What if there were one nutrient which could help you lose weight, increase energy, lower cholesterol, and promote heart health? Carnitine does all that and more. Carnitine accomplishes this by promoting fat burning. Carnitine is the only nutrient that can transport fat to the part of the cell that burns it off: the mitochondria. If you can’t get fat into the mitochondria, you can’t burn it. So no carnitine, no fat burning. Higher carnitine levels, on the other hand, allow our body to burn fat at an optimal rate. Carnitine is sometimes called an amino acid, but it is not. It is similar in structure to B vitamins, especially choline. However, carnitine is not a true vitamin because the body makes it in small amounts.

Carnitine is also found in animal products, especially red meat. Unless you are eating pounds of red meat a day, however, you are probably not getting enough carnitine.

**CARNITINE: THE MOST IMPORTANT NUTRIENT TO PROMOTE WEIGHT LOSS**

Increasing carnitine intake is the most natural way to support weight loss, because carnitine picks up fat and puts it in the part of the cell that burns it off without any side effects. Scientific evidence shows that increased levels of carnitine lead to increased fat burning. Carnitine also helps increase metabolic rate while maintaining levels of muscle tissue. This is crucial, because muscle tissue is where you do most of your fat burning. Carnitine is also useful for eliminating cravings and increasing the amount of energy you have to exercise, both of which are very helpful for those who want to lose weight.

**Benefits of Carnitine**

- Increases fat burning
- Increases energy levels
- Lowers cholesterol & triglycerides
- Promotes heart health
- Gives you more energy to exercise & increases exercise endurance & performance
- Reduces food cravings
- Promotes healthy circulation
- Promotes liver health
- Counters the side effects of medications such as Valproate, Adriamycin, & AZT

**Research Shows Carnitine Supports Weight Loss**

In a study of 18 overweight subjects, carnitine greatly increased weight loss. The subjects were split into two groups of 9. For 12 weeks, both groups ate a healthy diet and performed moderate exercise. One group was given 2,000 mg of carnitine, the other a placebo. In the placebo group, the average weight loss after 12 weeks was one pound. In the carnitine group, weight loss averaged eleven pounds. That’s an eleven-fold increase in weight loss simply by increasing carnitine levels! Body fat percentage levels also decreased markedly in the carnitine group.

**Signs of inadequate carnitine intake include:**

- Fatigue
- Progressive Weight Gain
- High Cholesterol and Triglycerides
- Weak Heart Function
- Lack of Mental Focus
- Poor Immune Function

**Carnitine Deficiency**

- Minimal Fat Burning
- Lower Energy Levels
- Weight Gain
- Increased Cravings
- High Cholesterol

**Optimal Carnitine Levels**

- Maximal Fat Burning
- Higher Energy Levels
- Weight Loss
- Decreased Cravings
- Lower Cholesterol

**Carnitine Deficiency**

- Minimal Fat Burning
- Lower Energy Levels
- Weight Gain
- Increased Cravings
- High Cholesterol

This information is provided for the use of physicians and other licensed health care practitioners only. This information is intended for physicians and other licensed health care providers to use as a basis for determining whether or not to recommend these products to their patients. This medical and scientific information is not for use by consumers. The dietary supplement products offered by Designs for Health are not intended for use by consumers as a means to cure, treat, prevent, diagnose, or mitigate any disease or other medical condition.
PROMOTING HEART HEALTH
The heart derives 70% of its energy from fat, and fat can't be burned without carnitine, so carnitine is a crucial heart nutrient. Carnitine has been found helpful in the treatment of mitral valve prolapse, angina, cardiac arrhythmias, cardiomyopathy, and congestive heart failure. Carnitine is also one of the most important nutrients for lowering cholesterol and triglycerides.6

SPORTS ENDURANCE
Because carnitine plays such a critical role in fat burning, carnitine is a great aid in promoting sports endurance. Fat is the #1 fuel our body uses in endurance sports, and research shows carnitine enhances aerobic performance and allows athletes to exercise longer without fatigue. Carnitine also increases the peak running speed in athletes by 6%.7

CHRONIC FATIGUE
Carnitine is an effective treatment for the fatigue seen in a number of chronic neurologic diseases. Chronic fatigue patients given 3,000 mg of carnitine saw statistically significant clinical improvement in 12 of the 18 studied parameters after 8 weeks of treatment. Increases in energy, well-being, and other parameters were more pronounced the longer patients took carnitine.8

HOW TO TAKE CARNITINE
Start by taking two 500 mg capsules of carnitine before or with breakfast. After one week the dose can be increased (if more energy or weight loss are desired) to two 500 mg capsules before both breakfast and lunch. Carnitine can also be taken in liquid or powder form. Increase your dose of carnitine gradually until you see the results you desire. Taking carnitine after 4:00 p.m. may make it harder to fall asleep at night, so take all carnitine ideally before 4:00 p.m. The only side-effect of taking too much carnitine: too much energy! Heart patients and those with serious illness should take carnitine with the supervision from their physician, as carnitine can reduce the need for heart-supporting medications.

When will I start feeling the benefits of carnitine?
You should begin to feel an increase in energy within the first few days. Weight loss results are usually seen within the first week. For sports endurance, it may take a week or more to see the benefits. Cholesterol and triglyceride lowering effects can take a month or longer.

How do I know whether to take carnitine or acetyl-L-carnitine?
For weight loss, lowering cholesterol, increasing energy, and sports endurance, carnitine (also called L-Carnitine) is the preferred form. For maximizing brain health, acetyl-L-carnitine is the ideal form. For those over forty, taking both is optimal.

Should carnitine be taken with other nutrients?
Combining carnitine with CoQ10 is always a good idea, as these nutrients work together in your cells. Taking carnitine along with chromium and zinc can be very helpful for weight loss. Magnesium, taurine, and vitamin E, EPA, as well as CoQ10 all help carnitine benefit the heart more effectively. Remember to treat all health problems with the guidance of a health care practitioner.

References