



## TOPIC SUMMARY for Healthcare Professionals

### Co-enzyme Q10 (CoQ10)

#### Overview

**Coenzyme Q10 (CoQ10)** is a vitamin-like, antioxidant supplement related to vitamin K. It is used by the cell's energy factories (mitochondria). It is made in the heart, liver, kidney and pancreas, and it is used by muscles, including the heart muscle and diaphragm. Aging, liver disease, and some medications (e.g., statins, beta-blockers, and some antidepressants) make it harder for humans to convert CoQ10 into its active form in the body, CoQH2-10. Smoking depletes CoQ10 levels.

**Uses:** It has been used to help patients suffering from heart failure, recent heart attacks, angina, high blood pressure, pre-eclampsia, Parkinson's disease, and with certain types of muscular dystrophy. It is also used to reduce the risk of heart problems from some cancer medicines. Because statin medications can block the body's production of CoQ10, some doctors recommend that anyone taking a statin medication also take CoQ10 supplements. CoQ10 is also used to help prevent migraine headaches and to help those with chronic fatigue feel more energetic.

#### Sources of CoQ10

**Dietary sources CoQ10 include:** Meat and seafood

#### Safety

Because it can lower blood pressure, it should be used with caution by patients taking blood pressure medicine and those about to undergo surgery. Pregnancy has not been evaluated in pregnant or breastfeeding women. Stop using it two weeks before any scheduled surgery. Magnesium may interfere with absorption of tetracycline and related antibiotics.

**Dose:** The doses used in most positive studies in adults ranged from 100 - 300 milligrams daily.

**Take it with food.** Absorption is better when CoQ10 is taken with fats like olive oil or whole milk. So, take it with a meal. Look for brands that contain polysorbate-80 or Q-Gel, which also helps improve absorption.

**Duration:** It can take up to three months of daily use before benefits are noticeable.

#### Product Information

No government agency routinely tests CoQ10 products. Dietary supplements like CoQ10 are regulated more like food than like drugs. There is variability in the quality of CoQ10 products, and you cannot always tell what is in a product from reading the label, even the fine print. We recommend using brands that have the USP stamp of approval or are approved by ConsumerLab in their independent testing.

**Cost:** CoQ10 is a relatively costly supplement.

<b><i>Selected Products Approved by ConsumerLabs</i></b>	<b>Capsule/Softgel Strength</b>
Country Life CoQ10	100 mg
CVS Pharmacy CoQ-10	100 mg
Dr. Sinatra Omega-Q Plus	100 mg
Finest Nutrition (Walgreens) Co Q-10	200 mg
GNC Preventive Nutrition CoQ-10	200 mg
Kirkland Signature CoQ10 (Costco)	300 mg
Member's Mark CoQ10 (Sam's Club)	100 mg
Nature Made CoQ10	100 mg
NSI CoQ10 (Vitacost)	100 mg
Simply Right (Sam's Club) CoQ-10 - Gluten free *	100 mg
Trader Joe's CoEnzyme Q10	100 mg
VitaCost CoQ10	100 mg
Vitamin Shoppe CoQ-10	
Whole Foods CoQ10 60 mg capsule	
Whole Foods CoQ10	60 mg

**\* Among the lowest cost**

See **patient information** from the US National Library of Medicine:

<http://www.nlm.nih.gov/medlineplus/druginfo/natural/938.html>

**Disclaimer: The *Herbs and Dietary Supplements Across the Lifespan Program* does not endorse products or the efficacy or safety of mentioned products.**