

unmatched
absorption

superior
heart

health

benefits

CoQsource® and coenzyme Q10 Frequently Asked Questions

Why is CoQ10 essential to your health?

Coenzyme Q10 is a fat-soluble vitamin-like substance present in every cell of the body and serves as a coenzyme for several of the key enzymatic steps in the energy production within the cell. Therefore it is critical and essential for all tissues and organs especially those that require a lot of energy like heart, brain and immune system. Further it is the only cell membrane-bound molecule for antioxidant acting in the cell membrane.

Why we do have to supplement CoQ10?

A: CoQ10 plays as a cofactor an essential role in the energy generation (ATP) in human body. The body natural produces CoQ10 (endogenous CoQ10). But this natural biological process within the body starts to decline at the age of 20.

CoQ10 is further present in small amounts in food (e.g. Anchovy: approx. 6mg per 100g, Olive Oil: approx. 3mg per 100g). Low CoQ10 blood levels are also observed in certain diseases and as side effect of cholesterol lowering drugs (Statins; they block also the biochemical pathway of the endogenous CoQ10 production and deplete stored CoQ10).

What leads to depletion of CoQ10 supplies in the body?

Aging, illness, disease, degenerative ailments, over-exertion, exposure to chemicals, lack of a proper diet, and the presence of statin drugs in the body can all contribute to lower levels of CoQ10.

If you're on a statin drug, should you take CoQ10?

Yes. Statin drugs (cholesterol-lowering drugs) have been shown to lower the body's stores of CoQ10 to the point of actually causing damage to the heart. (The Canadian government now requires that certain cholesterol medications contain labels recommending that people who take these medications will experience reduced CoQ10 levels as a result. Also US medical doctors have submitted in 2002 a citizen petition to the FDA covering this issue.) Thus, it is advisable to replenish the body with the CoQ10 nutrient at least once a day. It is important to note that CoQ10 supplementation does not interfere with the cholesterol-lowering effects of such statin drugs as Lipitor®, Crestor®, and Zocor®.

What is the need for improved absorption with regard to CoQ10?

"Regular CoQ10" (common delivery forms like powders, oil dispersions) has an extreme poor absorption rate into human body which means CoQ10 has a poor bioavailability. Thus improving the bioavailability of CoQ10 is a real issue. "Advanced CoQ10" (new delivery forms with enhanced absorption like CoQsource®) showing high bioavailability is of great importance to ensure that the body gets the CoQ10 it needs.

What kind of improved absorption products are on the market and how are they different?

Most of the products on the market use co-administered fat to reach a marginal improvement of absorption. Fat stimulates the natural process of fat digestion and absorption by enzymes and bile in the body. This process helps other fat-soluble substances like CoQ10 with their absorption. Few products use special formulation technologies to make CoQ10 more soluble in the gastric and intestinal fluids. The result is a higher absorption and better bioavailability.



unmatched
absorption

superior
heart
health
benefits

Why is CoQsource® better?

CoQsource® is like a pre-digested form of CoQ10 and grants that close to 100% of the applied dose gets absorbed. Compared to "Regular CoQ10" (common delivery forms like powders, dispersions) and other more bioavailable products CoQsource® has achieved the highest values. CoQsource® shows 600% increased absorption in comparison with "Regular CoQ10".

What makes CoQsource® the most effective and absorbable CoQ10 on the market?

The patented VESIsorb® delivery system used allows CoQsource® to deliver on the promise of superior absorption. SourceOne is committed to **"turning good ingredients into great ingredients"**. CoQsource® clinical study peak absorption results is a significant improvement compared to reported peak absorption values of 2.15%, 3.34%, and 5.44% for CoQ₁₀ in powder, oil dispersion, and lipid solution delivery systems respectively.

If I take 200mg of CoQ10 a day, how does taking 50mg CoQsource® compare to this?

Taking a dosage of 50mg CoQsource® a day equates to taking 350-500mg of "Regular CoQ10".

How is CoQsource® more cost-effective than other forms of CoQ10?

Based on its greater absorption rates, CoQsource® delivers more CoQ10 to the body in less time than other forms, thus offering greater value per bottle. It takes 7-10 regular formulated softgels, theoretically, to reach the same blood levels as just 1 CoQsource® softgel.

Why is nutrient efficiency important?

With pressure on the supply chain of nutrition increasing every year, we realize that there is a need to effectively utilize the resources we have. Starting with nutrients and our own health seemed like a good idea to us. Using increased absorption nutrients will have a "green" impact on the environment as well; efficient use of resources, less bottles and the opportunity to balance your supplement intake, allowing you to take other nutrients as Omega 3 and Tocotrienols as well now that you physically have to swallow less capsules. SourceOne supports you with "less is MORE". You need less to achieve more. Fewer soft gels in your daily regimen to achieve better results, and less active in a beverage formula because of the optimization of the efficacy of the individual components are examples of the brand message, "less is MORE".

Is it better to take the ubiquinone or ubiquinol form of CoQ10?

The worldwide introduction of CoQsource® for oral and topical applications represents a unique and patented solution to improving lipid based bioactive absorption, especially CoQ10 in either the ubiquinol or ubiquinone form.

Ubiquinol (reduced form of ubiquinone) has two hydroxyl groups (-OH) at the chinone-ring-structure which provides a slight more hydrophilic tendency compared to the ubiquinone's (two keton groups, =O). Thus ubiquinol has a slightly better solubility in the gastric/intestinal fluids and might be marginally better absorbed than ubiquinone.

445 E. Illinois Street
Suite 345
Chicago, IL 60611
800.755.4996 toll free
312.321.8223 fax

unmatched
absorption

superior
heart
health
benefits

What is the difference between bioavailability and absorption?

ABSORPTION

In general terms absorption means the uptake of water or dissolved substances from living cells and in this context called resorption. In case of oral application the resorption primarily takes place in the small intestine where molecules get absorbed and transported towards the blood and lymphatic vessel system of the intestinal wall. This process of resorption involves several steps like CoQ10 has to take reaching the bloodstream: oral ingestion, dissolution (breakdown of formulation and CoQ10 crystals into single dissolved CoQ10 molecules) in the stomach and small intestine and passive diffusion towards the absorption cells (enterocytes) which deliver CoQ10 into the lymphatics, and then into the general circulation of the blood, where the CoQ10 becomes bioavailable. Without resorption in the small intestine, CoQ10 is literally flushed out of the body and is not available to the body; without resorption, CoQ10 cannot be bioavailable.

BIOAVAILABILITY

This term is used to describe the fraction of an administered dose of unchanged drug that reaches the systemic circulation and is available at the site of action. By definition, when a drug is administered intravenously, its bioavailability is 100%. However, when a drug is administered via other routes of application (such as orally, topically ...), its bioavailability decreases. This decrease could be caused by many different reasons such as e.g. incomplete resorption, enterocyte cytochrome metabolism, P-glycoprotein efflux, liver first-pass, diseases and more. The bioavailability gets quantified as AUC ("area under the curve"; a plasma concentration vs. time plot) and could be expressed in two ways as "Absolute Bioavailability" or "Relative Bioavailability".

Absolute Bioavailability compares the bioavailability of the drug in systemic circulation administered non-intravenous (e.g. oral, rectal, transdermal, subcutaneous) with the bioavailability of the same drug administered intravenous.

Relative Bioavailability compares the bioavailability of a certain drug with another formulation of the same drug, usually an established standard, or through administration via a different route (e.g. CoQ10 oil suspension capsule vs. CoQ10 solubilizate capsule; e.g. oral vs. oral or oral vs. topical administration).