



designs for health®

ACETYL L-CARNITINE

HELPS TO SUPPORT COGNITIVE FUNCTION IN THE ELDERLY

90 VEGETARIAN CAPSULES | NPN80050511 | ALC090-CN

Designs for Health's Acetyl L-Carnitine provides 800 mg of this valuable nutrient per capsule. Acetyl L-carnitine is one of the most extensively researched brain nutrients shown to support mental energy and wellness. Research shows acetyl L-carnitine:

1. increases levels of important neurotransmitter chemicals needed for memory, focus, and learning
2. supports the natural repair of the damage done to brain cells caused by stress and poor nutrition.

SIGNS OF INADEQUATE ACETYL L-CARNITINE INTAKE INCLUDE:

- Mental fatigue
- Depression
- Short attention span
- Decreased memory and learning ability

Acetyl L-carnitine is a natural component of our brain's chemistry. The body makes it in small amounts, but as we age, acetyl L-carnitine levels decline. For optimal brain function, therefore, supplementation of acetyl L-carnitine may be highly beneficial. The only food source for this nutrient is animal brain, which is not a recommended food. Supplemental acetyl L-carnitine, on the other hand, is synthetically derived from other amino acids, and is suitable for vegetarians.

MEMORY AND COGNITION Studies show that acetyl L-carnitine slows or prevents age related decline in mental function.¹ 1.5 g/day of acetyl L-carnitine given to 236 older adults for forty-five days significantly increased the effectiveness of performance on all the measures of cognitive functioning, memory performance, and constructional thinking.² A small study on twenty adults given 1.5 g of acetyl L-carnitine experienced reversal of many of the signs of brain aging.³ Acetyl L-carnitine supplementation has well-documented neuroprotective effects and has been shown to maintain or increase acetylcholine levels in brain, which supports neuroplasticity and reduces brain inflammation.⁵ Acetylcholine is a neurotransmitter crucial for learning and memory.

DEPRESSION Acetyl L-carnitine also increases levels of compounds such as acetylcholine, which is essential for healthy mood levels. A review of human, animal and cellular models suggests acetyl L-carnitine is effective at improving depressive symptoms and supports neuroplasticity.⁶ A meta-analysis indicates acetyl L-carnitine supplementation significantly decreased depressive symptoms compared to placebo or no intervention and has fewer side effects than antidepressant medications.⁷

STROKE RECOVERY In a study looking at acetyl L-carnitine and stroke, 160 patients who suffered strokes at least one year prior to receiving supplementation were given 1.5 g of acetyl L-carnitine per day for eight weeks. This led to increased speed of recovery, as well as improved mood and attention span.⁸

ALZHEIMER'S DISEASE A total of over 600 patients with Alzheimer's have been studied in over twenty years of research,⁹ showing that acetyl L-carnitine benefits Alzheimer's patients.⁹⁻¹¹ Thirty Alzheimer's patients given acetyl L-carnitine for 6 months saw dramatically less mental deterioration.¹² One year treatment with acetyl L-carnitine in 130 patients with Alzheimer's also led to a slower rate of mental decline in 13 of the 14 outcome measures.¹³ Acetyl L-carnitine may also benefit the management of Parkinson's disease.¹⁴ In rat studies, acetyl L-carnitine has also been shown to improve age-related memory and learning impairments by activating synaptic function, and reducing cognitive deficits.¹⁵

HELPING DAMAGED NERVES Animal models of sciatic nerve injury show that acetyl L-carnitine dramatically increases the speed of nerve healing and prevents loss of nerve function.¹⁶ Acetyl L-carnitine should be considered in all cases where physical injury to neurons occurs, including brain injuries from car accidents and other causes.¹⁷ Those with brain injuries report that acetyl L-carnitine, especially when combined with phosphatidylserine, significantly improves overall brain function, attention span, and learning ability. Acetyl L-carnitine has also been found to be helpful in the management of diabetic neuropathy,¹⁷ especially when combined with lipoic acid and GLA.

Acetyl L-carnitine may be beneficial for managing diabetic neuropathy due to its safety profile. Multiple studies have shown the benefits of acetyl L-carnitine for peripheral nerve disease, improved nerve conduction velocity, and nerve regeneration.¹⁸ One hundred seventeen patients with diabetic neuropathy were given 500 mg of acetyl L-carnitine three times per day for 24 weeks and safely and effectively improved their symptoms.¹⁹

COMMON QUESTIONS ABOUT ACETYL L-CARNITINE

When will an individual start feeling the benefits of acetyl L-carnitine?

An increase in mental energy and focus may be noticeable within twenty minutes. For this reason, it should not be taken late in the day as it may delay falling asleep.

Are there nutrients that help acetyl L-carnitine work more effectively?

Phosphatidylserine, B vitamins, C vitamins, lipoic acid, phosphatidylcholine and EPA/DHA all increase the effectiveness of acetyl L-carnitine.

FUNCTIONS OF ACETYL L-CARNITINE MAY INCLUDE:

- Helps improve mental focus and energy
- Supports short- and long-term memory
- Protects the brain from stress
- Support the natural repair of physically damaged nerves
- Supports recovery from stroke
- May help reduce age-related memory deterioration

Medicinal Ingredients (per capsule):

Acetyl-L-Carnitine..... 800 mg

Non-Medicinal Ingredients: Hypromellose, magnesium stearate (vegetable source), stearic acid (vegetable source), silicon dioxide. **Recommended Dose:** Adults: Take three capsules per day, or as directed by your health care practitioner.

Acetyl L-Carnitine is energizing, so take no later than 4:00 p.m. Cofactor nutrients: Phosphatidylserine, B vitamins, lipoic acid, phosphatidylcholine, and EPA/DHA.

Contraindications: Epilepsy, manic depression

REFERENCES

For a list of references cited in this document, please visit: http://catalog.designsforhealth.com/assets/itemresources/Acetyl_L_Carnitine_References.pdf