

Citrus Solu-Q™

Unique CoQ10 Delivery System Utilizing Patented VESIsorb® Nano-Colloid Technology

DESCRIPTION

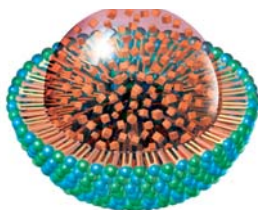
Citrus Solu-Q™, provided by Douglas Laboratories®, is a Caplique™ containing natural coenzyme Q10 in a patented, naturally self-assembling nano-colloid system for enhanced absorption.

FUNCTIONS

Coenzyme Q10 is a fat soluble nutrient that is poorly soluble in water and is not well absorbed when taken orally. Coenzyme Q10 is an important rate-limiting nutrient that is a cofactor in the mitochondrial electron transport chain, the biochemical pathway in cellular respiration from which adenosine triphosphate (ATP) and metabolic energy is derived. Since nearly all cellular activities are dependent upon energy, coenzyme Q10 is essential for the health of all human tissues and organs.

Given the strength of the science that has been emerging for the use of supplemental CoQ10, it is important to ensure that optimal CoQ10 levels are achieved in the blood following supplementation. Citrus Solu-Q™ is unique among coenzyme Q10 products as it utilizes the patented VESIsorb® technology to deliver coenzyme Q10. When mixed with an aqueous system, this patented technology results in the formation of a nano-colloid containing solubilized CoQ10. This association colloid delivery system contains a highly uniform distribution of droplets that are less than 100 nm in diameter. The size and structure of these droplets allow for enhanced solubility and absorption of coenzyme Q10 (figure 1). This image represents the structure of a nano-colloid droplet which consists of a monolayer with the coenzyme Q10 contained within the core. The formation of the colloidal system upon

Figure 1

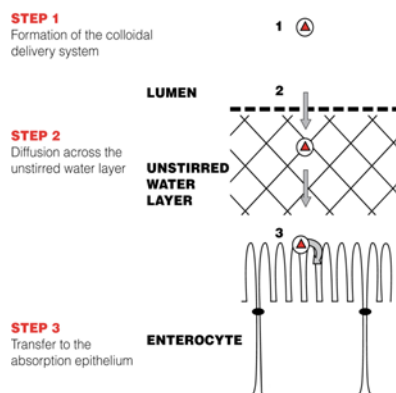


contact with an aqueous environment (such as the lumen of the intestine) enables the solubilized CoQ10 to more easily diffuse across the

unstirred water layer that is present between the enterocyte and the lumen of the intestine (figure 2). One can demonstrate the enhanced solubility of the CoQ10 contained in Citrus Solu-Q™ by placing a capsule in

Figure 2

ABSORPTION PATHWAY

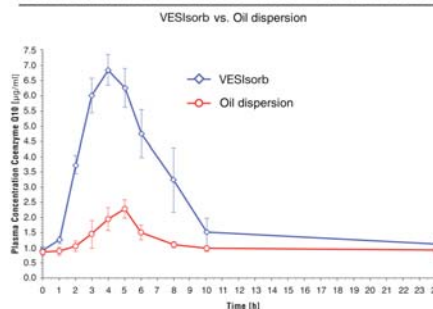


warm water. Once the capsule opens, the contents can be easily mixed with the water, resulting in the formation of the association colloid. There is no separation of oil and water phases as is typical with more traditional CoQ10 delivery systems.

In a clinical study in humans, supplementation with CoQ10 utilizing the patented VESIsorb® technology resulted in greater absorption compared with other CoQ10 products (figure 3).

Figure 3

PHARMACOKINETIC PROFILE



(continued on next page)

INDICATIONS

Citrus Solu-Q™ may be a useful dietary adjunct for individuals wishing to supplement their diets with a highly absorbable form of CoQ10.

FORMULA (#200054)

Supplement Facts		
Serving Size 1 Caplique™		
Servings Per Container: 30		
Amount Per Serving	%DV	
Vitamin E (as d-alpha-tocopheryl)	10 IU	33%
Natural Coenzyme Q10	100 mg	*
*Daily Value not established.		

Other ingredients: Gelatin (capsule), medium chain triglycerides, polysorbate 80, polyglycerol fatty acid esters and citrus oil extract (*Citrus sinensis*, peel).

SUGGESTED USE

Adults take 1 Caplique™ daily or as directed by your healthcare professional.

SIDE EFFECTS

None reported

HOW SUPPLIED

Boxes of 30 or 60 Capliques™

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES

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- Nicolson GL, Conklin KA. Reversing mitochondrial dysfunction, fatigue and the adverse effects of chemotherapy of metastatic disease by molecular replacement therapy. *Clin Exp Metastasis.* 2008; 25 (2): 161-9. Epub 2007 Dec 5.
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- Tran UC, Clarke CF. Endogenous synthesis of coenzyme Q in eukaryotes. *Mitochondrion.* 2007 Jun; & Suppl: S62-71. Epub 2007 Mar 30.

**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.**

**Manufactured for
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