



Carnitine

Overview

Carnitine is found in nearly all cells of the body and plays a critical role in the production of energy. It transports long-chain fatty acids into the mitochondria so they can be oxidized, or burned, to produce energy. Carnitine also transports toxic compounds out of the cellular organelles, preventing any accumulation. Given these functions, carnitine is concentrated in tissues that utilize fatty acids as fuel, like skeletal and cardiac muscles. For most people, the body makes enough carnitine. However, some people have genetic or medical conditions that prevent their bodies from meeting the necessary amount. This is when oral or injected supplementation is essential. Carnitine occurs in two forms: D-carnitine and L-carnitine. They are isomers (or mirror images) of each other. L-carnitine is the active form found in the body that transports fat to cells to be used as fuel in metabolic processes. D-carnitine does not occur naturally in humans. L-carnitine is synthesized in the brain, liver, and kidneys from the amino acids methionine and lysine and is critical to heart and brain function, muscle movement, and several other body processes. Insufficient carnitine can lead to problems in the liver, heart, and muscles.

Other Uses

Helps turn fat into energy, which makes it an ideal supplement for fitness goals. L-Carnitine may help reduce muscle damage during resistance training.

Dosage, Concentration, Route of Administration

Dosage: Seek advice from a licensed physician, medical director, or other healthcare provider

Concentration: 500mg/ml

Route of Administration: IV/IM

Storage

Store at controlled room temperature. Protect from light.