

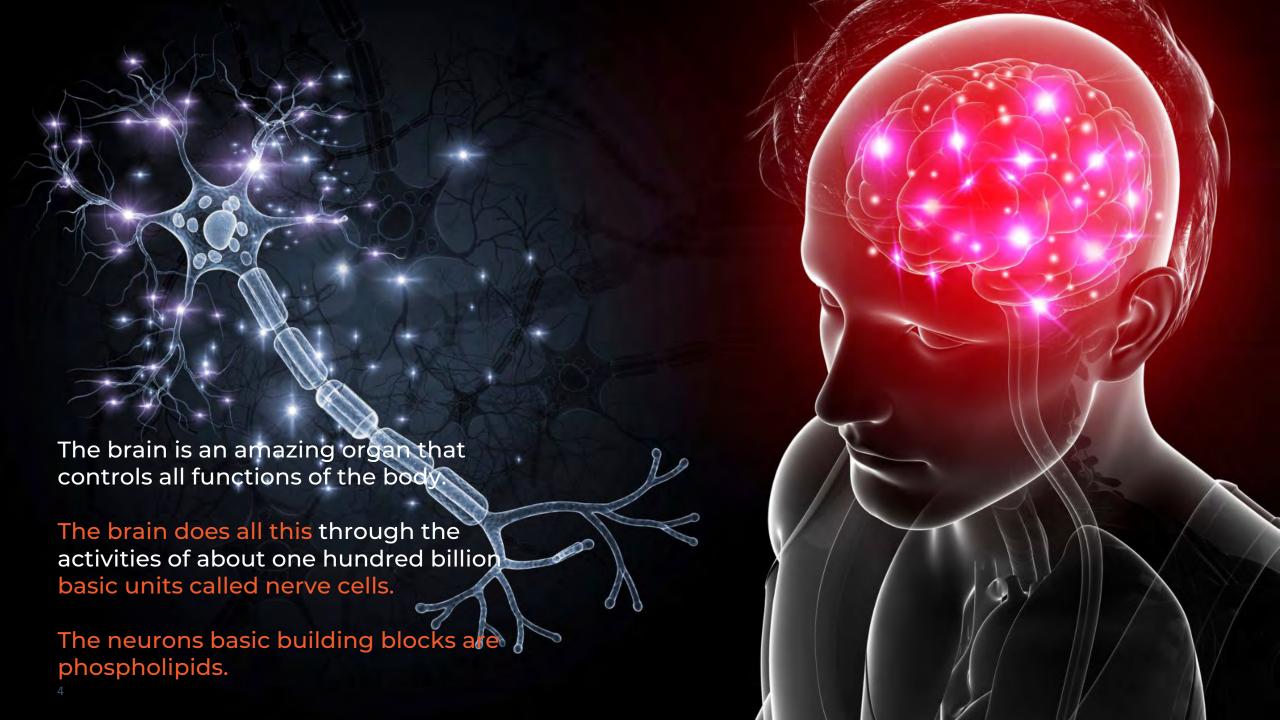
Innovative multi-action formulas proven to boost brain function

The company that has transformed the industry

Established in 1991







#### WHAT WE SPECIALIZE IN: PHOSPHOLIPIDS FOR BRAIN HEALTH

#### WHAT ARE PHOSPHOLIPIDS AND WHY ARE THEY IMPORTANT?



Positive Influence on Memory and Mood Normalizes the Stress Reactivity of Hypothalamus-Pituitary-Adrenal-axis in chronically stressed

Promoting Women's
Health Reduces Symptoms of the PreMen-



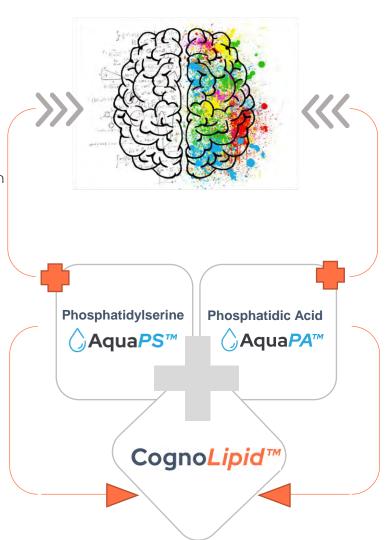
#### THE ONLY FORMULA THAT CAN ADDRESS BOTH

## MEMORY LOSS AND THE NUMBER ONE CAUSE OF MEMORY LOSS: STRESS

#### Phosphatidylserine

Vital to cell membranes Important for cell flexibility, communication and structure Key to regulating cell metabolism

https://pubmed.ncbi.nlm.nih.gov/25933483/https://www.jstage.jst.go.jp/article/jcb-n/47/3/47\_10-62/\_pdf/-char/en



#### Phosphatidic Acid

Essential to cell signaling, membrane curvature and metabolic regulation.

https://febs.onlinelibrary.wiley.com/doi/10.1046/j.1432-1327.1999.00822.x https://jissn.biomedcentral.com/articles/10.1186/1550-2783-10-S1-P6

# Stress Is More Than A Feeling It is a chemical changes in our body Stress causes the body to release the hormone cortisol.

Clinical studies found that elevated cortisol was associated with poorer overall cognitive functioning, as well as with poorer episodic memory, executive functioning, language, spatial memory, processing speed, and social cognition; while in animals, glucocorticoid administration resulted in cognitive impairment and abnormal behavior.

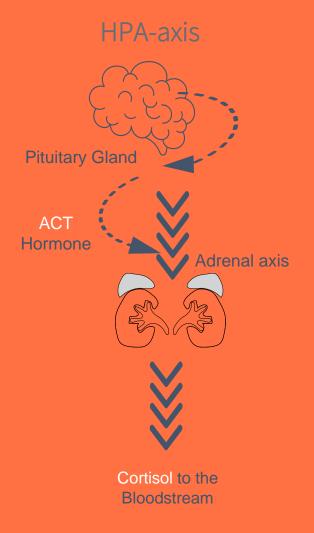
https://www.frontiersin.org/articles/10.3389/fnagi.2019.00043/full https://www.sciencedirect.com/science/article/abs/pii/S2451902216301070



# Until You Learn How To Do It!

### How to Manage Stress

Avoid Stressful Situation Learn relaxation techniques Avoid Extremes Change how you see the situation Set Priorities Learn relaxation techniques Change how you react to Stress Figure out what is most important Take control of situation



### We Can Help You

Normalizes the Stress Reactivity of Hypothalamus-Pituitary-Adrenal-axis in chronically stressed

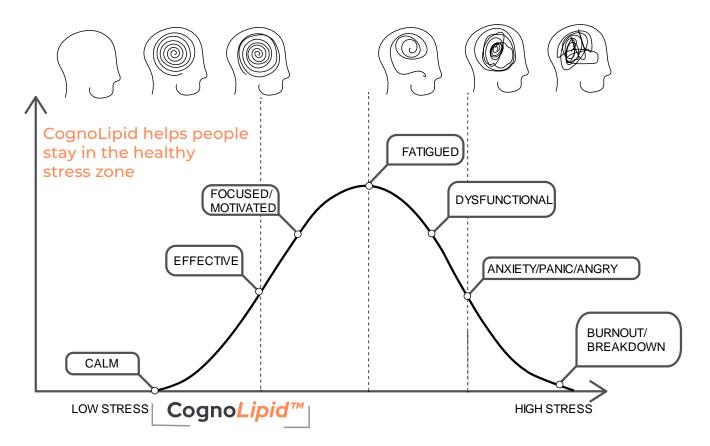


#### **BRAIN STRESS CURVE**

According to American Psychological Association (APA), there are 3 different types of stress:

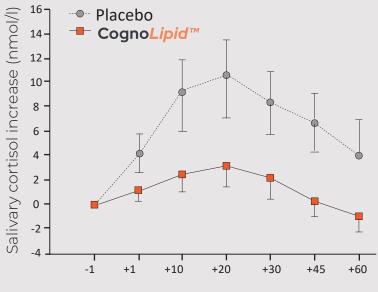
- 1. Acute Stress: Appears for a short time
- 2. Episodic acute stress: Mini-crises regularly, in which we live in a state of tension
- 3. Chronic stress: The grinding stress that wears us down over the years. Chronic stress is the most harmful type of stress.

Source: American Psychological Association





## Proven to manage cortisol in stressful situations



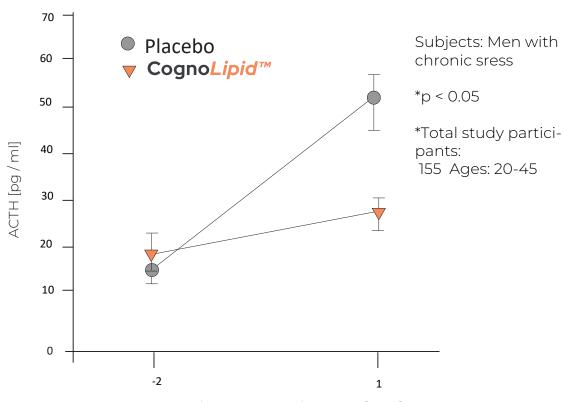
Time with respect to TSST (min)

Subjects avoided a large spike in cortisol and returned to a better state than their original after the event.

https://pubmed.ncbi.nlm.nih.gov/25414047/https://pubmed.ncbi.nlm.nih.gov/25081826/



## CognoLipid strengthens the body's stress response



Time with respect to the TSST [min]

TSST: Trier Social Stress Test

ACTH: Adrenocorticotropic hormone (indicates

response level to chronic stress)

TICS: Trier Inventory for Chronic Stress

https://pubmed.ncbi.nlm.nih.gov/25414047/https://pubmed.ncbi.nlm.nih.gov/25081826/

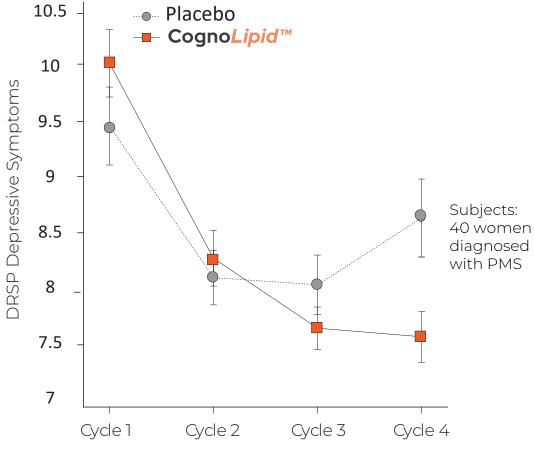
Promoting Women's Health Reduces Symptoms of the PreMenstrual Syndrome

PMS is a condition that affects a woman's emotions, physical health, and behavior during certain days generally just before her menses.

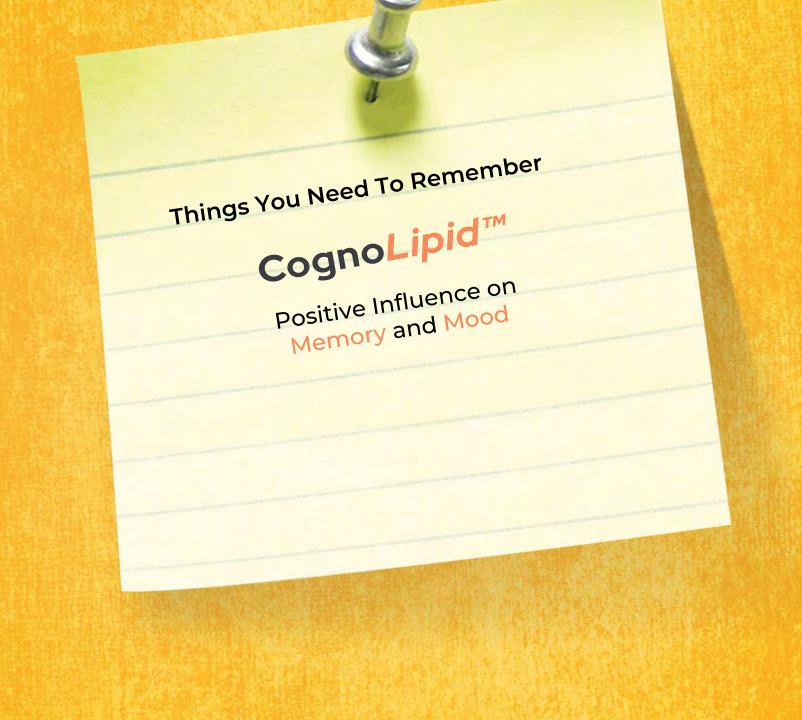




The benefits of CognoLipid to women's health

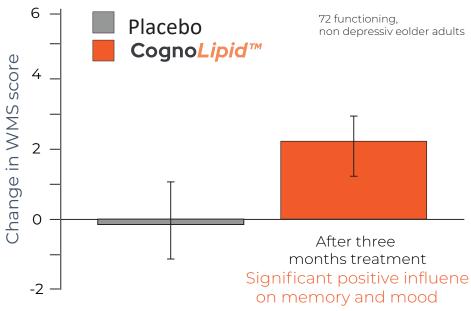


Significantly reduced physical PMS symptoms and marginally lowered depressive PMS symptoms \*DRSP: Daily Record of Severity of Problems https://pubmed.ncbi.nlm.nih.gov/29576358/





Improved memory, focus and mood in people with mild cognitive decline

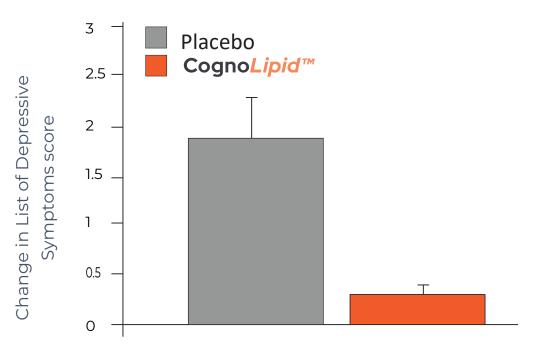


WMS: Wechsler Memory Score
The industry's leading memory assessment

https://www.jstage.jst.go.jp/article/jcb-n/47/3/47\_10-62/\_pdf/-char/en



Effect of CognoLipid on mood prevented "winter blues" Change in List of Depressive Symptoms score.



The placebo group experienced a significant increase in depressive symptoms between late summer and winter; whereas the CognoLipid group demonstrated no significant change in depressive symptoms.



A Best Practicw In Solnent Free, Water-Based Production

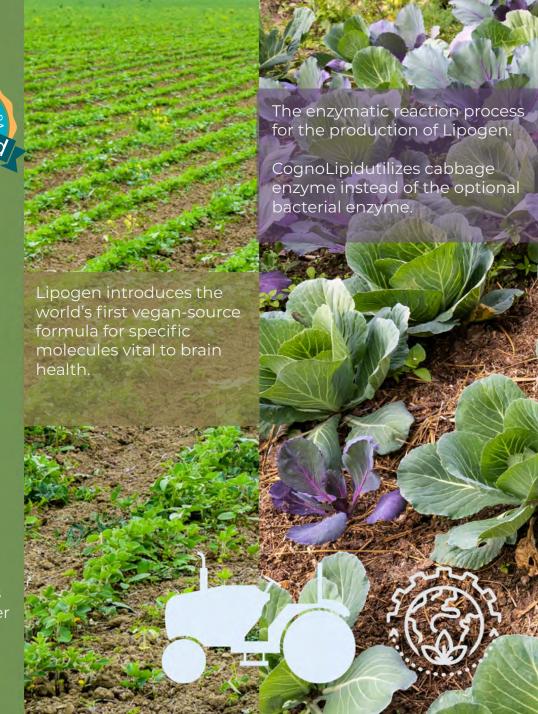
Lipogen products are not made with solvents. The eco-friendly manufacturing process is strictly water based.





Formulated for easy absorption and maximum bioavailability

Lipogen's nutrient production processes replicate the human body's, so they enter circulation in high percentages and get to work quickly on fortifying brain and nerve cells.



# LIPOGEN Established in 1991 Our history

## 1991

Lipogen established as partnership between company founders and two pioneering scientists – Professor Meir Shinitzky and Dr. Avner Sheinfeld –from the renowned Weizmann Institute.

Lipogen introduces the world's first vegan-source formula for specific molecules vital to brain health.

## 1992

Lipogen builds upon the Weizmann Institute's research success, progressing to formal formula development and clinical research.

Lipogen demonstrates the positive effects of the Lipogen PSPA formula on memory performance in healthy individuals. The results show that people who use the formula significantly improve their memory and mood.

## 1995

The company conducts a clinical study that shows significant positive impact of the Lipogen PS Plus formula on Alzheimer's disease patients' daily functioning, emotional state and general condition, with no side effects.

## 2003

The US Food and Drug Administration (FDA) grants the primary Lipogen ingredient phosphatidylserine (PS) a Qualified Health Claim approval, allowing Lipogen to specify on its label that consumption of PS "may reduce the risk of dementia or cognitive dysfunction in the elderly."

In 2019, PS is still the only nutritional supplement that has this claim approval (in the proper dose), while other supplement-claim requests have been rejected by the FDA.

## 2014

Lipogen publishes results of the clinical trial that assesses the effects of the formula on people's cortisol stress hormone levels. There is large and growing evidence worldwide about the correlation of high cortisol levels and Alzheimer's disease.

Lipogen proves again that subjects taking the formula suffer from less emotional stress, function better in stressful situations and have lower cortisol hormone levels than subjects who do not take the formula.

## 2004

Lipogen conducts an independent clinical study examining the effects of the Lipogen PSPA formula on the stress hormone cortisol. When the level of cortisol in the body remains abnormally high, people are at higher risk of health problems.

Results from the scientific study show that subjects who take Lipogen PSPA function better and have lower levels of cortisol during and after stressful events.

## 2016

Following successful formula safety and efficacy studies, Lipogen receives the European Union's most prestigious safety certificate NOVEL FOOD.

This extensive approval process includes submitting a detailed application, including in-depth ingredient data and characteristics, information of the production process, an analysis of various risk factors, stability data, use and level of exposure, history of exposure to the complex and a comprehensive toxicology report.

## 2006

Lipogen formulas are designated Generally Recognized As Safe (GRAS) by the FDA. To obtain this approval, companies must prepare a comprehensive product safety portfolio, including a detailed analysis and characterization of the formula's ingredients and the production process. The FDA reviews scientific information, clinical trial results and toxicology reports demonstrating product safety.

## 2010

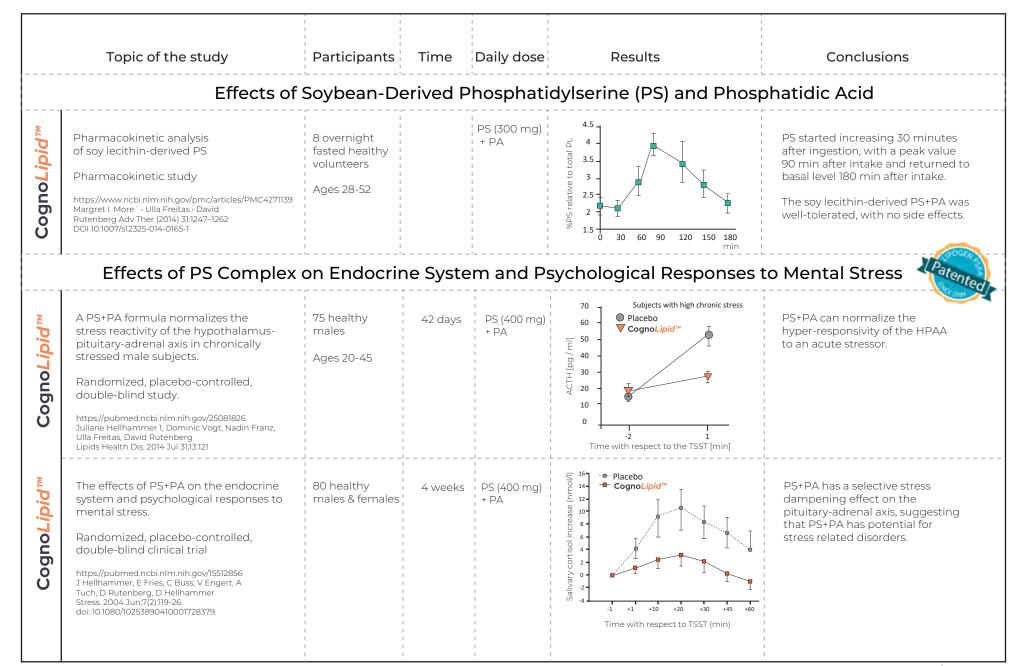
Lipogen signs a collaboration agreement with the large Swiss pharmaceutical company, Lonza.

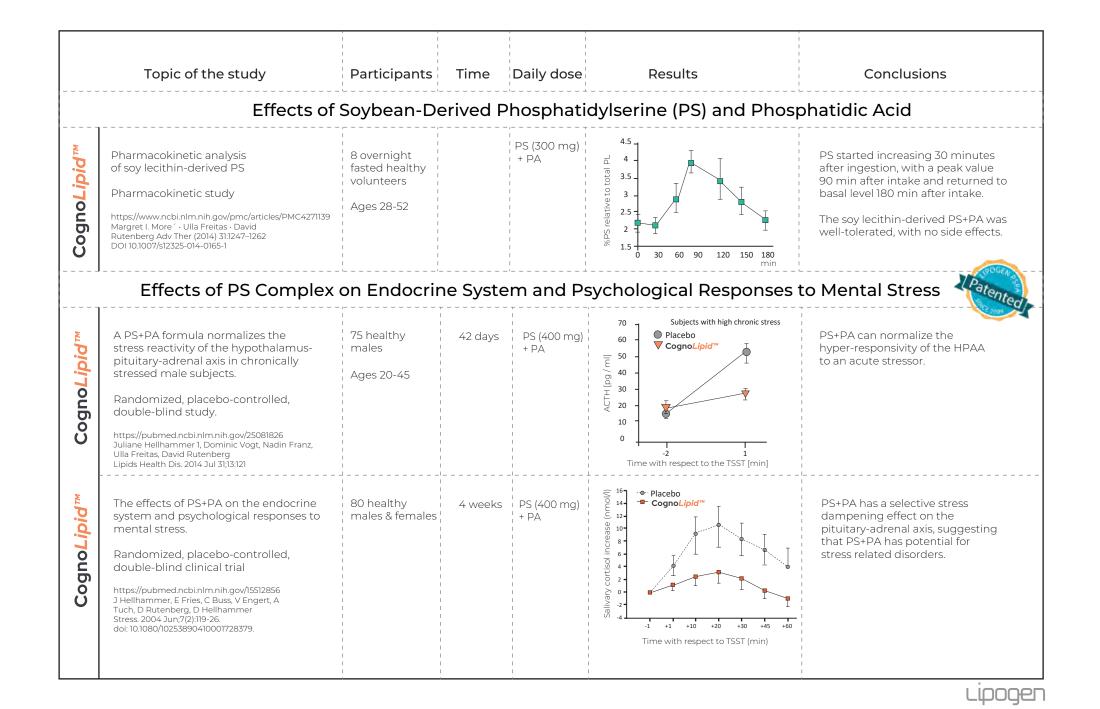
## 2018

The company publishes a clinical study that examines the positive effects of the formula on women with premenstrual syndrome (PMS) The results show that women who take the formula demonstrate significant improvement in emotional, physical and performance symptoms over 3 menstrual cycles, including lower depression and less interference in relationships and productivity.

## 2019

All Lipogen products are manufactured in an FDA-inspected facility, meeting all FDA regulations for dietary supplements.





#### The Benefits of the Phosphatidylserine + Phosphatidic Acid Formula to Women's Health

gnoLipid

A PS+PA complex (PAS) reduces premenstrual syndrome (PMS) symptoms.

Randomized, placebo-controlled, double-blind clinical trial

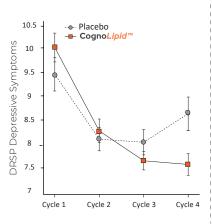
https://pubmed.ncbi.nlm.nih.gov/29576358 Katja Schmidt, Nicole Weber, Meir Steiner, Nadin Meyer, Anne Dubberke, David Rutenberg, Juliane Hellhammer Clin Nutr ESPEN. 2018 Apr;24:22-30.

40 women diagnosed with PMS by a gynecologist

Ages 18-45

3 ' treatment ' + PA cycles plus baseline

PS (400 ma)



Reduction in total symptom severity was significantly larger for the treatment group than the placebo group.

Cortisol levels were significantly lower in women taking PS+PA than the control group.



#### Lipogen: The gold standard in quality

#### Compliant with international safety and quality standards

All Lipogen products are manufactured in an FDA-inspected facility, meeting all FDA regulations for dietary supplements. Lipogen complies with the industry's highest quality and safety standards, including Good Manufacturing Practices (GMP).

All Lipogen formulas are Generally Recognized as Safe (GRAS). CognoLipid and MemreePlus are designated as Novel Foods by the European Union's European Food Safety Authority.

#### Dietary certifications

Lipogen products are certified kosher by the Orthodox Council of Jerusalem (OCJ) (Badatz) and certified Halal.

#### Sustainable production

Lipogen manufactures all its formulas using a proprietary water-based method that is solvent-free.

#### Patents awarded

Lipogen has earned numerous patents in the U.S., Europe, Canada and Japan for product use and production techniques.





Lipogen supercharges products with a powerful scientifically optimized formula.

#### Cognitive health applications



PMS symptoms improved significantly over 3 cycles, according to the Daily Record of Severity of Problems (DRSP) Total Score

Cogno*Lipid*™

Proven to lower PMS symptoms (emotional, cognitive, physical and social)

Decreases depression and lifts mood

Heightens concentration

Reduces appetite problems

elieves sleep disturbances

Lessens relationship interference

Lowers impact on productivity

Improves functioning

MemreePlus had a significant positive influence on memory, mood and daily functioning.

Proven for age-related cognitive decline

Prevents "winter blues"

Boosts memory and focus

Sharpens brain function

Improves cognitive function

Promotes quality of life

\* CognoLipid™

CognoLipid can normalize the hyperresponsivity of the HPA axis to an acute stressor in chronically stressed subjects.

> Proven to reduce stress in people with high chronic stress

Manages cortisol stress hormone levels

Promotes relaxation under pressure

Boosts performance in stressful situations



Lower | Decrease | Deter anxiety | muscle pain | weight gain

Promote Avoid I sexual health Cholest

Avoid high \ \ \ Support the \ \ cholesterol \ \ \ immune system \

