Coenzima Q (UBIQINOL) ; profundizando en su estudio

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CONTENIDO

- Estudio
- Coenzima Q y calidad de vida
- Coenzima Q y animo
- Coenzima Q y calambres

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Estudio observacional con producto alimentario para evaluar la calidad de vida de mujeres sanas postmenopáusicas que tomen coenzima Q-Ubiquinol, comparadas con otro grupo de la misma edad que no tome coenzima Q-Ubiquinol

OBJETIVO PRINCIPAL

Evaluar la calidad de vida en mujeres sanas postmenopáusicas que estén tomando durante 3 meses Coenzima Q-Ubiquinol en comparación con otro grupo que no las tome

OBJETIVOS SECUNDARIOS

· Evaluar el estado de salud general a los 3 meses

· Evaluar el estado de ánimo a los 3 meses

· Evaluar el número e intensidad de los calambres a los 3 meses

· Evaluar cambios en el estado general de la piel a los 3 meses

SAMEM

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Diseño del estudio

· Observacional con producto alimentario

· Abierto

· 3 meses de duración

· 2 brazos: A: mujeres que tomen Ubiquinol

B: mujeres que no lo tomen

· Tratamiento: 100 mg./día Ubiquinol Kaneka QH (forma activa de la coenzima Q10),(100% natural) durante 3 meses.

SAMEM

Criterios de elegibilidad

CRITERIOS DE INCLUSIÓN

·Mujer postmenopáusica entre 45 y 65 años

· Mujer que esté tomando coenzima Q–Ubiquinol y que la vayan a seguir tomando al menos los próximos 3 meses

o

· Mujer que no esté tomando Coenzima Q–Ubiquinol y que no la vaya a tomar en los próximos 3 meses

· Capaz de leer, entender y firmar un consentimiento informado, que esté dispuesta a realizar las visitas y a completar los cuestionarios del estudio

CRITERIOS DE EXCLUSIÓN

· Pacientes con enfermedad mental grave

· Sospecha o abuso de alcohol u otras drogas durante los 12 meses previos a la selección

· Cualquier otra consideración o hallazgo que a criterio del investigador considere la no participación del sujeto en el estudio

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Procedimientos del estudio

· Extracción de sangre para obtener los niveles de coenzima Q en la basal y a los 3 meses, solo en el brazo activo del estudio

· Escalas en la basal y a los 3 meses

· Questionarios en la basal y a los 3 meses

SAMEM

Escalas y cuestionarios del estudio

- ESCALA ANALOGICA DE ESTADO GENERAL DE SALUD
- ESCALA CERVANTES DE CALIDAD DE VIDA
- ESCALA ANALOGICA DEL ESTADO GENERAL DE LA PIEL (luminosidad , hidratación)
- CUESTIONARIO DE CALAMBRES
- ESCALA ANALOGICA DE MEMORIA

DIAGRAMA DE ESTUDIO

	V_1 SELECCIÓN	V_2 MES 3
CONSENTIMIENTO INFORMADO	X	
HISTORIA CLÍNICA	X	
MEDICACIÓN CONCOMITANTE	X	X
EXPLORACIÓN FÍSICA (Peso, talla, IMC)*	X	X
NIVELES DE COENZIMA Q	X	X
CONSTANTES VITALES*	X	X
ESCALAS Y CUESTIONARIOS	X	X
ACONTECIMIENTOS ADVERSOS		X

*Solo si se toman por la práctica clínica habitual

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PLoS One. 2017 Jan 26;12(1):e0170172. doi: 10.1371/journal.pone.0170172. eCollection 2017.

Effects of Coenzyme Q10 on Markers of Inflammation: A Systematic Review and Meta-Analysis.

Zhai J[1], Bo Y[2], Lu Y[3], Liu C[4], Zhang L[1].

Abstract

BACKGROUND/OBJECTIVE:

Chronic inflammation contributes to the onset and development of metabolic diseases. Clinical evidence has suggested that coenzyme Q10 (CoQ10) has some effects on inflammatory markers. However, these results are equivocal. The aim of this systematic review was to assess the effects of CoQ10 on serum levels of inflammatory markers in people with metabolic diseases.

METHODS:

Electronic databases were searched up to February 2016 for randomized controlled trials (RCTs). The outcome parameters were related to inflammatory factors, including interleukin-6 (IL-6), tumor necrosis factor-alpha (TNF-α) and C reactive protein (CRP). RevMan software was used for meta-analysis. Meta-regression analysis, Egger line regression test and Begg rank correlation test were performed by STATA software.

RESULTS:

Nine trials involving 428 subjects were included in this meta-analysis. The results showed that compared with control group, CoQ10 supplementation has significantly improved the serum level of CoQ10 by 1.17μg/ml [MD = 1.17, 95% CI (0.47 to 1.87) μg/ml, I2 = 94%]. Meanwhile, it has significantly decreased TNF-α by 0.45 pg/ml [MD = -0.45, 95% CI (-0.67 to -0.24) pg/ml, I2 = 0%]. No significant difference was observed between CoQ10 and placebo with regard to CRP [MD = -0.21, 95% CI (-0.60 to 0.17) mg/L, I2 = 21%] and IL-6 [MD = -0.89, 95% CI (-1.95 to 0.16) pg/ml, I2 = 84%].

CONCLUSIONS:

CoQ10 supplementation may partly improve the process of inflammatory state. The effects of CoQ10 on inflammation should be further investigated by conducting larger sample size and well-defined trials of long enough duration

Biochim Biophys Acta. 2016 Aug;1857(8):1079-1085. doi: **Coenzyme Q biosynthesis in health and disease.**
Acosta MJ[1], et al

Abstract

Coenzyme Q (CoQ, or ubiquinone) is a remarkable lipid that plays an essential role in mitochondria as an electron shuttle between complexes I and II of the respiratory chain, and complex III. It is also a cofactor of other dehydrogenases, a modulator of the permeability transition pore and an essential antioxidant. CoQ is synthesized in mitochondria by a set of at least 12 proteins that form a multiprotein complex. Mutations in human COQ genes cause primary CoQ(10) deficiency, a clinically heterogeneous mitochondrial disorder with onset from birth to the seventh decade, and with clinical manifestation ranging from fatal multisystem disorders, to isolated encephalopathy or nephropathy. The pathogenesis of CoQ(10) deficiency involves deficient ATP production and excessive ROS formation, but possibly other aspects of CoQ(10) function are implicated. CoQ(10) deficiency is unique among mitochondrial disorders since an effective treatment is available. Many patients respond to oral CoQ(10) supplementation. Nevertheless, treatment is still problematic because of the low bioavailability of the compound, and novel pharmacological approaches are currently being investigated.

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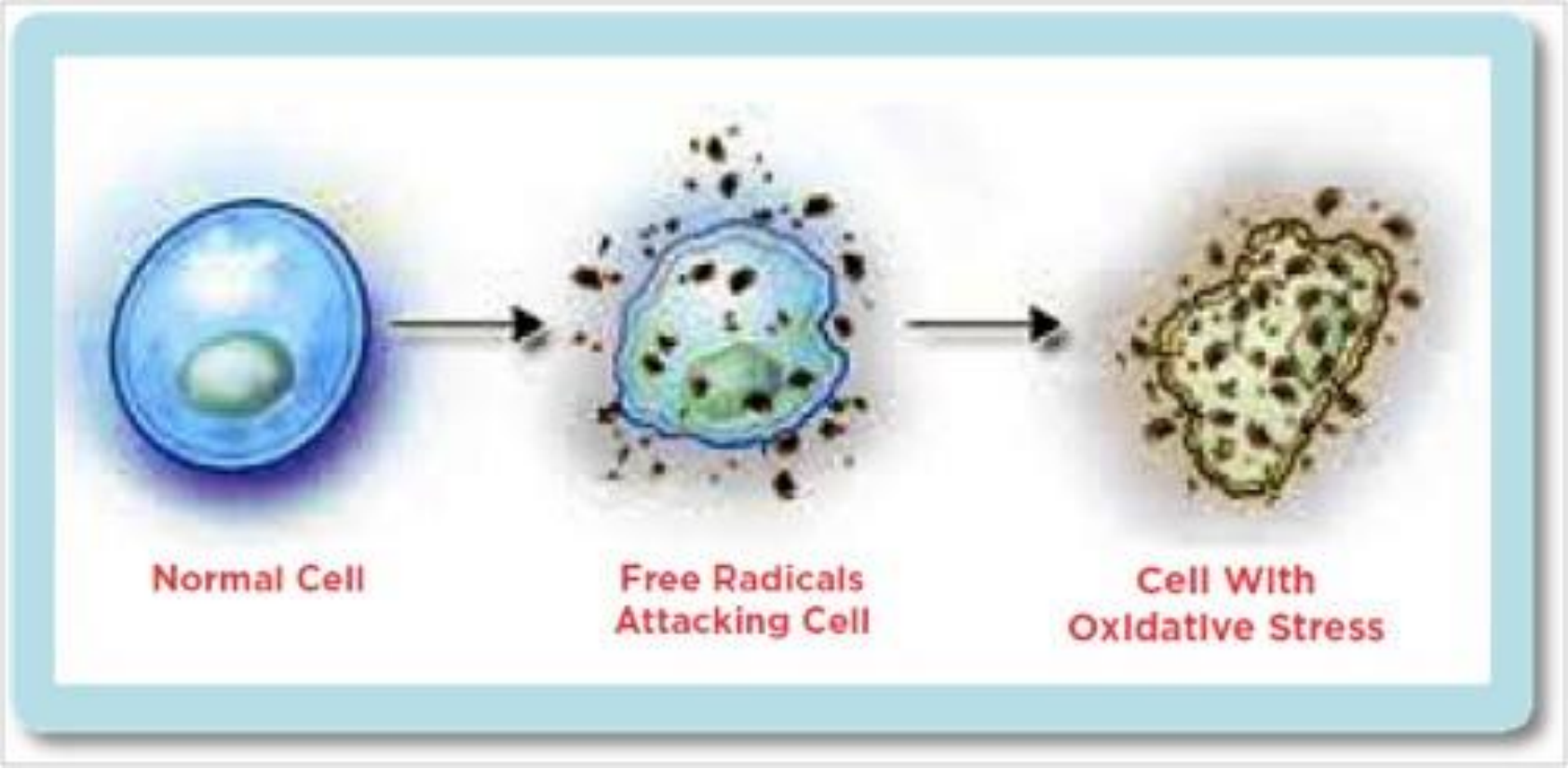
Biofactors. 2017 Jan 2;43(1):132-140.

The effect of dietary intake of coenzyme Q10 on skin parameters and condition: Results of a randomised, placebo-controlled, double-blind study.

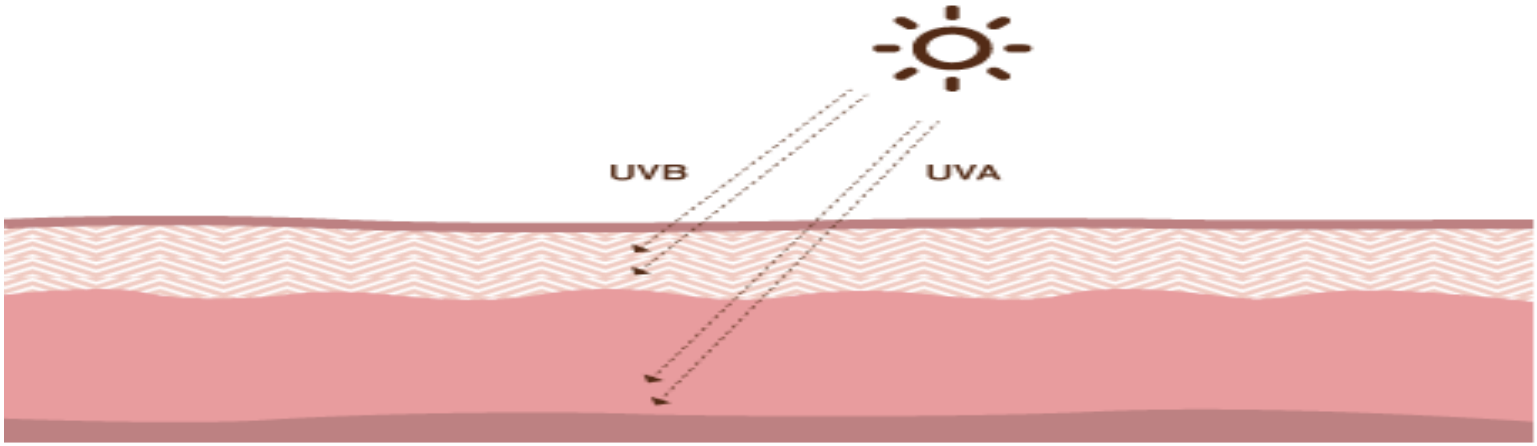
Žmitek K[1,2], Pogačnik T[1], Mervic L[3], Žmitek J[1], Pravst I[2].

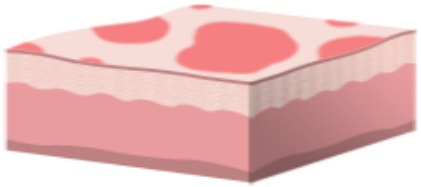
Coenzyme Q10 (CoQ10) is a natural constituent of foods and is also often used in both functional foods and supplements. In addition, it is a common ingredient of cosmetics where it is believed to reduce the signs of skin ageing. However, the existing data about the effect of dietary intake of CoQ10 on skin parameters and condition are scarce. To gain an insight into this issue, we conducted a double-blind, placebo-controlled experiment with 33 healthy subjects. Our objective was to investigate the effects of 12 weeks of daily supplementation with 50 and 150 mg of CoQ10 on skin parameters and condition. Study was conducted with a water-soluble form of CoQ10 with superior bioavailability (Q10Vital®). While the results of some previous in vitro studies showed possible protection in UVB response, we did not observe significant changes in the minimal erythema dose (MED). On the other hand, the intake of CoQ10 limited seasonal deterioration of viscoelasticity and reduced some visible signs of ageing. We determined significantly reduced wrinkles and microrelief lines, and improved skin smoothness. Supplementation with CoQ10 did not significantly affect skin hydration and dermis thickness.

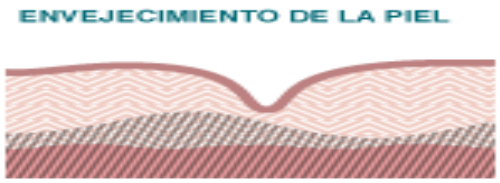
COENZIMA Q Y PIEL



COENZIMA Q Y PIEL







EFECTOS A CORTO PLAZO

Se forma el eritema y la quemadura solar. Este efecto provoca incomodidad en la piel, picor y aparición de manchas.

EFECTOS A LARGO PLAZO

La oxidación celular provoca el envejecimiento prematuro de la piel.

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Pilot study of safety and efficacy of polyprenols in combination with coenzyme Q10 in patients with statin-induced myopathy.

Latkovskis G, Saripo V, Sokolova E, Upite D, Vanaga I, Kletnieks U, Erglis A.

Medicina (Kaunas). 2016;52(3):171-9. doi: 10.1016/j.medici.2016.05.002. Epub 2016 May 30.

Coenzyme Q(10) and selenium in statin-associated myopathy treatment.

Fedacko J, Pella D, Fedackova P, Hänninen O, Tuomainen P, Jarcuska P, Lopuchovsky T, Jedlickova L, Merkovska L, Littarru GP.

Can J Physiol Pharmacol. 2013 Feb;91(2):165-70. doi: 10.1139/cjpp-2012-0118.

Does Coenzyme Q10 Supplementation Mitigate Statin-Associated Muscle Symptoms? Pharmacological and Methodological Considerations.

Taylor BA.

Am J Cardiovasc Drugs. 2017 Oct 12

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Vasc Health Risk Manag. 2015 Nov 6;11:579-81. doi: 10.2147/VHRM.S90551. eCollection 2015.

Reversal of statin-induced memory dysfunction by co-enzyme Q10: a case report.

Okeahialam BN[1].

Abstract

Statins are useful in the armamentarium of the clinician dealing with dyslipidemia, which increases cardiovascular morbi-mortality in hypertensive and diabetic patients among others. Dyslipidemia commonly exists as a comorbidity factor in the development of atherosclerotic cardiovascular disease. Use of statins is however associated with side effects which at times are so disabling as to interfere with activities of daily living. There are various ways of dealing with this, including use of more water-soluble varieties, intermittent dosing, or use of statin alternatives. Of late, use of co-enzyme Q10 has become acceptable for the muscle side effects. Only one report of any benefit on the rarely reported memory side effect was encountered by the author in the search of English medical literature. This is a report of a documented case of a Nigerian woman with history of statin intolerance in this case, memory dysfunction despite persisting dyslipidemia comorbidity. Her memory dysfunction side effect which interfered with activities of daily living and background muscle pain cleared when coenzyme Q10 was administered alongside low dose statin. Her lipid profile normalized and has remained normal. It is being recommended for use when statin side effects (muscle- and memory-related) impair quality of life and leave patient at dyslipidemia-induced cardiovascular morbi-mortality

Age (Dordr). 2013 Oct;35(5):1821-34. Coenzyme Q(10) supplementation reverses age-related impairments in spatial learning and lowers protein oxidation.

Shetty RA[1], Forster MJ, Sumien N.

Abstract

Coenzyme Q10 (CoQ) is widely available as a dietary supplement and remains under consideration as a treatment for age-associated neurodegenerative conditions Contrasting with the deleterious effect of long-term CoQ supplementation initiated during young adulthood previously published, this study suggests that CoQ improves spatial learning and attenuates oxidative damage when administered in relatively high doses and delayed until early senescence, after age-related declines have occurred. Thus, in individuals with age-associated symptoms of cognitive decline, high-CoQ intake may be beneficial

LOS RESULATADOS ….PRONTO