTROPIC HERBS, NEUROPLASTICITY, & NEUROGENESIS:

Nootropics are cognitive-enhancing substances, sometimes referred to as “smart drugs.” Most nootropics being marketed today are high cost, synthetic in form, chemical in nature, and may or may not come with a host of side-effects including addiction, depression, burnout, fatigue, stomach upset, or even worse. Synthetic nootropics cannot always reach neural pathways and may contain additional toxic ingredients. But HERBS are plants, and plant-based nootropics come in a much different package. Specifically the herbs used in my nootropic blend were completely obtained from natural, organic, sustainably-sourced plants. Also, these herbs are non-addictive, pleasing to the taste and smell senses, safely consumed over long periods of time (such as lifetimes), comparatively speaking, very low cost, and they all have properties that positively impact general health. The purpose of this study was to find an effective herbal therapy regimen that would improve cognitive function; I achieved my purpose. My research revealed that inhaling and ingesting nootropics in the form of herbal tisane and herbal aromatherapy did in fact lead to improved attention, awareness of

PROCESS: 13-week experiment, between ages of 53-79, “single subject” design study, volunteers were randomly assigned to either treatment group or control group. I measured compliance and observed any signs of negative side effects from using the herbs.

RESULTS: At the onset of this study, over half of the participants reported some level of cognitive decline by describing memory loss, brain fatigue, lack of attention, brain fog, or impaired focus. Using a 95% confidence interval, the average improvement in cognitive function was 22 percent. Statistically significant improvements were observed in areas of attention, delayed memory, immediate memory, language, and visuospatial memory as measure by the RBANS – The Repeatable Battery for the Assessment of Neuropsychological Status. Six of the eight therapeutic participants showed statistically significant increases in percentile rank and total scale scores. Participants in the control group showed either maintenance or decline in all but two cognitive areas and overall decline in total scale score and percentile rank. The data are encouraging in that they suggest that plant-based nootropics, when consumed through tea (tisane) and aromatherapy, may provide some individuals with or without cognitive decline a safe, natural method of improving their cognitive function.

THE HERBAL BRAIN® RESEARCH-BASED PRODUCT DESIGN:

3 methods of intake/uptake: olfactory, integumentary, and gastrointestinal

Uptake timing and long term “tonic” use combination for optimal effects

Recommended Use: daily

I have discovered these Herbs in combination to be the most beneficial for long-term benefits to cognitive health.

- **Green Tea** “*Camellia sinensis*”
- **Gotu Kola** “*Centella asiatica*”
- **Lemon** “*Citrus limonum*”
- **Ginkgo** “*Ginkgo biloba*”
- **Peppermint** “*Mentha piperita*”
- **Rosemary** “*Rosmarinus officinalis*”
- **Sage** “*Salvia officinalis*”
- **Basil** “*Ocimum basilicum*”
- **Brahmi** “*Bacopa monnieri*”
- **Periwinkle** “*Vinca minor*”
- **Lemon Balm** “*Melissa officinalis*”
- **Wood Betony** “*Stachys officinalis*”