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# Docosahexaenoic Acid (DHA) Supplementation Early in Pregnancy May Prevent Deep Placentation Disorders


## Abstract

Uteroplacental ischemia may cause preterm birth, either due to preterm labor, preterm premature rupture of membranes, or medical indication (in the presence of preeclampsia or fetal growth restriction). Uteroplacental ischemia is the product of defective deep placentation, a failure of invasion, and transformation of the spiral arteries by the trophoblast. The failure of normal placentation generates a series of clinical abnormalities nowadays called "deep placentation disorders"; they include preeclampsia, fetal growth restriction, preterm labor, preterm premature rupture of membranes, in utero fetal death, and placental abruption. Early reports suggested that a LC-PUFAs (long chain polyunsaturated fatty acids) rich diet reduces the incidence of deep placentation disorders. **Recent randomized controlled trials are inconsistent to show the benefit of docosahexaenoic acid (DHA) supplementation during pregnancy to prevent deep placentation disorders**, but most of them showed that **DHA supplementation** was associated with **lower risk of early preterm birth**. We postulate that DHA supplementation, early in pregnancy, may reduce the incidence of deep placentation disorders. If our hypothesis is correct, **DHA supplementation, early in pregnancy**, will become a **safe and effective strategy** for primary **prevention of highly relevant pregnancy diseases**, such as preterm birth, preeclampsia, and fetal growth restriction.



References :
Biomed Res Int. 2014;2014:526895. Epub 2014 Jun 12.
Carvajal JA.
Author information
Unidad de Medicina Materno Fetal, División de Obstetricia y Ginecología, Escuela de Medicina, Facultad de Medicina, Pontificia Universidad Católica de Chile, 8330024 Santiago, Chile ; Centro de Investigaciones Médicas, Pontificia Universidad Católica de Chile, Marcoleta 391, 8330024 Santiago, Chile.
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# Omega-3 fatty acid supplementation during pregnancy and respiratory symptoms in Children


## Abstract

***ABSTRACT BACKGROUND:*** Prenatal consumption of **omega-3 fatty acids** can act as an adjuvant in the **development of the immune system** and affect the **inflammatory response of neonates.**

***MATERIAL AND METHODS:*** We conducted a double-blind, randomized, placebo-controlled trial in Cuernavaca, Mexico. We randomly assigned 1,094 pregnant women (18 to 35 years of age) to receive 400 mg/day of algal **Docosahexaenoic acid** or placebo from 18 to 22 weeks of gestation through delivery. Birth outcomes and respiratory symptoms information until 18 months was available for 869 mother-child pairs. Questionnaires were administered and maternal blood samples were obtained at baseline. Mother atopy was based on specific IgE levels. During follow-up, information on infants' respiratory symptoms was collected through questionnaires administered at 1, 3, 6, 9, 12 and 18 months of age. Negative binomial regression models were used to evaluate the effect of supplementation on respiratory symptoms in infants.

***RESULTS:*** Among infants of atopic mothers, a statistically **significant protective effect of DHA treatment was observed** on phlegm with nasal discharge or nasal congestion [0.78 (95% CI 0.60 to 1.02)] and fever with phlegm and nasal discharge or nasal congestion [0.53 (95% CI 0.29 to 0.99)] adjusting for potential confounders.

***CONCLUSIONS:*** Our **results support** the hypothesis that **DHA supplementation during pregnancy** may **decrease** the **incidence of respiratory symptoms in children with a history of maternal atopic**.



References :
Chest. 2014 Mar 13. doi: 10.1378/chest.13-1432. [Epub ahead of print]
Escamilla-Nuñez MC, Barraza-Villarreal A, Hernández-Cadena L, Navarro-Olivos E, Sly PD, Romieu I. Cancer Manag Res. 2012;4:281-6. doi: 10.2147/CMAR.S35342. Epub 2012 Aug 24.

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# Enteric-coated, highly standardized cranberry extract reduces risk of UTIs and urinary symptoms during radiotherapy for prostate carcinoma


## Abstract

***BACKGROUND:*** **Cranberry** (Vaccinium macrocarpon) proanthocyanidins **can interfere with adhesion of bacteria to uroepithelial cells**, potentially **preventing lower urinary tract infections (LUTIs).** Because LUTIs are a common side effect of external beam radiotherapy (EBRT) for prostate cancer, we evaluated the clinical efficacy of enteric-coated tablets containing highly standardized V. msacrocarpon (ecVM) in this condition.

***METHODS:*** A total of 370 consecutive patients were entered into this study. All patients received intensity-modulated radiotherapy for prostate cancer; 184 patients were also treated with ecVM while 186 served as controls. Cranberry extract therapy started on the simulation day, at which time a bladder catheterization was performed. During EBRT (over 6-7 weeks), all patients underwent weekly examination for urinary tract symptoms, including regular urine cultures during the treatment period.

**RESULTS:** **Compliance was excellent, with no adverse effects or allergic reactions being observed.** In the cranberry cohort (n = 184), 16 LUTIs (8.7%) were observed, while in the control group (n = 186) 45 LUTIs (24.2%) were recorded. This difference was statistically significant. Furthermore, lower rates of nocturia, urgency, micturition frequency, and dysuria were observed in the group that received cranberry extract.

***CONCLUSION:*** **Cranberry extracts** have been **reported** to **reduce the incidence of LUTIs** significantly **in women and children.** Our data extend these results to patients with prostate cancer undergoing irradiation to the pelvis, who had a significant reduction in LUTIs compared with controls. **These results were accompanied by a statistically significant reduction in urinary tract symptoms (dysuria, nocturia, urinary frequency, urgency), suggesting a generally protective effect of cranberry extract on the bladder mucosa.**



References :
Bonetta A[1], Di Pierro F.


**Author information**
[1]Unità Operativa Radioterapia Oncologica, Istituti Ospedalieri di Cremona, Cremona.

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# Inhibitory activity of cranberry extract on the bacterial adhesiveness in the urine of women: an ex-vivo study


### Abstract

Strains of uropathogenic E. coli are responsible for approximately 90% of community-acquired, uncomplicated cystitis, and fimbriae represent the adhesive factors enabling E. coli to be anchored to uroepithelial cells in the first step of the infectious process. Recently, a few studies have shown that a correlation between the consumption of cranberry (Vaccinium macrocarpon) and prevention of UTI is related to the ability of proanthocyanidins to reduce the bacterial adhesion to uroepithelial cells. **In this study we evaluate the inhibitory activity of urine of healthy women treated with tablets containing cranberry extract on the adhesiveness of E. coli to uroepithelial human cells.** Two groups of 12 female volunteers each, aged between 18 and 65 years, were enrolled, one group with negative history and one group with positive history of recurrent cystitis. Subjects were treated with the active product or placebo in a random, cross-over, double-blinded sequence for one week in each of the two treatment sequences. Urine samples were collected at the beginning and the end of each study period. Tests of bacterial adhesiveness were performed with two strains of E. coli (ATCC 25922 and ATCC 35218) on HT1376 human bladder carcinoma cells. Significant reductions of bacterial adhesiveness were observed in women who received cranberry extract (-50.9%; p less than 0.0001), regardless of their medical history and the treatment period in the cross-over sequence. No changes were observed with placebo (-0.29%; n.s.). This ex-vivo **study showed that the assumption of cranberry extract in suitable amounts can have an anti-adhesive activity on uropathogenic E. coli.**



References :
Int J Immunopathol Pharmacol. 2010 Apr-Jun;23(2):611-8.


Tempera G[1], Corsello S, Genovese C, Caruso FE, Nicolosi D.
**Author information**
[1]Department of Microbiological and Gynaecological Sciences, University of Catania, Italy. tempera@unict.it


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# Can a concentrated cranberry extract prevent recurrent urinary tract infections in women? A pilot study


## Abstract

***BACKGROUND:*** Urinary tract infections (UTIs) are extremely prevalent and despite treatment with antibiotics, reoccurrences are common causing frustration in the patient and the potential for developing antibiotic resistance. **The use of cranberry products to prevent UTIs has recently become popular** and more clinical studies are needed to explore this use.

***OBJECTIVE:*** This open label pilot **study examined the ability of a concentrated cranberry preparation to prevent UTIs in women with a history of recurrent infections.**

***SUBJECTS:*** Women between the ages of 25 and 70 years old were included with a history of a minimum of 6 UTIs in the proceeding year.

***INTERVENTION:*** The women took one capsule twice daily for 12 weeks containing 200 mg of a concentrated cranberry extract standardized to 30% phenolics.

***DESIGN:*** A questionnaire was used initially to determine the patient's medical history and they were asked at monthly intervals if any of the information had changed. All of the women in the study had urinalysis within 24h before starting on the study preparation and once a month after that for 4 months. Subjects were followed-up approximately 2 years later.

**RESULTS:** All 12 subjects participated in the 12-week study and were available for follow up 2 years later. **During the study none of the women had a UTI. No adverse events were reported. Two years later, eight of the women who continue to take cranberry, continue to be free from UTIs.**

***CONCLUSION:*** **A cranberry preparation** with a high phenolic content may **completely prevent UTIs in women who are subject to recurrent infections.**



References :
Bailey DT[1], Dalton C, Joseph Daugherty F, Tempesta MS.
**Author information**
[1]Helios Integrated Medicine, PC, 4150 Darley Avenue, Boulder, CO 80305, USA.
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