

The easiest way to manage weight.

Thermo Carnitine

THERMOGENIC COMPLEX
Dietary Supplement

Available from selected pharmacies and healthcare practitioners

Thermo Carnitine is a unique blend of ingredients that helps with short and long-term weight loss. This blend of ingredients works to increase energy, helps burn excess fat and controls appetite. When used with Neo Phaseo, it is an effective one-two punch in the battle for weight control.

Composed of 3 key ingredients, Thermo Carnitine is a unique blend of L-Carnitine, Biotin, and Alpha Lipoic Acid. Carnitine increases mitochondrial energy and biotin is essential for fat and carbohydrate metabolism. It is of central importance in lipogenesis (fat manufacture), gluconeogenesis (glycogen manufacturing) and branched chain amino acid metabolism. Alpha Lipoic Acid increases the sugar burning ability of insulin.

Carnitine

An amino acid derivative synthesized from methionine and lysine, required in energy metabolism.
Common Name: Levocarnitine

Biotin

A water-soluble member of the B-complex group. The biochemical acts as a carrier for carbon-dioxide in the pyruvate carboxylase reaction, where biotin is linked to the epsilon-amino group of a lysine residue in the enzyme.
Common Name: Vitamin H

Alpha Lipoic Acid (ALA)

A sulfur containing substance that is readily converted to and from its reduced form dihydrolipoic acid. ALA acts as a coenzyme in reactions that occur in the Krebs cycle; specifically it is involved in the decarboxylation of pyruvate and some other alpha-keto acids.
Common Name: Lipoic acid or Thioctic acid

Indicated Benefits

- Deficiencies in Vitamin C, B3, B6, B12, folic acid, iron, SAME and lysine can reduce carnitine synthesis
- L-Carnitine slows down with aging
- Carnitine promotes weight loss
- Diabetic management
- Biotin plays an important role in metabolizing the energy

received from food. Biotin assists 4 essential enzymes that break down fats, carbohydrates and proteins

- Alpha Lipoic Acid is beneficial for heart disease, stroke and diabetes

Thermo Carnitine

Increases energy naturally, providing a steady supply of energy

Promotes healthy weight management

Helps maintain heart health

Improves aerobic sports performance

Might help ADHD and chronic fatigue

Does not burn out the adrenal system

- Thermo Carnitine may contribute to optimal fat oxidation and along with dietary changes and exercise, may promote a healthier body weight
- An alternative to ephedrine and ephedra like compounds that are used/indicated in thermogenic weight management therapies
- An important supplement to healthy weight management
- Provides a stable form of Alpha Lipoic Acid & L-Carnitine
- An FDA approved formula
- Good Manufacturing Practices (GMPs) are strictly adhered to in the production of Thermo Carnitine

Scientific Information – Carnitine Biochemistry

The transport of long-chain fatty acids by L-Carnitine into the mitochondrial matrix where they can be metabolized to generate energy requires three enzymes located on the mitochondrial outer and inner membranes. On the outer mitochondrial membrane of skeletal and cardiac muscle cells, carnitine-palmitoyl transferase I (CPTI) catalyzes the formation of acylcarnitine (a fatty acid + L-Carnitine) from acyl-CoA (a fatty acid + coenzyme A). A transporter protein called carnitine:acylcarnitine translocase (CT) transports acylcarnitine across the inner mitochondrial membrane. Carnitine-palmitoyl transferase II (CPTII) is associated with the inner mitochondrial membrane and catalyzes the formation of acyl-CoA within the mitochondrial matrix where it can

be metabolized through a process called beta-oxidation, ultimately yielding propionyl-CoA and acetyl-CoA.

Carnitine Deficiency

L-Carnitine is contained in the normal western diet and is also synthesized from methionine and lysine by the liver. It is required for the transport of activated long-chain fatty acids into the matrix compartment of mitochondria of tissues for subsequent oxidation.

Deficiency may occur in various genetic discords (eg, carnitine palmitoyltransferase deficiency, methylmalonic aciduria, propionic academia, and isovaleric acidemia) and has been corrected by L-Carnitine 25mg/kg/6 h orally. It may also result from diminished synthesis in severe liver disease or excessive loss from dialysis in chronic renal failure. Symptoms of hypoglycemia and skeletal muscle weakness, associated with biochemical evidence of carnitine deficiency during long term total parenteral nutrition have been reversed by carnitine therapy. (Reference: Merck 15th Edition, 1987, page 939 Ch.81)

Dosage & Administration

Adult: Take 1 caplet 3 times daily, best taken during the day with a meal.

Pediatric: 100-200mg/kg/d PO divided bid/tid not to exceed 3g/d

Ingredient Information

Available as 90 capsules

Each capsule contains:

Biotin33 mcg

L-Carnitine.....500 mg

R-Alpha Lipoic Acid.....100 mg

(Sodium Salt)

Other Ingredients: Cellulose, dicalcium phosphate, croscarmellose sodium, vegetable stearic acid, vegetable magnesium stearate, silica, purified water, hypromellose, titanium dioxide, hydroxypropyl cellulose, polyethylene glycol, polysorbate 80, elderberry powder, Brazilian palm tree wax.

Contains no artificial flavours or preservatives. Free from sugar, starch, sodium salt, gluten, lactose.

Action

Carnitine increases mitochondrial energy and biotin is

essential for fat and carbohydrate metabolism. It is of central importance in lipogenesis (fat manufacture), gluconeogenesis (glycogen manufacturing) and branched chain amino acid metabolism. Alpha Lipoic Acid increases the sugar burning ability of insulin.

Contraindications

L-Carnitine has not been consistently linked with any toxicity. Excess intake of biotin is excreted in the urine; no toxicity symptoms have been reported. Side effects with Alpha Lipoic Acid are rare but can include skin rash and potential hypoglycemic in diabetics.

Warnings/Precautions/Side Effects

Pregnant women and people suffering from any type of medical condition should consult their doctor before taking Alpha Lipoic Acid.

Drug Interactions

Anticonvulsant, valproic acid, and nucleoside analogues, used in the treatment of HIV infection, including zidovudine (AZT), didanosine (ddI), zalcitabine (ddC) and stavudine (d4T), may produce secondary L-Carnitine deficiencies. Pivalic acid-containing antibiotics used in Europe (pivampicillin, pivmecillinam and pivcephalexin) may also produce secondary L-Carnitine deficiencies (3,6) The cancer chemotherapy agents, ifosfamide and cisplatin, may increase the risk of secondary L-Carnitine deficiency, and there is limited evidence that L-Carnitine supplementation may help prevent cardiomyopathy induced by doxorubicin (adriamycin) therapy (2).

Published Studies

'A Dietary Supplement Containing Standardized Phaseolus Vulgaris Extract Influences Body Composition of Overweight Men and Women', Int. J. Med. Sci. 2007, 4(1): 45-52

'Blocking Carbohydrate Absorption and Weight Loss: A Clinical Trial using Phase 2 Brand Proprietary Fractionated White Bean Extract', Alternate Medicine Review, Vol 9, Number 1, 2004

'Decrease in Respiratory Quotient During Exercise Following L-Carnitine Supplementation', Int J Sports Med. 10 (1989), pp169-174

'Effects of a commercial starch blocker preparation on carbohydrate digestion and absorption. in vivo and in vitro studies', The American Journal of Clinical Nutrition 38: Oct 1983 pp498-503

'Influence of L-Carnitine administration on maximal physical exercise', Eur J Appl Physiology (1990) 61:486-490

'L-Carnitine Supplementation in Humans. The Effects on Physical Performance', Int. J. Sports Med. 11 (1990)

Thermo Carnitine is formulated from natural sources and is pharmaceutically tested to guarantee full potency and absolute clinical purity.



GMP Quality assurance

Harmonic Health is a science-based health and wellness company dedicated to developing harmony and balance in people's lives through the development of cutting-edge, science-driven programs and products that improve health and wellness to enrich the quality of life.



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