

Patient Fact Sheet

CO-ENZYME Q10

CO-ENZYME Q10, also known as CoQ10 or Ubiquinone, is a substance that exists naturally in the body, and now is also being chemically produced. It is involved in energy production in cells, and is an antioxidant (a chemical that protects cells against some kinds of damage). Some people with heart disease, cancer, and other conditions have low levels of CoQ10 in their bodies. However, people who take CoQ10 usually take more than would be needed to raise the level back to normal levels.

WHAT IS IT USED FOR?

- ◆ CoQ10 is used as complementary therapy for many kinds of heart problems, including heart failure, heart attacks, angina (chest pain), high blood pressure, and heart damage caused by some medications. It is also sometimes used before heart surgery.
- ◆ It has been recommended for gum disease.
- ◆ It has also been recommended for patients with cancer and diabetes.
- ◆ It has been used to try to improve athletic performance.

WHAT HAVE STUDIES SHOWN?

- ◆ In patients with **chronic heart failure**, those treated with CoQ10 had some improvement of their symptoms, including shortness of breath, fatigue, and leg swelling. In one study patients who took CoQ10 did not need to be in the hospital as often as those who did not take it.
- ◆ In patients with **heart attacks**, those who received CoQ10 for a time afterwards had fewer repeat heart attacks, less chest pain, and fewer abnormal heart rhythms than those who did not take CoQ10.
- ◆ In one small study of patients with stable **angina** (chest pain), CoQ10 let them exercise more without chest pain.
- ◆ In several studies of people with **high blood pressure**, CoQ10 treatment helped lower blood pressure.
- ◆ Taking CoQ10 for one or two weeks before **heart surgery** decreases the risk of abnormal heart rhythms and may make the heart work better and make recovery time shorter.
- ◆ Pretreatment with CoQ10 may help protect the heart from damage by the cancer drug **adriamycin**. More studies are needed, however.
- ◆ Some children with **mitral valve prolapse** (a heart condition) have better heart function when they take CoQ10.
- ◆ **Diabetics** have low levels of CoQ10 in their bodies, but giving them extra CoQ10 does not improve their blood sugar control.

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- ◆ Many **cancer** patients also have low levels of CoQ10. Studies are needed to show whether CoQ10 can help with cancer treatment.
- ◆ CoQ10 treatment may help **gum disease**, but more studies are needed to be sure.
- ◆ CoQ10 does not help **athletic performance**.

WHAT ARE THE SIDE EFFECTS?

About 2% of people taking CoQ10 have side effects, including irritability, nausea or upset stomach, diarrhea, stomach pain, and rashes. Low platelets (the cells that help the blood to clot) have also been reported.

No long-term problems have been found from taking CoQ10.

WILL IT INTERFERE WITH MY OTHER MEDICATIONS OR MY MEDICAL CONDITION?

- ◆ People with liver damage may need lower doses of CoQ10, because the liver helps remove it from the body.
- ◆ People who take diabetic medications, or medications to lower their cholesterol, should ask their doctor or nurse practitioner if it is safe for them to take CoQ10.

IS IT SAFE FOR CHILDREN AND PREGNANT WOMEN?

There are no studies of CoQ10's safety for children and pregnant women. There are also no reports of birth defects or other problems.

WHAT ARE TYPICAL DOSAGES?

- ◆ Adult doses of CoQ10 for heart problems are usually 50 mg, two or three times a day.
- ◆ Adult doses for gum disease are usually 25 mg two times a day.
- ◆ Studies in children have used doses of 2 mg per kilogram per day; this is a little less than 1 mg per pound of body weight per day.
- ◆ Adults and children should follow their health care provider's instructions about CoQ10 doses.

WHAT ELSE DO I NEED TO KNOW?

Always tell your doctor or nurse practitioner if you are taking any dietary supplement, and before starting any new one. Your health care provider needs to know everything you are taking in order to help you make decisions about your health care. Some dietary supplements can cause problems with other dietary supplements, herbs, or medications.