

L-Carnitine



Discussion and Clinical Support

Carnitine sometimes is classified as an amino acid, although it is not used by the body for protein synthesis or as a neurotransmitter. Carnitine is a nutrient responsible for the transport of long-chain fatty acids into the energy-producing centers of the cells (the mitochondria). Carnitine helps the body convert fatty acids into energy, which is used mostly for muscular activities throughout the body.

The body produces Carnitine in the liver and kidneys and stores it in the skeletal muscles, heart, and brain. This process provides muscular energy by burning fat, and also prevents fatty build-up around vital organs. Muscle cells that use the most energy, particularly the heart, can benefit by having adequate carnitine levels.

Vegetarians may need to supplement to ensure healthy levels in their bodies. Our Carnitine is the 100% pure and natural form synthesized in a laboratory by bacterial cultures and is vegetarian with no detectable levels of D-Carnitine.

Some people may have an increased need for dietary Carnitine due to high-fat diets, certain medications, genetic predisposition, and low dietary levels of the precursor amino acids lysine and methionine.

Transports Fatty Acids into the Mitochondria for Oxidation

L-Carnitine is best known as the nutrient that transfers fatty acid groups into the mitochondria for oxidation and energy production (1 - 7). Individuals who supplement with L-Carnitine often notice an apparent increase in energy levels for

this reason.

The other side of bringing fatty acids into the mitochondria is the removal of waste products. The removal of toxic accumulations of fatty acid metabolites is a less heralded, but important role of L-Carnitine. Studies at the University of California, Berkeley and elsewhere have explored the benefits of carnitine supplementation for mitochondrial function, especially in aging animals. Similarly, overweight individuals may have less than optimal L-Carnitine levels for cellular functioning.

Supplement Facts		
Serving Size: 1 Capsule	Amount Per Serving	% Daily Value
Amount Per Container: 60		
L-Carnitine (L-Carnitine®) (from L-Carnitine Tartrate)	500 mg	*
*Percent Daily Values are based on a diet of 2,000 calories per day.		
†Daily Value not established.		

Details
Other ingredients: Gelatin (capsule), Cellulose, Magnesium Stearate and Silica.

Boosts Cellular Energy

The primary implication of the foregoing is that L-Carnitine supports cellular energy production (1 - 8). This can have ramifications in a variety of areas. For instance, the aim of one study was to investigate whether L-Carnitine supplementation could affect fat oxidation, protein turnover, body composition, and weight development in slightly overweight subjects. Twelve volunteers received a regular diet either without or with L-Carnitine supplementation. The result was a significant increase in lean body mass, meaning that there was increased dietary fat oxidation without accompanying protein catabolism. (9)

BENEFITS

TRANSPORTS FATTY ACIDS FOR ENERGY PRODUCTION
BOOSTS CELLULAR ENERGY

SUGGESTED USAGE

As a dietary supplement, take 1 capsule 1 to 3 times daily with or without meals.

CAUTIONS /INTERACTIONS

Mild gastrointestinal symptoms have been reported at higher levels of intake. Otherwise, L-Carnitine is considered remarkably safe. L-Carnitine is listed as pregnancy category B, indicating animal studies have revealed no harm to the fetus, but that no adequate studies in pregnant women have been conducted. Interactions are not common. However, L-Carnitine may potentiate the anti-arrhythmic effect of propafenone and mexiletine in patients with ischemia.

FREE OF COMMON ALLERGENS

Contains no sugar, salt, starch, yeast, wheat, gluten, corn, soy, milk, egg or preservatives.

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