

Breakthrough in brain nutrition and protects memory and intellect

As we age, it is very common to observe a gradual decline in mental ability, chiefly memory lapses and difficulty in concentration. These are the result of **brain aging**: structural changes that take place in the brain as we age. Although these changes may be “normal” in the sense that they happen to almost all of us, that does not mean that they are inevitable.

Cutting-edge research has led to a breakthrough in the treatment and prevention of brain-aging, also known as **age-related cognitive decline**. It's a natural substance called *vinpocetine* (pronounced vih-n-POH-seh-teen), derived from the *Vinca minor* (or lesser periwinkle) plant. Used as a prescription medication in Europe and Asia for over 20 years, vinpocetine has been shown to bring about significant improvements in cognitive and intellectual performance in healthy patients¹ as well as those with mild to moderate cognitive impairment.² This breakthrough substance is now available, without a prescription, in the United States.

Are you suffering from brain-aging?

Signs of brain aging include difficulty in remembering names, directions, words, and appointments; disorientation; memory lapses; and even depression and anxiety. These symptoms can signal the beginning of a breakdown in brain circulation and nerve communication.

Pound for pound, the brain consumes far more than its share of the body's resources of blood, oxygen, and nutrients. For this reason, it is exquisitely sensitive to impaired circulation or restricted blood flow. Too little blood means too little oxygen for your hungry brain cells, and this is a primary cause of cognitive impairment. Even if you've begun to notice subtle signs of decline, it's not too late to take action. With the help of vinpocetine and other targeted brain-nutrients, these connections can be rejuvenated and restored.

By recharging your brain cells with oxygen, you can clear away the cobwebs and bring things into crystal-clear focus once again.

Vinpocetine: more than just a “smart drug”

Benefits:

- Increases memory
- Improves intellectual performance
- Enhances coordination and concentration
- Improves eye problems, including dry macular degeneration and glaucoma
- Improves hearing loss and tinnitus
- Improves recovery from stroke
- Can prevent strokes and other vascular disease

How does vinpocetine work?

Vinpocetine is quite unlike any other known natural or pharmaceutical agent. According to the pharmacological literature, it acts in three unique and interconnected ways to improve brain function.

1. It selectively **increases blood flow to the brain**, routing a greater percentage of blood from the heart to the brain without negative effects on blood pressure or circulation to other parts of the body. In cases in which brain tissue has been damaged (such as by stroke), vinpocetine directs an increased supply of blood to the damaged tissue, speeding the healing process.

2. It **increases the efficiency of oxygen transportation into the brain tissues**. By inhibiting the tendency of blood platelets to clump or clot, vinpocetine promotes circulation of oxygen-rich blood throughout the network of tiny blood vessels that feed the brain's tissues.

3. Most intriguing is its ability to **improve cerebral metabolism**. Vinpocetine actually increases the brain's utilization of oxygen. Interest-

¹ *European J. Clin Pharmacol*, vol. 28, pp. 567-571, 1985.

² *Int. Clinical Psychopharmacology*, vol. 6, pp. 31-43, 1991

ingly, it also improves the ability of the brain to withstand a deficiency of oxygen (as in the case of a stroke).

By regulating key enzymes in the brain (specifically, *phosphodiesterase* and *adenyl cyclase*), vinpocetine also increases the level of ATP in the brain. ATP stands for *adenosine triphosphate*, the chief energy-carrying chemical in the body.

More oxygen equals more brain power

By creating a super-oxygenated environment in the brain, vinpocetine appears to boost cognitive function and to protect against neurological damage due to vascular disease or deterioration. Numerous clinical trials around the world confirm its effectiveness in improving **memory, poor concentration, communication problems, speech disturbances, dizziness, impaired coordination**, and other neurological symptoms.³

In dozens of clinical trials, only a small number of people experienced side effects, usually a brief drop in blood pressure or a faster heart rate. These effects were mild and disappeared after a short time. (These side effects were mostly reported with the injectable form of vinpocetine, not the oral supplement.)

An emerging superstar

Although much of the excitement over vinpocetine centers around its effectiveness in improving brain function, this remarkable nutrient is useful for a wide range of vascular and neurological conditions.

HSI medical editor Dr. Martin Milner sees vinpocetine as having great potential for **preventing strokes and mini-strokes** (transient ischemic attacks) in patients who are at risk. Dr. Ron Hoffman notes its promise as a **treatment for eye problems** (including macular degeneration), **tinnitus**, and **Meniere's disease**. Other researchers have cited its effectiveness in the treatment of **epilepsy** and neurological complications of **diabetes**. A dose of only 10 mg of vinpocetine works as well as much larger doses of other brain-enhancing drugs and is effective in a larger number of cases.

Vinpocetine has only recently been approved by the FDA and virtually all of the research to date on vinpocetine has been conducted and published in

Japan, Germany, Russia, or Eastern Europe. Over the next decade, we will almost certainly see vinpocetine emerging as a superstar among natural therapeutic substances. Until the news gets out to the public at large, you may have difficulty finding this little-known nutrient as a dietary supplement.

A breakthrough formulation

Although European research has focused on vinpocetine as a stand-alone therapy, we have found an innovative formula that combines vinpocetine with other brain-active nutrients, including Gingko, acetyl-L-carnitine, phosphatidylserine, and Bacopa monniera.

This brand new product, called *Memoractiv*, provides a synergistic combination of substances that neutralize free radicals, provide the nutritional building blocks needed to synthesize neurotransmitters, and enhance nerve-signal transmission.

Gingko biloba is a well-known botanical remedy used in the treatment of circulatory diseases, with particular value in the treatment of brain aging. Gingko increases circulation to the brain and is a potent antioxidant, helping to prevent free-radical oxidation in the brain. A recent double-blind study of 40 Alzheimer's patients found that supplementation with Gingko (80 mg three times a day for three months) caused significant improvements in memory, attention, and reaction time.⁴ According to Dr. Donald Brown, N.D., writing for the *Quarterly Review of Natural Medicine*, Gingko is "one of the clinician's most useful tools for slowing cognitive decline in the elderly."

Acetyl-L-carnitine has the ability to prevent brain-cell death and to protect nerve cells from degeneration due to aging or disease.⁵ This molecule readily crosses the "blood-brain" barrier, passing from the bloodstream directly into the tissues of the brain, where it stimulates the mitochondria, or energy factories, of the brain cells. Benefits of acetyl-L-carnitine include increased alertness, improved learning and memory, enhanced cognitive ability, and an increased attention span.⁶ In a double-blind study of Alzheimer's patients over the course of one year, those patients receiving acetyl-L-carnitine showed significantly less progression of the disease.⁷

Phosphatidylserine (PS) is an essential fatty acid that is necessary for optimal brain functioning.

³ *Journal of the American Geriatric Society*, vol. 35, no. 5, pp. 425-30, 1987

⁴ *Human Psychopharmacology*, vol. 9, pp. 215-22, 1994

⁵ *International Journal Dev. Neuroscience*, vol. 10, no. 4, pp. 321-329, 1992

⁶ *Functional Neurology*, vol. 4, no. 4, pp. 387-390, 1989

⁷ *Neurobiological Aging*, vol. 16/1, pp. 1-4, 1995

PS keeps the membranes of the brain cells fluid and pliant, allowing the cells to absorb nutrients more efficiently. It also stimulates the activity of neurotransmitters, the “messenger” chemicals that relay nerve signals from cell to cell, literally helping you think. More than two dozen controlled clinical trials have demonstrated that supplementation with PS greatly improves learning and memory, with the greatest benefit coming to those with the greatest impairment.

Bacopa monniera is an Ayurvedic botanical used to improve learning and memory, as well as to treat epilepsy and insomnia. Frequently used with children, it has been shown to increase recall and reaction time and stimulate exploratory behavior. Its mechanism of action in the brain is believed to be as an antioxidant, and perhaps as a chelator of heavy metals.

The time to act is now

The discovery of vinpocetine and the powerful new *Memoractiv* formulation have ushered in a new era of brain longevity. By maximizing oxygenation, blood flow, and nerve cell function with targeted nutrition, you can avoid the gradual decline that we used to consider an inevitable part of the aging process.

If you have already begun to notice subtle changes in your response time and recall, this nutritional approach can supply your brain with the nutrients you need to restore maximum function.

Memoractiv is sold only to licensed physicians, but as a member of HSI, you can order this product yourself through the Center for Natural Medicine Dispensary.

Could it be Alzheimer's disease?

According to the American Institute of Preventive Medicine, Alzheimer's strikes one in 10 people over the age of 65, and a frightening 45 percent of those over the age of 85. As our population ages, Alzheimer's disease is quickly becoming a national health crisis.

In its early stages, Alzheimer's can be indistinguishable from “normal” brain aging. But when treated in its earliest stages, the progression of the disease can often be dramatically slowed. Recently, very exciting research has shown that nutrients like vinpocetine and ginkgo biloba can even reverse damage that has already occurred.

The cause of Alzheimer's remains unclear, although recent research reported in previous *Members Alerts* points to several possible culprits, including herpes infection, high homocysteine levels, and aluminum toxicity. As always, a preventive approach is the best defense. You can reduce your risk factors by taking some simple steps now.

Reduce your aluminum load. Hair tissue analysis can tell you if your body has stored unhealthy amounts of aluminum. The most common sources of aluminum are cookware, deodorants, baking soda, and antacids. Also, high aluminum levels can be chelated with malic acid supplements.

Keep homocysteine levels low. This toxic amino acid, also a culprit in the development of heart disease, can increase your risk of Alzheimer's disease, as we reported in the May 1998 *Members Alert*. Supplementation with a homocysteine-lowering formula like *Cardiocysteine* will keep this killer at bay.

Supply brain-targeted nutritional support. Make sure your brain gets adequate blood supply, oxygenation, and nutrient support. *Memoractiv* provides an ideal balance of therapeutic nutrients for optimum brain function and health.

Note: If memory lapses, episodes of verbal or spatial disorientation, or personality changes become more frequent or severe, it is important to consult a doctor for a definitive diagnosis.