

memo

DATE: August 4, 2021
TO: WIC Coordinators and Local Agency Staff
FROM: Carole Kelnhofer, Training Coordinator Breastfeeding:
SUBJECT: Hand Expression - Topic of the Month

August is [National Breastfeeding Month](#); the United States Breastfeeding Committee (USBC) has declared this year's theme to be "**Every Step of the Way**". There are many steps that make the breastfeeding journey a success and having a good milk supply is one important part. To highlight this importance, step 5 of the Ten Steps to Successful Breastfeeding, states, "*Show Mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.*" For more information on all the steps visit the Baby Friendly USA webpage [10 Steps & International Code](#).

Milk production is regulated by milk removal; when an individual is having difficulty latching or maintaining their supply, they must find another way to express their milk. Milk expression can be done manually by hand or with a manual or electric breast pump. This article will focus on hand expression and will start with the benefits.

The Benefits of Hand Expression

- Provide extra stimulation for the breast
- Maximize colostrum withdrawal
- Increase milk production and removal
- Promote efficient breast drainage
- Soften the areola to help baby latch
- Increase fat and calorie content of milk
- Provide a spoonful that can be fed to a sleepy baby and can soothe a baby having difficulty latching
- It's free and always available!

Early stimulation of the breast is essential to building a strong milk supply. Studies have found that hand expression can be more effective at removing colostrum, boosting production, and increasing the duration of breastfeeding than pumping alone.¹ Hand expression is especially

effective when the breast is engorged, where the warm touch and massage can help move fluids out of the way to release the milk more effectively.

Hand expression is a great tool to support breastfeeding and reduce the need for supplementation. Many have found that learning how to hand express has made them more comfortable with touching and handling their breasts.² Education about hand expression ahead of time can also reduce frustration and anxiety for the new parent. Every pregnant person should be encouraged to learn the benefits of and how to perform hand expression.

Prenatal vs Postnatal Hand Expression

Prenatal or ‘Antenatal’ expression of milk is the practice of expressing milk during one’s pregnancy. Long thought to be a risk to premature labor, studies have now found that to be untrue. There are some medical conditions that make it harder to establish breastfeeding after birth, such as a parent that has a planned cesarean birth, diabetes, or breast abnormality, or an infant with cleft lip/palate or Down syndrome. For these parents, prenatal hand expression can support the baby by getting stored colostrum quickly after birth.

Postnatal hand expression is done after the baby is born. Postnatal hand expression has long been found to be an effective way to stimulate the breast and release colostrum. If there is trouble latching right from the start or baby needs to be separated from the parent after birth, hand expression of colostrum can provide the essential nutrients, antibodies, and many more protective factors. Additionally, learning and practicing hand expression within the first few days after birth gives the parent a convenient tool that is free and available on demand.

WIC education should focus on postnatal hand expression and refer to one’s healthcare provider for information and support about prenatal hand expression.

How Much Expressed Milk is Expected?

When a parent first tries hand expression, they will likely only see a few drops of milk; this is normal. With practice and as they become comfortable with expressing by hand, they will notice the amount increase. Total production of colostrum in the first day of life averages 1-2 ounces and will double each day that follows. To break it down further, that is about a teaspoon per feeding on day 1, then 2-3 teaspoons per feeding on days 2-3. Since colostrum is thick and rich, small amounts are all baby needs. By days 4-5, mature milk should arrive, and the volume of milk will increase significantly.

Talking to Participants About Hand Expression

As discussed, it is never too early to start talking about hand expression. The choice of how to feed one’s baby is a personal one, and some participants may have not yet decided while others may be resistant. It is important to keep an open mind when speaking to participants about their feeding choices. Using open-ended questions such as “What are your thoughts about breastfeeding?” or “Have you and your partner discussed breastfeeding?” is a great way to begin the conversation.

Discussion about hand expression may be framed as a beneficial tool to support breastfeeding. Hand expression is simple to learn and with practice, can become easy. Asking questions such as “What have you heard about hand expression?” and “Can I share with you what I have learned about hand expression?”, may get the participant interested in learning more. There are many resources out there to support parents in the technique. It may be helpful to keep a list of referrals/resources specific to your agency as well.

WIC - Scope of Practice

At WIC, it is important to know when to educate and when to refer. If you are not comfortable discussing hand expression or have not been trained in lactation support, there are many resource options to offer participants. Having an IBCLC or Peer Support person on staff, offering a referral to local lactation support or their healthcare provider, or providing a list of community resources are all great options. There are many videos and handouts as well that may introduce a new parent to the basics of hand expression; below are some examples.

Hand Expression Videos

[Breastmilk Production](#) (First Droplets)

[Hand Expression of Breastmilk](#) (Stanford University)

[Expressing the First Milk](#) (Global Health Media)

- Milk expression videos are available in multiple languages at [Global Health Media Videos](#) (Choose language and search the Breastfeeding tab.)

[Hand Expression](#) (Breastmilk Counts, Texas WIC)

Hand Expression Handout

[Lactation Education Resources](#): Hand Expression of Breastmilk

- Available in English, Spanish, Arabic, and Vietnamese.

Resources

1. Morton, J., Hall, J., Wong, R. *et al.* [Combining hand techniques with electric pumping increases milk production in mothers of preterm infants](#). *J Perinatol* 29, 757–764 (2009).
2. [The Power of Hand Expression](#). Diana West, BA, IBCLC, *La Leche International*, January 15, 2019.

Continue to send your topic suggestions to Carole Kelhofer at carole.kelhofer@state.mn.us.

References - Complete Listing of Hyperlinks:

National Breastfeeding Month (<http://www.usbreastfeeding.org/p/cm/ld/fid=840>)

10 Steps & International Code (<https://www.babyfriendlyusa.org/for-facilities/practice-guidelines/10-steps-and-international-code/>)

Breastmilk Production (<https://vimeo.com/284639410>)

Hand Expression of Breastmilk (<https://med.stanford.edu/newborns/professional-education/breastfeeding/hand-expressing-milk.html>)

Expressing the First Milk (<https://globalhealthmedia.org/portfolio-items/expressing-the-first-milk/?portfolioCats=191%2C94%2C13%2C23%2C65>)

Global Health Media Videos (<https://globalhealthmedia.org/videos/>)

Hand Expression (<https://www.breastmilkcounts.com/moms-playground/educational-activities/hand-expression/>)

Lactation Education Resources

(https://www.lactationtraining.com/component/edocman/search-result?filter_search=hand%20expression&layout=table&Itemid=0)

Combining hand techniques with electric pumping increases milk production in mothers of preterm infants (<https://doi.org/10.1038/jp.2009.87>)

The Power of Hand Expression (<https://www.lli.org/the-power-of-hand-expression/>)

*Minnesota Department of Health - WIC Program,
85 E 7th Place, PO BOX 64882, ST PAUL MN 55164-0882;
651-201-4404, health.wic@state.mn.us, www.health.state.mn.us; to obtain this information in
a different format, call: 651-201-4404*