FIGHT MEMORY LOSS

NEUROSERINE

Phosphatidyl Serine

AND IMPROVE BRAIN HEALTH

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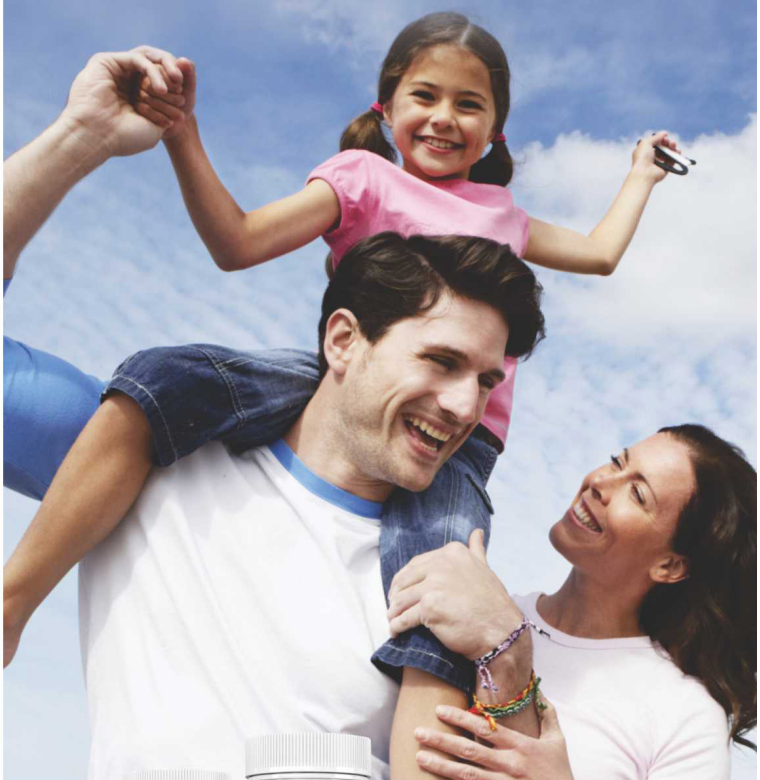

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NEUROSERINE Phosphatidyl Serine

The First direct approach to Alzheimer's Disease

Presentation
200 mg Soft Gel Capsule
of
Phosphatidyle Serine

Alzheimer's Disease

Alzheimer's disease (AD) is the most common form of dementia that initially targets memory and progressively destroys the mind. Almost 1 out of 5 elderly subjects suffer from any form of dementia.

Pharmacological management can provide only symptomatic relief, transiently effective with adverse effects.

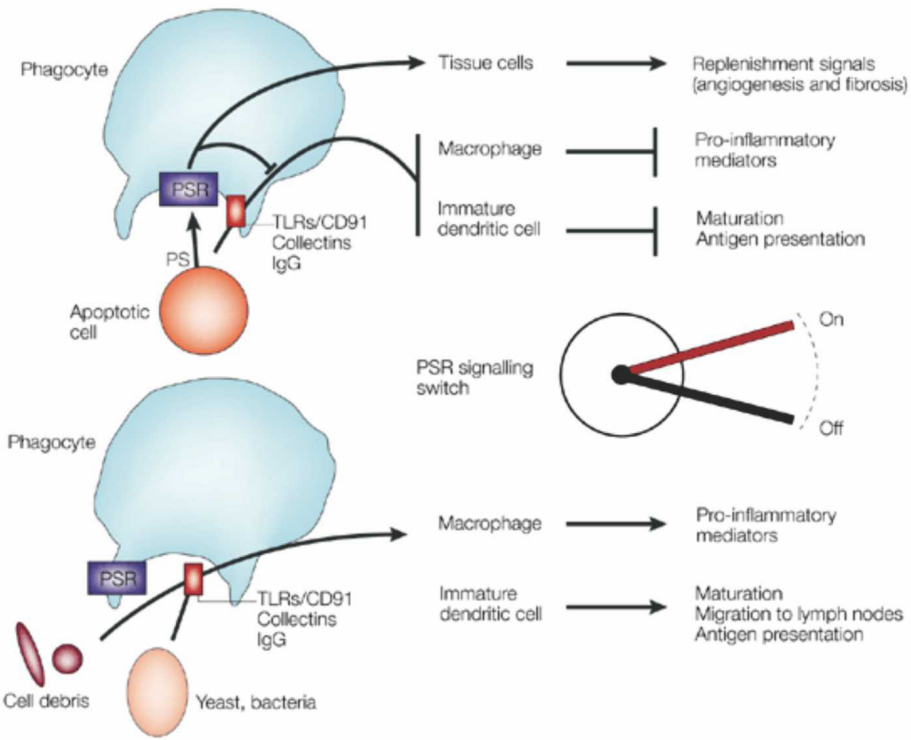
Therapeutic nutritional supplements phosphatidylserine (PS), energy nutrient like acetyl-L-carnitine, Vitamin C, Vitamin E and other B Vitamins fights Alzheimer's as a prevention and as an effective adjuvant with medication.

Phosphatidylserine (PS)

is an important phospholipid that makes up the basic structural components of the cell membrane. They play an important role in cell-to-cell communication and transfer of biochemical messages into the cell, which trigger celluar responses. The proper functioning of these processes is of ultimate importance, especially in the central nervous system. Phosphatidyleserine enhances cellular metabolism and communication by influencing the fluidity of cell membranes.

Oral supplementation of PS has been shown to improve cell metabolism, specific neurotransmitter systems including acetylcholine, norepinephrine, serotonin, and dopamine.

Numerous clinical trials have established that PS exerts significant benefit for cognition, especially those functions that tend to decline with age, including memory, learning, vocabulary skills, and concentration.



Biochemistry

Phosphatidyleserine is formed in the body from the amino acid L-serine, glycerophosphate, and two fatty acids. Some PS is converted to phosphatidyl-ethanolamine, which is in turn converted to phosphatidylcholine.

Phosphatidyl-ethanolamine can also be enzymatically converted to phosphatidylserine.

Pharmacokinetics

Pharmacokinetic studies indicate exogenous Phosphatidyleserine crosses the blood-brain barrier, where it appears to have an affinity for the hypothalamus.

Oral administration results in peak levels in 1-4 hours.

Mechanisms of Action

Phosphatidylserine modifies glucose metabolism in the brain, catecholamine and acetylcholine release, NMDA (N-methyl-D-aspartic acid) receptor density (Important for Memory) and function, acetylcholine receptor density which are co-related to the behavioral changes.

The primary mechanism of action appears to be an enhancement of cholinergic transmission.

1. Phosphatidylserine increases cholinergic function in multiple ways. First, it enhances the activity of Na+,K+-ATPase, which helps maintain membrane potential.
2. It increases Ca2+ uptake into K+-depolarized corticol synaptosomes, and this is an important event in neurotransmitter release
3. Phosphatidylserine affects exocytosis of neurotransmitters by interacting with membrane-binding proteins
4. Improves memory by increasing the turnover of dopamine and/or norepinephrine (NE) in the brain
5. Phosphatidylserine mediates a variety of processes related to synaptic plasticity, information storage, and glutamatergic transmission
6. It also acts as an antioxidant, suppresses cytotoxic factors such as TNF-alpha and nitric oxide, interacts with nerve growth factor (NGF), and increases brain glucose concentration.

Indications

Age-Associated Memory Impairment/ Cognitive Decline

In Elderly men supplementation of Phosphatidylserine resulted in significant improvements in behavioral alterations (loss of motivation, initiative, interest in the environment, and socialization), memory, concentration and learning. Dose: 300 mg daily.

Alzheimer's Disease

Phosphatidylserine produces significant improvement in anxiety, motivation, memory, and cognition. Daily doses of 200-300 mg for up to six months will improve clinical global impression and activities of daily living.

Attention Deficit/Hyperactivity Disorder

Phosphatidylserine in combination with omega-3 fatty acids shows promise in the management of attention deficit/hyperactivity disorder (ADHD). Studies demonstrate that a supplementation of Omega-3 with PS in children with severe symptoms of shown significan improvement when assessed with the Test of Variables of Attention (TOVA). Omega-3/ PS improves attention performance.

Dosage: 200 mg 2 to 3 times daily

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