TECHNICAL DATA SHEET





ENERGY & VITALITY

Potent anti-aging antioxidants. Supports cellular metabolism and energy production.

Aging is not for the faint of heart, and nearly everyone would prefer to delay the inevitable. At Mountain Peak Nutritionals we understand that people want to age gracefully and feel healthy for as long as possible. With this ideal in mind, we created Longevity formula – a basic health component for a sustainable and successful anti-aging regimen. Longevity formula contains high levels of coenzyme Q-10, acetyl-L-carnitine (with biotin), resveratrol, alpha-lipoic acid, and serrapeptase. By bringing together the top five scientifically recognized, anti-aging ingredients into a single capsule, we have created a Condition Specific Formula[®] that is more affordable and provides a nutritional supplement that can be used daily and, along with healthy lifestyle practices, can provide noticeable and long-term results. Longevity formula, combined with a wholesome diet and exercise, will allow for people to feel more revitalized and achieve better health well into their "golden years."

Supplement Facts

Serving size: 1 capsule Servings per container: 60		
Amount per serving		%DV
Alpha-Lipoic Acid	200 mg	*
Resveratrol 50%	200 mg	*
Acetyl-L-Carnitine	200 mg	*
Coenzyme Q-10	100 mg	*
Serrapeptase 600,000 u/gm	15 mg	*
Biotin 1%	200 mcg	*
* Daily Value not established.		

Other ingredients: vegetarian capsules (hypromellose and water), silica

INGREDIENTS:

Coenzyme Q-10

Coenzyme Q-10 is a vitamin-like compound present in virtually all cells and in especially high concentrations in the heart, liver, kidney, and pancreas. Within the cell, 25-30% of total coenzyme Q-10 is found in the nucleus, 40-50% in the mitochondria, 15-20% in the microsomes, and 5-10% in the cytosol. Its primary functions include activity as an antioxidant, a membrane stabilizer, and as a cofactor in many metabolic pathways, particularly in the production of adenosine triphosphate (ATP) in oxidative respiration (1). Coenzyme Q-10 levels are highest during the first 20 years of life and decline with age. At age 80, coenzyme Q-10 levels may be lower than at birth. A lack of coenzyme Q-10 appears to be a factor in the impaired function of the mitochondrial electron transport chain, and particularly the mitochondrial enzymes, complex I and complex II. Coenzyme Q-10 is the electron acceptor for these complexes. Preclinical research indicates that supplementation increases cerebral concentrations of coenzyme Q-10 and reduces the loss of dopamine and dopaminergic axons.

Acetyl-L-Carnitine

Acetyl-L-carnitine, the most important carnitine ester, is converted to L-carnitine in the body by carnitine acetyltransferase (2). Carnitines play an important role in lipid metabolism and energy production. They are essential for normal mitochondrial function, acting as a transporter of long-chain fatty acids into the mitochondria for beta-oxidation (3). Acetyl-L-carnitine is structurally related to acetylcholine. It also serves as a precursor to acetylcholine release and increases choline acetyltransferase activity (4). Acetyl-L-carnitine is thought to help in the regeneration and repair of neurons and therefore decrease excessive excitability and firing. Acetyl-L-carnitine and biotin work together for the nutritional support of the biochemical disturbances that can occur in metabolic syndrome and weight loss.

Replaces all previous versions: 8.25.21

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.

Resveratrol 50%

Resveratrol is a polyphenolic compound that exists in nature as cis- and trans-stereoisomers. Resveratrol may decrease the activity of cytokines. Preliminary evidence suggests that transresveratrol possesses antioxidant activity. Evidence also suggests resveratrol is a potent agent to inhibit COX-1 and COX-2 (5). Resveratrol is offered in various potencies and standardization choices. In wine, however, the trans-resveratrol content is highly dependent on grape type, climate, and practices used to make the wine. At Mountain Peak Nutritionals® we elected to use the potency standardized to contain 50% trans-resveratrol. Longevity formula contains 200 mg of standardized 50% trans-resveratrol, which is more effective than the 500 mg of 20% trans-resveratrol typically found in other anti-aging nutritional supplements. Claims of higher percentages of trans-resveratrol are predominantly synthetic creations and appear to be less bioavailable than the naturally created 50% trans-resveratrol.

Alpha-Lipoic Acid(ALA)

Endogenous alpha-lipoic acid is both a fat and water soluble coenzyme that, together with pyrophosphatase, is involved in carbohydrate metabolism and production of adenosine triphosphate (ATP). ALA can regenerate endogenous antioxidants, such as vitamin E, vitamin C, and glutathione and prevent oxidative damage (6). ALA helps maintain healthy glucose metabolism, supports the nervous system and provides nutritional support for healthy liver function (7).

Serrapeptase

Serrapeptase is a proteolytic enzyme believed to have fibrinolytic effects (8). Serrapeptase may support the body's natural healing process.

<u>Biotin</u>

Biotin is a water-soluble B vitamin that acts as a coenzyme during the metabolism of protein, fats, and carbohydrates. Biotin-containing enzymes are involved in gluconeogenesis, fatty acid synthesis, propionate metabolism and the catabolism of leucine in mammals.

Patients: Consult with your healthcare professional for the proper use of this formula.

For more information about this and other Condition Specific Formulas $^{\odot}$ please visit our website at:

mountainpeaknutritionals.com email us: support@mtnpeaknutrition.com



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REFERENCES:

- 1. J Am Coll Cadiol 1999;33:1549-52
- 2. Ann N Y Acad Sci 2004:1033:30-41
- 3. Clin Pharmacokinet 2003;42:941-67
- 4. N Engl J Med1999;341:1670-79
- 5. Bioorg Med Chem 2004;12:5571-78
- 6. Free Rad Biol Med 1995;19:227-50
- 7. Free Rad Biol Med 1998;24:1023-39
- 8. J Ethnopharmacol 2001;78:139-43

