



INCREASE BREAST MILK SUPPLY WITH HERBAL GALACTAGOGUES

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ABSTRACT

Mother's breast milk is the optimal source of nutrition for babies. WHO recommends exclusive breastfeeding starting within one hour after birth until a baby is six months old. However insufficient milk production is one of the most common reasons given for discontinuing breastfeeding. Galactagogues are substances that increase the

production or flow of milk. A large number of plant preparations are used as galactagogues around the world. Many of them can easily and safely be added to the diet. This article review the herbal galactagogues most frequently used in India.

KEYWORDS: Breast milk, Herbal Galactagogues, Asparagus, Fenugreek.

INTRODUCTION

Mother's breast milk is the optimal source of nutrition for babies. WHO recommends exclusive breastfeeding starting within one hour after birth until a baby is six months old. It is comprised of nutrient proteins, non-protein nitrogen compounds, enzymes, lipids, oligosaccharides, hormones, growth factors, host defense agents, vitamins A, C, B complex, binding proteins, lysozyme and antibodies, as well as many other factors that build a strong and healthy human being. Prolactin is the hormone responsible for the production of milk. Most women can produce enough milk to meet their infant's demand. However insufficient milk production is a common problem. Low milk supply is one of the most common reasons given for discontinuing breastfeeding.^[1]

Agents promoting the secretion and flow of breast milk are known as galactagogues. They include foods, herbal medicines and pharmaceutical drugs. Currently available

pharmaceutical galactogogues are metoclopramide and domperidone. These drugs will increase prolactin level.^[2] Throughout the world, women have used many herbal preparations to increase breast milk supply. Many cultures have special foods that are thought to enhance milk production. For any substances to be used as galactogogues, the side effects on both the mother and infant must be fully evaluated. Most of these substances have not been scientifically evaluated but traditional use suggests safety and some efficacy. They should be used in moderate amounts during lactation. This is a review of herbs that are commonly used in India for increasing breast milk production in nursing mothers.

1. Asparagus - *Asparagus racemosus* (Liliaceae family)

The root of the plant is used as galactogogue. Its role as galactogogue has been mentioned in Ayurvedic text books such as *Charak samhita* and *Susruta samhita*. Asparagus powder (about 1/4 to 1/2 teaspoon) is traditionally taken mixed in a glass of warm milk, with honey, or sugar. It can also be mixed with ghee. Oral administration of roots of *Asparagus racemosus* increased the milk yield in rats, cows, buffaloes and goats. Mradu Gupta *et al* carried out a clinical evaluation for galactogogue efficacy of *Asparagus racemosus* roots. An increase in prolactin level was observed in research group than in control group. The weight of the mothers and the weight of the babies, showed substantially higher increases in the research group as compared to the control group. The overall research findings validate the galactogogue activity of Asparagus.^[1, 3]

2. Moringa- *Moringa oleifera* (Moringaceae family)

Moringa leaves have been used as a natural galactogogue. It can be taken like a tea or also mixed with fresh juice. It can be added to food recipes. Ma. Corazon P. Estrella *et al* demonstrated the lactation-enhancing effect of Moringa leaves as evidenced by the significantly greater increase in the volume of milk expressed by mothers on the 3rd to the 5th postpartum day given *Moringa oleifera* capsules compared to those given placebo.^[4, 5]

3. Fenugreek - *Trigonella foenum-graecum* (Fabaceae family)

Fenugreek seeds are the most commonly used herbal galactogogue. In India, fenugreek seeds added to cereals and wheat flour or made into gruel, given to the nursing mothers to increase milk synthesis. It is usually discontinued once milk supply has reached an appropriate level. It is an oxytocic and stimulates the uterus and milk ducts in the breast. Fenugreek supports the production of milk by providing essential fatty acids. It directly increases the amount of

breast tissue, thereby enhancing lactation. Many clinical studies showed that herbal tea of fenugreek seed improved the breast milk supply. [6, 7, 8, 9]

4. *Leptadenia reticulata* (Asclepiadaceae family) and *Breynia patens* (Phyllanthaceae family)

In India it is claimed that Leptaden the herbal drug, which consists of *Leptadenia reticulata* and *Breynia patens*, when given to post-natal cases of lactation, results in increased milk secretion. Dr.N.R. Bhandari, *et al* carried out a clinical trial with Leptaden in postnatal cases of lactation .The results showed that there was appreciable increase in secretion of breast milk. No side effects were observed in both the mother and child. [10, 11]

5. Garlic- *Allium sativum* (Liliaceae family)

It has been used for many years as an herbal treatment to stimulate breast milk production . The Australian Breastfeeding association notes that garlic eaten by mother increases the length of time the baby suckles the breast each feed, resulting in improved milk supply. Garlic milk is a popular traditional post-delivery drink given to nursing mother. Boil garlic cloves in the water till the quantity is reduced to about a quarter. Add a glass of milk to the mixture and bring it to a boil. Allow to cool a bit. Add honey, sugar or jaggery. Filter it and use. [11, 12, 13]

6. Fennel- *Foeniculum vulgare* and Dill - *Anethum graveolens* (Umbelliferae family)

Fennel has been used for centuries to increase lactation. Fennel is boiled in water for few minutes. Remove from heat and let it steep for 5 minutes. Filter and drink it warm. Fennel is also used to counteract infant colic, whether consumed by the mother or given directly to the infant. Vida Ghasemi et al showed that herbal tea containing fennel seed improved signs of breast milk sufficiency and infant's growth parameters compared to the control group. Dill is known to increase the flow of milk in nursing mothers and will then be taken by the baby in the milk to help prevent colic. [14, 15]

Other Indian Foods to increase milk supply in lactating mothers

Mother's diet affect the quantity and quality of milk, so it is advisable to take a balanced and nutritious diet, rich in calcium, protein, vitamins and minerals. Brown rice, tapioca, oats, almond, lentils, cumin seeds, leafy vegetables, carrot, ginger ,jaggery and bottle guard must include in diet to increase breast milk production. Including lot of fluids is also very important while breast feeding.

CONCLUSION

Breast milk provides complete nourishment to the baby during the first six months. The use of herbal galactogogues is common amongst women during breastfeeding. Some studies show that herbal galactogogues can increase breast milk production. Many of them can easily and safely be added to the diet. Lactating mothers should consume a well-balanced diet, maintain adequate fluid intake and avoid substances known to decrease milk supply. Research based information should be available to breastfeeding women who wish to use herbal galactogogues.

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