

# The Outpatient Breastfeeding Champion Program Session 3



***IABLE***

---

Institute for the Advancement  
of Breastfeeding &  
Lactation Education



- The Instructor has no conflicts of interest to disclose
- Continuing medical education credits (CMEs) and continuing education recognition points (CERPs) for IBCLE are awarded commensurate with participation and complete/submission of the evaluation form
- CMEs can be used for nursing credits



**IABLE**  

---

*Building  
Breastfeeding-Knowledgeable  
Medical Systems & Communities*



## OBC Session 3

- Breastfeeding in the Immediate Postpartum Period
  - Skin-to-Skin
  - Self-Led Latch
  - Delivery of the Placenta
  - Colostrum
- Secretory Activation (Lactogenesis II)
- Engorgement
- Supporting Dyads during the First Week Postpartum
- Maternal Infant Separation
- Hospital Discharge & Follow Up



**These are the topics covered in this session**

## Objectives for Session 3

- Describe infant-led latch
- Identify the physiologic triggers leading to milk production early postpartum
- Recite 4 crucial steps necessary to establish successful breastfeeding in the first few days after delivery
- Explain to the lactating parent how to manage engorgement



**These are the topics covered in this session**



Photo by Olivia Anne Snyder on Unsplash

5

Immediately after birth the current recommendation is to place the infant on the mother's chest and abdomen for warmth, to allow the umbilical cord to transfer blood to the infant for 30-120 seconds, and to keep the baby warm. The baby can be dried and vitals can be checked while skin to skin. As we will learn later, skin to skin will initiate infant reflexes to breastfeed in the first hour postpartum, when the baby is the most awake and alert on the day of birth.



Here you can see the baby remaining skin to skin while mom is awake and alert postpartum



Photo by [Mohammad Hossein Farahzadj](#) on [Unsplash](#)

7

If a mother or birth parent has a cesarean birth, the infant can be placed skin to skin if possible, or can at least be brought next to mom while they are finishing up surgery.

## BABY-FRIENDLY HOSPITAL INITIATIVE (revised 2018)



### TEN STEPS TO SUCCESSFUL BREASTFEEDING



#### **Critical management procedures**

- 1a.** Comply fully with the *International Code of Marketing of Breast-milk Substitutes* and relevant World Health Assembly resolutions.
- 1b.** Have a written infant feeding policy that is routinely communicated to staff and parents.
- 1c.** Establish ongoing monitoring and data-management systems.
- 2.** Ensure that staff have sufficient knowledge, competence and skills to support breastfeeding.

#### **Key clinical practices**

- 3.** Discuss the importance and management of breastfeeding with pregnant women and their families.
- 4.** Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.
- 5.** Support mothers to initiate and maintain breastfeeding and manage common difficulties.
- 6.** Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.
- 7.** Enable mothers and their infants to remain together and to practice rooming-in 24 hours a day.
- 8.** Support mothers to recognize and respond to their infants' cues for feeding.
- 9.** Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.
- 10.** Coordinate discharge so that parents and their infants have timely access to ongoing support and care.



The Baby Friendly Hospital Initiative is a set of steps which have been proven to optimize the breastfeeding parent's chance to establish successful breastfeeding. Please read and interpret these, but no need to go into great detail

## Breastfeeding Early Postpartum

- Limit pain meds near the end of labor
- Skin-skin right after birth
- Delay cord clamping
- Encourage rooming-in of baby
- Breastfeeding education
  - Staff observes feeds each shift
- No anti-lactation drugs for the parent



9

### **Breastfeeding Early Postpartum**

Ideally **limit pain meds** near the end of labor to help prevent sleepiness in newborn right after birth

#### **Skin-Skin right after birth**

Place the newborn skin-to-skin with the parent immediately after delivery. Delay unnecessary interventions, such as weights, eye ointments, and first bath.

**Delay cord clamping** – the duration of time that the cord is allowed to pulse before cutting depends on the clinical situation, but is often 30-120 seconds. During that time the infant is skin to skin with mom or the birth parent, dried, and observed for vitals. The baby's weight can be done later.

#### **Encourage rooming-in of baby**

The parent needs to identify the baby's early feeding cues. If early feeding cues are missed, breastfeeding is less frequent, and the newborn is at risk for entering a late stage of hunger, leading to disorganization and difficulty latching. Infrequent feeding also can lead to lower milk production.

#### **Breastfeeding Education**

Many parents have insufficient knowledge. They may not have had the opportunity or time to take a class, read a book, etc. Hospital staff need to provide education, which often is in the form of short bursts of teaching at the bedside. Some hospitals have videos on the mother-baby channel to watch.

#### **Staff will observe feeds each shift.**

Parents gain confidence if they are observed and given feedback on positioning, latch, and nutritive feeding. If the parent is developing sore nipples, this should be addressed. Education provides confidence and independence.

**No anti-lactation drugs** will be given to the parent. We will be discussing this later.

## Early Skin-to-Skin Contact

- Increased:
  - Breastfeeding duration
  - Temperature regulation
  - Blood sugar control
- ↓ Infant crying
- ↑ Maternal affection



AAP Pediatrics 138(3) Sept 2016

## Early Skin-to-Skin

We know from several studies that when babies are put skin-to-skin early, they have increased:

**Breastfeeding duration** – the baby is likely to nurse longer than a baby who did not have a chance to be skin-to-skin with mom in the hospital

**Thermoregulation** – mom is the ‘warmer’, and she is able to keep the baby warm. The baby does not need to be separated into a separate warmer

**Blood glucose** –the baby’s blood sugar is much more stable. This is probably due to the fact that the baby is more likely to nurse early, longer and more often. The baby is also warmer, which helps to prevent a drop in blood sugar

**Infant crying** – The baby does not cry as much, as the baby feels safer, is more comfortable and feeding more often.

**Increased maternal affectionate love/touch** Early skin-to-skin helps to change mom’s hormones too, which have an effect on her sense of affection, bonding, and love for her baby



## Skin-to-Skin and Self-Led Latch

- Awakens infant feeding reflex
- Organizes route to feeding
  - Search->feel->root
  - Baby finds the nipple/areola and latches

11

### **Skin-to-Skin and Self-Led Latch**

Why does skin-to-skin increase breastfeeding frequency, and early nursing?

#### **Skin-skin awakens the infant feeding reflex**

Think about what happens when you hold a young baby against your chest, and the baby is awake. The baby will start to bob and peck at your chest with his mouth. You will then feel the baby shift his weight to one side, as if the baby is 'flinging' himself to one side.

The bobbing/pecking and flinging to one side make up the feeding reflex. These are movements that indicate that the baby is looking for the breast. Starting Chest-chest stimulates these reflexes to take off.

#### **Organizes route to feeding**

If the baby is allowed to move to the side, the baby will use his mouth and cheeks to 'root', by moving his face from side to side, using the cheeks to root to find the nipple.

Once the baby finds the nipple the baby will try to latch.



## Delayed Cord Clamping (DCC)

- The newborn is placed skin to skin after vaginal delivery for at least 30 sec-120 seconds after birth to allow for blood transfusion from the placenta to the baby
- DCC helps to prevent anemia in breastfed infants
- DCC enables the natural process of skin to skin while waiting to clamp and cut the cord



American College of OB/Gyn Opinion 814, 2020

12

### Delayed cord clamping

The infant is placed skin to skin after vaginal delivery for 30 sec- 2 minutes to allow for blood transfusion from the placenta to the baby

DCC helps to prevent anemia in breastfed infants. It has also been shown to be very helpful for preterm infants, by decreasing the need for blood transfusions, intraventricular hemorrhage and necrotizing enterocolitis.

DCC enables the natural process of skin to skin while waiting to clamp and cut the cord

## First Feeding as Soon as Possible After Birth



- Baby Friendly Hospital Initiative Step 4
- Newborn awake & alert first 1-2 hours (the Golden Hour)
  - Decreases risk of low blood sugars
    - Low blood sugar leads to early bottle supplementation
  - Parental breastfeeding confidence is higher with early feeding at the breast



13

### First Feeding in the First Hour

#### Baby Friendly Hospital Initiative Step 4-

Facilitate immediate and uninterrupted skin-to-skin contact and support individuals to initiate breastfeeding as soon as possible after birth.

*This step is meant to be achieved by having the baby skin-skin right after birth, which will allow the baby to nurse when ready. If parent cannot put the baby skin-skin, then the other parent is encouraged to put the baby skin-skin*

#### **Newborns tend to be awake and alert the first few hours after birth.**

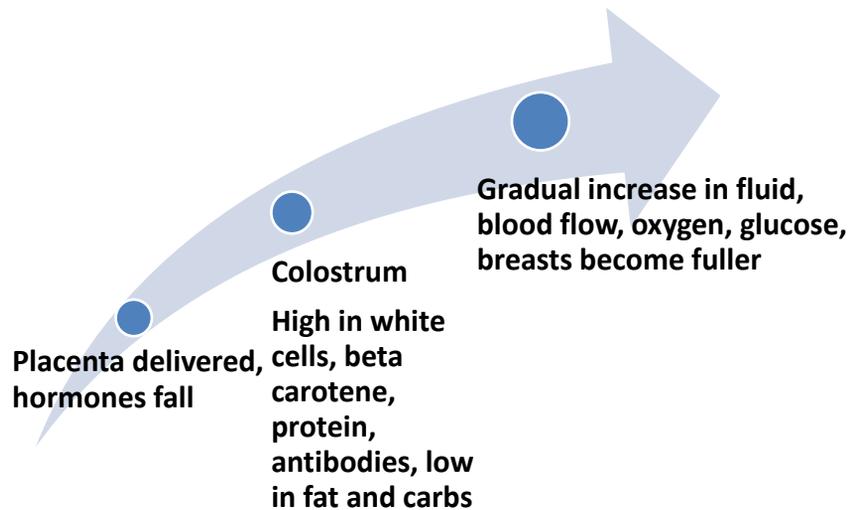
This means that the baby is ready and most likely to latch well at this time. The baby often becomes sleepy and less interested in nursing for the next several hours. This is often referred to as the 'golden hour'

#### **This is an important window for the first feeding.**

Breastfeeding right away decreases risk of low blood sugars, which is a common reason why babies receive bottle supplementation early postpartum.

The parent develops confidence that baby can nurse well. IF the baby won't nurse for the rest of the day, the parent still knows that the baby has the ability to latch and nurse.

## Lactogenesis II (Secretory Activation) After Birth



14

### Lactogenesis II After Birth

Lets talk about how milk increases after birth. This is also known as secretory activation. As you know the breasts are not full of milk at the time of delivery, so what changes occur in the body to start the process of milk production?

#### **Placenta is delivered and the hormones fall**

As you learned in the previous sessions, the hormones from the placenta tell the breasts to develop during pregnancy, in order to have the proper tissue that is needed to make milk.

The breasts won't start making milk until the placental hormones leave the body. So the placenta hormones tell the breasts to **Get Ready, Get Set, But Don't GO Until I Leave**

The placenta is delivered right after the baby is, and over the next 2-3 days, the body's levels of these hormones are gradually decreasing, which then allows the breast to start making milk

#### **Colostrum**

The first milk that appears is colostrum. This is also present in the last trimester of pregnancy, and the volume gradually increases in the first few days. Colostrum is very yellow, thick, and full of infection-fighting white cells. It is high in a substance called beta-carotene, making the milk quite yellow. This is the same substance that causes carrots and sweet potatoes to be orange. Colostrum is also high in protein, low in fat and carbs. It is low volume, because babies don't need high volumes of milk in the first few days of life.

#### **Gradual increase in fluid, breasts become fuller**

By days 2-5 the individual notices that heavier/fuller breasts. The body is bringing more oxygen and fluids to the breast in order to make a larger volume of milk.



This is a picture of colostrum. You can see how yellow and thick it appears.

## Colostrum

Early colostrum feeds are small in the first 48 hours

Small, freq feeds are appropriate for newborn size.

Every 1-3 hr feeds are expected 8-12 times/day in the first several days

ABM protocol on Supplementation 2017

16



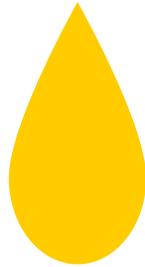
### Colostrum

On average infants take 2-10 ml per feeding in the first 48 hours.

#### Requires Frequent Feeding

Babies nurse very often given the low volume of colostrum. It is expected for the baby to nurse every 1-3 hours for the first few days. During awake times, the infant may cluster and feed every hour for 2-4 hours, before going back to sleep. Therefore, they are feeding approximately 8-12 times every 24 hours

## What is the Total Colostrum Produced in the First 24 Hours? 48 hours?



**0.1-11ml total  
0-24 hours**



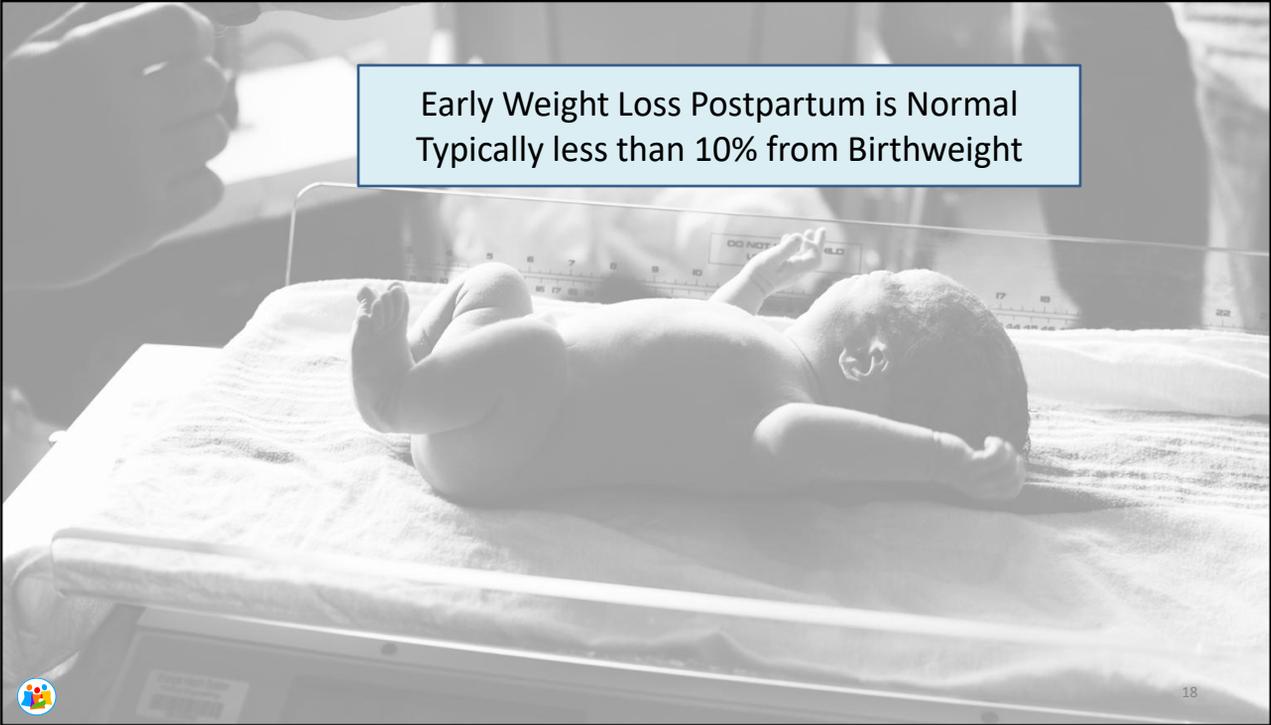
**2.2-40 ml total  
24-48 hours**



Kato et al Breastfeeding Med 2022 Jan; 17(1): 52-58

17

Ask what they think is the total colostrum produced at 24 hours, then at 48 hours. This was a study of 101 mothers in Japan who gave birth to infants who could not breastfeed. They hand expressed every 3 hours around the clock for 2 days, with help from midwives. No difference in volumes between primips and multips in the first 24 hours, or between vag vs cesarean birth. The Multips increased their volumes faster after 24 hours



Early Weight Loss Postpartum is Normal  
Typically less than 10% from Birthweight

**Early Weight Loss is Normal- ABM Clinical Protocol #3 on Supplementation, 2017**

Infant weight loss is normal the first 2-3 days until milk supply increases. Typical weight loss is 5-10%. Once the baby is at 10% weight loss, the infant's weight and milk production need to be closely observed. It is important to monitor whether milk production is increasing, and that the baby is feeding well, to prevent further weight loss and ensure that the infant is gaining weight. **We will talk more about this in session 5.**



This is a picture of an early feeding cue. You can see that the baby is awake and his hand to his mouth. This would be the time to put the baby to the breast, rather than waiting until the baby is frantic and crying. In order to recognize this cue, parent(s) need to be focused on the baby, not on pictures, presents, guests, etc.

## Latch Is More Manageable Before Infant is Crying!



20

Click on the infant to play this video. This shows a restless infant, who is not crying with hunger, but certainly ready to eat. Catching infants early helps latch, because they are not beyond frustration yet and are still organized.



Frequent Feeding +  
Complete Emptying =  
Rise in Milk Production



Infrequent Feeding +  
Poor Milk Transfer =  
Insufficient Milk  
Production



21

### **More Milk (Up Arrow)**

More frequent feeding and complete emptying of the breasts will help to ensure a sufficient milk production

### **Less Milk (Down Arrow)**

The principle here is that when the breasts are making milk, but the milk is not removed, the cells that make the milk will slow down on milk production

Engorgement is a common problems that can lead to a decrease in milk production, especially if it is prolonged

Leaving the breasts full by not nursing the baby often will also lead to loss of milk.

In addition, if the baby is not transferring milk well, the breasts will remain full, which also will lead to a decrease in production.

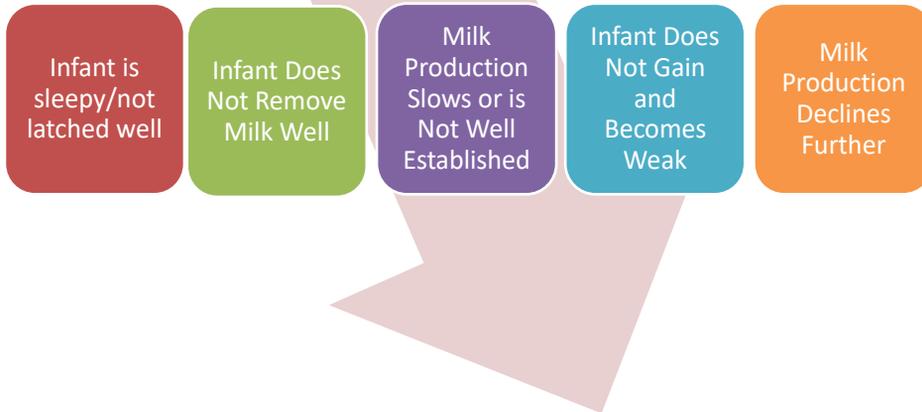
## The Positive Trend in Milk Removal with Feeding



22

With healthy feeding, the infant takes plenty of milk from the breasts, leading to an increase in milk production. The baby gains well, and increases his strength. The milk production continues increase according to the baby's demands, and the baby keeps gaining appropriately.  
This is a healthy feeding cycle.

## The Negative Trend when Insufficient Milk is Removed During Feeding



23

A sleepy baby tends to not transfer milk well, leading to the baby to not take enough calories, which results in weight loss and weakness. Milk production will decline because insufficient amount of milk is removed.

This will then lead to more sleepiness since the baby is not taking enough calories. It is a vicious cycle, which can lead to dangerous infant outcomes, and loss of milk production



### **Transition to transitional milk**

Transitional milk, on the left occurs after the colostrum stage, before it is mature, as seen on the R. Transitional milk is present from about day 3 to the third weeks.

Transitional milk looks more yellow that mature milk, but is thinner, with less protein and more volume than colostrum. It is higher in protein that mature milk.



**How could a pacifier affect breastfeeding success?**



Please ask the participants these questions to stimulate discussions



## Early Pacifier Use and Breastfeeding

- Studies have shown no impact on breastfeeding rates at 2,3,4, and 6 mo
  - Possibly because parents in these studies are shown how to use pacifiers safely



<sup>26</sup>  
Cochrane Database of Systematic Reviews 2016, Issue 8. Europ J Pediatr 2022 Sept; 181(9)

There is strong evidence that pacifier use does not interfere with breastfeeding. The problem with these studies is that the participants in the study were probably educated on how to use pacifiers safely. It makes common sense to have parents avoid all pacifiers until the infant is nursing well and gaining weight well. See next slide

## When Are Pacifiers OK?



- Baby is latching & nursing well
- Back to birth weight
- Good weight gain
- Painful procedures or separations when mom cannot be present



### **When are Pacifiers OK?**

#### **Baby is latching & nursing well**

If the baby is not nursing well or latching well, there are obviously nursing problems. Address the nursing problems first, and have a plan for improvement before offering a pacifier.

#### **Back to birth weight and continuing with a good weight gain**

In the first few weeks, babies are usually content and sleepy after nursing, as long as the calorie intake is good. They often don't look for a pacifier until they have more awake alert time, after a few weeks of age. It is best to not give a pacifier early on, since the infant might just sleep away his/her hunger cues and not wake up to feed. Prove that the baby will wake up and take enough calories at the breast over the first few weeks, before offering a pacifier.

#### **Painful procedures or separations when mom cannot be present.**

We know that sucking is soothing, and this can help when a baby is upset, such as with a blood draw, or when mom cannot be present, such as at daycare.



**How could rooming-in affect  
breastfeeding success?**

Please ask the participants these questions to stimulate discussions

## Evidence for Rooming In

- Improved patient satisfaction
- Decreased risk of abductions/switches
- Decrease infant abandonment
- Empowerment to parents
- Increased frequency of breastfeeding
- Decreased hyperbilirubinemia
- Increased likelihood of nursing up to 6 months



Photo by Gabriel Tovar on Unsplash



### **Why does Rooming In Increase Breastfeeding Success?**

This is a list of benefits for rooming in, as described by the American Academy of Pediatrics in 2016

The decreased risk of hyperbilirubinemia is because of the increased frequency of breastfeeding

## Risks of Early Bathing



- World Health Organization recommends first bath at 24 hours of age
- Bathing in the first 24 hours is associated with decreased exclusive breastfeeding at time of hospital discharge
  - Prevents skin to skin
  - Increased risk of hypothermia, causing fatigue and poor feeding
- AAP advises bathing after first feeding if birthing parent has HIV, a hepatitis virus, or COVID-19



### Risks of Early Bathing

The World Health Organization recommends the first bath at 24 hours of age-  
file:///C:/Users/aregl/Downloads/WHO-MCA-17.07-eng%20(1).pdf

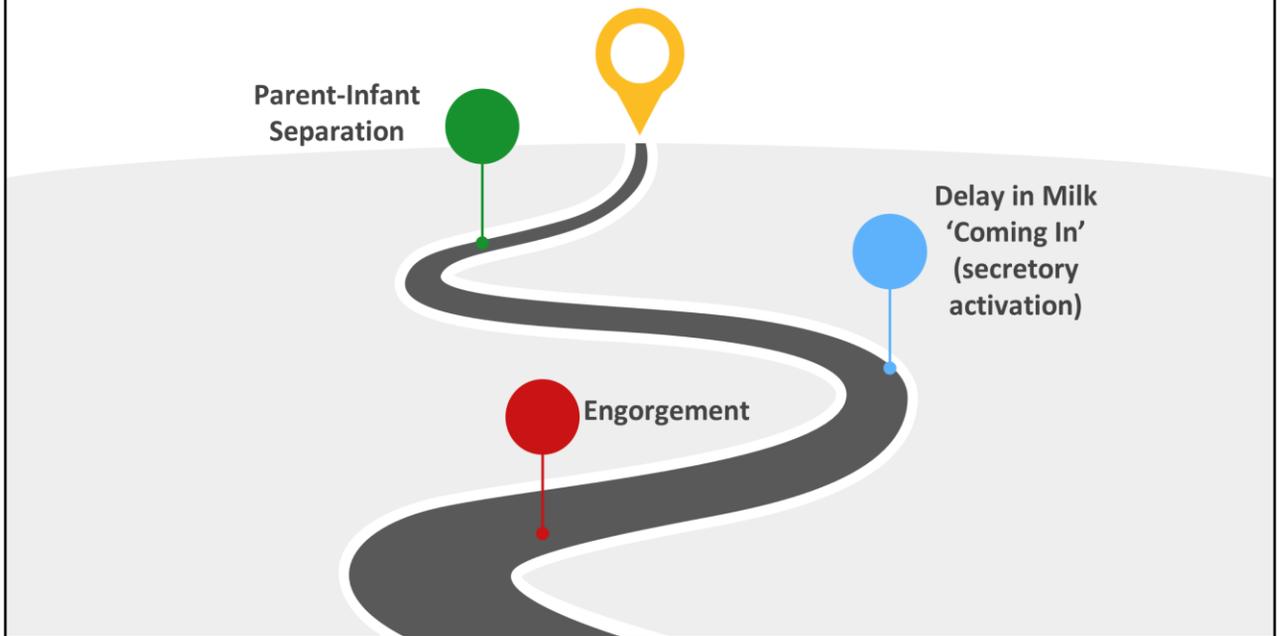
Early bathing, within the first 24 hours is associated with decreased exclusive breastfeeding at the time of hospital discharge. It is thought that it interrupts time that the infant is skin to skin.

It also appears that early bathing decreases the infant's core temperature, leading to fatigue and poor feeding.

Best to wait at least 24 hours to bathe.

This comes from DiCioccio HC, Ady C, et al Initiative to Improve Exclusive Breastfeeding by Delaying the Newborn Bath. Health Care Improvement and Evaluation 48(2) p. 189-196 March 2019

## Bumps in the Road Early Postpartum



This is a Summary Slide- There are some major issues that can occur soon after birth, that can make breastfeeding more challenging. We will talk about each of these

# Parent-Infant Separation



## Help parent establish and maintain lactation

- Initiate milk expression within the first hour pp
  - Initiation between 1-6 hours OK for production, but within 1 hour is best to express colostrum for newborn
- Pumping + manual expression
  - Frequency is key to sufficient production
- Maintain and promote bonding
- Skin-to-skin



\*Parker et al J Perinatology (2020) 40:1236-1245

32

## **Maternal-Infant Separation- for instance, if the birth parent goes to the ICU or needs surgery**

### **Help mothers establish and maintain lactation**

Help mom pump with manual expression within the first hour. The most recent randomized control trial on the timing of first expression and milk volumes was done by Parker et al in 2020. They found that initiation in the first 6 hours is no different than first hour. It is all about freq of pumping, not exact timing.

This means hand expression during or after pumping. Using hands will help to express thick colostrum, which is harder to do with a pump.

### **Maintain and promote bonding**

Mom should be encouraged to hold her baby as much as possible, and to have skin-to-skin as much as possible.

This will help increase her milk production

(We will show a video on hands-on pumping in the 7<sup>th</sup> session)

# Premature Infants



- Initial milk expression within the first 1-2hrs
  - Critical to have colostrum for oral immune care
  - Frequency of pumping more important than pumping in the first hour
- Frequent expression, at least every 3hr with no more than a 5hr break at night
- Coach the parent on optimal pump use + hand expression
- Nuzzle, skin-to-skin when possible
- Encourage full milk production by 14 days (600ml-750ml)

There is some evidence that milk production is higher with early onset of expression, but there is stronger evidence that frequent expression is needed, at least every 3 hours with no more than a 5 hour break at night, and that pumping in the first 1-2 hours is not as crucial as the frequency of pumping. (Parker, Sullivan et al J Perinatol 2020 40: 1236-1245)

However, early hand and/or pump expression in the first 1-2 hours will provide colostrum for oral immune care, that should be given to premies approximately three times a day for the first several days or week (Jain et al Breastfeeding Med 2022 Jan 17(1))

Parents need strategies to optimize their production while pumping, so work with parents to ensure pump availability, properly fitted flanges, and optimal pump pressures. We will talk more about pumps in session 7

Frequent skin to skin helps milk production.

Nuzzling the infant at the breast, such as allowing the infant to lick the nipple, can help increase the prolactin level, which can help build milk production.

The lactating parent should be encouraged to reach the peak milk production by 14 days, as this is needed for when the infant is older, which is typically 600ml-750ml per day.

# Diagnosis of Delayed Lactation

- Milk is not 'in' by:
  - Day 2-3 for those who've previously lactated
  - Day 2-5 for first baby



- No breast fullness
- Excessive infant weight loss



34

## Diagnosis of Delayed Lactation

Signs of a delay in lactation include:

**The milk is not in by day 3 for a multiparous mom, or by days 5 for a primiparous mom.**

**Moms breasts won't feel fuller or heavier**

**The baby loses excessive weight (>10%)**

In this situation, babies can have different appearances:

1. The baby might be angry, aggressive with feeding and fussy at the breast. Mom notices that the baby seems hungry
2. The baby is calm, loves to relax and nurse at the breast, and won't fuss at the breast. The baby might sleep peacefully between feedings. In this situation, a first time mom might not know that anything is wrong, until the baby is weighed.



## Delayed Secretory Activation- (Milk Comes in Late) What to do?

- Breastfeed the baby first
  - Pump + manual expression after feeding
  - Supplement with expressed BM, + any other supplementation needed
- Supplement by ~10% weight loss if production is not sufficient yet
- Firm feeding plan, and follow dyad closely



35

### **Delayed Secretory Activation- What to do?**

#### **Feed the baby at the breast first**

For each feeding put the baby to each breast/chest first. Recommend that the parent pump and manually express the breasts after feeding, and feed that expressed milk to the baby. Depending on volume, other supplementation may be needed such as donor milk or formula. Soon we will talk about ways to supplement.

#### **Supplement by about 10% weight loss, particularly when milk production has not increased sufficiently**

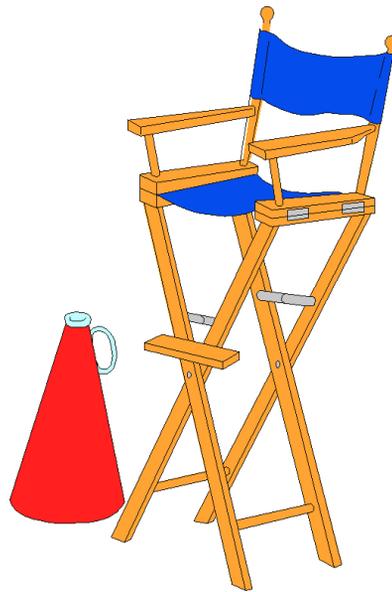
When should we decide that it is important to give the baby more calories? Typically, if the baby has dropped to a 10% weight loss, the parent notices no increase in breast heaviness/fullness, and the baby is either nursing too often or clearly not satisfied. It is important for the parent to pump and/or manually express after nursing, and supplement the baby with expressed breastmilk. IF there is not much expressed milk the baby might need either donor milk or formula to supplement. Supplementation can occur in different ways, which we will talk about later, in session 5.

#### **Develop a firm feeding plan, and follow these babies closely.**

When problems like this come up, parents need firm guidance on what to do. A feeding plan is needed, such as how often to nurse the baby, how to express the breasts after feeding, and how the baby will be supplemented. The dyad should be followed closely often every 1-2 days depending on the parents' experience and confidence.

## What are Options for Supplementation?

- The parent's expressed human milk
- Donor human milk
- Infant formula



36

### **What are Options for Supplementation**

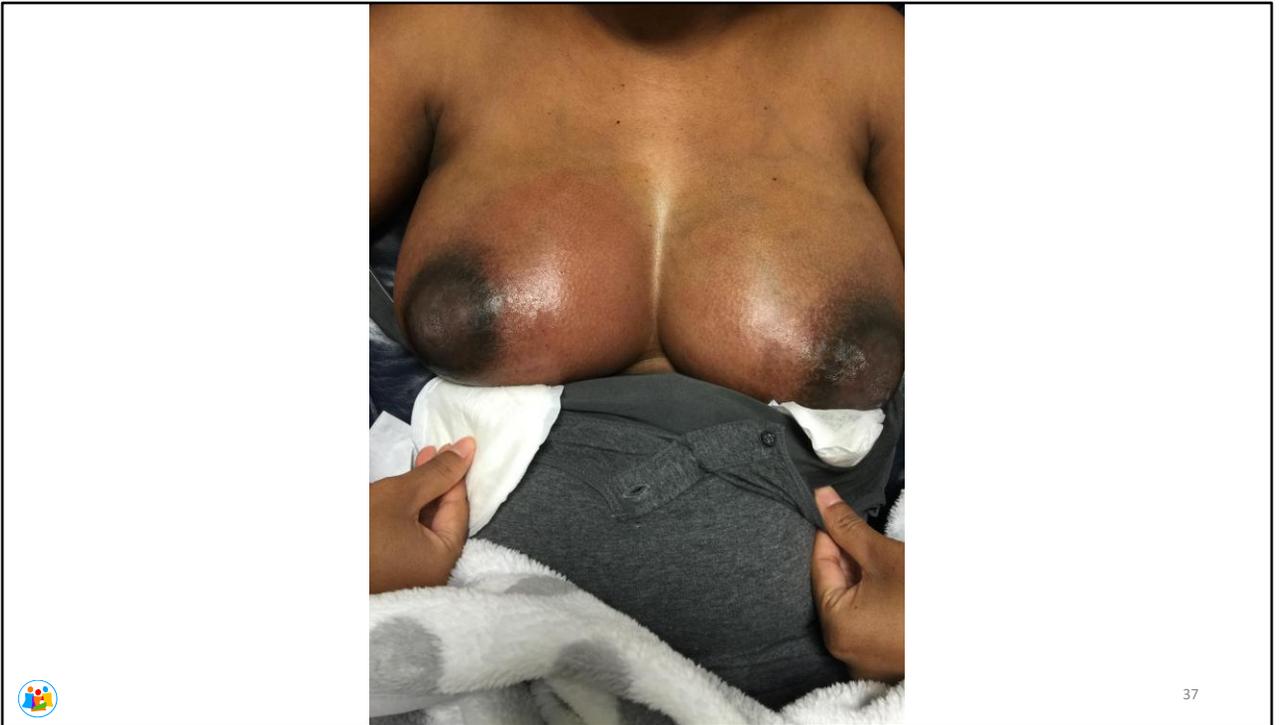
**The picture of the directors chair is a symbol that you are the director, guiding families on options.**

#### **The parent's expressed human milk**

##### **Donor Human Milk**

This can be pasteurized milk from a milk bank, or milk donated from an individual who the family knows well.

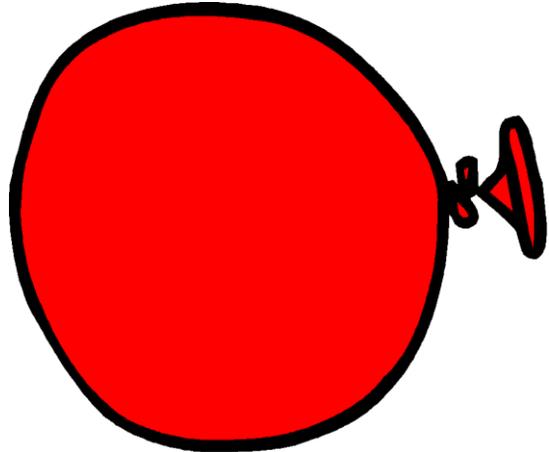
##### **Infant formula**



This is a picture of significant bilateral engorgement. The next slides will discuss engorgement

# Engorgement

- Days 3-5 pp
- Increased blood flow
- Edema (swelling)
- Not the same as 'too much milk'



38

## Engorgement

### Days 3-5 postpartum

Engorgement does not happen for everyone. It is more common with the first baby. It occurs when the body is bringing more fluid to the breast to increase milk production, around days 3-5 postpartum.

### Increased blood flow

Engorgement in the first week postpartum is due to increased blood flow to the breast, in order to start the process of making milk.

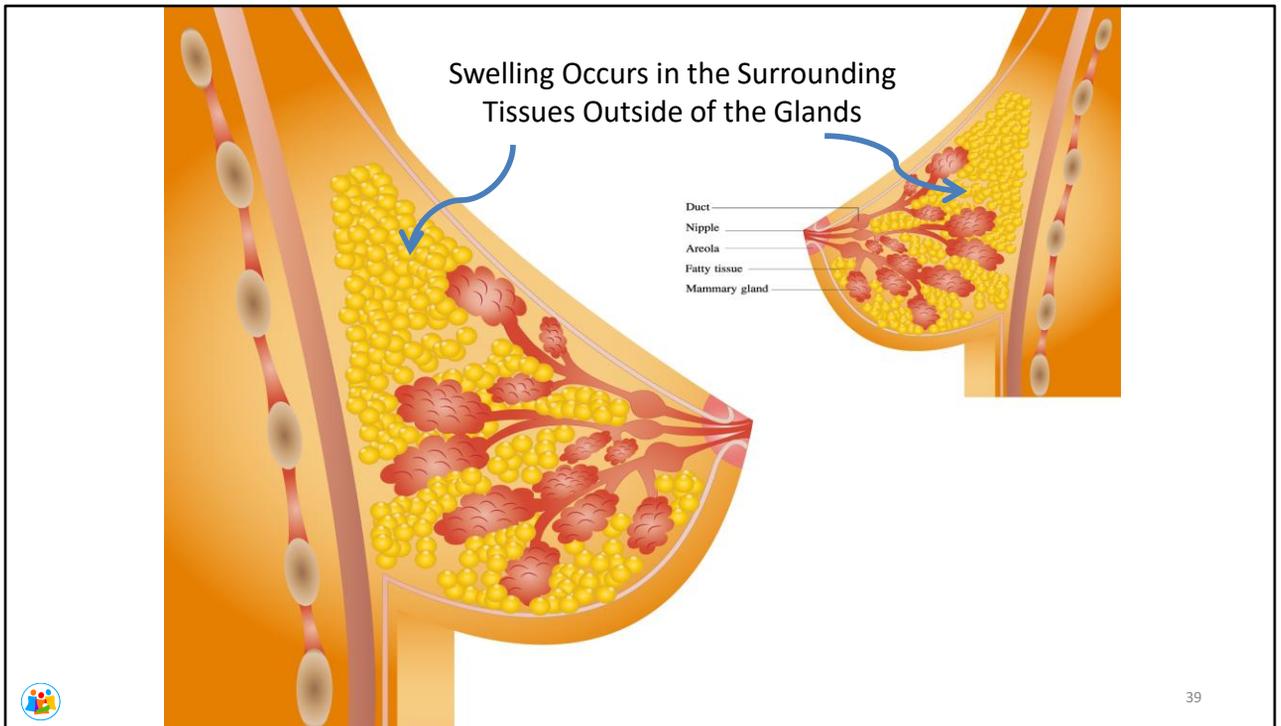
### Edema

An engorged breast is often swollen with edema, much like a swollen ankle. There is fluid in the tissues around the ducts and milk producing cells.

### Not the same as hyperlactation

Hyperlactation refers to having a high milk production. Engorgement is swelling, which is NOT the same as having lots of milk. Therefore, engorgement cannot be 'pumped off' like breasts that are full due to hyperlactation

The next slide shows a picture of where edema occurs  
(go to next slide)



This slide demonstrates that the swelling is in the tissues that surround the glandular, milk producing, tissue. The swelling can actually put pressure on the glandular tissue, making it difficult to express milk that is being made

# Effects of Engorgement

- Harder to latch
- Sore nipples
- Breast discomfort
- Reduction in milk production



40

## Effects of Engorgement

There are several negative effects of engorgement on lactation

### Harder to Latch

When the breast is so full, the nipple/areolar area is hard to compress and latch to. An analogy would be a tightly blown-up balloon. It is hard to grab the end of tightly blown-up balloon. In the same way, the baby has trouble latching deeply onto the breast.

The baby ends of latching shallowly, which leads to nipple trauma.

### Sore Nipples

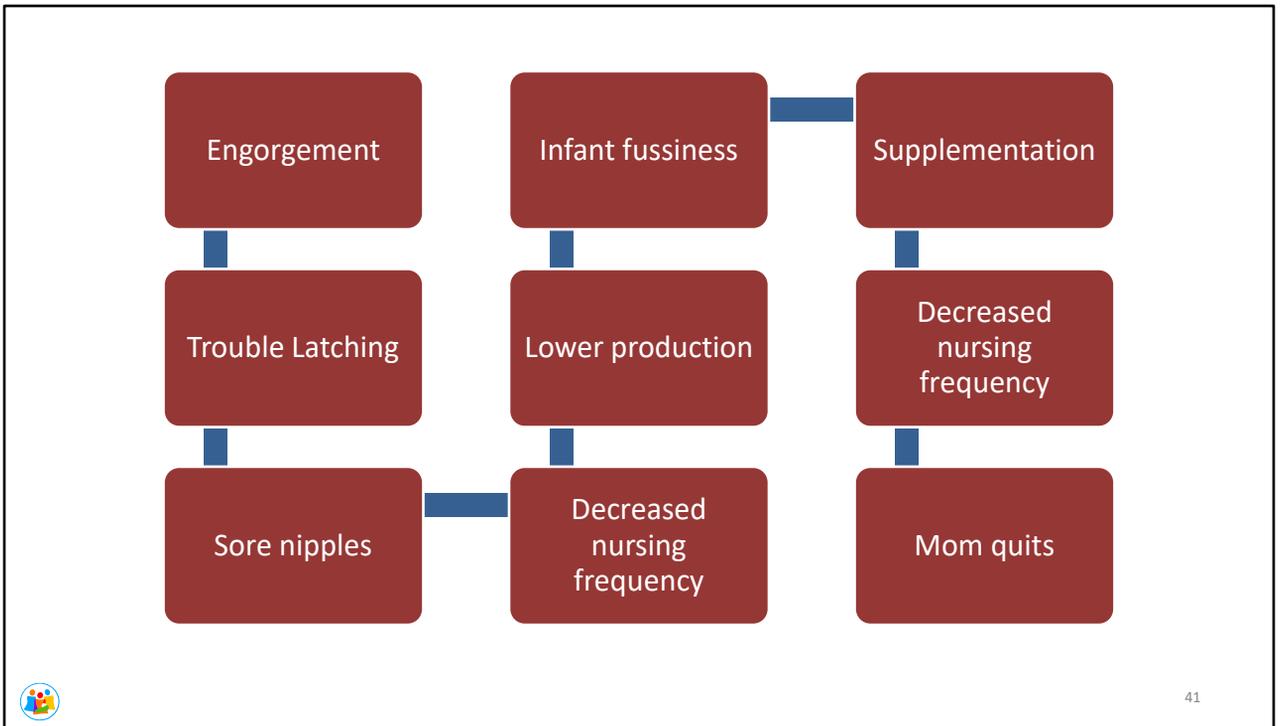
The parent experiences sore nipples because the baby is latching on shallowly. This is a very common reason why nursing have gone well at hospital discharge, and soreness and possible cracks began after discharge, on days 3-4.

### Breast Discomfort

Engorgement causes the breasts to feel heavy and uncomfortable. The breasts might appear warm, and even red and tender.

### Reduction in milk production

This can be a very serious result of sustained engorgement. Sometimes it is hard to express milk when there is so much swelling in the tissues around the milk producing glands. If the milk cannot leave the breast, milk production will slow down and possibly stop.



This is a common scenario for many lactating parents:  
 The lactating parent experiences engorgement  
 This leads to trouble latching the baby onto the breast  
 Sore nipples occur because the baby cannot latch on deeply  
 Because of pain the baby is nursed for shorter periods and less often because of nipple pain  
 Milk production declines because of not nursing the baby as often  
 The baby becomes fussy due to hunger  
 The parent feels a need to supplement the baby because of increased hunger cues  
 The baby does not nurse as often because the baby is receiving supplementation. So instead of nursing every 2-2.5 hours, the baby nurses every 3-4 hours  
 In addition, the baby starts to prefer the bottle, so may not be as eager to nurse.  
 The parent is frustrated and quits nursing

## 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!!**



42

### **Treatment for Engorgement- the picture is hand expressing drops of milk Heat before breastfeeding to improve milk flow.**

The parent can apply hot compresses to the breast for 5 minutes before nursing or pumping. A disposable diaper placed in very warm water makes an easy warm compress for the breast.

### **Express some milk to soften areolae**

This will make it easier for the baby to achieve a deep latch

### **Reverse pressure softening.**

This is a technique to decrease swelling around the nipple/areolar area. It involves taking the finger tips and pushing down on the areola at the base of the nipple, to reduce swelling.

### **Apply cool compresses after nursing to decrease edema (swelling).**

Some people advise cabbage leaves, which have not been shown to be more effective than cool compresses

**Best Treatment is prevention with frequent feeding!!**



43

This slide has the video on reverse pressure softening



This is a lymphatic massage video. The touch is as light as a cat, just lifting the skin to activate lymphatic flow

## See Babies Within 24-72 Hours after Discharge



- 24 hours:
  - If jaundice, poor nursing, sore nipples
  - First breastfed infant, feeding OK, milk not in yet
- 48 hours:
  - If breastfeeding fine, milk increasing, no jaundice, no pain
- 72 hours
  - If cesarean birth, feeding well, milk in at discharge, baby's weight loss has stabilized



45

### Supporting Dyads Immediately After Discharge

See babies within 24-72 hours after discharge:

**24 hours:**

**If jaundice, not nursing well, sore nipples**

These dyads need to be seen back right away to see how the feeding plan is going, recheck jaundice, follow up on sore nipples.

**If this is the first breastfed infant, nursing OK, milk not in yet**

Dyads who leave the hospital and milk is not increasing yet should be seen in 24 hours to make sure the baby's weight is OK

**48 hours:**

**If feeding fine, milk increasing, no jaundice, no soreness**

**72 hours:**

**If cesarean birth, nursing fine, milk in at discharge, especially if baby's weight loss has either stabilized or is gaining wt**

## Early Postpartum Concerns



In the next few slides we will talk about some very common concerns that parents have the first few days home after birth



## Infant up during the Night, Sleepy in the Day

- Day-Night cycles reversed at birth
- Wake the baby to feed during the day
- Parents take daytime naps
- Keep baby up in the evening
- Keep lights low at night, put baby back to bed after feeding



47

### **The baby is up all night, and sleepy in the day**

#### **Day-Night cycles are reversed at birth**

Fetuses have their awake time when the parent settles into bed to sleep. When the baby is born, the baby's natural rhythm is to be up at night, and sleep more in the daytime.

#### **Wake the baby to feed during the day**

Don't let the baby sleep away the day. If you as an adult nap too much in the day, you will have trouble sleeping at night. Newborns need a lot of sleep, but they should be woken to feed regularly, and encourage awake time during the day.

#### **Parents take daytime naps**

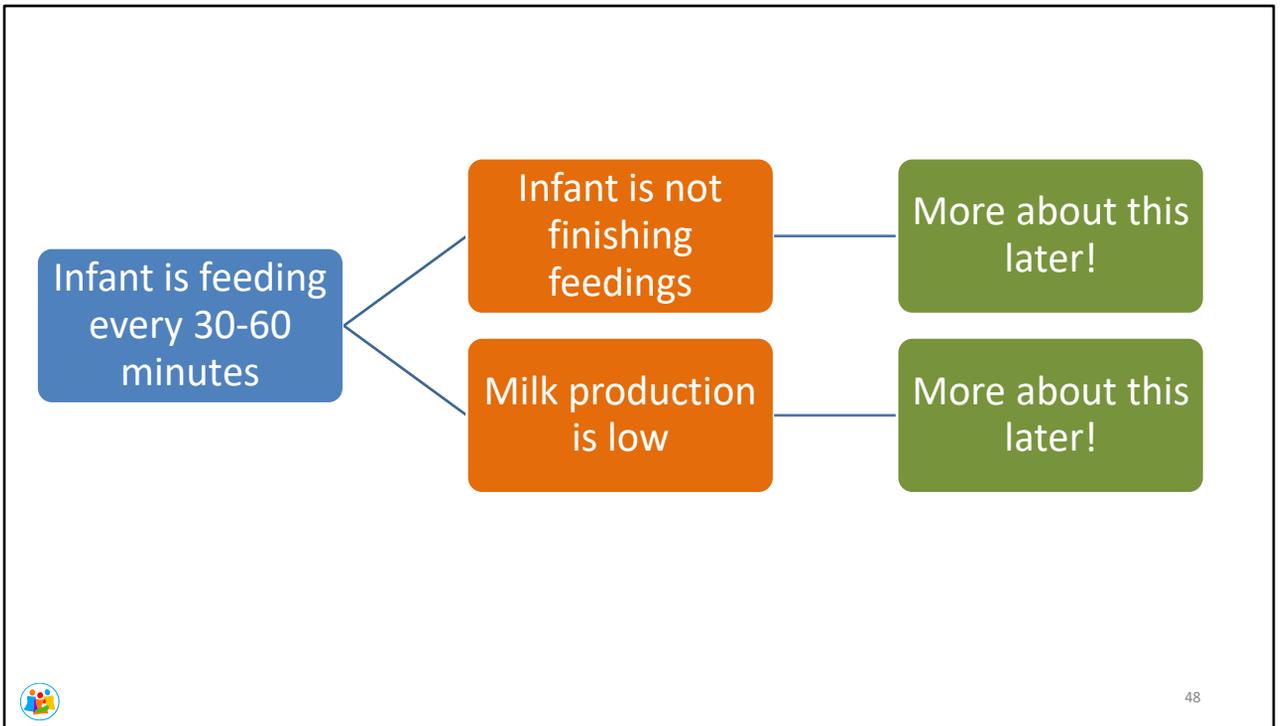
Because parents are up with the baby at night, they need to rest during the day. If they don't, parents often make a decision to take turns getting up and feeding the baby. This will lead to the lactating parent not feeding as often at night, and a decrease in milk production

#### **Keep the baby up in the evening**

This way the baby feeds more often in evening, and wakes less in the middle of the night. Don't let the baby sleep away the evening time, from 6-10 pm. The baby will want to be up much more in the middle of the night if he is well rested from having power naps in the evening.

#### **Keep lights low at night, put baby back to bed after feeding**

Keep the lights low, keep the environment quiet, and try not to play with the baby at night, so that the baby goes back to sleep.



**Baby feeds every 30-60 minutes.**

This is a common problem that can be difficult to sort out. Many parents will assume that the milk production is low, so they will supplement with formula.

Possible reasons include:

1. The baby is falling asleep at the breast and is not finishing feeding.
2. Milk production is low

We are going to talk about strategies to manage these infants in the 5<sup>th</sup> session.



Parents are exhausted, can they give a bottle at night?

- Encourage all feeds at the breast
- Ideal for the lactating parent to not skip feedings
  - Pump if parent needs a feeding break
- Nap while infant is napping
- Make sure the baby finishes feeding
  - Typically feeding every 1.5-3 hours, occasional clusters
  - Move feeding clusters to evening



49

**Parents are exhausted, can they give a bottle at night?**

**Explain that all feeding is best done at the breast early on.**

The lactating parent should be encouraged to not skip feedings. Some lactating parents look for a break from every feeding. The lactating parent should be encouraged to pump in lieu of directly feeding if needed. Sometimes pumping is faster than direct feeding, and this allows the parent to have a break.

**Nap while infant is napping**

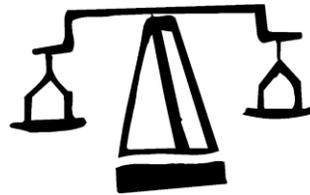
The lactating parent needs rest in the day in order to be up at night nursing

**Make sure the baby is finishing feeding to decrease frequency of nursing**

Typically direct feeding occurs every 1.5-3 hours, with occasional clusters  
Move clusters of feeding to the evening, so that they don't happen over night

## Parents worry that they cannot tell how much the baby is taking

- Check infant weight with current eating pattern
  - Encourage parents to trust the baby
- Weigh the baby often to instill confidence
- Explain risks and challenges of pumping/bottle feeding



50

### Parents worry that they cannot tell how much the baby is taking

#### **Check infant weight with current eating pattern-**

Excellent weight gain should give the parents confidence

Encourage parents to trust the baby- reassure them that the baby's feeding cues are safe to follow, as long as the baby has been gaining well.

However, if baby is not gaining well, they have a good reason to be concerned. Validate their concerns, and the family will need a feeding plan.

#### **Weigh the baby often to instill confidence**

Let the parents know that you want to support them. This might mean weighing the baby often to allow them to feel confident that the baby is taking enough milk with nursing.

#### **Explain that pumping and bottle feeding is often not sustainable**

Explain that pumping and bottle feeding means double feeding- pumping and bottle feeding. In addition, bottles and pump parts need to be washed. Pumping often does not maintain milk production as well as nursing does, increasing the risk of lowered milk production. Exclusive pumping is also associated with more plugged ducts, pump trauma. Bottle feeding breastmilk causes babies to gain more weight than nursing.

## Optimal Latch?



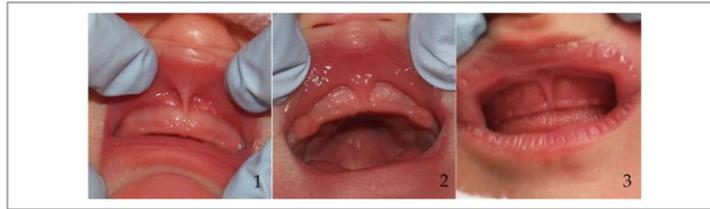
51

The next several slides show different latches, and I will ask you to tell me if this appears to be an optimal latch, or a problematic latch.

This latch looks great. The baby is close to the breast with a nice wide-open mouth. Nose is close to the breast. The corner of the baby's mouth is as wide as it could be.

## Lets Talk About the Upper Lip

- 100% of infants have an upper lip frenulum
- Rarely if ever cause a problem with breastfeeding
  - The upper lip seals the mouth to the breast to allow for vacuum
- The upper lip does not flip out like the lower lip
  - Early clipping does not prevent dental problems later.



**Figure 1.** Stanford superior labial frenulum classification. Type 1: Insertion of the frenulum is near the mucogingival junction. Type 2: Insertion is along the mid attached gingiva. Type 3: Insertion is along inferior margin at the alveolar papilla, and can continue to the posterior surface.



The upper lip frenulum is completely normal in all newborns. At least 80% attached to the edge of the gum line (are types 2 and 3). The upper lip does not flip out (flange out). Its role is to form a seal of the upper breast, to allow for vacuum when the baby is nursing. Sometimes the upper lip looks tight or tucked under, and that occurs when the baby is feeling insecure, like the breast is going to fall out of their mouth, or feel that they need to hold on tight to the breast for another reason. It is rarely if every necessary to clip the upper lip frenulum, and a great deal of research has substantiated this. Despite this evidence many dentists and other laser providers tend to laser it, for reason that is proven by research.



## Optimal Latch?



53

This latch is ideal

The baby has a wide-open mouth and nose is close to the breast. The baby is somewhat far away, and seems to be in the mom's lap. The mother could be offered a pillow in her lap to bring the baby closer.

## Optimal Latch?



54

This is a good latch, baby is held close, mouth could be pulled open wider, OK if no pain and transferring milk well



This latch is not ideal

The baby is further from the breast.

The mouth is not wide open, and the baby is not latched on deeply. The parent could either take the baby off and latch again, or put downward pressure on the chin to open the mouth wide, and draw the baby closer to them.

## Optimal Latch?



56

This is a typical latch of an older infant, older than about 4 mo, who tend to rely more on using their tongues to remove milk, and not their muscles of the lips or around the mouth.

## Optimal Latch?



57

This latch is ideal

Although the nose is not touching the breast, the latch is very wide, and the underside of the lower lip is visible. The upper lip normally lies flat like this and does not flange out like the lower lip does.



This latch is not ideal

The baby is not deeply latched to the breast. The lips are splayed nicely, but the mouth needs to be wider open, and the baby needs to be held closer, for a deeper latch.



Is this optimal positioning? Ask the participants. Point out what we are looking for- maternal comfort, baby well aligned with ear, shoulder hip in 1 line, baby well supported and close to the breast.  
Yes, this is good positioning

## Optimal Positioning?



60

This positioning is not optimal- the baby has their head turned to the L, which can cause shallow nursing. Mom can be instructed to turn the baby's body so that the baby's belly button is against mom's chest.

## Conclusions Session 3

- Routines in the first several hours after birth play a huge role in breastfeeding success.
- Early skin-to-skin contact is essential for newborn health and facilitates the first feeding.
- A delay in milk 'coming-in' (secretory activation) is common and can lead to lactation failure.
- Teaching families about engorgement before leaving the hospital is important.
- Follow-up in the office within 24-72 hours after hospital discharge is imperative.



**Please review the conclusions**