## COMPLETE ®
### L-CARNITINE PLUS

<table>
<thead>
<tr>
<th>Form</th>
<th>500 mg tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily intake</td>
<td>1 tablet with meal, 3 tablets per day</td>
</tr>
<tr>
<td>Active ingredients (daily intake)</td>
<td>L-Carnitine L-Tartrate 729 mg (pure L-Carnitine 500 mg), standardized Green Tea extract 120 mg (polyphenols 108 mg)</td>
</tr>
<tr>
<td>Application</td>
<td>Food supplement, additional source of L-Carnitine and Green Tea polyphenols</td>
</tr>
</tbody>
</table>

*The basis for true weight loss is proper eating and regular exercise. Supplements are beneficial for an added kick to serious weight-loss program.*

<table>
<thead>
<tr>
<th>Item N 1415</th>
<th>60 tablets</th>
<th>20 days supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item N 1416</td>
<td>90 tablets</td>
<td>30 days supply</td>
</tr>
</tbody>
</table>

## I. ITEM INTRODUCTION

### I.I. INGREDIENTS OF L-CARNITINE PLUS ARE FOUND TO BE BENEFICIAL FOR THE FOLLOWING:

- Low strength and endurance, physical and mental fatigue
- Muscle mass development
- Muscle injuries and sore muscles
- Fat burning (addition to a weight loss program)
- Control of body composition
- Cardio protective (to increase cardiac output, lower the heart rate under stress, reduce the intensity of cardiac infarction and symptoms of heart failure)
- For surgeries that may be accompanied by blood loss (for promotion of formation of red blood cells)
- Aging brain, dementia, Alzheimer's disease, impaired memory, concentration, ability to learn
- Liver related ailments (liver tissue renewal, liver function, problems of fatty liver)
- Sexual (activity of sperm, amount and number of sperm, fertility of sperm)

### I.II. PROPERTIES OF L-CARNITINE PLUS INGREDIENTS:

- L-Carnitine Tartrate is a natural substance that, it is currently the best-researched dietary supplement in the world with 7822 studies listed, and has every appearance of being a wonder remedy. Moreover, it is non-toxic, without contraindications and adverse interactions, and well-tolerated by young and old. L-Carnitine Tartrate makes a varied contribution, directly and indirectly to normal functioning of the metabolism. It can improve vitality, help prevent heart problems, and help slow down the aging process. Whenever an organism needs energy, L-Carnitine plays an important role. It transports fatty acids into the mitochondria. L-Carnitine mainly increases the rate at which fat is burned. This tends to reduce fat and build up lean muscle mass.
- L-Carnitine is not a drug but a natural healthy dietary supplement. L-Carnitine has no harmful side effects and poses no known risks.
- Green tea may be beneficial in weight control. Green tea has thermogenic properties and promotes fat oxidation. Green tea extract having a role in the control of body composition via sympathetic activation of thermogenesis, fat oxidation, or both. Studies showed that average fat oxidation rates were 17% higher after ingestion of Green tea extract.
I.III. L-CARNITINE PLUS IS MOSTLY RECOMMENDED TO:

- Individuals on a calorie reduced diet for weight loss
- Athletes
- Smokers
- Individuals who have above-average stress levels in their lives
- Quickly exhausted individuals
- Vegetarians
- For fat burning and control of body composition

II. INFORMATION FOR SPECIALISTS

REPORTED BENEFITS OF L-CARNITINE PLUS INGREDIENTS:

Discovered in Russia in 1905, L-carnitine is a nitrogen-containing, short-chain carboxylic acid - technically, it is not an amino acid. It is a water-soluble, vitamin-like compound that is readily synthesized in the body from lysine and methionine.

L-Carnitine is used by the body to transport long chain fatty acids to the "power sources" in the cells called mitochondria, which are where the calories get "burned" or oxidized for energy. Since this fat burning is such a major source of muscular energy, deficiencies in L-Carnitine are manifested as low energy levels and muscular weakness.

The highest concentrations of Carnitine are found in red meat and dairy products. Other natural sources of Carnitine include nuts and seeds (pumpkin, sunflower, sesame), legumes or pulses (beans, peas, lentils, peanuts), vegetables (artichokes, asparagus, beet greens, broccoli, brussels sprouts, collard greens, garlic, mustard greens, okra, parsley, kale), fruits (apricots, bananas), cereals (buckwheat, corn, millet, oatmeal, rice bran, rye, whole wheat, wheat bran, wheat germ) and other "health" foods (bee pollen, brewer's yeast, carob).

In general, 20 to 200 mg are ingested per day by those on an omnivorous diet, whereas those on a strict vegetarian or vegan diet may ingest as little as 1 mg/day.

Of the many fat-loss supplements, L-Carnitine is one that always found useful when trying to drop extra kilograms.

L-Carnitine Tartrate is a natural substance that, it is currently the best-researched dietary supplement in the world with 7822 studies listed, and has every appearance of being a wonder remedy. Moreover, it is non-toxic, without contraindications and adverse interactions, and well-tolerated by young and old.

L-Carnitine Tartrate makes a varied contribution, directly and indirectly to normal functioning of the metabolism. It can improve vitality, help prevent heart problems, and help slow down the aging process. Whenever an organism needs energy, L-Carnitine plays an important role. For example it transports fatty acids into the mitochondria. L-Carnitine mainly increases the rate at which fat is burned. This tends to reduce fat and build up lean muscle mass.

L-Carnitine is not a drug but a natural healthy dietary supplement. L-Carnitine has no harmful side effects and poses no known risks.

L-Carnitine is recommended for the following: expectant mothers, small children, athletes, smokers, people who have above-average stress levels in their lives, people who suffer from heart disease and diabetes, or seniors who would like to preserve and promote their health and mental fitness even at an advanced age. Another area of use is for people who are quickly exhausted or anyone on a calorie reduced diet for weight loss.

Vegetarians and vegans will profit a great deal from L-Carnitine as a dietary supplement. Vegetarian expectant and breast-feeding mothers are strongly advised to take additional L-Carnitine in order to avoid deficiencies and not to endanger the healthy growth of their children.

Health Benefits of L-Carnitine

**Muscles**
Increases strength and endurance
Relieves physical and mental fatigue
Promotes and maintains new development of muscle mass
Reduces muscle injuries and sore muscles
Accelerates regeneration
Helps the cells to burn fat (making it excellent addition to a weight loss program)

**Heart**
Increases cardiac output
Lowers the heart rate under stress
Reduces the intensity of cardiac infarction
Reduces symptoms of heart failure, angina pectoris

**Recovery from Surgeries**
Experts recommend L-Carnitine for surgeries that may be accompanied by blood loss because it promotes formation of red blood cells and strengthens your immune system, aiding recovery.

**Immune Cells**
Supplies energy to immune cells
Increases activity of immune cells under stress
Doesn't strain the immune system

**Brain, Nerves**
Slows aging of brain, dementia, Alzheimer's disease
Improves cognitive abilities like concentration, memory, and ability to learn
Accelerates renewal of tissue

**Liver**
Improves liver function
Reduces problems of fatty liver
Accelerates renewal of liver tissue

**Sperm**
Improves activity of sperm
Enlarges amount and number of sperm
Increases fertility of sperm

Tea consumption had its origin in China more than 4000 years ago. Green tea has been used as both a beverage and a method of traditional medicine in most of Asia, including China, Japan, Taiwan, Vietnam, Korea, India and Thailand, to help everything from controlling bleeding and helping heal wounds to regulating body temperature, blood sugar and promoting digestion.

Recent literature has suggested that Green tea may be beneficial in weight control. Recent studies on Green tea's thermogenic properties have demonstrated a synergistic interaction between caffeine and catechin polyphenols that appears to prolong sympathetic stimulation of thermogenesis. A randomized, placebo-controlled study of 10 individuals was conducted to investigate whether a Green tea extract could increase the 24-h energy expenditure and fat oxidation in humans. Compared to the placebo, the Green tea extract resulted in a significant 4% increase in 24-h energy expenditure and a significant decrease in 24-h respiratory quotient without a change in urinary nitrogen. 24-hour urinary excretion of norepinephrine was higher during treatment with the Green tea extract than with the placebo. Treatment with caffeine alone in amounts equivalent to those found in the Green tea extract had no effect on energy expenditure and respiratory quotient nor on urinary nitrogen or catecholamine excretion. It was concluded that Green tea has thermogenic properties and promotes fat oxidation beyond that explained by its caffeine content, with the Green tea extract having a role in the control of body composition via sympathetic activation of thermogenesis, fat oxidation, or both.
Another study reported similar results, that Green tea extract may stimulate brown adipose tissue *thermogenesis* to an extent which is much greater than can be attributed to its caffeine content, with thermogenic properties residing primarily in an interaction between its high content in catechin-polyphenols and caffeine with sympathetically released noradrenaline (NA).

A study performed at Birmingham (UK) University, showed that average fat oxidation rates were 17% *higher after ingestion of Green tea extract* than after ingestion of a placebo. Similarly the contribution of fat oxidation to total energy expenditure was also significantly higher by a similar percentage following ingestion of Green tea extract. This implies that ingestion of Green tea extract can not only increase fat oxidation during moderately intensive exercise but also improve insulin sensitivity and glucose tolerance in healthy young men.

A recent study looked at the effects of short term Green tea consumption on a group of students between the ages of 19–37. Participants were asked not to alter their diet and to drink 4 cups of Green tea per day for 14 days. The results showed that short term consumption of commercial Green tea reduces systolic and diastolic blood pressure, fasting total cholesterol, body fat and body weight. These results suggest a role for Green tea in decreasing established potential cardiovascular risk factors. This study also suggests that reductions may be more pronounced in the overweight population where a significant proportion are obese and have a high risk of cardiovascular disease.


**External links:**

**L-CARNITINE**
- National Cancer Institute, USA: [http://www.cancer.gov/drugdictionary/?CdrID=615086](http://www.cancer.gov/drugdictionary/?CdrID=615086)

**GREEN TEA**
- University of Maryland Medical Center (UMMC): [http://www.umm.edu/altmed/articles/green-tea-000255.htm](http://www.umm.edu/altmed/articles/green-tea-000255.htm)

**References:**


