K16 AdrenaCalm™

Balancing cream which modulates the neuroendocrine response to stress.

BENEFITS OF PRODUCT

- Provides agents in an optimal form of delivery to support overstimulated adrenals
- Provides support for memory, cognition, and the management of anxiety

KEY INGREDIENTS RESEARCH COMMENTARY

PHOSPHATIDYLSERINE (PS) is an endogenously produced phospholipid that is embedded in cell membranes and is the major phospholipids in the brain. Its general functions include supporting cellular chemical signal transmissions, activating cell surface receptors, and cellular exchange of nutrients and waste products.

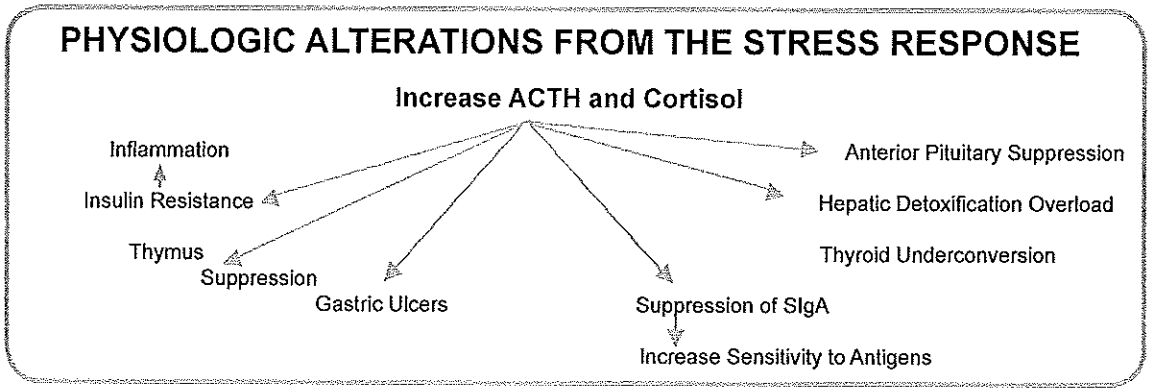
The endogenous production of phosphatidylserine is a very difficult and energy consuming process. It requires the combination of L-serine, glycerphosphate, and two fatty acids, and the aid of methyl donors such as B-12, folic acid, S-adensylmethionine with essential fatty acids. Its arduous chemical synthesis that depends upon commonly deficient nutrients may explain why its exogenous intake has shown such great promise.

Exogenous supplementation of phosphatidylserine has shown the ability to enhance cellular metabolism and communication,[1] [2] [3] protect cells from oxidative damage,[4] decrease anxiety, improve mood, motivation and depression,[5] [6] [7] [8] enhance memory and cognition,[9] [10] [11] and decrease cortisol.[12] [13] [14] [15]

Perhaps the most clinically significant impact of PS is its ability to lower cortisol. An overactive hypothalamus-pituitary-adrenal axis that induces hypercortisolemia has many adverse impacts on healthy metabolism. Elevated cortisol has been shown to induce insulin insensitivity, decrease TSH and T3 production,[16] [17] increase inactive reverse T3, [18] decrease phase II glucoronidation and sulfation, suppress pituitary function,[19] increase the potential for gastric and duodenal ulcers, lower intestinal secretory IgA,[20] [21] delay intestinal mucosal cell generation,[22] suppress immunity,[23] decrease bone density, induce depression,[24] encourage obesity, [25] [26] [27] and increase the risk for cardiovascular and neurodegenerative disorders.[28]

Therefore, the use of PS shows great promise in the management of disorders induced by the elevations of cortisol from chronic stress syndromes. Up until now, the use of PS was limited in clinical practice because very high doses of oral PS (up to 800 mg a day) are required to blunt the physiological stress response. This therapeutic dose of PS is very expensive and requires 8 or more capsules of intake per day which makes it difficult for patient compliance. Many of the best responses of PS in clinical studies also used intravenous forms of delivery. This appeared to be the best form of delivery because it bypassed the gastrointestinal tract and was able to be delivered directly into the blood stream.

The new innovative form of PS delivery in a cream has now allowed clinicians to use the required amounts of PS to modulate the stress response. The PS cream allows hundreds of milligrams of PS to enter directly into the blood stream by bypassing the gastrointestinal tract. Transdermal delivery utilizes lipid spheres, known as liposomes, to transport PS through the skin and into the blood. Once there, the liposome shell around the PS substance degrades and makes PS available for active response in the bloodstream.



Statements in this flyer have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure or prevent any disease.

Formula Info Page

CREAM FORMULA

ACTIVE INGREDIENTS:

Phosphatidylserine, Vitamin B1 (thiamine), Vitamin B2 (riboflavin), Valerian root, Lemon Balm, Milk Thistle, Polygala Tenuifolia, Hazel bud extract, Lime tree bud extract, Juniper bud extract, St. Mary's Thistle, CoQ 10, St. John's Wort, Bitter Cucumber, magnesium phosphate, Marking Nut, German Chamomile, Elm, Gorse, Olive, Red chestnut, Vervain, Impatients, Pituitary, Adrenal, Thyroid.

INDICATIONS OF USE

This product may be used to decrease stress response, decrease anxiety, improve mood, improve depression, and enhance memory and cognition.

DIRECTIONS

Apply 1/4 to 1/2 teaspoon to vascular area of skin (behind knees, inside elbow crease, palms, and back of neck) in the morning, afternoon, and night time, or as directed.

OTHER PRODUCTS TO CONSIDER

Other products can be used in conjunction with **AdrenaCalm™** to support adrenal hyperfunction. Adrenal hyperfunction has been associated with insulin resistance. **Glysen® (K01)** is a broad spectrum nutritional and herbal product to enhance insulin receptor site sensitivity. **OmegaCo3™ (K07)** is a broad spectrum essential fatty acid product with cofactors to support insulin resistance and adrenal function.

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