

## Optimized Carnitine with GlycoCarn®

### 60 vegetarian capsules

Item Catalog Number: 00916

A major cause of aging is deterioration of the energy-producing components of the cell, resulting in reduced cellular metabolic activity, the accumulation of cellular debris and eventually cell death.<sup>1-7</sup> L-carnitine helps maintain cellular energy metabolism by assisting in the transport of fat through the cell membrane and into the mitochondria within the cell, where fats are oxidized to produce the cellular energy ATP.<sup>8-13</sup>

Acetyl-L-carnitine is the acetylated ester of the amino acid L-carnitine. Acetyl-L-carnitine is an endogenous mitochondrial membrane compound that helps maintain mitochondrial bioenergetics and lowers the increased oxidative stress associated with aging.<sup>14</sup> Acetyl-L-carnitine and L-carnitine are absorbed into the bloodstream efficiently. Both are effective at carrying fatty acids across the membrane into the cell where they are burned as energy and utilized efficiently by the mitochondria.<sup>15-17</sup> Acetyl-L-carnitine also guards against oxidative damage.<sup>18,19</sup> Amyloid-beta peptide is a principal component of senile plaques and is thought to be central to the pathogenesis of the degenerating process. Acetyl-L-carnitine exerts protective effects against A-beta neurotoxicity and oxidative stress.<sup>14</sup>

Optimized Carnitine with GlycoCarn® combines three advanced forms of carnitine in one single formula to help you optimize energy output:

- Acetyl-L-carnitine crosses the blood-brain barrier to combat oxidative stress and promote energy production in brain and central nervous system tissues.<sup>20</sup> It also supports the release and synthesis of acetylcholine, enhances the release of dopamine from neurons and helps it bind to dopamine receptors.
- Acetyl-L-carnitine arginate (ArginoCarn®) is a patented form of carnitine that promotes the growth of neurites that facilitate communication among nerve cells in the brain.<sup>21</sup>
- GlycoCarn® is a patented form of carnitine called glycine propionyl-L-carnitine that is molecularly bonded to glycine, one of the precursor amino acids to carnitine biosynthesis. This form offers such benefits as enhanced fatty acid metabolism, antioxidant activity and increased nitric oxide production. In addition, GlycoCarn® promotes optimal blood flow and combats muscle fatigue by increasing energy stores of glycogen.<sup>22</sup>

These optimized forms of carnitine help transport fatty acids right to the heart of your energy-producing mitochondria. And that boost in cellular function can help you produce cellular energy faster, for a quicker recovery after exercise and less muscle fatigue during exercise.<sup>23,24</sup> It may also benefit your brain, heart, and central nervous system right along with your muscles.

## References

### Supplement Facts

Serving Size 2 vegetarian capsules

Servings Per Container 30

#### Amount Per Serving

Acetyl L-Carnitine HCl	800 mg
ArginoCarn® Acetyl L-Carnitine Arginate Di-HCl	300 mg
GlycoCarn® Glycine Propionyl L-Carnitine HCl	300 mg

Other ingredients: vegetable cellulose (capsule), dicalcium phosphate, silicon dioxide, vegetable stearate.

This product contains NO milk, egg, fish, peanuts, crustacean shellfish (lobster, crab, shrimp), soybeans, tree nuts, wheat, yeast, gluten, corn, or rice. Contains NO sugar, and no artificial sweeteners, flavors, colors, or preservatives.

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### Dosage and Use

- Take two capsules once or twice daily, or as recommended by a healthcare practitioner.
- This product can be taken on an empty stomach with water or juice in the morning in divided doses or all at once.

### Caution

For some people, L-carnitine, especially acetyl-L-carnitine, may have a stimulating effect. Therefore, it may be unwise to take it in the evening.

## Warnings

- Keep out of reach of children.
- Do not exceed recommended dose.
- Do not purchase if outer seal is broken or damaged.
- If you have a bad reaction to product discontinue use immediately.
- When using nutritional supplements, please consult with your physician if you are undergoing treatment for a medical condition or if you are pregnant or lactating.

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