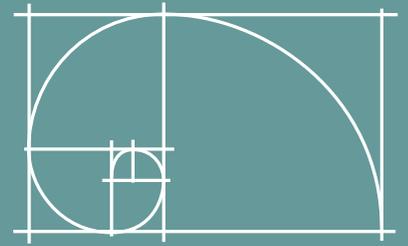




**ULTRACOG™**  
DHA  
Phosphatidylserine

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## What is Phosphatidylserine?

Phosphatidylserine is a naturally occurring phospholipid that is important in the maintenance and health of the cell membrane and elicits important cell signaling that promote healthy brain function. More importantly, phosphatidylserine has been shown to play an important role in bolstering our cognitive health within the membrane of neurons. The consumption of phosphatidylserine reduces the risk of age related cognitive decline. Some of this amphipathic molecule is created endogenously by our own bodies, but a vital source of phosphatidylserine comes from our diet. With age-associated cognitive decline becoming an increasing concern, it is more important than ever to maintain healthy levels of phosphatidylserine to reinforce proper neurological function.\*

## About UltraCog DHA™ Phosphatidylserine

Vesta's UltraCog DHA™ is an all-natural phosphatidylserine that is derived with omega-3 from an all-natural, non-GMO marine source. UltraCog DHA™ offers all the cognitive advantages of PS with the added benefits of unsaturated omega-3 fatty acids, and it is isolated utilizing proprietary technology to deliver the most bioactive and potent functional ingredient for cognitive improvement, mental acuity, and cardiovascular health.

Additionally UltraCog DHA™ is a form of PS that is not only derived from PS conjugated omega-3, but specifically docosahexaenoic acid form which is often known to provide more potent health benefits due to its nature long chain unsaturated fatty acid. Both USDA Dietary Guidelines and the American Heart Association recommend the incorporation of DHA (omega-3 fatty acids) into our diets for better cardiovascular health. Interestingly DHA has been shown to be a key component of our brains. This synergistic function of both PS and DHA is what makes UltraCog DHA™ such a potentially effective molecule. UltraCog DHA™ effectively functions to:

- Increase cognitive activity
- Reduce feelings of distress and improve overall mood
- Slow down age-associated decline of mental function
- Improve cardiovascular health



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

[www.vestaingredients.com](http://www.vestaingredients.com)

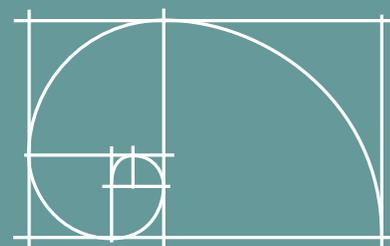


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Phosphatidylserine is essential for intercellular communication. A volumous amount of in vitro studies utilizing primary human neurons have shown that phosphatidylserine is absolutely vital for proper neuronal function. Phosphatidylserine is known to be vital in vesicular release of neurotransmitters from presynaptic terminals, transduction of neuron-to-neuron signaling, preserving Na<sup>+</sup>/K<sup>+</sup> balance, and regulate neuronal growth homeostasis. These essential neuronal functions eventually decline with age, and their proper maintenance is required in order to maintain proper neurological health and cognition.

Several preclinical and clinical studies have shown that the dietary supplementation of phosphatidylserine has both a neuroprotective and a neuroenhancing effect:

In a preclinical model, aged rats were fed various forms of phosphatidylserine. The researchers observed a significant improvement in three different, independent cognitive tests. Ultimately the authors of the study conclude that there was an increase in psychomotor capacity and overall cognitive improvement.

Environmental factors and lifestyle choices can cause damage to our brain, and with time, they cumulatively lead to aging of the brain. Consumption of phosphatidylserine may reduce the risk of age related cognitive decline that comes with age.\* A study was conducted in which scientists took brain sections and incubated them with phosphatidylserine. The sheer act of exposing the brain to more phosphatidylserine lead to an increase activity of neurons. In addition, two clinical studies have shown that phosphatidylserine can improve cognitive function in patients with age-related cognitive decline. Collectively, the large amount of amassed data shows that phosphatidylserine is vital to proper cognitive health.

*\*Very limited and preliminary scientific research suggests that phosphatidylserine may reduce the risk of cognitive dysfunction in the elderly. FDA concludes that there is little scientific evidence supporting this claim.*

## Product Specification

**Chemical Name:** Phosphatidylserine

**Recommended daily intake:** 20-300 mg

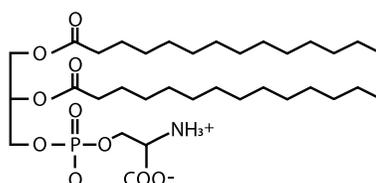
**Pack size:** 1 kg (custom packaging available)

**Molecular formula:** C<sub>42</sub>H<sub>82</sub>NO<sub>10</sub>P

**Molecular weight:** 792.08 g/mol

**CAS number:** 51446-62-9

**Purity:** >99%. 20% granulated/non-granulated available



**Vesta**<sup>®</sup>

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