



# Common Herbs and Foods Used as Galactagogues

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**Abstract:** *Historically, herbs and foods have been used as galactagogues by breastfeeding women to maintain and increase milk supply. Commonly used herbs and foods used as galactagogues are reviewed. Doses, other uses for taking herbals by breastfeeding mothers, and cautions to observe when using these galactagogues are discussed. This information can be used by health care professionals as general guidelines to counsel lactating mothers who wish to use or are already using herbals or consuming foods to stimulate milk supply. A brief mention of prescription galactagogue alternatives is provided. Sources of currently available nonprescription galactagogue information are listed. This information will be useful for community, clinic, hospital, and other health care settings where consultative services are provided to breastfeeding mothers. Utilization of the information provided will allow health care professionals to counsel mothers on the use of herbals and foods as galactagogues.*

**Keywords:** galactagogues; herbals; food; breastfeeding; lactation

In times past, a good human milk supply for newborns and infants was crucial for survival. Historically, it is evident that nations, cultures, and tribes

developed traditions based on herbs and foods being used to maintain and increase milk supply. Mothers are often concerned about inadequate quantity of breast milk. Many will attempt to increase breast milk supply by taking herbs and foods categorized as “galactagogues.” These substances stimulate milk supply or oxytocin, which aids in breast milk ejection. Common herbs and foods used as galactagogues are numerous and varied and include almonds, anise, asparagus, borage, caraway, chaste tree fruit, chicken soup, cilantro, coconut, coriander, cumin, dandelion, dill, fennel,

production by increasing the production of oxytocin and/or prolactin. Unfortunately, other more serious adverse effects precluded their use as galactagogues.

These drugs include chlorpromazine, reserpine, sulpiride, trifluoperazine, and thioridazine. Two prescription drugs have found use as galactagogues because they possess less severe side effects. One drug is metoclopramide, although it crosses the blood–brain barrier and may precipitate depression in the mother or cause tardive dyskinesia (involuntary, repetitive body movements) with long-term use.<sup>4</sup> A second drug that is

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fenugreek, garlic, ginger, hops, lettuce, marshmallow root, millet, mushrooms, nettle, oat straw, papaya, pumpkin, red clover, red raspberry, rice, sage, seaweed soup, sesame seeds, sunflower seeds, thistles, and vervain.<sup>1-3</sup>

As pharmaceutical science and research advanced, it was noted that certain prescription drugs had an unusual side effect: They initiated or increased milk

used is domperidone as it does not cross the blood–brain barrier.<sup>5,6</sup> An issue that limits its use is that domperidone does not have prescription status in the United States. One final drug that has shown potential use as a galactagogue is metformin.<sup>7</sup> It has been shown to increase milk supply in women with polycystic ovarian syndrome. All 3 of these drugs result in only low

DOI: 10.1177/1941406411406118. From the US Food and Drug Administration, Rockville, Maryland. The article is not related to any FDA assigned duties or work and represents only the author's views and not the views of the FDA in any manner. Address correspondence to Frank J. Nice, MS, MPA, DPA, US Food and Drug Administration, 7500 Standish Place, MPN II, Rockville, MD 20855. e-mail: fjncat@hotmail.com.

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concentrations in breast milk and are usually compatible with breastfeeding.<sup>8</sup>

As with prescription drugs and over-the-counter (OTC) medications, breastfeeding women use herbals to treat a variety of ailments and to maintain health. Herbal use is as prevalent among breastfeeding women as it is with consumers who are not breastfeeding. Herbals provide the opportunity not to use a prescription or OTC medication. Many continue to be used as galactogogues by breastfeeding mothers and recommended by lactation consultants and health care professionals. Those most commonly used as single therapy herbal and food galactogogues include blessed thistle, chaste tree fruit, fennel, fenugreek, garlic, goat's rue, and milk thistle. Those less commonly used and more often used in combination include alfalfa, anise, borage, caraway, coriander, dandelion, dill, fennel, hops, marshmallow root, nettle, oat straw, red clover, red raspberry, and vervain.

Most knowledge about herbal use during breastfeeding and potential side effects of the wide variety of herbals comes from the systematic collection of data in Germany (eg, the *German Commission E Monographs*, which have been translated into English<sup>9</sup>). There are also several published texts that provide useful information on herbal use during breastfeeding. These include *The Nursing Mother's Herbal*,<sup>3</sup> *Medications and Mother's Milk*,<sup>8</sup> and *Nonprescription Drugs for the Breastfeeding Mother*.<sup>10</sup> There have been reports of specific herbal adverse effects, but there is still a lack of standard ways to report these adverse effects. As with all medications, breastfeeding women should prove a real need for treatment before taking any herbal.

Other than the above references, there is a lack of evidence-based information on the use and safety of herbals and foods as galactogogues in many cases. Marketing of herbals is not regulated by the Food and Drug Administration (FDA), and research studies are not required. The intent of nonregulation is to allow the consumer to make personal health decisions without government

interference. Therefore, there is a need for the consumer to be informed and for health care professionals to provide and counsel with information that is available. Health care providers must be ready to assist consumers to become literate on the use of herbals. They should investigate and review all options: historical, cultural, and evidence-based.

Information provided on the use of galactogogues, developed from available resources, can serve as general basic guidelines for nursing mothers. The following list is not inclusive, but does represent the most commonly used nonprescription galactogogues in the United States. The list can be used by health care professionals to become familiar with galactogogues that mothers may be using or are considering to use.

## Galactogogues<sup>3,8-12</sup>

### Alfalfa (*Medicago sativa*)

*Dose:* Up to 60 g daily (1 to 2 capsules 4 times a day)

*Other uses:* Diuretic and laxative

*Caution:* Alfalfa may cause loose stools and/or photosensitivity; do not use if allergic to peanuts and/or legumes; do not use in patients with systemic lupus erythematosus (SLE)

### Anise (*Anisi fructus*)

*Dose:* 3.5 to 7 g as tincture or tea, 5 to 6 times a day

*Other uses:* For anxiety and as antifatulent

*Caution:* Anise may cause allergic reaction

### Blessed Thistle (*Cnicus benedicti herba*)

*Dose:* Up to 2 g, in capsule form, daily

*Other uses:* May increase appetite and settle upset stomach

*Caution:* Blessed thistle may cause allergic reaction

### Borage (*Borago officinalis*)

*Dose:* 1 to 2 g, in capsule form or as tincture, daily

*Other uses:* For anxiety and as diuretic

*Caution:* Borage may cause loose stools and/or minor gastrointestinal upset; avoid large amounts because of potential blood thinner action

### Caraway (*Carvi fructus*)

*Dose:* 1.5 to 6 g daily as tincture, tea, or essential oil

*Other uses:* For anxiety and as antifatulent

*Caution:* Avoid large amounts of the essential oil form (can be irritating to mucous membranes)

### Chaste Tree Fruit, Chasteberry, Vitex (*Agni casti fructus*)

*Dose:* 30 to 40 mg daily as an alcoholic extract (50% to 70% alcohol)

*Other uses:* To treat breast pain dysmenorrhea

*Caution:* Herb may cause rash; extract form has high alcoholic content, although amount consumed is very small

### Coriander, Cilantro (*Coriandri fructus*)

*Dose:* 3 g daily as tea

*Other uses:* Antifatulent, diuretic, and mild antidiabetic

*Caution:* Herb may rarely cause photosensitivity; avoid herb if allergic to celery; avoid large amounts of herb

### Dandelion (*Taraxaci herba*)

*Dose:* 5 g, in capsule form or as tincture or tea, 3 times a day

*Other uses:* Antidiabetic and diuretic

*Caution:* Dandelion may rarely cause contact dermatitis; patients with bile duct blockage, gall bladder problems, or bowel obstruction should not use

### Dill (*Anethi fructus*)

*Dose:* 3 g daily as tincture or tea

*Other uses:* Antifatulent and diuretic

*Caution:* None

### Fennel (*Foeniculi fructus*)

*Dose:* 0.1 to 0.6 mL of oil (equal to 100 to 600 mg) daily

*Other uses:* For gastrointestinal disorders and as an expectorant

*Caution:* Fennel may cause allergic reaction and dermatitis

**Fenugreek (*Foenugraeci semen*)**

*Dose:* Orally, 6 g, in capsule form, daily; externally to treat inflammation, 50 g in 8 ounces of water

*Other uses:* To stimulate appetite, externally to control inflammation

*Caution:* Fenugreek may cause nausea and vomiting in mother and diarrhea in baby; may increase asthma symptoms or lower glucose levels in mother; may cause skin reactions with external use (avoid nipple area); may cause “maple syrup” smell in mother’s and/or baby’s urine and/or sweat; do not use if allergic to peanuts and/or legumes

**Garlic (*Allii sativi bulbos*)**

*Dose:* 4 to 9 g, in capsule form, daily

*Other uses:* For possible positive cardiovascular effects and/or immune system stimulation

*Caution:* Garlic increases nursing time because of odor in breast milk but may decrease nursing time if garlic odor is unacceptable to infant

**Goat’s Rue (*Galegae officinalis herba*)**

*Dose:* 1 to 2 mL of tincture, 2 to 3 times a day

*Other uses:* To lower blood glucose levels

*Caution:* None

**Hops (*Lupuli strobulus*)**

*Dose:* 500 mg of dry extract daily, 1 cup to 2 cups of tea daily, 1 bottle of stout beer daily

*Other uses:* For anxiety and insomnia

*Caution:* None, but do not use hops if depressed

**Marshmallow Root (*Althaeae radix*)**

*Dose:* Two 500-mg capsules, in capsule form, 3 times a day; or 60 g daily as tincture or tea

*Other uses:* Diuretic

*Caution:* Marshmallow root rarely may cause allergic reaction

**Milk Thistle (*Cardui mariae herba*)**

*Dose:* 12 to 15 g daily as infusion (equal to 200 to 400 mg of silybinin)

*Other uses:* For possible liver protective properties

*Caution:* Milk thistle may have laxative effect and/or cause allergic reaction

**Oat Straw, Oats (*Avenae stramentum*)**

*Dose:* 100 g daily

*Other uses:* Diuretic and for anxiety and depression

*Caution:* Do not use if patient has celiac disease

**Red Raspberry (*Rubidaei folium*)**

*Dose:* 2.7 g as three 300-mg capsules 3 times a day or daily as tincture or tea

*Other uses:* Nutritive

*Caution:* Red raspberry rarely may cause loose stools and/or nausea; may decrease milk supply if used for greater than 2 weeks

**Red Clover (*Trifolium pretense*)**

*Dose:* 40 to 80 mg daily as tincture or tea

*Other uses:* For estrogenic properties and as expectorant

*Caution:* Do not exceed recommended dosage; avoid fermented red clover; patients taking anticoagulants and/or aspirin should not use (contains coumarin, a blood thinner)

**Stinging Nettle (*Urtica dioica and Urtica urens*)**

*Dose:* 1.8 g as one 600-mg capsule 3 times a day, 1 cup of tea 2 to 3 times a day, 2.5 to 5.0 mL of tincture 3 times a day

*Other uses:* Mild diuretic and for mild gastrointestinal upset

*Caution:* Stinging nettle may cause mild diuresis and/or mild gastrointestinal upset

**Vervain (*Verbena officinalis*)**

*Dose:* 30 to 50 g daily as tea

*Other uses:* For anxiety and hypertension

*Caution:* Do not use if pregnant (because of oxytocic properties)

**Summary**

Nursing women who use herbals should use the same diligence and

cautions as when using FDA-regulated drugs. The fact that many manufacturers promote their products as “natural” does not always imply that using them is usually safe. Unlike the regulation of prescription and OTC medicines, the FDA does not regulate herbal products in the same manner. The FDA regulates herbals under food manufacturing regulations. Herbal products are required to be free of contaminants. Herbal labels may not make unfounded health and medical claims. Because of this situation, active ingredients may be present in more or less amounts than the herbal package label lists. Unknown harmful ingredients may potentially be present. Strengths of herbal product ingredients may vary depending on the particular plant used, the part of the plant used, and where, when, and how the herb was processed. These inconsistencies can lead to differences in efficacy and potentially harmful adverse effects in the mother and/or her nursing. Consumers, and especially breastfeeding mothers, should purchase herbals from reputable manufacturers and from pharmacies where they can consult with knowledgeable pharmacists on proper use. ■

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