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NLM Citation: Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006-. Black Currant Seed Oil. [Updated 2018 Dec 3].
Bookshelf URL: https://www.ncbi.nlm.nih.gov/books/

Black Currant Seed Oil

Revised: December 3, 2018.

CASRN: 97676-19-2

Drug Levels and Effects

Summary of Use during Lactation

Black currant seed oil contains alpha and gamma-linolenic acid, anthocyanins, proanthocyanidin, flavonoids, vitamin C, and 2 nitrile-containing compounds. It is generally well tolerated. Some evidence exists that indicated supplementation of mothers with black currant seed oil during pregnancy and exclusive breastfeeding decreases the rate of atopic dermatitis in breastfed infants.[1] Heating breastmilk to 63.5 degrees C reduces the concentration of linolenic acid by about 22%. Freezing milk at -20 degrees C and thawing more than once decreases linolenic acid concentration by an average of 63%.[2]

Dietary supplements do not require extensive pre-marketing approval from the U.S. Food and Drug Administration. Manufacturers are responsible to ensure the safety, but do not need to *prove* the safety and effectiveness of dietary supplements before they are marketed. Dietary supplements may contain multiple ingredients, and differences are often found between labeled and actual ingredients or their amounts. A manufacturer may contract with an independent organization to verify the quality of a product or its ingredients, but that does *not* certify the safety or effectiveness of a product. Because of the above issues, clinical testing results on one product may not be applicable to other products. More detailed information about dietary supplements is available elsewhere on the LactMed Web site.

Drug Levels

Maternal Levels. Relevant published information was not found as of the revision date.

Infant Levels. Relevant published information was not found as of the revision date.

Effects in Breastfed Infants

In one study, supplementation of mothers with GLA had no effect on the development of atopic dermatitis in their breastfed infants.[3]

Nursing mothers were randomly selected from a larger blinded study comparing black currant seed oil (containing 48% linoleic acid, alpha-linoleic acid 13%, gamma linoleic acid 14%; Aromtech Ltd, Tornio, Finland)

3 grams daily to olive oil 3 grams daily as a placebo. Intake started between the 8th and 16th week of pregnancy and continuing postpartum until the end of exclusive breastfeeding. The selected mothers consisted of 31 who received black current seed oil and 30 who received placebo. Exclusive breastfeeding lasted 3.9 months in the black currant seed oil group and 4.2 months in the control group. Breastmilk levels of interleukin 4, 5, 10 and 12 were lower and levels of interferon-gamma were higher in the black current seed oil group. No difference was found in breastmilk levels of tumor necrosis factor. Mothers of children who developed atopic dermatitis by the age of 12 months had lower levels of IFN-gamma in their breastmilk.[1][4]

Effects on Lactation and Breastmilk

Relevant published information was not found as of the revision date.

References

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2. Wardell JM, Hill CM, D'Souza SW. Effect of pasteurization and of freezing and thawing human milk on its triglyceride content. Acta Paediatr Scand. 1981;70:467-71. PubMed PMID: 7315290.
3. Kitz R, Rose MA, Schonborn H et al. Impact of early dietary gamma-linolenic acid supplementation on atopic eczema in infancy. Pediatr Allergy Immunol. 2006;17:112-7. PubMed PMID: 16618360.
4. Linnamaa P, Savolainen J, Koulu L et al. Blackcurrant seed oil for prevention of atopic dermatitis in newborns: a randomized, double-blind, placebo-controlled trial. Clin Exp Allergy. 2010;40:1247-55. PubMed PMID: 20545710.

Substance Identification

Substance Name

Black Currant Seed Oil

Scientific Name

Ribes nigrum

CAS Registry Number

97676-19-2

Drug Class

Breast Feeding

Lactation

Complementary Therapies

Oils

Phytotherapy

Plants, Medicinal