

The Ultimate Brain Nutrient

Cognizin Citicoline

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You know their face, but recalling their name puts a serious strain on your memory banks. And then there's that embarrassing moment when you realize you not only forgot the reason for the phone call but also the person you were calling!

And what about that embarrassing pause while you grapple for a word that has suddenly vanished from your mind. Are you getting concerned that those senior moments are creeping into your life more often?

You don't need to be an official senior citizen to experience an increasing frequency of senior moments. In fact, brain research reveals that the natural decline and actual shrinking of your grey matter actually occurs at the tender age of 25, although it is not usually apparent. However with demanding lifestyles, lack of exercise, nutritional deficiencies, insufficient sleep, oxidative stress, and toxicity, people at younger and younger ages are becoming seriously drained of brainpower.

Cognizin Citicoline for the Care and Feeding of Your Brain

Our brain is truly an amazing organ. According to neuroscientists, the brain is continuously reorganizing itself throughout each person's daily life. Far from being hard wired and fixed, the brain exhibits neuroplasticity, the ability to change in response to every experience, every new thought and every new learning well into adult life. Another recent discovery of our brain's agility is the process of neurogenesis, the ability to generate new brain cells in some areas of our brain as well as repairing damaged nerve cells.¹

In order to access these amazing abilities, our 100 billion brain cells must be able to perform optimally every day of our life. Mounting scientific evidence has shown that brain nutrients provide the essential components to sustain healthy grey matter.

One particular nutrient called citicoline (also known as CPD-Choline), a water soluble compound found in every cell in the body, is an exceptional brain nutrient. It is available under the brand name Cognizin® Citicoline. Without any known side-effects, Cognizin Citicoline promises to protect our brains from the ravages of time and the environment.

While other brain nutrients may assist the brain in a very narrowly targeted way, Cognizin is unique in its ability to impact many vital brain functions and has several important mechanisms of action.

Our brain requires a tremendous amount of energy. Although the brain accounts for less than two percent of a person's weight, it consumes 20 percent of the body's energy. Aging decreases the amount of available energy produced by the brain. Cognizin supports brain health by increasing the activity

of the mitochondria (the energy-producing furnaces in each cell) in neurons to produce the necessary energy for proper cell function.

Researchers found that Cognizin significantly increased the levels of ATP; the high-energy compound produced by mitochondria, in both healthy and brain-damaged laboratory animals and decreased the area of damage in the latter.^{2,3}

Cognizin Citicoline also promotes brain metabolism by enhancing the production of neurotransmitters, especially acetylcholine, a key player in memory and cognition. Declining acetylcholine results in loss of memory, loss of the ability to store new memories and emotional disturbances. Cognizin also supports the activity of nerves in the brain that respond to acetylcholine.

In older adults with cognitive impairment, supplementation with Cognizin improved measures of cognitive function including short and long-term memory, attention, perceptual-motor capacity, and behavioral and emotional control.⁴

Evidence indicates that Cognizin can increase the levels of other neurotransmitters. Studies had shown increased levels in dopamine and norepinephrine. Dopamine is an important neurotransmitter: it creates a feeling of well being and pleasure; it is needed by the brain to cement new learning's; and it is necessary in the treatment of Parkinson's disease. Norepinephrine is involved in the fight-or-flight stress response and serves to increase attention, heart rate and muscle readiness.

The primary structural components of cell membranes are the phospholipids. This is important because cell membranes surround and regulate the activity of every neuron as well as its internal structures. Membranes surround every cell in the body and play critical functions in regulating nutrients and other compounds that flow in and out of the cell. Phospholipids also serve as conductors in the transmission of nerve impulses.

Cognizin is involved in the synthesis of phospholipids and can be considered a brain phospholipids booster. Scientific research has shown that citicoline promotes brain metabolism by restoring phospholipids content in the brain. When the body absorbs Cognizin, it is broken down during digestion into two components: uridine and choline. Citicoline is then reformed in the brain and becomes a raw material for phosphatidylcholine synthesis.

Cognizin provides the key phospholipids components that become the building blocks for many important brain phospholipids, including phosphatidylserine (PS) and phosphatidylcholine (PC). It has been shown to delay brain cell membrane damage and even to reverse some kinds of membrane damage.⁵ →

A Sharper Brain at Any Age

Many human and animal studies have proven that Cognizin supplementation can be most helpful for many types of cognitive and brain disorders. It has demonstrated therapeutic effects with stroke patients and those with brain trauma. It also showed improvement in patients with Alzheimer's disease and has been effective in alleviating Parkinson's disease. For many of the elderly who have to contend with memory loss or cognitive impairment, Cognizin can make a huge difference in regaining their mental facilities as well as quality of life.

But can Cognizin help the many cognitively challenged, stressed out, sleep deprived, career driven middle-agers?

At 42, Lisa thought she was too young to be concerned with cognitive decline. But her hectic life as a Ph.D. student, a mother of two young children, an imminent move of residence overseas, not to mention perimenopausal changes was all too much for her brain. She would repeatedly dash to the top of the stairs only to completely forget the reason why she made the trip by the time she arrived on the top step. Her memory recall and attention were fading.

Not only were the increasingly frequent memory lapses a cause for concern, Lisa also entertained a nagging thought that something more sinister could be lurking. Could this actually be a sign of early Alzheimer's?

Lisa was desperate for help. At the recommendation of a friend, she began to take Cognizin daily with the hope it would improve her cognitive functioning. Although skeptical at first, within six weeks, Lisa realized something definitely was happening. Her brain was profoundly changing. She could easily remember things again. She could even focus on her research and retain the information.

According to Lisa, "It was a *dramatic* improvement. It was as though the fog cleared and I could once again remember, recall and focus with ease. Another bonus was an improvement in my moods and even my sleep was sounder."

Lisa was overjoyed that her vital cognitive functions were fully restored. Cognizin is now included in her daily nutritional regimen.

Lisa, like many of us in the modern, hectic world, was aging her brain before its time. Fortunately, Cognizin Citicoline, came to her rescue in time.

A landmark study led by Harvard researchers at McLean Hospital, in Boston investigated whether Cognizin could improve the cognitive functioning of middle-aged people. This was the first time Cognizin had been tested on healthy middle-aged people.⁶

The researchers took a group of male and female volunteers and put them in an MRI to measure the energy needed to make the brain work. Then the volunteers were instructed to take Cognizin daily. After six weeks the volunteers were put back into the MRI to evaluate if any changes had taken place.

The results revealed an overall impressive fourteen percent increase in brain energy.

According to Perry Renshaw, M.D., Ph.D., Director of the Brain Imaging Center at McLean Hospital, Harvard University and Professor of Psychiatry at Harvard Medical School, "The unanticipated and somewhat remarkable result we found was that the brain energy supply...is actually increased in critical brain regions by this supplement."

Dr. Renshaw went on to say, "This is really rather surprising. We've been looking for this kind of an effect for a long time. The only other thing that seems to have this kind of effect for the brain is sleep."

Overall Cognizin had a multi-faceted effect on brain health showing increased concentration, focus and improved accuracy, better performance and improved speed on cognitive tasks. According to Dr. Renshaw, "The kinds of words they (test subjects) used to describe how they felt were sharper, a little bit more alert, more productive at work, more energetic."⁷

A Healthy Brain, A Happy Life

The health of our brain is not separate from the overall health of our body. In order to maintain brain fitness it is crucial to incorporate daily physical and mental exercise, stress management, a nutritious whole food diet, adequate rest and social interactions. Brain fitness and optimal cognitive functioning also requires supplementing with the latest super-star brain nutrient, Cognizin Citicoline

As we quest for effective ways to turn back the clock on aging, Cognizin is a proven safe, effective, multi-faceted brain energizer. For the elderly, it can help restore vital memories and recall. And for those with more serious brain impairment, Cognizin offers a therapeutic adjunct to help with their treatment and recovery. However, just about all of us can benefit from an extra brain boost.

In an age when our life span is growing longer, it is imperative to ensure our mental faculties remain as vital as our bodies. A healthy brain allows us to continue enjoying and learning from all of the experiences of life. □

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