Phosphatidylserine (PS) is a nutrient essential for optimal brain function. Because PS is crucial for the overall health of brain cells, research on PS has shown that it benefits a wide range of brain activities. There are no foods rich in PS, except for brain (which, of course, is not recommended as a food), so PS supplementation is the only way to increase levels of this valuable brain nutrient. The body can make PS, but in far from optimal quantities, and less as we age.

How PS Benefits Memory and Recall
In order for memories to be both formed and recalled, neurons must talk to each other. Without PS, such communication among neurons is difficult if not impossible. With PS, neurons communicate more effectively. That is why PS has such positive effects on memory, recall, and overall brain function.

Age-Related Memory Loss
As we age, most individuals lose some memory function. PS may help to reverse or slow this process. Seventy-five patients with age-related memory impairment were given 300 mg of PS per day for 12 weeks. PS led to improved performance tests related to learning and memory tasks of daily life. Another study of 33 patients with dementia showed equally promising results. This 8 week study of 300 mg per day of PS showed that PS can significantly improve overall brain wellness in those with dementia.

Alzheimer's Disease
Alzheimer's disease is a debilitating ailment that destroys the memory of older adults. While there is no cure for Alzheimer's, nutrients like PS may help slow the progression and even reverse some of the symptoms of this disease. Eighteen patients with Alzheimer's disease given 400 mg of PS per day for 6 months experienced a wide range of positive effects on memory and recall. In a different study, 25 patients with Alzheimer's disease given 300 mg of PS for 12 weeks also saw improvements in brain function. This study also showed that PS may have the most benefit when given in early stages of Alzheimer's.

Depression
The effects of phosphatidylserine on cognitive, affective and behavioral symptoms were studied in a group of 10 elderly women with depressive disorders. Patients were treated with placebo for 15 days, followed by PS at 300 mg/day for 30 days. PS induced consistent improvement of depressive symptoms, memory and behavior.
PS and Hormones

Research shows that phosphatidylserine helps normalize cortisol levels when the body is under stress. Studies have been performed using exercise as a means of producing stress, as exercise-induced stress can trigger an excessive cortisol response. The results of the research demonstrated that PS promotes healthy hormone levels by reducing the cortisol response to acute exercise-induced stress.\textsuperscript{11,12} Thus, PS is effective at combating this stress, helping to stave off the negative effects that accompany too much exercise, such as substandard performance, potential injury, and even a lowered immune response.\textsuperscript{13}

Research also showed that PS supplementation helped to increase the testosterone to cortisol ratio in males.\textsuperscript{13} Testosterone levels normally will fall after intense exercise, since high cortisol levels impair the production of testosterone. Thus, PS supplementation helps to promote a healthy hormonal balance for those undergoing rigorous exercise. (Keep in mind that not all levels of exercise increase cortisol levels, as mild to moderate exercise programs are touted for their stress-reducing effects.)

It stands to reason that, although these studies used exercise to trigger stress, the effectiveness of PS is not limited to physical stress since cortisol, the ‘fight or flight’ hormone, is released in high amounts in response to stressful situations, whether they be physical, mental or emotional.

How to Use:

- Most studies in humans where PS has been used to optimize brain function used 300 mg of PS per day. Long term supplementation at 100-200 mg per day may be sufficient for most adults to maintain optimal brain levels PS; higher doses have been used for athletes.
  - Powder: 1 gram (200 mg; approx. 1/4 teaspoon) per day
  - Capsules: 1 capsule (150 mg) per day
- If PS is being used to help with any medical condition, or if an individual is taking medications (especially psychotropic medications), PS must be taken under the guidance of a health care practitioner.

References


To contact Designs for Health, please call us at (800) 847-8302, or visit us on the web at www.designsforhealth.com.