Mito Essentials



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Clinical Applications

- Recharges Cellular Energy Production*
- Supports Immune Function*
- Increases Antioxidant Production*
- Supports Detoxification Capacity *

Mito Essentials 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 peer reviewed, double-blind research, Mito Essentials 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. Mito Essentials 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.

All Absolute Health Formulas Meet or Exceed cGMP Quality Standards

Discussion

Mito Essentials is scientifically formulated, based on published research, to boost mitochondrial reserves and recharge cellular energy production. Mito Essentials 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.

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, which fuels the mitochondria, resulting in significant boosts 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. ^{2,3} Studies show that ALC supports immune function by protecting CD4 and CD8 immune cells and the reproduction of lymphocytes for the identifying and eliminating invading antigens. ^{4,5}

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

Alpha Lipoic Acid (ALA) is an antioxidant and plays a synergistic role in recharging other antioxidants such as vitamin C, vitamin E, CoQ10 and glutathione. Lipoic acid also plays a key role in supporting detoxification capacity. 8 Studies show that a combination of ALA and ALC helps minimize oxidative damage.^{9,10} 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. 9,10

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. 11 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. ¹¹

Broccoli Seed Extract contains a high amount of glucoraphanin, a compound that is a precursor to sulforaphane. Sulforaphane is an antioxidant that supports detoxification capacity and immune response; inducing Phase II detoxification enzymes and raise intracellular glutathione levels. 12

Green Tea (EGCG) polyphenols have demonstrated significant antioxidant, probiotic- and immune-supporting properties. 13 The green tea polyphenols increases antioxidant protection by forming complexes with free radicals and neutralizing them, minimizing oxidative damage throughout the body, and stimulating the activity of liver detoxification enzymes, thus supporting detoxification capacity.13

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



Supplement Facts

Serving Size 4 Capsules Servings Per Container 15 & 30

4 capsules contain	mount Per Serving	% Daily Value	4 capsules contain	Amount Per Serving	% Daily Value
Vitamin A (from 5,000 IU as Natural Beta Carotene)	1,500 mcg	167%	Selenium (as Selenium Glycinate Complex)	75 mcg	136%
Vitamin C (as Ascorbic Acid USP)	250 mg	278%	Manganese (as TRAACS®	1 mg	43%
Vitamin D (D3 as Cholecalciferol)	in D (D3 as Cholecalciferol) 25 mcg (1,000 IU) 125%		Manganese Bisglycinate Chelate)	ring	4070
Thiamin (Vitamin B1) (from Thiamine Hydrochloride USP)	15 mg	1,250%	Chromium (as O-polynicotinate) [‡]	50 mcg	143%
Riboflavin (Vitamin B2 USP)	15 mg	1,154%	Potassium (as Potassium Citrate USP)	30 mg	<1%
Niacin (as Niacinamide USP)	15 mg	94%	N-Acetyl-L-Cysteine USP	600 mg	
Vitamin B6 (as Pyridoxine Hydrochloride USP)	15 mg	882%	Acetyl L-Carnitine Hydrochloride	500 mg	*
Folate (from 800 mcg as Quatrefolic® (6S)-5-Methyltetrahydrol	1,360 mcg DFE folic acid glucosar	340% nine salt)	Malic Acid (as DiMagnesium Malate)	215 mg	
Vitamin B12 (as Methylcobalamin)	250 mca	10, 417%	Alpha Lipoic Acid	200 mg	
Biotin	50 mcg	167%	Mixed Tocopherols	50 mg	
Pantothenic Acid (as d-Calcium Pantothenate USP)	15 mg	300%	Green Tea Leaf Extract (Standardized to contain 45% EGCg (Epigallocatechin		•
Choline (as Choline Bitartrate)	15 mg	3%	Broccoli Seed Extract (TrueBroc®)	40 mg	*
Calcium (as Calcium Citrate USP)	75 mg	6%	(Standardized to contain 13% Glucora		
odine (from Potassium Iodide)	37 mcg	25%	Inositol NF	15 mg	*
Magnesium (as DiMagnesium Malate		18%	trans -Resveratrol (from	10 mg	*
Zinc (as TRAACS® Zinc Bisglycinate Chelate)	5 mg	45%	Polygonum cuspidatum (Roots)) * Daily Value not established		

Other Ingredients: Natural Vegetable Capsules, Ascorbyl Palmitate, Magnesium Stearate, Magnesium Silicate and

Directions

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

Caution

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

Does Not Contain

Gluten, corn, yeast, artificial colors, and flavors.



References

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