



Memory™

Memory and mental function are fundamental in creating a fulfilling and productive life. As life expectancies continue to lengthen we look closer at the quality of life we can create. Being able to use our brain most effectively is paramount for all ages. Clinical nutrition provides an incredible avenue to reach our goal of optimum mental function. Mountain Peak Nutritionals **Memory™** formula is designed to enhance memory, improve focus and concentration, assist in better learning and slow down the aging of brain cells. The ingredients found in **Memory™** formula are chosen based on current scientific research and clinical studies that indicate the efficacy of each ingredient. **Memory™** formula is safe for children with attention deficit disorder (ADD) and brings noticeable improvement to memory and cognitive function in older adults.

INGREDIENTS:

Choline

Choline has traditionally been considered a B vitamin. However, this is controversial as the human body can synthesize choline. Choline, or its metabolites, is needed for the synthesis of cell membrane phospholipids and as a methyl donor for the synthesis of other compounds (1). Choline concentrates in the nerve tissue. Choline is a precursor to acetylcholine, which plays a vital role in the transmission of an impulse from one nerve fiber to another across a synaptic junction.

n-Acetyl L-Carnitine

n-Acetyl L-carnitine occurs naturally in the body and readily crosses the blood-brain barrier. Once in the brain it improves mitochondrial energetics, prevents oxidative damage, and enhances cholinergic neurotransmission (2). n-Acetyl L-carnitine is structurally related to acetylcholine and also serves as a precursor to acetyl coenzyme A. In recent studies n-acetyl L-carnitine has been shown to prevent age-related reduction of nerve growth factor in certain portions of the brain.

Bacopa Monnieri

Bacopa monnieri is also known as Brahmi, a well-known Ayurvedic herb that contains memory-enhancing constituents called bacosides. According to scientists at the Central Drug Research Institute in Lucknow, India, bacosides help repair damaged neurons by adding muscle to kinase, the protein involved in the synthesis of new neurons (3). Bacopa is primarily used to improve learning and enhance memory. In human studies Bacopa has been shown to increase a child's exploratory behavior and have a positive effect on recall and reaction time.

dl-Phenylalanine (free form)

dl-Phenylalanine is the racemic mix of 50% d and 50% l-Phenylalanine. l-Phenylalanine is an essential human amino acid and the only form of phenylalanine found in proteins. dl-Phenylalanine is a clinically proven mood enhancer and a precursor of tyrosine. It enhances endorphin and enkephalin levels in the central nervous system.

Supplement Facts

Serving size: 1 capsule
Servings per container: 60

Amount per serving	%DV
Vitamin C (as Poly C Ascorbate)	10 mg 30%
Vitamin B6 (as Pyridoxal-5-Phosphate)	10 mg 453%
Vitamin B12 (as Methylcobalamin)	400 mcg 667%
Folic Acid (Calcium Folate)	800 mcg 200%
Ginkgo biloba/phosphatidylserine complex (Virtiva®)	150 mg *
Choline (as Bitartrate)	100 mg *
n-Acetyl L-Carnitine	100 mg *
Bacopa monnieri extract (20% bacosides A & B) (whole herb)	50 mg *
dl-Phenylalanine (free form)	50 mg *
l-Tyrosine (free form)	50 mg *
Taurine (free form)	50 mg *
Ashwagandha extract (Withania somnifera) (4.5% withanolides) (root)	28 mg *
Rhodiola rosea (4% rosavins) (rhizome)	25 mg *
Vinpocetine	500 mcg *
Huperzine A, B, C (as Toothed Clubmoss)	250 mcg *

Percent Daily Values are based on a 2,000 calorie diet.

* Daily Value not established.

Other ingredients: Vegetarian capsules, (cellulose and water), l-Leucine, silica
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L-Tyrosine (free form)

L-Tyrosine is a non-essential amino acid that the body synthesizes from phenylalanine. It is a precursor for the catecholamines dopamine, epinephrine, and norepinephrine. Supplemental tyrosine improves performance, memory, and learning, under extreme environmental conditions, intense exercise, or psychological stress (4). L-tyrosine is an important constituent of thyroid hormone.

Taurine (free form)

Taurine is a conditionally essential amino sulfonic acid. Large amounts of taurine are found in the human brain, retina, heart, and platelets. Taurine appears to have both antioxidant and free radical scavenging activity (5).

Ginkgo biloba/phosphatidylserine complex (Virtiva®)

Both ginkgo biloba and phosphatidylserine are universally recognized as nootropic agents that improve cognitive enhancement, mental acuity and brain function. Virtiva® has a proprietary phytosome-like structure obtained by creating a complex of ginkgo biloba standardized extract and phosphatidylserine. This synergistic complex improves absorption and bioavailability while improving both secondary memory performance and significantly increasing the speed of memory task performance (6).

Ashwagandha

Ashwagandha contains several active constituents including alkaloids, steroidal lactones (withanolides, withaferins) and saponins. Researchers believe ashwagandha has a so-called "anti-stressor" effect. Preliminary evidence suggests ashwagandha suppresses stress-induced increases of dopamine receptors in the corpus striatum of the brain (7).

Vitamin C

Vitamin C is included as a cofactor to help potentiate antioxidant and free radical scavenging effects.

Rhodiola Rosea

Rhodiola rosea products are standardized based on rosavin content. It also contains a phenylpropanoid glycoside called salidroside, which is believed to be responsible for rhodiola's stimulant, anti-stress, and adaptogenic actions (8). Rhodiola rosea provides support for physical and mental stress in students in a double-blind crossover study. Cognitive function, memory and attention are enhanced by promoting the activity of neurotransmitters, such as serotonin, dopamine and norepinephrine.

B6 Pyridoxal-5-Phosphate

Pyridoxal-5-Phosphate is the biologically active form of B6. It is necessary for various metabolic reactions such as transamination of amino acids, conversion of tryptophan to niacin, synthesis of gamma-aminobutyric acid (GABA) in the CNS, metabolism of serotonin, norepinephrine and dopamine (9).

B12 Methylcobalamin

Methylcobalamin is the biologically active coenzyme form of B12. Deficiency of B12 is associated with impaired cognitive performance, memory loss and depression (10). B12 is needed to prevent anemia. It aids folic acid in regulating the formation of red blood cells, improving oxygen delivery to tissues and aids in the utilization of iron (11).

Folinic Acid (Calcium Folate)

Folinic acid has long been recognized as a brain food and is needed for energy production and the formation of red blood cells. After folinic acid is absorbed, it is reduced to tetrahydrofolate and then enters a methylation cycle. Current scientific evidence indicates low folate concentrations may be related to atrophy of the cerebral cortex, particularly in people with neocortical lesions related to Alzheimer's disease (12).

Vinpocetine

Vinpocetine is a derivative of apovincamine, a compound found in the periwinkle plant. Vinpocetine increases efficient use of oxygen and glucose and stimulates production of ATP for cellular energy (13). One double-blind study showed healthy subjects exhibited an incredible boost in short-term memory function within one hour of ingesting vinpocetine (14).

Huperzine A, B, C

Huperzine A, B, C is an alkaloid isolated from Toothed Clubmoss. Huperzine A, B, C is a potent inhibitor of acetylcholinesterase (AChE), the enzyme that breaks down acetylcholine. Huperzine A, B, C is thought to be beneficial in dementia, memory impairment and myasthenia gravis due to its effects on acetylcholine levels (15).

Patients: Consult with your healthcare professional for the proper dosage and use of this formula. For more information about this and other Condition Specific Formulas® please visit our website at:

www.mpn8.com



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