



## Lemon Balm

Revised: December 3, 2018.

## Drug Levels and Effects

### Summary of Use during Lactation

Lemon balm (*Melissa officinalis*) contains a lemon-scented essential oil containing citronellal, neral, and geranial monoterpenoid aldehydes; polyphenolic compounds (including rosmarinic acid); and monoterpene glycosides. Lemon balm has no specific lactation-related uses. No data exist on the excretion of any components of lemon balm into breastmilk or on the safety and efficacy of lemon balm in nursing mothers or infants. However, it has been safely and effectively used with other herbs in infants for the treatment of colic, diarrhea, and other conditions,[1][2] so the smaller amounts expected (but not demonstrated) in breastmilk are likely not to be harmful with usual maternal doses. Lemon balm is "generally recognized as safe" (GRAS) as a food flavoring by the U.S. Food and Drug Administration. As a drug, it is generally well tolerated in adults with nausea, vomiting, abdominal pain, dizziness, and wheezing reported occasionally.

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 randomized trial assigned mothers of preterm infants to receive either a purported herbal galactagogue tea twice daily, a fruit tea twice daily or nothing. The galactagogue tea mixture (Natal, Hipp [Turkey]) contained 1% stinging nettle as well as melissa, caraway, anise, fennel, goat's rue, and lemon grass in unspecified amounts. All mothers received similar breastfeeding advice from the same nurse and two groups were told that the tea would increase milk production, but compliance with the study teas was not assessed. Mother used breast pumps to extract and measure their milk and output on day 1 and day 7 of the study were compared. Although the increase in volume of extracted milk was greater in the galactagogue tea group, there was no difference in maternal serum prolactin between the groups at 7 days. No difference in infant weight gain was seen between groups, although the authors stated that additional supplementation was provided to all infants in addition to the pumped milk.[3] The study was not blinded, the randomization method was not stated, intent-to-treat analysis was not performed, and some of the numerical results were internally inconsistent, so the quality of the study was poor.

## References

1. 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.
2. 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.
3. Ozalkaya E, Aslandogdu Z, Ozkoral A et al. Effect of a galactagogue herbal tea on breast milk production and prolactin secretion by mothers of preterm babies. *Niger J Clin Pract.* 2018;21:38-42. PubMed PMID: 29411721.

## Substance Identification

### Substance Name

Lemon Balm

### Scientific Name

*Melissa officinalis*

### Drug Class

Breast Feeding

Lactation

Complementary Therapies

Phytotherapy

Plants, Medicinal