

# Pumping Basics Counseling on Pump Use



**IABLE**

Institute for the Advancement  
of Breastfeeding &  
Lactation Education

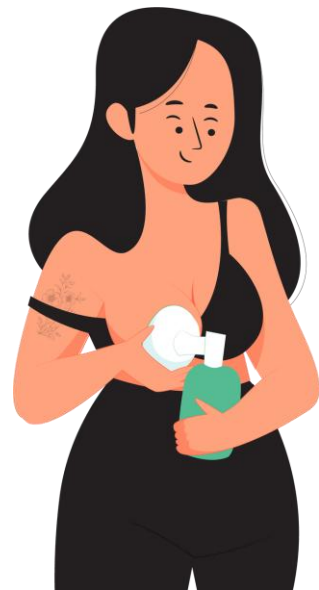
[Lacted.org](http://Lacted.org)



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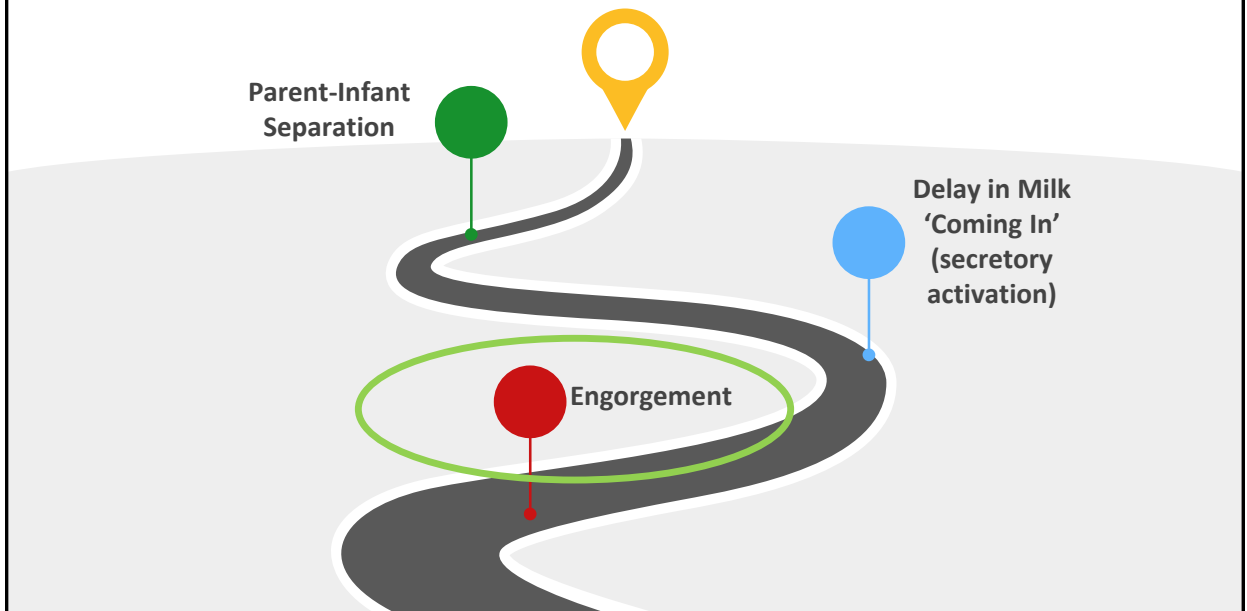
## Objectives

- Explain management of engorgement including reverse pressure softening and lymphatic drainage
- Explain how to fit pump flanges.
- Discuss drip milk collectors and suction vessels
- Explain antenatal colostrum expression
- Describe how to incorporate hand expression with pumping
- Outline a pump plan for a client



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## Bumps in the Road Early Postpartum



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What do you see?



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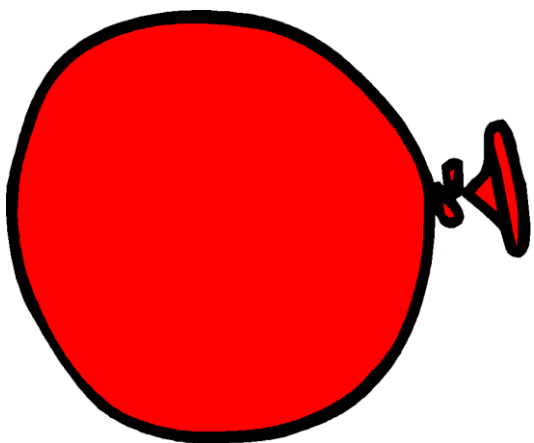
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## Engorgement

- Days 3-5 pp
- Increased blood flow when milk production is increasing
- Edema (swelling)
- Not the same as 'too much milk'
- Worse with IV fluids in labor

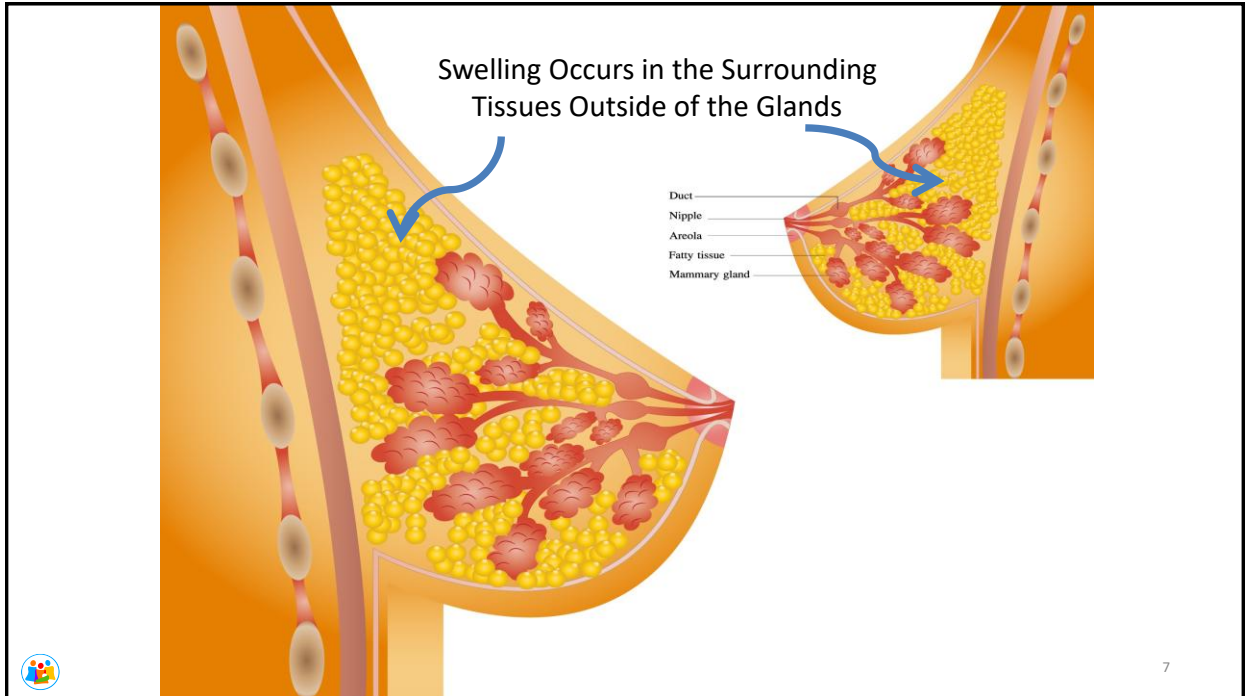


A large red circle with a black outline, representing a swollen breast, with a small black and red teat on the right side.



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## Effects of Engorgement

- Harder to latch
- Sore nipples
- Breast discomfort
- Reduction in milk production
- Often mistaken for mastitis



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### Treatment for Engorgement

- Heat before breastfeeding to improve milk flow
- Hand express milk to soften areolae
- Apply cool compresses after feeding to decrease swelling
- Reverse Pressure Softening
- Lymphatic drainage
- **Best Treatment is prevention with frequent feeding!!**

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### Reverse Pressure Softening is a Strategy to Improve Infant Latch



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## Sizing Flanges



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## Sizing Flanges

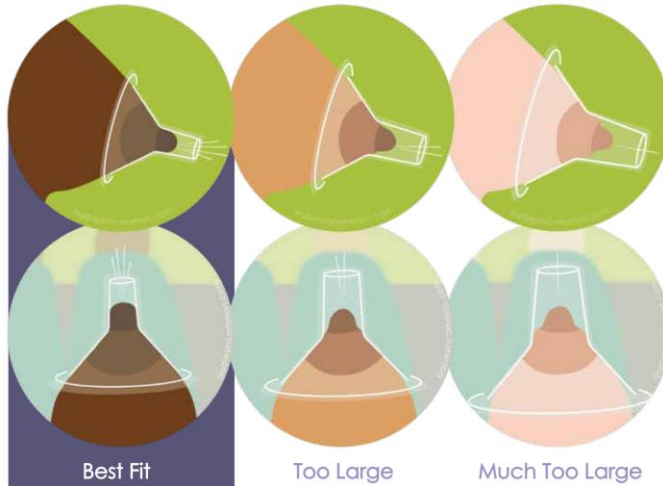
- Just the nipple should go into the flange shaft.
- Vacuum needs to go thru the nipple, and throughout ductal system
- If flange is too large, the areola is dragged into flange, causing areolar swelling and blockage of milk flow
- If too small, nipple won't move in flange, and trauma can occur



Too large- areola within flange shaft

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## Flanges- The Right Fit



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## How to Measure Flanges

- Use a measuring tool to fit the flanges
- Fit both sides, as nipples may be different sizes



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Using flange inserts to measure



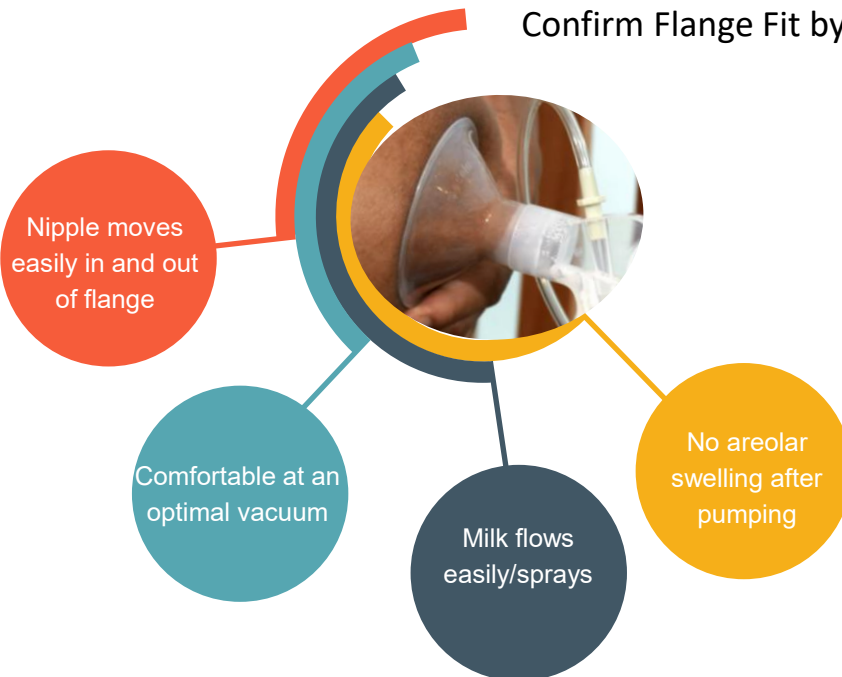
Using a measuring tool



- Measuring the base of the nipple often lead to a large fit
- Measuring the tip of the nipple often leads to small fit

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### Confirm Flange Fit by Pumping



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## Suction Vessels



- Some users refer to these as hand pumps
- Attach to breast via suction
- Tend to be wide-mouthed
- Often attached to one breast while nursing from the other
- Often used with the intention to collect drip milk, but suction increases production
- When used on the 2nd side, it removes the first & biggest letdown before baby can nurse



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## Passive Milk Collectors



- They do not apply vacuum
- Ideal for collecting drip milk
- Low/no risk of trauma
- They don't steal milk from the infant
- Beware- some appear to be passive collectors, but do apply suction



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## Pump Counseling- Getting Started

- ✓ Pump recommendations are individualized, based on their situation
- ✓ Most often, lactating parents pump in place of a breastfeed



Source: USBC

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## Pumping - Getting Started

### Wash

- Wash hands
- Use clean pump parts






### Location

- Safe, uninterrupted
- Comfortable
- Clean
- Not a bathroom
- Has an outlet, chair, table/surface, lighting

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## Hands Free Pumping

Not all bras work with all pumps

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## Promoting a Letdown at Work

'Experience' the baby


- Photos/video
- Article of clothing/blanket
- Audio of the baby

Source: US Breastfeeding Committee

Get Comfy!

- Music
- Eat/drink
- Distract
- Feel safe

- Massage/tickle breasts
- Rub nipples
- Warm packs



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## Typical Guidance

### Frequency

- Every 3 hours with no more than a 5-7 hour break overnight
- Difficult to expect more frequent pumping when at work

### Duration

- Most often for 12-20 minutes
- Often through 2 let-downs
- Fast sprays are over
- Breasts feel soft
- If high production, remove what is needed

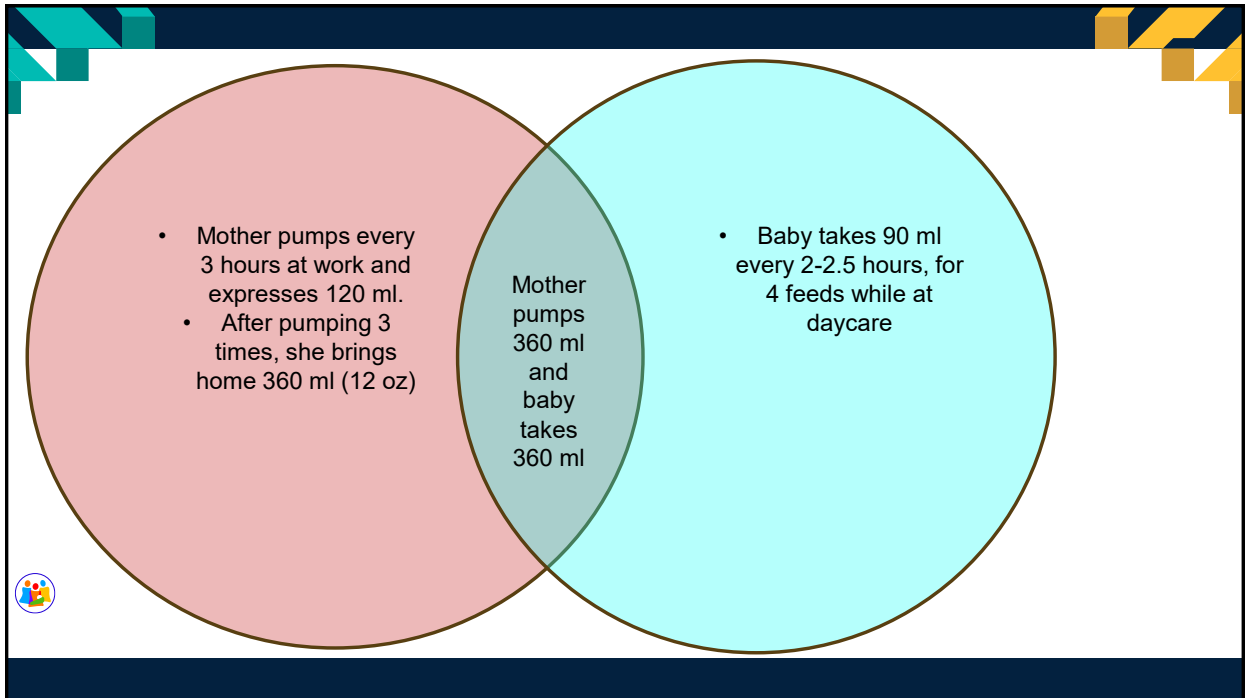


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**Mom expresses concern that her baby feeds every 2-2.5 hours at home. What happens if she cannot pump this often at work?**



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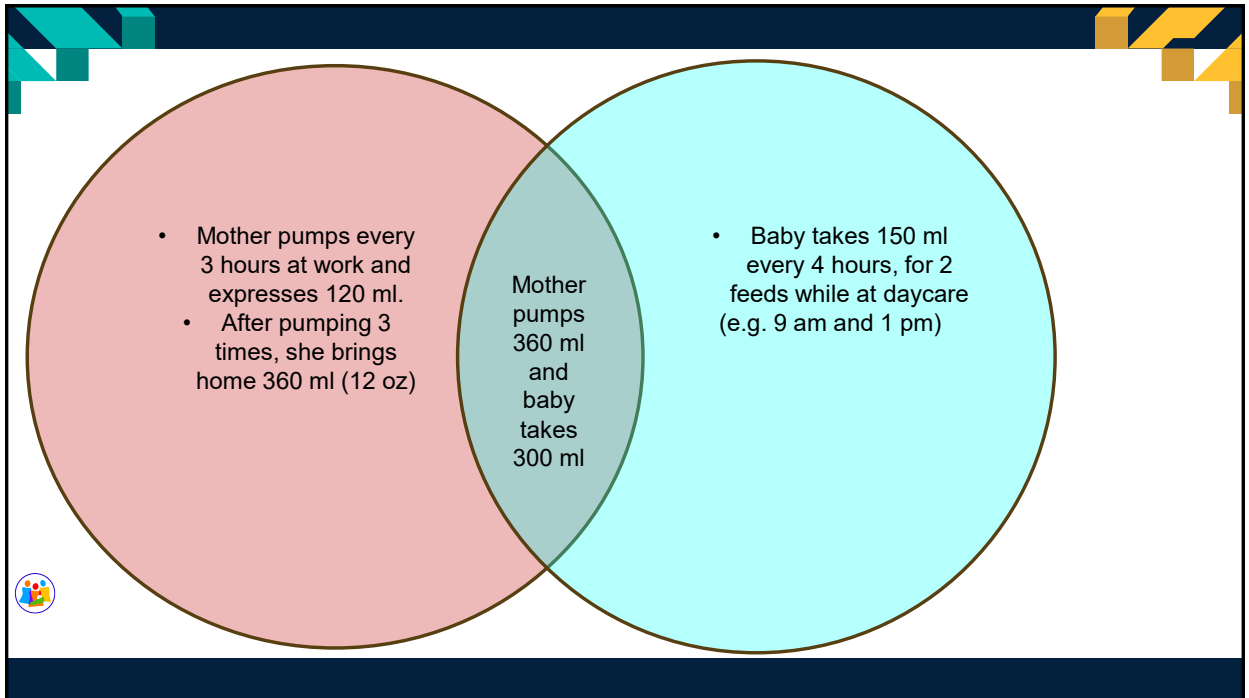


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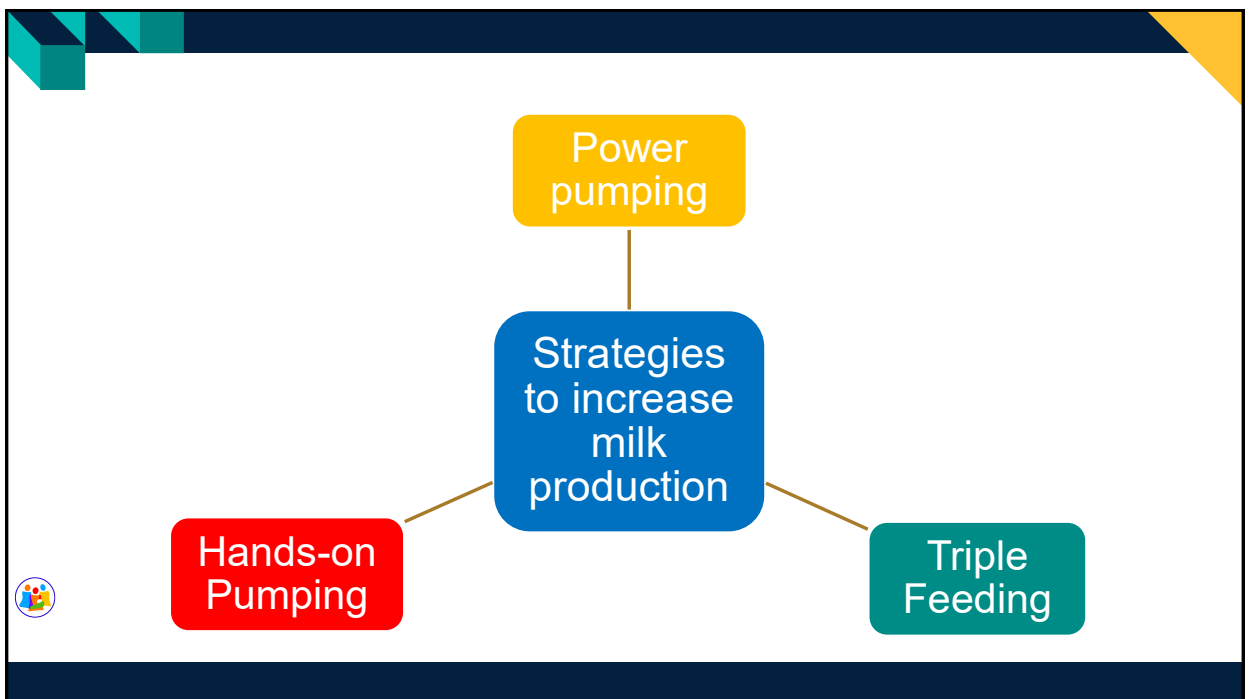
**Mom expresses concern that her 4 month old baby is taking 5 oz (150 ml) every 4 hours at daycare, but the most she can express is 120 ml every 3 hours?**

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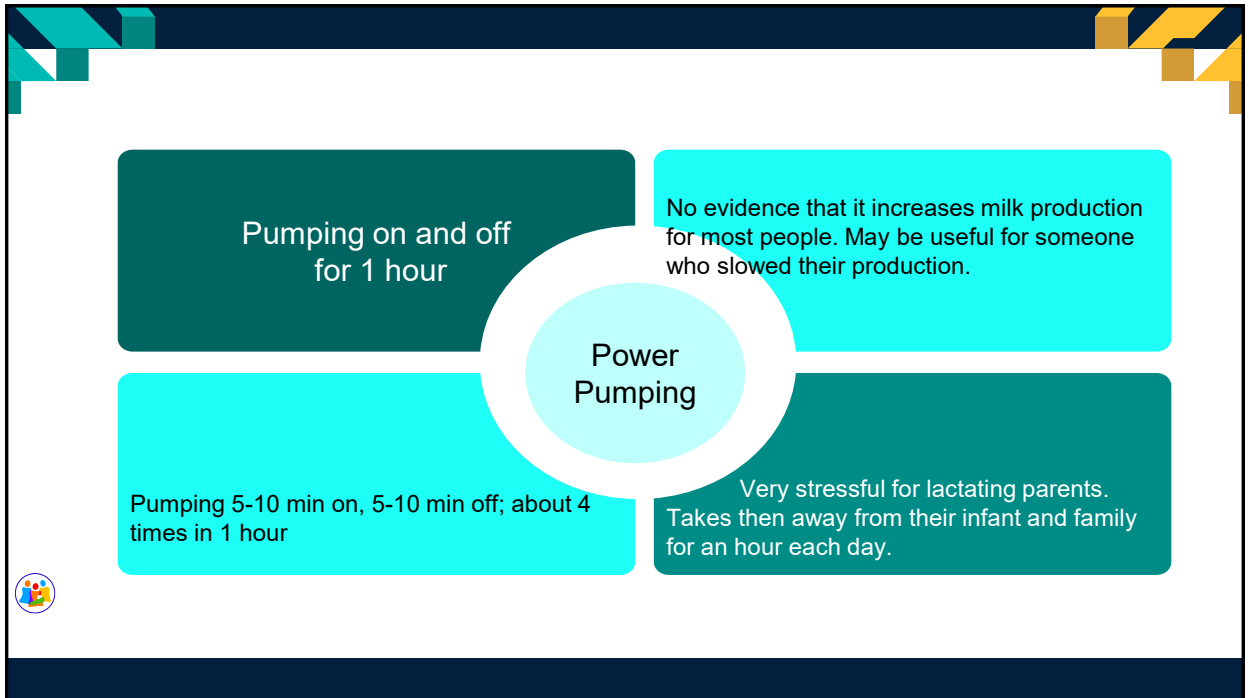




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## Hands on Pumping-Variable Strategies

Before pumping  
to trigger a let-  
down

During pumping  
to aid milk flow

After pumping to  
remove more  
milk

Adding hands is  
not needed if the  
pump is effective  
and efficient



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## Manual (Hand) Expression of the Breast



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## **Ideal Situations for Manual Expression**

- The first week postpartum
- Engorgement
- Low milk production
- No pump available
- Hands-on pumping
- Infrequent need
- Personal/cultural preference



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## Hand Expression Video



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## Triple Feeding

Nurse the baby

Pump after nursing

Supplement the baby with  
EBM or other milk

- Not sustainable to do several times a day
- People often end up pumping 1 hour+ after nursing, taking milk from the next feeding
- Triple feeding will not increase milk production if the infant is an excellent nurser
- If the infant does not remove milk well, then just nurse a few times a day, until infant matures



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## Antenatal Colostrum Expression

- Expressing colostrum during pregnancy
- Demonstrated to be safe in low risk pregnancies after 36 weeks gest.
- Most common reason - to provide colostrum for infants of diabetic mothers
- Research has proven that it does not bring milk in faster!



Sobik et al Bfeeding Med 18(2) 2023 p. 107-115; Moorhead Study Australian and New Zealand J of Obstetrics and Gynecology December 2024

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## SYSTEMATIC REVIEW OF ANTENATAL BREASTMILK EXPRESSION (ABME)

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Systematic review

10 studies

Most Low Quality  
1 RCT

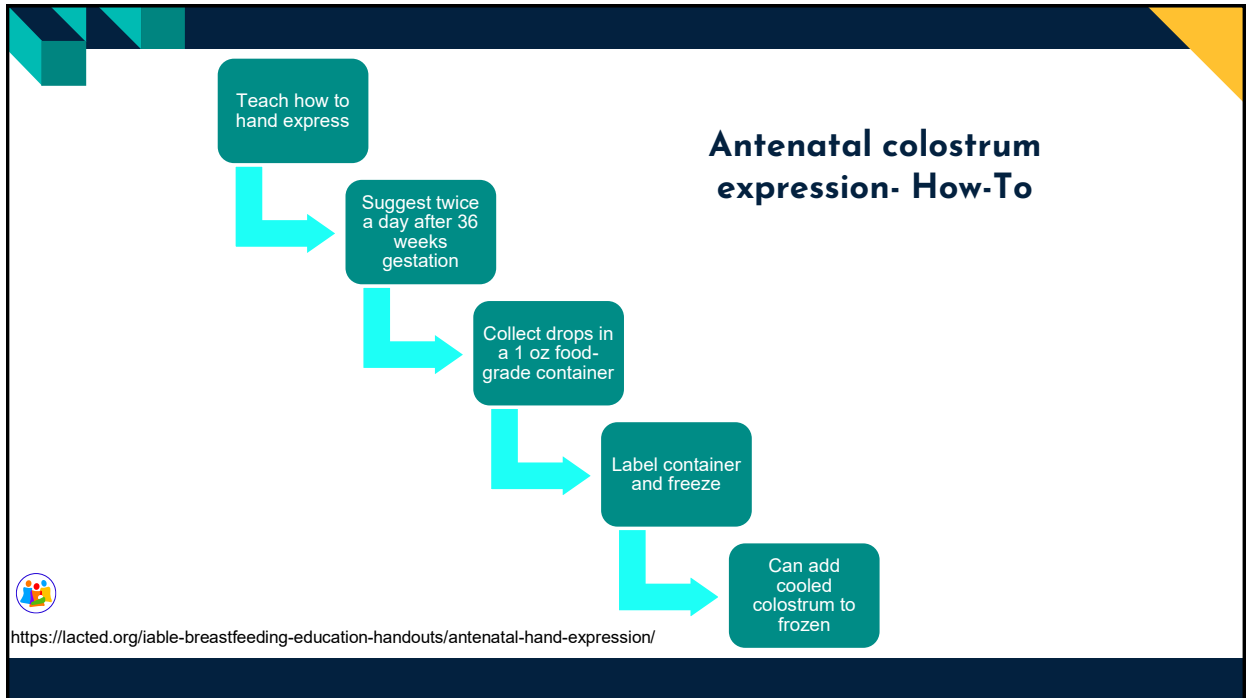
- Most people expressed around 36-37 weeks gest
- Unclear what average volumes are
- The only RCT had women hand expressing twice a day for no more than 10 min among pregnant women with gest DM who were low risk; average vol = 5 ml total for the entire prenatal time (DAME study)
- 5 studies reported that women engaged in ABME had greater confidence and were more committed to breastfeeding
- In the RCT, infants of women who did ABME were given less formula than those who did not do ABME
- Some women reported feeling a sense of failure, guilt, anxiety if they could not express much colostrum
- Antenatal colostrum expression has not been shown to increase milk production or hasten secretory activation



Sobik et al Bfeeding Med 18(2) 2023 p. 107-115

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## Common Pumping Scenarios

### Exclusive Pumping

- Pump every 3 hours
- No more than a 5-6 hour break overnight until 4 months, then a 7-hour nighttime break is OK
- If high production, can pump less often for less time

### Pumping at work, nursing at home

- Pump every 3 hours at work
- Breastfeed when at home

### Pumping while infant's skills are still emerging

- Such as premature, ill, or sleepy infants
- If infant is not removing milk well, practice breastfeeding 2-3 times a day, and pump immediately after
- Pump all other feedings, until infant removes milk well



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**Natasha is a GIPi who is 2 months postpartum and would like to develop a pumping plan for going back to work in 2 weeks.**

**She has been exclusively breastfeeding without complications. She will return to work as a restaurant server 5 days a week.**



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## What questions do you have for her?

- What pump will she be using?
- Does she know how to use her pump?
- Has she had flange fitting?
- What does she know about pumping at this point?
- Does she have some milk stored for her first day back to work?
- If she has pumped, how much did she express in lieu of nursing?
- Has she talked to her employer about pumping at work?
- What are the childcare plans?
- What are her work hours?
- When will she breastfeed the baby before leaving for work?
- When will she arrive for work?
- Is there a place to pump at work?
- Is there a place for milk storage at work?
- Can she pump every 3 hours at work?
- When will she return home?



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## What questions do you have for her?

- What pump will she be using? - *she has a Spectra S2*
- Does she know how to use her pump? *Yes, she has been doing some practice pumps at home*
- Has she had flange fitting? *No, but pumping feels fine right now*
- What does she know about pumping at this point? *She knows how to use her pump but is not sure when she should pump at work*
- Does she have some milk stored for her first day back to work? *Yes, ~20 oz (600 ml) stored*
- If she has pumped, how much did she express in lieu of nursing? *5 oz*
- Has she talked to her employer about pumping at work? - *No, she didn't think she needed to. She thinks he will be OK with her pumping*
- What are the childcare plans? - *her friend will be watching the baby*
- What are her work hours? *Arrive at 3 pm, leave at 11pm Mon-Fri*
- When will she breastfeed the baby before leaving for work? *Before the baby's nap at 1 pm*
- When will she arrive for work? - *She must leave at 2:15pm, will arrive at 2:45 pm*
- Is there a place to pump at work? - *She plans to pump in her car*
- Is there a place for milk storage at work? - *yes, she can use one of the refrigerators in the kitchen*
- Can she pump every 3 hours at work? *She thinks so*
- When will she return home? - *11:30 pm*



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## What can we suggest for Natasha?

- She needs flange fitting reviewed if she has pain, slow milk removal, clogged ducts or other pumping problems. So far pumping is going well for her.
- She may want to talk to her employer to make sure they are aware of her plans for pumping at work
- Inform her that her employer is required to have a space for pumping at work.
- Pumping every 3 hours at work is ideal
- Consider getting to work a little early to pump, such as 2:30 pm, or pump on the way to work in the car.
- Pump every 3 hours, so if she pumps at 2:30 pm, pump at 5:30 and 8:30 pm
- When she arrives home at 11:30 pm either pump or breastfeed
- Leave the fresh milk in the refrigerator for the next day at work. Avoid putting her fresh milk in the freezer and giving the baby older milk.



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## What are strategies to store milk for the first day back to work?

- Express 1-2 oz (30-60ml) total once a day after nursing in the am.
- Start about 2-4 weeks before returning to work.
- Pump from just one side if production is high.
- It is normal for the parent to become tightly matched to the baby's intake, so they may not express much after nursing.
- No need for a large freezer stash! When back to work, what they pump on Monday is for Tuesday's milk.



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## Conclusions

- Parents need guidance on proper breast shield size to prevent complications from pumping.
- Hands on pumping can help with milk removal but not necessary if pumping is going well.
- Antenatal expression helps teach hand expression. It will not bring in milk production faster.
- Power pumping is not an evidence-based strategy to increase production and is often stressful.
- Pumping plans need to be individualized for each person's situation.

