



Chamomile

Revised: July 20, 2019.

CASRN: 8002-66-2

Drug Levels and Effects

Summary of Use during Lactation

Two different plant species with similar effects are known as chamomile: German chamomile (*Matricaria recutita*) and Roman chamomile (*Chamaemelum nobile*). Both contain similar ingredients, including sesquiterpenes (e.g., bisabolol, farnesene), sesquiterpenelactones (e.g., chamazulene, matricin), flavonoids (e.g., apigenin, luteolin), and volatile oils. Chamomile is used orally as a sedative and for gastrointestinal conditions; it is used topically for wound healing. Both herbal and homeopathic preparations have been used to treat mastitis and cracked, bleeding nipples.[1][2] Chamomile has been used as a galactagogue;[3][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]

Chamomile is "generally recognized as safe" (GRAS) for use in food by the U.S. Food and Drug Administration as a spice, seasoning, or flavoring agent. No data exist on the safety of chamomile in nursing mothers or infants, although rare sensitization may occur (see below).[6] It has been safely and effectively used alone and with other herbs in infants for the treatment of colic, diarrhea, and other conditions,[7][8][9][10] so the smaller amounts expected (but not demonstrated) in breastmilk are likely not to be harmful with usual maternal doses. Note *Clostridium botulinum* (botulism) spores have been found in some loose-leaf chamomile teas sold in health food stores.

Topical chamomile is a known sensitizing agent, even with homeopathic products.[11] Two women developed contact dermatitis of the nipples and areolas after applying Kamillosan ointment for cracked nipples. The product was purchased in England and contained 10.5% Roman chamomile extracts and oil. Reactions were confirmed to be caused by Roman chamomile by patch testing in both women. Drinking chamomile tea can exacerbate topical skin rashes and has caused anaphylaxis in sensitized individuals.[12] Chamomile has possible cross-reactivity with other members of the aster family (e.g., echinacea, feverfew, and milk thistle).[6]

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

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

Effects on Lactation and Breastmilk

A mother nursing her 3-month-old infant began drinking 1.5 to 2 L daily of a chamomile infusion made by pouring 1.5 L of hot water over 1 to 3 grams of chamomile flowers. Each time after drinking the infusion, she noticed fullness and tenderness of the breasts 4 to 6 hours later. She also found that she was able to pump 90 mL of milk after chamomile use, compared to 60 mL without chamomile use. During this time she was also mildly hypothyroid.[4]

References

1. Castro M. Homeopathy. A theoretical framework and clinical application. *J Nurse Midwifery.* 1999;44:280-90. PubMed PMID: 10380446.
2. Nayeri SD, Kheirkhah M, Janani L. The effect of chamomile ointment on the healing of breastfeeding mothers' nipple sore-a randomized controlled clinical trial. *Journal of Evolution of Medical and Dental Sciences-Jemds.* 2019;8:1399-404. DOI: [10.14260/jemds/2019/311](https://doi.org/10.14260/jemds/2019/311).
3. Boies EG, Vaucher YE, Willies-Jacobo L et al. Use of foods, herbs and teas by Latina mothers to enhance breastfeeding. *Pediatr Res.* 2004;4 (Suppl S, Part 2):213A.
4. Brodribb W. ABM Clinical Protocol #9: Use of galactogogues in initiating or augmenting maternal milk production, second revision 2018. *Breastfeed Med.* 2018;13:307-14. PubMed PMID: 29902083.
5. Silva F, Dias F, Costa G et al. Chamomile reveals to be a potent galactogogue: The unexpected effect. *J Matern Fetal Neonatal Med.* 2017;(April 10):1-3.. PubMed PMID: 28000519.
6. O'Hara M, Kiefer D, Farrell K, Kemper K. A review of 12 commonly used medicinal herbs. *Arch Fam Med.* 1998;7:523-36. PubMed PMID: 9821826.
7. Weizman Z, Alkrinawi S, Goldfarb D, Bitran C. Efficacy of herbal tea preparation in infantile colic. *J Pediatr.* 1993;122:650-2. PubMed PMID: 8463920.
8. Savino F, Cresi F, Castagno E et al. A randomized double-blind placebo-controlled trial of a standardized extract of *Matricariae recutita*, *Foeniculum vulgare* and *Melissa officinalis* (ColiMil) in the treatment of breastfed colicky infants. *Phytother Res.* 2005;19:335-40. PubMed PMID: 16041731.
9. Zhang Y, Fein EB, Fein SB. Feeding of dietary botanical supplements and teas to infants in the United States. *Pediatrics.* 2011;127:1060-6. PubMed PMID: 21536609.
10. Wojcicki JM, Holbrook K, Lustig RH et al. Infant formula, tea, and water supplementation of Latino infants at 4-6 weeks postpartum. *J Hum Lact.* 2011;27:122-30. PubMed PMID: 21527796.
11. Barankin B, Gross MS. Nipple and areolar eczema in the breastfeeding woman. *J Cutan Med Surg.* 2004;8:126-30. PubMed PMID: 15129318.
12. McGeorge BC, Steele MC. Allergic contact dermatitis of the nipple from Roman chamomile ointment. *Contact Dermatitis.* 1991;24:139-40. PubMed PMID: 2040155.

Substance Identification

Substance Name

Chamomile

Scientific Name

Matricaria recutita Chamaemelum nobile

CAS Registry Number

8002-66-2

Drug Class

Breast Feeding

Lactation

Complementary Therapies

Phytotherapy

Plants, Medicinal