

- Supports a strong and healthy cardiovascular system
- Provides superior oxidation defence
- Contains CoQ10 in a highly bioavailable formula



ITEM# 123

The energy that every cell needs to function is produced through a complex process in the mitochondria, an organelle within the cell, often called the cellular powerhouse. Cells store energy in a molecule called adenosine-5-triphosphate, or ATP. Thus ATP is synthesized and used by every cell in the body. CoQ10 is an essential part of the electron transport chain used to make ATP. CoQUINONE™ was developed to deliver high-quality, highly bioavailable CoQ10 to the cells to support the production of ATP.

Cells with the highest energy demands, such as in the heart, contain the highest levels of CoQ10, which has been studied for years in the United States, Europe, and Japan for its role in producing cellular energy for the heart and other muscles.<sup>1</sup> Several human clinical trials demonstrate CoQ10's effectiveness in maintenance of good heart function.<sup>2-5</sup>

## ANTIOXIDANT PROTECTION

A byproduct of energy production in the mitochondria is the formation of damaging free radicals. Nature has designed a molecule in CoQ10 that is remarkable because it not only assists in ATP production, it also works in concert with other antioxidants to clean up the free radicals that are produced during that process and protect against their damaging effects.<sup>6,7</sup> As an antioxidant, it rivals vitamins E and C.<sup>8,9</sup> In addition, CoQ10 helps to regenerate and recycle vitamin E.

## ALPHA LIPOIC ACID

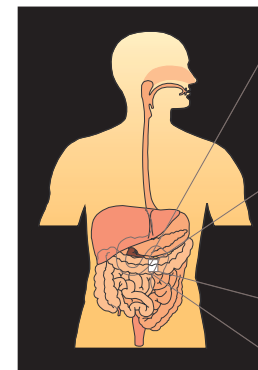
Alpha lipoic acid is another component involved in mitochondrial energy metabolism and recycling oxidized CoQ10.<sup>10</sup> This system also helps to regenerate and recycle other antioxidants, including vitamins E and C and glutathione.<sup>7,11,12</sup>

## DO YOU NEED COQ10?

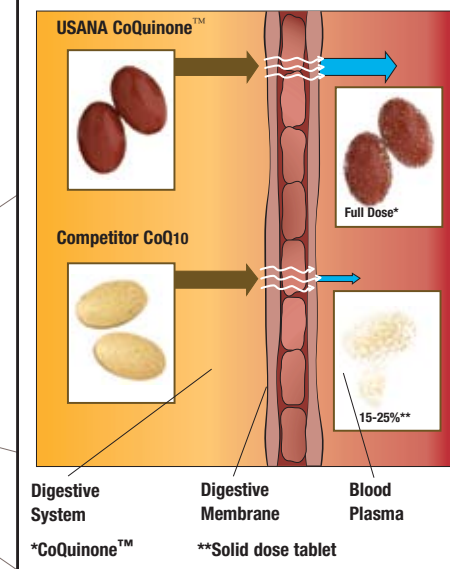
As we age, the ability to absorb and synthesize CoQ10 diminishes and the amount of CoQ10 retained in tissues decreases.<sup>13</sup> In addition, CoQ10 may be depleted by several other factors, including overall nutritional status and inadequate levels of the B vitamins, vitamin C, and selenium. Some drugs, including the cholesterol-lowering statins, and excessive exercise or environmental stresses such as illness and extreme weather may also lower CoQ10 levels in tissue.<sup>14-16</sup>

## WHY COQUINONE™?

CoQUINONE contains a full 30 mg of CoQ10 and 12.5 mg of alpha lipoic acid per soft gel capsule. USANA's unique formulation provides these important antioxidants in a natural mixture of lecithin and vegetable-derived glycerin monooleate in a base of medium chain triglycerides. Clinical tests performed in USANA's laboratories show that CoQUINONE delivers CoQ10 in much higher quantities than from solid formulations or from competitive liquid formulations, making CoQUINONE more bioavailable than other CoQ10 products.<sup>17</sup>



USANA's CoQuinone™ uses a proprietary formulation that delivers substantially more CoQ10 to the blood plasma than other competing dosage forms.<sup>13</sup>



## References

1. Sartor B. J Cardiovasc Nurs 2002;16(4):9-20.
2. Langsjoen PH, Langsjoen AM. Biofactors 1999;9:273-84.
3. Soja AM, Mortensen SA. Ugeskr Laeger 1997;159:7302-08.
4. Satta A, et al. Clin Ther 1991;13:754-57.
5. Kamikawa T, et al. Am J Cardiol 1985;56:247-51.
6. Litaru GP, Battino M, Folkers K. Handbook of Antioxidants. New York: Marcel Dekker; 1996.
7. Kagan VE, Nohl H, Quinn PJ. Handbook of Antioxidants. New York: Marcel Dekker; 1996.
8. Alleva R, et al. Mol Aspects Med 1997;81(Supp):S105-12.
9. Kontush A, et al. Biochim Biophys Acta 1995;1258:177-87.
10. Nohl H, Gille L, Z Naturforsch [C] 1988;53:250-53.
11. Kagan VE, et al. J Lipid Res 1992; 33:985-97.
12. Bast A, Haenen GR. Biochim Biophys Acta 1988;963:558-61.
13. Kalen A, et al. Lipids 1989;24:579-84.
14. Aberg F, et al. Eur J Clin Invest 1998;28:235-42.
15. Mortensen SA, et al. Mol Aspects Med 1997;18(Supp):S137-44.
16. Palomaki A, et al. FEBS Lett 1997;410:254-58.
17. Cuomo J, Rabovsky A. Clinical Research Bulletin 2001. USANA Health Sciences.

**RECOMMENDED ADULT DOSE:** TAKE ONE (1) OR TWO (2) CAPSULES DAILY, PREFERABLY WITH MEALS. USE ONLY ON THE ADVICE OF A PHYSICIAN. / **DOSE RECOMMANDÉE POUR ADULTES :** PRENDRE UN (1) OU DEUX (2) CAPSULES PAR JOUR, DE PRÉFÉRENCE LORS DES REPAS. N'UTILISER QUE SUR L'AVIS D'UN MÉDECIN.

**EACH CAPSULE CONTAINS:** 30 mg **CHAQUE CAPSULE CONTIENT:** COENZYME Q-10 COENZYME Q-10

**NON-MEDICINAL INGREDIENTS: / INGRÉDIENTS NON-MÉDICINAUX:** MEDIUM CHAIN TRIGLYCERIDES, GELATIN, GLYCERIN MONOOLEATE, LECITHIN, GLYCERIN, PURIFIED WATER, ALPHA-LIPOIC ACID, ANNATTO SEED EXTRACT, TITANIUM DIOXIDE. / TRIGLYCÉRIDES À CHAINES MOYENNES, GÉLATINE, MONO-OLEATE DE GLYCÉRINE, LÉCITHINE, GLYCÉRINE, EAU PURIFIÉE, ACIDE ALPHA-LIPOÏQUE, EXTRAIT DE GRAINES DE ROCOUVER, DIOXYDE DE TITANE.