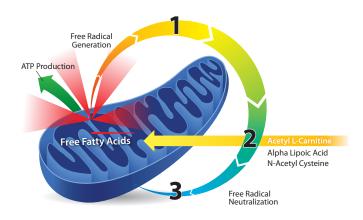


# LOVE YOUR LIVER RESTORE 2

## **CLINICAL APPLICATIONS**

- , RECHARGES CELLULAR ENERGY PRODUCTION
- , SUPPORTS IMMUNE FUNCTION
- , Increases Antioxidant Protection
- , SUPPORTS DETOXIFICATION CAPACITY

This product is a scientifically formulated blend of nutrients specifically designed to recharge cellular energy production, increase antioxidant protection, support detoxification capacity, and support immune function. Based on peerreviewed, double-blind research, this product provides a unique blend of acetyl L-carnitine, alpha lipoic acid and N-acetyl cysteine. All have shown to support immune function and energy output. This product also includes key micronutrients and phytonutrients, including green tea, broccoli seed extract and resveratrol, to protect the mitochondria and continually recharge the cycle of energy production.



#### 1. Foundation—Micronutrient Essentials

Cellular energy production requires adequate nutritional cofactors. This product provides key micronutrients to ensure the cycle of energy production is established.

#### 2. Ignition—The Power Trio

This product works by combining acetyl L-carnitine, alpha lipoic acid and N-acetyl cysteine to recharge cellular energy production and increase antioxidant protection.

## 3. Protection----Bioactive Phytonutrients

This product provides plant compound "signals" to stimulate proper mitochondrial function and guard against mitochondrial degeneration.

## **Overview**

The body's cells and organ systems depend on an adequate supply of energy to function optimally. The mitochondria, known as the power house of the cell, contain nutrients and enzymes that are important forrecharging cellular energy production. Some of these enzymes convert food to usable energy in the form of adenosine triphosphate (ATP). ATP functions as the key source of energy for all cells. In order to increase mitochondrial output, there must be adequate fuel supply for combustion and abundant antioxidants to scavenge free radical by-products. Preserving energy reserves and increasing energy output is a critical part of maintaining optimal health.

Lack of sleep, too much stress, poor nutrition and prescription medications can draw on energy reserves, using them up faster than they can be replenished. Even the vital biologic systems can create an energy deficit that needs to be restored.

Some of the most energy demanding systems in the body are:

- Liver detoxification
- Immune function
- Cardiovascular function
- Neurologic function

This product is scientifically formulated, based on published research, to boost mitochondrial reserves and recharge cellular energy production.¹ This product includes the powerful antioxidant trio of alpha lipoic acid, N-acetyl cysteine and acetyl L- carnitine, all shown to recharge cellular energy production and the primary cellular antioxidant pools of vitamins E and C and glutathione.

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

# Acetyl L-Carnitine<sup>†</sup>

Acetyl L-carnitine (ALC) is an amino acid that is associated with recharged cellular energy production. It has been shown to increase the flow of free fatty acids, the fuel source for mitochondria, resulting in a significant boost in energy production. With age, free radical production increases oxidative damage to the mitochondria, which can potentially decrease energy production. ALC has been shown to recharge cellular energy production and has been found, in combination with lipoic acid, to lower oxidative stress. <sup>2,3</sup> Studies have also shown that ALC supports immune function by protecting CD4 and CD8 immune cells and by supporting the reproduction of lymphocytes for the identification and elimination of invading antigens.<sup>4,5</sup>

# N-Acetyl Cysteine<sup>†</sup>

N-acetyl cysteine (NAC) is an antioxidant that scavenges free radicals and supports detoxification capacity.<sup>6</sup> NAC has been shown to increase production of glutathione, an important antioxidant found in the body.<sup>6</sup> In addition to its antioxidant activity, glutathione supports immune function by activating T-cells.<sup>7</sup>

# Alpha Lipoic Acid†

Alpha lipoic acid (ALA) is an antioxidant and also plays a synergistic role in recharging other antioxidants such as vitamin C, vitamin E,  $CoQ_{10}$  and glutathione. Lipoic acid also plays a key role in supporting detoxification capacity.<sup>8</sup> Studies have shown that a combination of ALA and ALC helps minimize oxidative damage.<sup>9,10</sup> Oxidative stress causes damage to DNA, RNA, proteins, mitochondrial membranes and lipids, and contributes to the functional decline of mitochondria, cells, tissues and eventually organs such as the brain.<sup>9,10</sup>

# Resveratrol<sup>†</sup>

Resveratrol is a polyphenol molecule found in many plant species, including grapes and cranberries, and is found in high concentrations in wine. Polyphenols act as antioxidants that protect plants from damage that can be caused by bacteria, fungi and radiation.<sup>11</sup> Resveratrol is believed to be the dietary factor behind the "French Paradox," which is the high rate of cardiovascular wellness in the French population, despite their high fat intake. In addition to its antioxidant properties and support for cardiovascular function, resveratrol has been shown to support immune function.<sup>11</sup>

#### Broccoli Seed Extract<sup>†</sup>

Broccoli seed extract contains a high amount of glucoraphanin, a compound that is a precursor to sulphoraphane. Sulphoraphane is an antioxidant and supports detoxification capacity and immune response. Sulphoraphane has been shown to induce Phase II detoxification enzymes and raise intracellular glutathione levels.<sup>12</sup>

# Green Tea (EGCG)†

Green tea polyphenols have demonstrated significant antioxidant, probiotic- and immune-supporting properties. The hydroxyl group of green tea polyphenols increases antioxidant protection by forming complexes with free radicals and neutralizing them, minimizing oxidative damage throughout the body. Green tea polyphenols also stimulate the activity of liver detoxification enzymes, supporting detoxification capacity. The hydroxyl group of green teap of gr

## The Micronutrient "Backbone" †

To recharge cellular energy production efficiently, optimal levels of critical nutrients and enzyme cofactors must be achieved. This product provides an optimized backbone of vitamins and minerals necessary for increasing energy output and meeting daily nutritional needs.

# **Directions**

2-4 capsules per day or as recommended by your health care professional.

#### **Does Not Contain**

Gluten, yeast, artificial colors or flavors.

## **Cautions**

If you are pregnant or nursing, consult your physician before taking this product.

Serving Size 4 Capsules Servings Per Container 30					
	Amount Per Serving	% Daily Value		Amount Per Serving	% Daily Value
Vitamin A (from 5,000 IU as Natural Beta C	1,500 mcg arotene)	167%	Selenium (as Selenium Glycinate Complex)	75 mcg	136%
Vitamin C (as Ascorbic Acid USP)	250 mg	278%	Manganese	1 mg	43%
Vitamin D (D3 as Cholecalciferol)	25 mcg (1,000	IU) 125%	(as TRAACS™ Manganese Bisglyci	nate Chelate)	
Thiamin (Vitamin B1)	15 mg	1,250%	Chromium (as O-polynicotinate)‡	50 mcg	1439
(from Thiamine Hydrochloride U	- /		Potassium (as Potassium Citrate USF	) 30 mg	<19
Riboflavin (Vitamin B2 USP)	15 mg	1,154%			
Niacin (as Niacinamide USP)	15 mg	94%	N-Acetyl-L-Cysteine USP	600 mg	*
Vitamin B6 (as Pyridoxine Hydrochloride US	15 mg P)	882%	Acetyl L-Carnitine Hydrochloride (MitoCarn™)	500 mg	*
Folate (from 800 mcg as	1,360 mcg DFE	340%	Malic Acid (as DiMagnesium Malate)	215 mg	*
Quatrefolic® (6S)-5-Methyltetrah	, ,		Alpha Lipoic Acid	200 mg	*
Vitamin B12 (as Methylcobalamin)	250 mcg	10, 417%	Mixed Tocopherols	50 ma	*
Biotin	50 mcg	167%	Green Tea Leaf Extract (Standardized	45 ma	*
Pantothenic Acid (as d-Calcium Pantothenate USF	15 mg	300%	to contain 45% EGCg (Epigallocate		
Choline (as Choline Bitartrate)	15 ma	3%	Broccoli Seed Extract (TrueBroc®)	40 mg	*
Calcium (as Calcium Citrate USP)	75 mg	6%	(Standardized to contain 13% Glucoraphanin)		
lodine (from Potassium Iodide)	37 mcg	25%	Inositol NF	15 mg	*
Magnesium (as DiMagnesium Mala		18%	trans -Resveratrol	10 mg	*
viagnesium (as Diwagnesium waia Zinc	5 mg	45%	(from Polygonum cuspidatum (Roo	ts))	



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