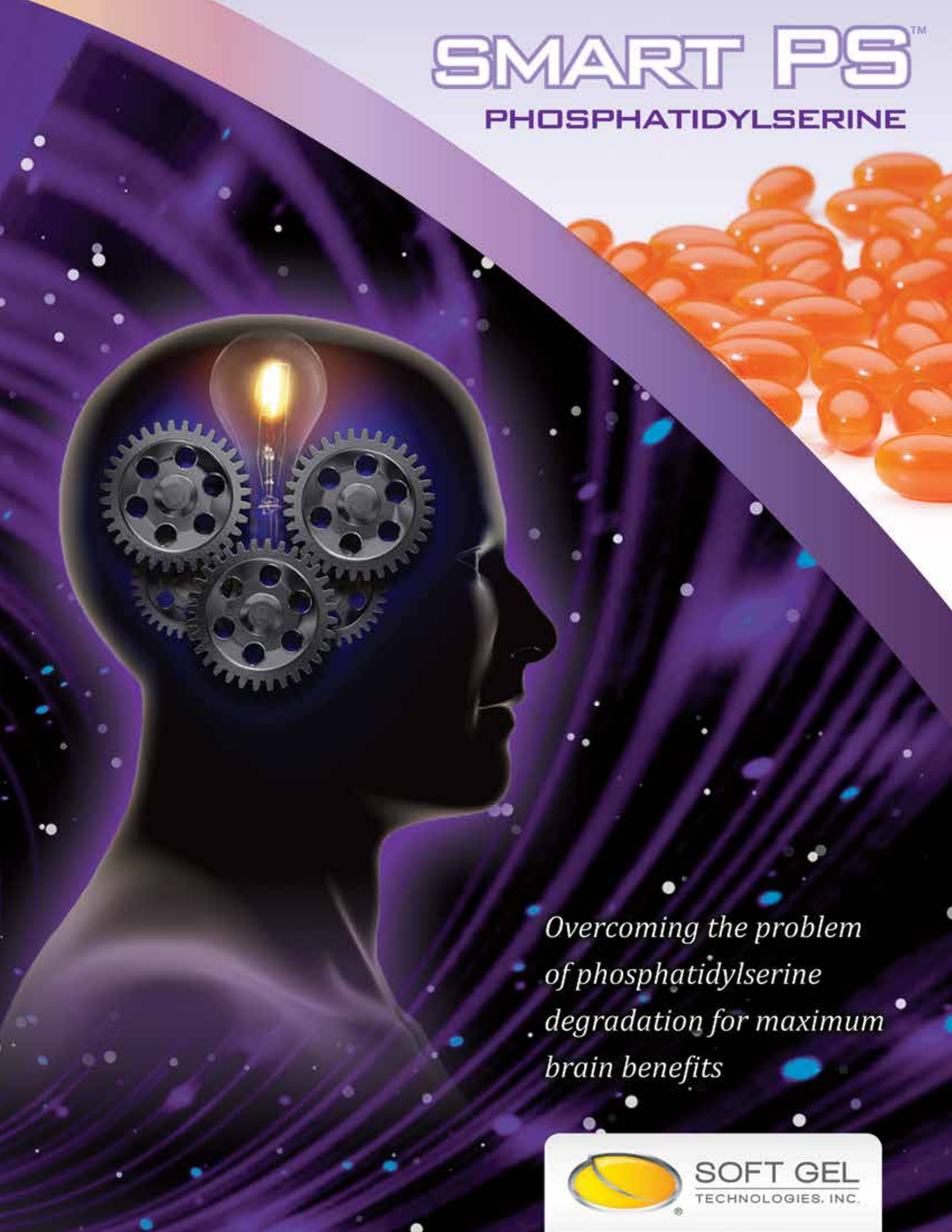
SMART PS™

PHOSPHATIDYLSERINE



Overcoming the problem of phosphatidylserine degradation for maximum brain benefits

SOFT GEL TECHNOLOGIES, INC.®

SMART PS™

PHOSPHATIDYLSERINE

Promotes Mental Alertness

The Plague of Cognitive Decline

Millions of Americans suffer from mild memory problems associated with aging. About 10% of those 65 and older may find their memory, language skills, and other mental functions slipping. While this loss of cognitive function is a normal part of the aging process, it is traumatic for the sufferer and can significantly decrease quality of life.

The Promise of Phosphatidylserine

While many nutraceutical ingredients have been touted for their ability to improve cognitive performance, few have the scientific backing of phosphatidylserine (PS).* A naturally occurring phospholipid, PS is a crucial building block of cell membranes, ensuring their fluidity and structure, and ultimately, their function.*

Why is that significant? Because new research performed at Stanford University's School of Medicine by pioneering cell biologist Bruce Lipton, Ph.D., has revealed that the cell membrane is much more important than previously thought. Rather than simply being a container for the contents of the cell, the cell membrane is the master controller of signal transmission.

It is the molecular mechanism that tells the cell what to do in response to the environment. In essence, the cell membrane — not the nucleus — is the brain of the cell. And it relies on sufficient supplies of PS to function.*

It is no wonder, then, that several multi-center, double-blind, placebo-controlled trials on people with mild, age-related memory problems have suggested that PS improves cognitive performance.*

The Phosphatidylserine Stability Issue

Unfortunately, PS is highly unstable and therefore prone to degradation. In fact, a recent shelf-life study, performed on a standard fluid PS material by an independent international laboratory for phospholipid analysis, showed dismaying results. Within 12 weeks of encapsulation, the standard fluid PS material had degraded by 10%. Within 18 weeks, it had degraded by nearly 20%.

The Stable Solution: Smart PS™

To overcome the issue of PS stability, Soft Gel Technologies offers Smart PS™ — an exclusive fluid dispersion PS material, provided as finished dosage soft gels, that has enviable stability. Shelf-life studies on Smart PS™, performed by the same independent laboratory mentioned above, found that even after 24 months, the material showed absolutely no degradation. It was as potent at month 24 as it was the day it was encapsulated.

Phosphatidyl Serine vs. Phosphatidyl Choline

As phospholipids, both phosphatidylserine (PS) and phosphatidylcholine (PC) are major components of cell membranes. However, unlike PS, PC has very limited value in improving mental function. Why? Bioavailability. As a nutritional supplement, PC is hoarded by the liver. As a result, hardly any of it actually makes it to the brain. That is why there are no solid, repeatable clinical studies correlating PC use with cognitive improvement. PS, on the other hand, is a modified form of PC that does get to the brain, making it a highly valuable nutrient for enhancing cognitive function.*

Who Should Take Smart PS™?

- Anyone wishing to improve mental alertness, memory or concentration
- Older adults already feeling the effects of aging*
- Anyone struggling with low mood*
- Athletes looking to improve performance and hasten recovery

**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.*

Supporting Research

The only brain ingredient granted a qualified health claim by the FDA, phosphatidylserine is supported by a wealth of research, showing it:

- **Preserves brain cell integrity***

  In laboratory animals, PS has been shown to protect the integrity of brain cells important for learning and memory.*[2,3,4]

- **Helps slow down age-related cognitive decline, including:**
  - **Memory**
  - **Attention**
  - **Concentration**
  - **Word Recall**

  Human research, including multi-center, double-blind, placebo-controlled trials, have demonstrated that PS improves some types of mental performance in subjects with mild memory problems associated with aging.* [5,6,7,8,9,10]

- **May "turn back" the aging process***

  Perhaps most impressively, research has indicated that soy-derived PS may "turn back" the aging process. When elderly adults supplemented with 300mg of soy-PS per day, they experienced profound improvements in memory after 12 weeks.* In fact, the improvement in ability to remember names amounted to an age "reversal" of 13.9 years!* [11]

- **Supports a calm and positive mood in the elderly***

  Two studies in elderly women suffering from either major depression or depressive symptoms found that PS significantly improved symptoms of anxiety and depression.[13,14]

- **Reduces the risk of cognitive dysfunction, including Alzheimer's disease**

  Two studies in elderly women found that PS significantly improved feelings of occasional stress and low mood.*[12,13]

- **Enhances athletic performance and recovery***

  A recent study on healthy male subjects found that PS was effective at combating exercise-induced stress and physiological degradation from over-exercise by blunting increases in cortisol levels.*[14] Other research has shown PS improves athletic performance and exercise capacity, while decreasing muscle soreness.* [15]

Dosage

The standard dosage of PS, based on PS intakes utilized in clinical trials, ranges between 100-300mg per day. Accordingly, 100mg per day of Smart PS™ is the minimum recommended daily dosage. For immediate results, PS supplementation at 300mg/day, reduced to 100mg/day after four weeks, may be indicated.

Safety

Soft Gel Technologies' Smart PS™ material is Generally Recognized as Safe (GRAS). A safety study in elderly human subjects showed that a dosage of 200mg, three times per day, caused no significant changes in biochemical or hematological safety parameters, and did not affect blood pressure or heart rate. Additionally, PS has no known side effects, and unlike other remedies, does not influence neurotransmitters such as serotonin.

Available Forms

Smart PS™ is available from Soft Gel Technologies as clear, oval finished dosage soft gels, providing 100mg soy-derived PS per soft gel. We also offer a soy-free version made with sunflower oil.

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Smart PS™ Highlights

Available only from Soft Gel Technologies, Smart PS™ finished dosage soft gels feature an exclusive fluid dispersion phosphatidylserine material that has significantly enhanced stability for maximum brain benefits.

Research in animals and humans has shown that PS:

- Preserves brain cell integrity*
- Helps slow down age-related cognitive decline, including memory, attention, concentration, and word recall*
- May "turn back" the aging process*
- Supports a calm and positive mood in the elderly*
- Reduces the risk of cognitive dysfunction, including Alzheimer's disease
- Enhances athletic performance and recovery*

Why Choose Smart PS™?

- **Enhanced stability**. PS is highly unstable and therefore prone to degradation. A recent shelf-life study found that standard fluid PS material had degraded by nearly 20% within 18 weeks of encapsulation. By comparison, shelf-life studies on Smart PS™ found that even after 24 months, the material showed absolutely no degradation.
- **A proven cognitive enhancer**. While many nutraceutical ingredients have been touted for their ability to improve cognitive performance, few have the scientific backing of PS.* Even the conservative ConsumerLab.com has supported its use for age-related memory problems. Additionally, PS is the only brain health ingredient to have been granted a qualified health claim by the FDA.
- **Safe**. Soft Gel Technologies' Smart PS™ material is Generally Recognized as Safe (GRAS) and is free of side effects. A safety study in elderly human subjects showed that PS caused no significant changes in biochemical or hematological safety parameters, and did not affect blood pressure or heart rate.
- **Bioavailable**. Unlike phosphatidylcholine, which is hoarded by the liver, PS is a modified form of PC that actually reaches the brain, making it a highly valuable nutrient for enhancing cognitive function.* Pharmacokinetic studies show that e xogenous (supplemental) PS easily crosses the blood-brain-barrier.*[18]
- **Turnkey solution**. Smart PS™ is available from Soft Gel Technologies as clear, oval finished dosage soft gels, providing 100mg soy-derived PS per soft gel. We also offer a soy-free version made with sunflower oil. No need to formulate or encapsulate – we've done the work for you.

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