



PS·IQ MEMORY

The key to lifelong memory

What do you do to nourish and maintain your brain? Aside from mother telling you that fish was brain food, most people are unfamiliar with how nutrition can help the brain to function well. If the brain is healthy, the mind will think more clearly. You can learn and remember. PS·IQ Memory provides optimum brain nutrition.

Research suggests that phospholipids, such as phosphatidylserine (PS), and essential fatty acids, such as docosahexaenoic acid (DHA), may work together to enhance brain function throughout life. PS·IQ Memory is a unique formula that combines these nutrients to give the brain some powerful nutritional support.

WHAT CAUSES DAMAGE TO BRAIN CELLS?

Aside from accident, illness, smoking, overuse of alcohol and drugs and pollution exposure, inferior nutrition can be damaging to the brain. Our modern diets are either deficient in required nutrients or contain contaminants that do damage. Dr. Parris Kidd warns, "The excessive consumption of alcohol, the smoking of cigarettes, preferences for bad foods, mercury fillings in the teeth, all are up to the individual to change.... Other toxic environmental factors are not totally under the individual's control to change, but often can be eliminated: lead and other toxins, polluted water, pesticides and herbicides on foods." (Kidd)

Dr. Kidd also comments on "excitotoxins" found in foods, such as aspartate in diet soda and glutamate in the food additive, MSG. "These are nerve transmitters, and are essential to brain function in small amounts. But once their concentrations build up and they escape control, they can damage the brain. The nerve cells become overexcited, use up their available energy and eventually burn out." (Kidd) Bad fats such as trans fatty acids can also negatively affect brain tissue.

The modern increase in epilepsy, ADHD, multiple sclerosis, Alzheimer's, and other brain and nerve disorders all indicate that we need to give serious attention to our brain health.

THE BRAIN BUILDING BLOCKS

Both essential fatty acids and PS are building blocks for the brain. Essential fatty acids must be supplied by the diet – our body cannot make them. Researchers are building a strong case for docosahexaenoic acid (DHA), found in fish oil, as the most important essential fatty acid for the brain.

Even better documented is a phospholipid called phosphatidylserine. PS is a fat-soluble nutrient that is a building block for nerve cell membranes and is most highly concentrated in brain cells. PS helps to revitalize brain cells. It is safe, well-tolerated and the research shows it enhances our ability to think, learn and remember. Supplemental PS is derived from soy phospholipids that already have a long history of use as dietary supplements.

DHA and PS work together for optimal brain function. Studies on rats show that a DHA deficiency can also cause a decrease in total PS content in the brain. (Garcia, *et al.*)

HOW PS BOOSTS BRAIN POWER

The membranes are major action centres in our cells. They regulate what goes in and out, how cells talk to one another, and numerous other vital actions. As we age our cell membranes become less efficient. PS increases cell membrane efficiency and revitalizes membrane function. In the brain PS has a profound effect on the functioning of neurotransmitters and of synapses, the connections that make up brain circuits.

PS PROTECTS THE BRAIN FROM DAMAGING STRESS

The brain is very vulnerable to the effects of sustained emotional stress. Prolonged stress is harmful to the brain and can impair thinking ability in even the youngest and brightest. Fragile brain cells need an abundant supply of oxygen to keep them humming at top efficiency. Stress reduces circulation, depriving the brain cells of needed oxygen and nutrients, with a negative impact on memory and other cognitive functions. Dr. Parris Kidd explains, "The sustained emotional stress, our anticipation of it and our feelings of powerlessness, kill brain cells... Under sustained stress, the physiological fight-or-flight response becomes pathologic, it pushes the individual into disease. We become mental casualties of chronic stress." (Kidd)

That is where PS might help. "One beautiful effect of PS as an orthomolecule is that it works to keep the brain's processes within normal limits, raising them when they are low and lowering them when they are high. So PS boosts the weak stress response in the elderly person, and calms down exaggerated stress response in the healthy young person." (Kidd)

THE CASE FOR DHA

Docosahexaenoic acid is an omega-3 long-chain polyunsaturated fatty acid that is one of the building blocks of brain tissue. DHA is a major fatty acid in the gray matter of the brain and retina of the eye, comprising up to 60% of the fatty acids in the retina of the eye. That is why DHA is so important to vision. Studies show that DHA supplemented babies have a visual advantage.

OUR BRAIN NEEDS DHA THROUGHOUT LIFE

DHA works with PS to help ensure that the cells in the retina, brain and other parts of the nervous system can effectively transmit electrical signals. As we get older we may have a reduced ability to make DHA. Researchers are discovering that low levels of DHA correlate with changes in mood, memory loss, and visual inadequacy, and may be a significant risk factor for dementia. Research is underway to determine whether DHA supplementation might be helpful for aging.

WE ARE NOT GETTING AS MUCH DHA FROM OUR DIET AS WE USED TO

Most of us used to get more DHA from red meat, organ meats, and eggs, animal foods often high in saturated fats and cholesterol. As we have reduced the amounts of animal foods and saturated fats in our diet – and rightly so – we've also reduced food sources of DHA.

MORE MENTAL HEALTH BENEFITS

Some researchers link reduced fatty acids, such as DHA, in the diet to the rising rate of depression during the last hundred years. "Epidemiological studies in various countries and in the United States in the last century suggest that decreased n-3 fatty acid consumption correlates with increasing rates of depression. We postulate that adequate intakes of long-chain polyunsaturated fatty acids, particularly docosahexaenoic acid, may reduce the development of depression just as n-3 polyunsaturated fatty acids may reduce coronary heart disease." (Hibbeln, *et al.*)

LEARNING, BEHAVIOUR AND DHA

Researchers at Purdue University have shown that children who are hyperactive, impulsive, and inattentive, may have low levels of essential fatty acids, especially DHA.

The experiment involved 53 boys who suffered from ADHD compared to 43 matched controls. Analysis showed that the boys with ADHD had significantly lower levels of essential fatty acids in their blood. They concluded that supplementation with missing fatty acids may be a useful treatment for hyperactivity. (Stevens, *et al.*)

PS-IQ MEMORY – A SAFE SOLUTION

Taking PS-IQ Memory each day provides DHA (from the highest quality tuna oil) and PS (carefully extracted from soy). Both PS and DHA are integral components of our brain cells, so long term supplementation with PS-IQ Memory is very safe.

SUPERIOR BRAIN NUTRITION WITH PS-IQ MEMORY

Whether we are young, in midlife, coping with the very real effects of stress, or are experiencing concentration and memory problems due to age, we can all benefit from the protective brain nutrients found in PS-IQ Memory.

KEY REFERENCES

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