# Increasing Your Milk Supply

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# **Key Points:**

- Breastfeeding your baby or expressing and pumping both breasts regularly stimulates your body to make milk.
- Starting a milk supply and keeping or increasing it takes time. How long it takes is different for each mother.
- Babies' behaviours can be confusing. Often mothers worry about their milk supply. If your baby is more fussy than usual but is growing well, there are other reasons for this fussiness. A growth spurt is an example. Frequent feeding will help you make more milk.

Please see the pamphlet "Breastfeeding Your Baby" for more information at: <a href="http://www.bcwomens.ca/Fact-Sheets-Resources-Site/Documents/BCW732\_BFYourBaby\_2015\_May271.pdf">http://www.bcwomens.ca/Fact-Sheets-Resources-Site/Documents/BCW732\_BFYourBaby\_2015\_May271.pdf</a>

## Other pamphlets available are:

- Breast Massage, Expression and "Hands On" Pumping of Mother's Milk
- ► Helpful Hints: For starting and keeping up your milk supply when your baby is not breastfeeding
- Mother's Milk: Using, storing and transporting milk and cleaning equipment

# For mothers of babies in the Neonatal Intensive Care Nursery (NICU):

- "Mother's Milk in the NICU"
- ▶ A Premie Needs His Mother DVD available on Channel 68 in the hospital

#### Other resources:

- Babies Best Chance web site: <u>www.bestchance.gov.bc.ca</u>. Booklet is available on line.
- ▶ BCW website Check resources including videos and pamphlets at <a href="http://www.bcwomens.ca/health-info/pregnancy-parenting/feeding-your-baby">http://www.bcwomens.ca/health-info/pregnancy-parenting/feeding-your-baby</a>

#### How do I make more milk?

#### 1. If your baby is able to breastfeed:

- ▶ Hold your baby skin to skin
- ▶ Feed as soon as possible after birth
- Use both breasts at each feeding
- ▶ Feed when your baby shows hunger cues. Babies usually feed at least 8 times or more in 24 hours, including during the night. To increase milk supply, feed more often
- Position and latch carefully
- Help your baby stay awake to do lots of sucking. Using hand compression and massage while feeding helps
- Ask for help to make sure your baby is feeding well
- ▶ Hand express for a few minutes after each feeding.

# 2. Your baby is not yet able to breastfeed, or does not do lots of sucking when put to breast:

- Hold your baby skin to skin.
- ► Hand express and pump your breasts at least 8 times in 24 hours, after putting baby skin to skin.
- Use "hands on" pumping to fully empty your breasts. Read the pamphlet "Breast Massage, Expression and Hands on Pumping of Mother's Milk"
- Use a hospital or rental electric pump. Use it on the lowest pressure to start and increase to comfort.
- Pumping should not hurt. It does not help to increase the pump pressure so high that it is painful.
- ▶ Pump near your baby and in the same room whenever possible.

# What are the most common reasons for low milk supply?

- Breast surgery or use of some medications such as birth control pills.
- ▶ Babies who do not feed well. Babies may not feed well if they are born preterm, are jaundiced, sleepy, or latch poorly.

- Not breastfeeding or using a pump often enough including during the night
- Use of ineffective pump equipment
- Drop in supply over time because you have to just rely on pumping
- "Sleep training" your baby

# What else can I do to maintain or increase my milk supply?

1. Ask for help.

There are some other reasons for a low milk supply. Ask for help as soon as you notice you are getting less milk or that your baby is not satisfied with breastfeeding. The problem can often be solved when you get help right away.

For NICU Mothers: Ask for help if you notice you are:

- Pumping less than 140 ml in 24 hours after the 4th day.
- Pumping less than 500 ml in 24 hours by two weeks.
- 2. Spend time skin-to-skin with your baby every day if at all possible.
- 3. Breastfeed or empty your breasts at least 8 times in 24 hours, including at night.
- 4. Try increasing the number of times you breastfeed or pump to more than 8 times in 24 hours for 3 or 4 days.
- 5. Refer to the other BC Women's pamphlets listed on page 1.

### If you need more help, then add:

6. Medication or herbs. They can be helpful to increase your milk supply.

# What do I need to know about taking medications to increase milk supply?

# Domperidone (Motilium®) is often used to increase milk supply It:

- Can be used to help increase levels of the hormone prolactin that stimulates milk production
- ▶ Is approved by the American Academy of Pediatrics & Motherisk for use by breastfeeding mothers.
- ▶ Health Canada issued a safety alert regarding careful use.

- Þ Requires a prescription from your doctor/midwife
- May be most helpful if your baby is premature or adopted
- Was originally used to treat stomach problems. It has a side effect of increasing milk supply in breastfeeding women.
- May interact with other medications. Always check with your doctor or pharmacist and let them know what other medications you are taking (including medications you get over the counter and herbal products)
- Is not used if you are taking other drugs that affect heart beat
- Is not used if you have an allergy to domperidone, a prolactinoma, Crohn's disease, irritable bowel syndrome, a gastrointestinal obstruction, perforation or hemorrhage, liver disease, heart disease, a risk of abnormal heart rate or rhythm or abnormal levels of electrolytes like potassium or magnesium

#### How much do I take?

Usually 10 mg (1 tablet) three times a day. Some mothers may take a higher dose than this if the medication is not working at the lower dose. The maximum dose recommended by the makers of domperidone and Health Canada is 30 mg in 24 hours.

### What side effects might I have?

#### Common side effects include:

- irritability
- diarrhea

headache

drv mouth

stomach cramps

Contact your doctor if you or your baby have any bothersome or unusual side effects.

Rare side effects: at high doses domperidone may cause abnormal heart rhythms. So far, there have been no reports of this side effect happening in mothers using domperidone for breastfeeding.

Seek medical attention if you experience heart palpitations, dizziness or fainting.

## Stopping the medication:

- ▶ Take one less pill every three or four days.
- If your milk supply drops, then return to the previous dose for 2 weeks and slowly reduce the dose again.

#### Herbs

- Not all herbs are safe to take when you are breastfeeding. Read the package carefully and check with your doctor or midwife, pharmacist or nurse.
- Women tell us that fenugreek, blessed thistle, fennel or raspberry teas increased their breast milk supply.
- There are few research studies written in English that confirm herbs increase milk supply. There is research indicating that herbal products often contain substances not listed on the label including product substitution, contaminants and /or fillers.
- Herbs are not regulated which means no government department is checking to make sure that herbal products are safe.

## **Acupuncture and Aromatherapy**

- Women who have tried acupuncture or aromatherapy tell us that they sometimes work.
- ▶ To date there are no known research studies that confirm they are helpful with milk supply problems.

# Using the drug Domperidone (Motilium®) by Breastfeeding Women: information to share with your doctor or midwife

Many factors influence how well lactation is established in nursing women and breastfeeding support is crucial in determining success. Medications used as galactogogues can be effective in increasing milk supply but should be used only after all modifiable factors that affect milk production have been addressed including improving latch, and increasing effectiveness of milk removal.

### Domperidone (Motilium®)

Domperidone is a peripheral dopamine antagonist approved for the treatment of upper gastrointestinal motility disorders. Though not an official indication, domperidone is also commonly used as a galactogogue in women with inadequate milk supply. While studies are limited, domperidone has been shown to increase milk supply in breastfeeding mothers by increasing levels of the hormone prolactin. Domperidone is often favored over another dopamine antagonist, metoclopramide, for this indication, as it does not cross the blood brain

barrier limiting its central nervous system side effects. Also, as limited amounts of domperidone are transferred into breast milk and there have been no reports of concern in breastfeeding infants.

#### Side Effects/Warnings

Common side effects seen in patients taking domperidone include dry mouth (2%), headache (1%), irritability (less than 1%), abdominal cramps (less than 1%), and diarrhea (less than 1%). These side effects can increase with increased dosage or prolonged use.

Although serious side effects, including ventricular arrhythmias and sudden cardiac death, have been reported with high doses given by IV administration, no serious side effects have been reported with use of domperidone as a galactogogue in breastfeeding mothers. Patients deemed at a higher risk of such side effects include patients greater than 60 years of age, patients using doses greater than 30 mg per day, and patients that have predisposing risk factors for QT prolongation. It is imperative that a thorough medical/medication history is taken to identify women who are not suitable candidates for domperidone use (see below, Contraindications). Screening EKGs are generally not recommended in healthy mothers without risk factors

#### **Drug Interactions**

Domperidone is metabolized in the liver by the enzyme CYP3A4 and, as a result, has multiple drugs interactions. The manufacturer and Health Canada list as a contraindication to domperidone combining with any potent CYP3A4 inhibitor which will increase the levels of domperidone. It is also a contraindication to use domperidone combined with any other medication that can prolong QT interval.

#### Contraindications

### Domperidone is contraindicated in patients:

- with prolongation of cardiac conduction intervals, particularly QT
- with significant electrolyte disturbances
- with cardiac disease
- · with moderate or severe liver impairment
- · receiving QT prolonging drugs and/or potent CYP3A4 inhibitors

### Dosage

The most frequently studied dose of domperidone for effectively increasing milk supply is 10 mg (one tablet) given three times per day. No studies evaluate doses of domperidone greater than 20 mg three times per day when used as a galactogogue. As a result of the associations

between higher doses and serious side effects, the manufacturer and Health Canada have set the maximum dose of domperidone in all populations at 30 mg per day. Taking domperidone with respect to food does not matter. It takes 2 to 3 days of taking the drug before milk supply will start to increase and it may take a few weeks to reach the full effect.

#### Stopping Domperidone (Motilium®)

If full milk production is achieved, it may be possible to taper down and discontinue the dose of domperidone The dose should be reduced by no more than one tablet every three days. For example, a mother taking one tablet three times a day would reduce to one tablet twice a day. After three days of taking one tablet BID, if there is no reduction in breastmilk supply, another tablet can be dropped. If the breastmilk supply decreases, the mother should return to the previous dose (in this example, three tablets a day) before trying again.

#### References:

- Asztalos, EV et al. (2017). Enhancing milk production with domperidone in mothers of preterm infants J Hum Lact 33 (1) 181-7..
- Antonio, A. Z. et. Al (2010) Safety and Efficacy of Galactagogues: substances that Induce, maintain andiIncrease breast milk production. Journal of Pharmaceut Sci 13 (2) 162-174.
- 4. Bazzano, AN et al. (2016). A review of herbal and pharmaceutical galactalogues for breastfeeding. Ochsner J. 16(4) 511-524.
- Bozzo, P., Loren G., Ito,S.. Health Canada advisory on domperidone. Should I avoid prescribing domperidone to women to increase milk production? Canadian Family Physician Sep 2012,58,952-953.
- Briggs, G.G., Freeman, R.K. (2014). Drugs in Pregnancy and Lactation. A reference guide to fetal and neonatal risks. 10th edition. Wiulters & Kluwer, PA USA.
- Campbell-Yeo,M.L. et al. (2010). Effect of domperidone on composition of preterm human milk. Pediatrics,125(1):e107-14
- 8. .Doggrell,S., Hancox,J. (2014) Cardiac safety concerns for domperidone, an antiemetic and prokinetic and galactogogue medicine. Expert opin drug saftey evaluation,13 (1):131-38..
- Hale, T. Rowe H. (2014). Medications and Mother's Milk. (14th edition) Pharmasoft Publishing, USA.
- 10. Paul C et al. (2015). Use of domperidone as a galactagogue drug: a systematic review of the benefit-risk ration. J Hum Lact. 31 (1) 57-63.
- 11. Zuppa AA et al. (2010). Safety and efficacy of galactogogues: substances that induce, maintain and increase breast milk production..

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