

ROOT Zero-In

ROOT Zero-In is a proprietary strategic blend of adaptogens and amino acids to improve overall health and wellbeing! With only seven ingredients, ROOT has created a nutraceutical unlike any other. There is no reason to complicate a product with 30+ ingredients when it is possible to keep it high quality and simplistic so the body can utilize each component to stimulate various molecular pathways for the utmost effect. The inclusion of anhydrous caffeine and vitamin D work as a catalyst to synthesize the adaptogens and dopamine agonists. Although caffeine is often only thought of as a stimulant, when combined with these adaptogens the result is a phenomenal boost in cognitive function and performance. Because this happens where neurotransmitters are created first, in the gut, the increased dopaminergic activity and vagal tone positively influences all bodily systems from head to toes.

PRIMARY BENEFITS MAY

REGENERATE MICROBIOME

IMPROVE IMMUNE RESPONSE

BALANCE NEUROTRANSMITTER PRODUCTION

OPTIMIZE SLEEP AND CIRCADIAN RHYTHM

ENHANCE MOOD, RELIEVE STRESS AND TENSION

IMPROVE RECOVERY AND PHYSICAL PERFORMANCE

IMPROVE ENDOCRINE FUNCTIONING AND SEXUAL HEALTH

INCREASE FOCUS, MENTAL ACUITY AND COGNITIVE FUNCTIONING

REDUCE RISK OF HYPERTENSION, HEART FAILURE AND METABOLIC SYNDROME

SUPPLEMENT FACTS

Serving Size: 1 Capsule

Amount Per Serving		% Daily Value
Vitamin D (as Cholecalciferol)	25mcg	125%
Anhydrous Caffeine	100mg	††
12 HBP Proprietary Brain Blend	575mg	††
N-Acetyl-L-Tyrosine L-Theanine Velvet Bean Seed Powder (<i>Mucuna pruriens</i>) Pine Bark Extract (98% Proanthocyanidins) Turmeric Root Extract (95% Curcuminoids)		

†† Percent Daily Value Not Established

Other Ingredients: Vegetable Cellulose (capsule), Micro-crystalline Cellulose, Magnesium stearate.



Organic



Gluten-Free



Vegan



Non-GMO

<https://therootbrands.com/>

Disclaimer: These statements have not been evaluated by the Food and Drug Administration. The product is not intended to diagnose, treat, cure, or prevent any disease.



Zero-In Relevant Studies

Vitamin D

"Vitamin D in Synaptic Plasticity, Cognitive Function, and Neuropsychiatric Illness" by P. Mayne & T. Burne. Dysregulation of PNNs caused by vitamin D deficiency may contribute to the presentation of cognitive deficits. PMID: 30795846

"Vitamin D and the Nervous System" by G. Bivona, CM Gambino, G. Lacolino, & M Ciaccio. VD contributes to cerebral activity in both embryonic and adult brains, helping the connectivity of neural circuits responsible for locomotor, emotional and reward-dependent behavior. Low VD serum levels have been found in patients affected by Alzheimer Disease, Parkinson Disease, Multiple Sclerosis, Autism Spectrum Disorders, Sleep Disorders and Schizophrenia. PMID: 31142227

Anhydrous Caffeine:

"Caffeine Protects Dopaminergic Neurons From Dopamine-Induced Neurodegeneration via Synergistic Adenosine-Dopamine D2-Like Receptor Interactions in Transgenic *Caenorhabditis elegans*" by R.V.M. Manalo & P.M.B. Medina. Caffeine protects dopaminergic neurons from dopamine-induced neurodegeneration and acts by modulating adenosine receptor-DOP2R interactions. PMID: 29563862

"Is Caffeine a Cognitive Enhancer?" by A. Nehlig. Indirect action on arousal, mood and concentration contributes in large part to its cognitive enhancing properties. PMID: 20182035

N-Acetyl-L-Tyrosine

"N-acetyl-L-tyrosine is an intrinsic triggering factor of mitohormesis in stressed animals" by T. Matsumura, O. Urya, F. Matsuhisa, K. Tajiri, H. Matsumoto, Y. Hayakawa. NAT-dependent FoxO activation increases in the gene expression of antioxidant enzymes and Keap1. Moreover, we find that NAT represses tumor growth, possibly via the activation of Keap1. In sum, we propose that NAT is a vital endogenous molecule that could serve as a triggering factor for mitohormesis. PMID 32118349

"Effect of tyrosine supplementation on clinical and healthy populations under stress or cognitive demands" by B. Jongkees, B. Hommel, S. Kuhn & L. Colzato. TYR does seem to effectively enhance cognitive performance, particularly in short-term stressful and/or cognitively demanding situations. We conclude that TYR is an effective enhancer of cognition, but only when neurotransmitter function is intact and DA and/or NE is temporarily depleted. PMID: 26424423

L-Theanine

"The Effects of Green Tea Amino Acid L-Theanine Consumption on the Ability to Manage Stress and Anxiety Levels: a Systematic Review" by JL Williams, JM Everett, NM D'Cunha, D. Sergi, EN Georgousopoulou, RJ Keegan, AJ McKune, DD Mellor, N. Anstice, N. Naumovski. Our findings suggest that supplementation of 200-400 mg/day of L-THE may assist in the reduction of stress and anxiety in people exposed to stressful conditions. PMID 31758301

"Psychotropic effects of L-theanine and its clinical properties: From the management of anxiety and stress to a potential use in schizophrenia" by FL Sakamoto, RMP Ribeiro, AA Bueno, HO Santos. Published data suggests that L-theanine administered at daily doses ranging from 200 to 400 mg for up to 8 weeks are safe and induce anxiolytic and anti-stress effects in acute and chronic conditions. L-theanine at doses lower and higher than these may also show promising therapeutic potential. PMID 31412272

Zero-In Relevant Studies

Mucuna Pruriens (Velvet Bean Seed Powder)

"An assessment of potential nutritive and medicinal properties of Mucuna pruriens: a natural food legume" by R. Pathania, P. Chawla, H. Khan, R. Kaushik, MA Khan. This legume is considered as a future restorative herb because of its anticholesterolemic, anti-Parkinson, antioxidant, antidiabetic, sexual enhancing, anti-inflammatory, antimicrobial, and antivenom activities. It also exhibits anticancer activities. PMID 32477848

"Mucuna pruriens seed extract reduces oxidative stress in nigrostriatal tissue and improves neurobehavioral activity in paraquat-induced Parkinsonian mouse model" by SK Yadav, J. Prakash, S. Chouhan, SP Singh. Our result suggested that Mucuna Pruriens seed extract treatment significantly reduced the Paraquat (chemical herbicide) induced neurotoxicity as evident by decrease in oxidative damage, physiological abnormalities and immunohistochemical changes in the Parkinsonian mouse. PMID 23562769

Turmeric Root Extract (Curcuminoids)

"Curcumin and Type 2 Diabetes Mellitus: Prevention and Treatment" by F. Pivari, A. Mingione, C. Brasacchio, L. Soldati. Curcumin has different pharmacological and biological effects that have been described by both in vitro and in vivo studies, and include antioxidant, cardio-protective, anti-inflammatory, anti-microbial, nephro-protective, anti-neoplastic, hepato-protective, immunomodulatory, hypoglycaemic and anti-rheumatic effects. In animal models, curcumin extract delays diabetes development, improves β -cell functions, prevents β -cell death, and decreases insulin resistance. PMID 31398884

"A Systematic Review and Meta-analysis of Randomized Controlled Trials on the Effects of Turmeric and Curcuminoids on Blood Lipids in Adults with Metabolic Diseases" by F. Yuan, H. Dong, J. Gong, D. Wang, M. Hu, W. Huang, K. Fang, X. Qin, X. Qiu, X. Yang, F. Lu. In conclusion, turmeric and curcuminoids can significantly modulate blood lipids in adults with metabolic diseases. PMID 31212316

Pine Bark Extract (Proanthocyanidins)

"Pine bark extracts: nutraceutical, pharmacological, and toxicological evaluation" by YY Li, J. Feng, XL Zhang, YY Cui. Great potential for the identification and development of novel antioxidant, anti-inflammatory, cardiovascular, neuroprotective, and anticancer medicines. PMID: 23562769

"Pine bark extract prevents low-density lipoprotein oxidation and regulates monocytic expression of antioxidant enzymes" by S. Nakayama, Y. Kishimoto, E. Saita, N. Sugihara, M. Toyozaki, C. Taguchi, M. Tani, T. Kamiya, K. Kondo. Pine bark extract significantly prolonged the lag time of LDL oxidation. Based on our findings, it appears that PBE enhances the antioxidant defense capacity of LDL and monocytes and may play a preventive role in atherosclerosis progression. PMID 25458248

"Supplementation with a pine bark extract rich in polyphenols increases plasma antioxidant capacity and alters the plasma lipoprotein profile" by S. Devaraj, S. Vega-López, N. Kaul, F. Schönlaue, P. Rohdewald, I. Jialal. Following oral supplementation in humans, Pycnogenol significantly increases antioxidant capacity of plasma, as determined by oxygen radical absorbance capacity, and exerts favorable effects on the lipid profile. PMID 12530550

"Pycnogenol, French maritime pine bark extract, improves endothelial function of hypertensive patients" by X. Liu, J. Wei, F. Tan, S. Zhou, G. Würthwein, P. Rohdewald. Supplementation of the patients with 100 mg Pycnogenol over a period of 12 weeks helped to reduce the dose of the calcium antagonist nifedipine in a statistically significant manner. The intake of Pycnogenol decreased endothelin-1 concentrations significantly compared to placebo while concentrations of 6-keto prostaglandin F1a in plasma were significantly higher compared to placebo. PMID 14659974

"Pycnogenol protects neurons from amyloid-beta peptide-induced apoptosis" by Q.L. Peng, A.R. Buz'Zard, B.H.S. Lau. Pycnogenol not only suppressed the generation of ROS but also attenuated caspase-3 activation, DNA fragmentation, PARP cleavage, and eventually protected against Abeta-induced apoptosis. PMID 12117551

"Treatment of ADHD with French maritime pine bark extract, Pycnogenol" by J. Trebatická, S. Kopasová, Z. Hradecná, K. Cinovský, I. Skodáček, J. Suba, J. Muchová, I. Zitnanová, I. Waczulíková, P. Rohdewald, Z. Duracková. Results show that 1-month Pycnogenol administration caused a significant reduction of hyperactivity, improves attention and visual-motoric coordination and concentration of children with ADHD. PMID 16699814