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Cumin

Revised: May 15, 2024.

Drug Levels and Effects

Summary of Use during Lactation

Cumin (*Cuminum cyminum*) seed contains a volatile oil that contains cuminaldehyde and other aldehydes; the seeds also contain numerous flavonoids and terpenes. Cumin has been used as a galactogogue in India and Turkey;[1-4] however, no scientifically valid clinical trials support this use. Galactogogues should never replace evaluation and counseling on modifiable factors that affect milk production.[5,6] No data exist on the excretion of any components of cumin into breastmilk or on the safety and efficacy of cumin in nursing mothers or infants. Cumin is "generally recognized as safe" (GRAS) as a spice and flavoring by the U.S. Food and Drug Administration. Cumin is generally well tolerated, but occasional phototoxic skin reactions have been reported after contact with the oil. Those allergic to cumin or related herbs should avoid cumin.

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. Eighteen nursing mothers who were nursing their infants of 8 to 53 weeks of age were served a curry dish that contained an average of 1.06 mg of eugenol. The baseline eugenol concentration in milk was 1.11 mcg/L in one sample. Eugenol was found in concentrations of 1.63 mcg/L, 1.78 mcg/L and 2.92 mcg/L in the 1 hour, 2 hour and 3 hours samples from the same mother. Eugenol was below the limit of detection in all other samples.[7]

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

Effects in Breastfed Infants

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

Effects on Lactation and Breastmilk

Women who were between 14 and 90 days postpartum and reported lactation failure were given instructions on breastfeeding technique and encouraged to exclusively breastfeed. If their infant had gained less than 15 grams in 1 week, they were randomized to receive either two tablespoonfuls of a mixture containing wild asparagus or an identical placebo for 4 weeks. In each 100 grams, the mixture contained *Asparagus racemosus* 15 grams, *Anethum soiva* 1 gram, *Ipomea digitata* 1 gram, *Glycyrrhiza glabra* 1 gram, *Spinacia oleracea* 2.5 grams, *Cuminum cyminum* 0.5 gram, and Panchatrinamol 1 gram. Of the 64 women randomized, 11 did not complete the trial. Serum prolactin measurements were made before a morning nursing before treatment, and after 4 weeks of treatment. Infant weight gains and the number of supplemental feedings were recorded initially and after 4 weeks of therapy. No differences were found in the changes in serum prolactin, infant weight gain or amount of supplementation between the treatment and placebo groups after 4 weeks of therapy. No side effects or changes in liver function tests occurred during the study.[8]

One hundred fifty-eight mothers in Iran of who reported difficulty in breastfeeding were given either a proprietary mixture of herbs (Shirafza Drop) or a chlorophyll solution as a placebo. The herbal mixture contained the purported galactogogues fennel, anise, cumin, black seed, and parsley. Infant ages ranged between 0 and 6 months and they were exclusively breastfed. Weight gain of the infants was measured over time. No difference in infant weight gain was seen between the two groups of infants.[9] Blinding and randomization in this study is unclear.

In an uncontrolled, non-blinded multicenter study in India, 1132 patients who reported inadequate milk supply were give a mixture (Lactancia, Corona Remedies Pvt. Ltd.) to take in a dose of 30 grams twice daily. The product contains *Asparagus racemosus* (wild asparagus, shatavari), *Cuminum cyminum* (cumin), *Glycyrrhiza glabra* (licorice), *Spinacia oleracea* (spinach) as well as amino acids, vitamins, minerals and DHA. Most of the mothers (1049) had improved lactation and increased infant weight.[10] However, with no placebo control group, results cannot be attributed to the product.

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Substance Identification

Substance Name

Cumin

Scientific Name

Cuminum cyminum

Drug Class

Breast Feeding

Lactation

Milk, Human

Complementary Therapies

Phytotherapy

Plants, Medicinal