

[Biochem Biophys Res Commun.](#) 1997 May 19;234(2):296-9.

Activities of vitamin Q10 in animal models and a serious deficiency in patients with cancer.

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New data on blood levels of vitamin Q10 in **116 cancer patients** reveal an incidence of 23.1% of patients (N=17) with breast cancer whose **blood levels were below 0.5 microg/ml**. The incidence of breast cancer cases with levels below 0.6 microg/ml was 38.5%. The incidence is higher ($p < 0.05$) than that for a group of ordinary people. Patients (N=15) with myeloma showed a mean blood level of 0.67 +/- 0.17 microg/ml. The incidence of a vitamin Q10 blood level below 0.7 microg/ml for these 15 cases of myeloma was 53.3%, which is higher ($p < 0.05$) than the 24.5% found for a group of ordinary people.

PMID: 9177262 [PubMed - indexed for MEDLINE]

[Biochem Biophys Res Commun.](#) 1995 Jul 6;212(1):172-7.

Progress on therapy of breast cancer with vitamin Q10 and the regression of metastases.

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Over 35 years, data and knowledge have internationally evolved from biochemical, biomedical and clinical research on vitamin Q10 (coenzyme Q10; CoQ10) and cancer, **which led in 1993 to overt complete regression of the tumors in two cases of breast cancer**. Continuing this research, **three additional breast cancer patients** also underwent a conventional protocol of therapy which included **a daily oral dosage of 390 mg of vitamin Q10** (Bio-Quinone of Pharma Nord) during the complete trials **over 3-5 years**. The numerous **metastases in the liver of a 44-year-old patient "disappeared,"** and no signs of metastases were found

elsewhere. A 49-year-old patient, on a dosage of 390 mg of vitamin Q10, revealed **no signs of tumor in the pleural cavity after six months**, and her condition was excellent. A 75-year-old patient with carcinoma in one breast, after lumpectomy and 390 mg of CoQ10, showed **no cancer in the tumor bed or metastases**. Control blood levels of CoQ10 of 0.83-0.97 and of 0.62 micrograms/ml increased to 3.34-3.64 and to 3.77 micrograms/ml, respectively, on therapy with CoQ10 for patients A-MRH and EEL.

PMID: 7612003 [PubMed - indexed for MEDLINE]

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Partial and complete regression of breast cancer in patients in relation to dosage of coenzyme Q10.

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Relationships of nutrition and vitamins to the genesis and prevention of cancer are increasingly evident. In a clinical protocol, **32 patients having -"high-risk"- breast cancer** were treated with antioxidants, fatty acids, and **90 mg. of CoQ10**. Six of the 32 patients showed partial tumor regression. In **one** of these 6 cases, the dosage of CoQ10 was **increased to 390 mg**. In one month, the tumor was no longer palpable and in another month, mammography confirmed the absence of tumor. Encouraged, **another case** having a verified breast tumor, after non-radical surgery and with verified residual tumor in the tumor bed was then **treated with 300 mg. CoQ10**. After 3 months, the patient was in excellent clinical condition and there was no residual tumor tissue. The **bioenergetic activity of CoQ10, expressed as hematological or immunological activity**, may be the dominant but not the sole molecular mechanism causing the regression of breast cancer.

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Apparent partial remission of breast cancer in 'high risk' patients supplemented with nutritional antioxidants, essential fatty acids and coenzyme Q10.

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Thirty-two typical patients with breast cancer, aged 32-81 years and classified 'high risk' because of tumor spread to the lymph nodes in the axilla, were studied for 18 months following an Adjuvant Nutritional Intervention in Cancer protocol (ANICA protocol). The nutritional protocol was added to the surgical and therapeutic treatment of breast cancer, as required by regulations in Denmark. The added treatment was a combination of nutritional antioxidants (Vitamin C: 2850 mg, Vitamin E: 2500 iu, beta-carotene 32.5 iu, selenium 387 micrograms plus secondary vitamins and minerals), essential fatty acids (1.2 g gamma linolenic acid and 3.5 g n-3 fatty acids) and Coenzyme Q10 (90 mg per day). The ANICA protocol is based on the concept of testing the synergistic effect of those categories of nutritional supplements, including vitamin Q10, previously having shown deficiency and/or therapeutic value as single elements in diverse forms of cancer, as cancer may be synergistically related to diverse biochemical dysfunctions and vitamin deficiencies. Biochemical markers, clinical condition, tumor spread, quality of life parameters and survival were followed during the trial. Compliance was excellent. The main observations were: (1) none of the patients died during the study period. (the expected number was four.) (2) none of the patients showed signs of further distant metastases. (3) quality of life was improved (no weight loss, reduced use of pain killers). (4) six patients showed apparent partial remission.

PMID: 7752835 [PubMed - indexed for MEDLINE]

Survival of cancer patients on therapy with coenzyme Q10.

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Over ca. 25 years, assays in animal models established the **hematopoietic activities of coenzyme Q's** in rhesus monkeys, rabbits, poultry, and children having kwashiorkor. Surprisingly, a virus was found to cause a deficiency of CoQ9. Patients with AIDS showed a-"striking"-clinical response to therapy with CoQ10. The macrophage potentiating activity of CoQ10 was recorded by the carbon clearance method. **CoQ10 significantly increased the levels of IgG in patients.** Eight new case histories of cancer patients plus two reported cases support the **statement that therapy of cancer patients with CoQ10**, which has no significant side effect, **has allowed survival** on an exploratory basis for periods of 5-15 years. **These results now justify systematic protocols.**

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