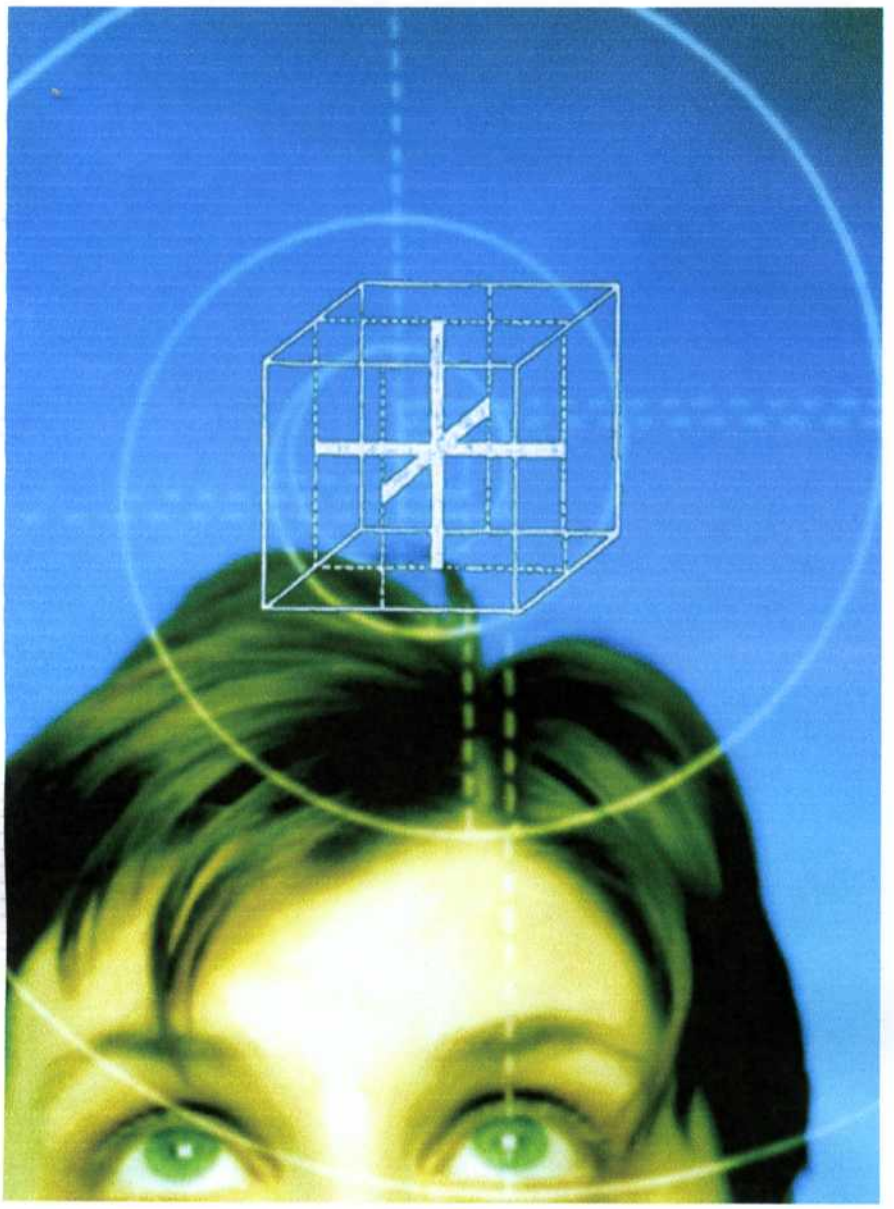
Phospholipids Reduce the Effects of Stress & Improve Brain Power

by Gina Ladinsky

Can you quickly count backwards from 2083 to zero and subtract 17 from each new total? In 2004, 80 healthy subjects, ranging in age from 20 to 45, were subjected to this type of stress test by German researchers who determined that supplements of soy lecithin phosphatidic acid (PA) and phosphatidylserine (PS) complex helped to reduced the effects of stress by reducing the production of cortisol (Hellhammer, J., E. Fries, C. Buss, et al). Other recent research has shown these same phospholipids can help seniors improve memory as well as improve mood by keeping "autumn depression" at bay. Taking PA and PS complex to improve memory loss in seniors helps to deter the negative effect of low self-confidence and low self-respect that often accompanies the aging process. Even Alzheimer's patients showed mental and physical improvement after being given a daily dose of PS (Gindin 1996). In general, research is showing that soy lecithin PA and PS complex supplements support memory, learning and concentration. Reducing the body's response to stress is important, since stress can lead to burnout, alcoholism, and certain types of obesity.



PHOSPHOLIPIDS ARE IN EVERY SINGLE CELL

Phospholipids are found in soybeans, other seeds, and in eggs. They are the building blocks of every cell in the human body and are responsible for forming the cell membrane, which controls nutrient uptake for all cells. Two phospholipids found in high concentration in the brain are phosphatidylserine and phosphatidic acid. They are important for memory and the ability to concentrate. They also have the effect of reducing stress and improving mood. When we are under stress, our body releases cortisol, a hormone that increases blood pressure, blood sugar, and suppresses the immune system. This includes physical stress, such as injury and illness, as well as emotional stress. Cortisol affects the digestion of food, the immune system and the sleep-waking rhythm. If blood levels of cortisol remain high for long periods of time, brain damage can occur. This can result in memory damage, mood disorders and concentration problems. Researchers have found that people who feel their lives are out of control have more illnesses, higher blood pressure, and a greater possibility of cardiac disease, and this may be due to a higher concen-

tration of cortisol. Supplements of soy lecithin PA and PS complex can help.

In 2004, a German study found that a supplement of soy lecithin PA and PS complex reduces the release of adrenocorticotropic hormone (ACTH), which stimulates the secretion of cortisol in the adrenal cortex (Hellhammer, J., E. Fries, C. Buss, et al). Hellhammer's double-blind study subjected participants to mental stress including math problems and giving a five minute speech in front of a panel of psychologists, while being videotaped. The subjects had three minutes to prepare their speech. The subjects, who were on varying doses of soy lecithin PA and PS complex, or a placebo, had their blood drawn throughout the stress tests. Cortisol blood levels were measured and the results demonstrated the reduction of cortisol in the group that had taken 400 mg of soy lecithin PA and PS complex. The groups that took higher amounts did not demonstrate an increased reduction in cortisol. The placebo group showed no reduction in cortisol. The research indicates that the phospholipids did not decrease the stress; instead, the stress had less of an impact on the. The study clearly proved that the added phospholipids served to lower cortisol production.

PHOSPHATIDYLSERINE

Research that began in the 1970s has shown the benefits of phosphatidylserine to include an increased ability to concentrate, to recall names and faces, and to remember numbers. Unfortunately, this important phospholipid found in the brain does decrease as we age. Since phospholipids form the basis of all cells in the body, the effect of their decline through the years can be significant, especially in the brain. Some of the functions attributed to PS include: the activation of protein kinase C, an important enzyme believed to decrease aging in the brain; the increase of dopamine release, which controls activity in the brain; and an increase of glucose metabolism, which is used as a nutrient in the brain.

A double-blind study by Dr. Jacob Gindin, head of the Geriatric Institute of Education and Research at Kaplan Hospital in Rehovot, Israel, performed a three-month study on individuals between the ages of 60 and 80 years old. Half of the participants received a placebo and the other half received a supplement of 100 mg of PS. The results indicated a significant improvement in visual memory along with improved recall of information. In addition, the subjects' attitudes improved. Although the placebo group experienced "autumn depression," the group that had taken PS did not have depression. Clearly, all research points toward the many positive effects of taking phospholipid supplements that specifically contain soy lecithin PA and PS.

ON THE HORIZON

Another positive effect of PS is that it allows for better control of stress hormones for athletes. In the past few years, researchers have found that athletes taking 400 to 800 mg of PS an hour before engaging in physical stress had a decrease in cortisol levels. However, this is still under investigation. Also being considered is the use of PS in patients with brain infarction, consequences of coma, whiplash, learning problems, dyslexia, and brain damage due to accidents. To date, a study carried out on rats did not show any side effects from taking PS. However, since acetylcholine and dopamine are released, it is best to take PS with meals to avoid stomach problems.

TWO GREAT CHOICES IN PHOSPHOLIPID SUPPORT

Metabolic Response Modifiers (MRM), a company that leads the nutrition industry in excellent products and research, offers two different products that contain phospholipids for brain support. One is Neuro-Max™ II, which contains phosphatidylserine and other phospholipids for the brain, ashwagandha for mental clarity, ginkgo to enhance cerebral blood flow, and other components that support neural and brain functions. Additional, MRM offers PS, which contains a phospholipid complex that includes phosphatidylserine, phosphatidylcholine, phosphatidylethanolamine and phosphatidylinositol.

According to MRM, PS is one of the most unique supplements on the market today with remarkable bioactivity. PS has the ability to support memory, concentration, and an increase in exercise performance. On the other hand, MRM's Neuro-Max II is a "state of the art" brain-enhancing formula that contains components to support memory and cognitive function. The choice is yours; either way, you can't go wrong with soy lecithin phosphatidic acid (PA) and phosphatidylserine (PS) complex found in Neuro-Max II and in PS by MRM. ■

Resources

Metabolic Response Modifiers formulates nutritional products based on nutraceutical science. The company consistently delivers high-quality supplements, and focuses on enhancing the public's ability to make informed health care decisions. MRM's health maintenance and wellness programs emphasize an integral approach to nutritional well-being. For more information visit www.mrm-usa.com or call (800) 948-6296.