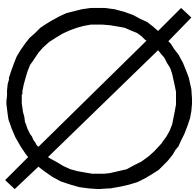


## Tools needed for Section II:



- The *Breastfeeding Answer Book* by La Leche League International
- *Breastfeeding Education Guide* by the Colorado WIC Program
- Video: "Breastfeeding Techniques that Work! First Attachment," Volume 1, by Kittie Frantz

The Montgomery glands, tiny darker bumps on the areola, secrete oils and antibodies to keep the nipple moist and to fight infection.



## Section II: Getting Ready

For most moms, breastfeeding is a learning experience. It may be natural, but it is not instinctive. The women you will see at WIC will have varied experiences and knowledge about breast-feeding. Teaching good breastfeeding technique can help women have an enjoyable and successful time breastfeeding.

In this section you will learn about the anatomy of the breast, breast preparation, positioning, latch-on, and length and frequency of feeds. Building your knowledge in breastfeeding technique will enable you to provide helpful and accurate information to the woman who has decided to breastfeed.

### Breast Preparation

Many women believe that nipple preparation is necessary to "toughen up" their nipples for breastfeeding. Some women may reveal astounding and completely unnecessary practices that will make you wince in pain. These practices may include rubbing a dry wash cloth on their nipples, pulling and stretching the nipples, or even rubbing their nipples with sandpaper. Believe it or not, these techniques used to be taught to moms to help prevent nipple soreness.

Fortunately, research has shown that the breast prepares for the experience naturally and taking part in these practices does not prevent nipple soreness (good positioning and attachment does). The Montgomery glands, tiny darker bumps on the areola, secrete oils and antibodies to keep the nipple moist and to fight infection. The use of soaps, lotions, and creams can remove these protective conditioners and can result in cracked nipples. Encourage women to just use plain water when washing their breasts in the later weeks of their pregnancy and while breastfeeding.

### Practices to Avoid

- 1) Using soap or other drying agents on the nipple
- 2) Rubbing nipples with a towel or washcloth or pulling and stretching the nipple
- 3) Expressing colostrum prenatally
- 4) Using a pump prenatally
- 5) Wearing tight or restrictive clothing

- 6) Using lubricants on the nipple
- 7) Exposing the breast to the sun or a hair dryer
- 8) Using breast pads with plastic liners

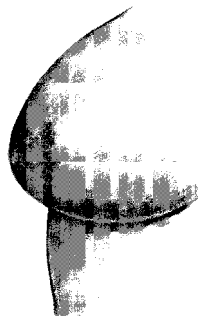
## Breast Type

Breasts come in all shapes and sizes. It is very unlikely that the size or shape of a woman's breast will affect her ability to breast-feed. Some women may believe there is not enough room in their tiny breasts to store milk and others who are well-endowed believe they will smother their babies if they attempt to breast-feed. Reassure women that the size of the breast will not affect milk production or supply. Inform the well-endowed woman that positioning can help her infant successfully breastfeed. And encourage all women to have a breast exam by their physician or nurse practitioner, or conduct a self-exam to identify flat or inverted nipples or any breast anomalies. The size of the breast may not have an effect on breastfeeding, however, having a flat or inverted nipple can make breastfeeding more challenging for the infant, especially if it is not identified prenatally.

Encourage women to have a breast exam by their physician.

### "Pinch Test"

Women can conduct a self-exam for flat or inverted nipples by doing a simple "pinch test." Instruct mom to gently squeeze just behind the nipple with her thumb and forefinger. This imitates the motion her baby will make while nursing.



Flat nipple

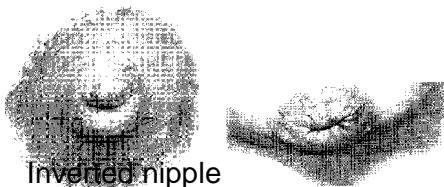
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### Normal nipples

Normal nipples protrude outward and remain protruded when pinched.

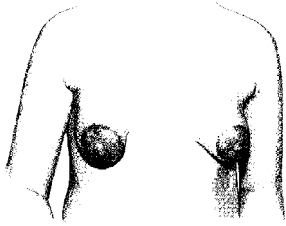
### Flat or inverted nipples

Flat or inverted nipples do not become erect when stimulated; an inverted nipple may have a central indentation or retract when compressed. Although some infants have difficulty latching on correctly to flat or inverted nipples, with proper guidance and perseverance, babies can learn to nurse successfully from a wide range of nipple configurations. Wearing breast shells over flat or inverted nipples is a passive treatment that may be initiated in the last trimester of pregnancy by women who choose to do so. Another alternative is to pre-pump prior to each breastfeeding in the early days postpartum. If a woman is identified as having flat or inverted nipples, refer her to the WIC RD/RN for further evaluation and a treatment plan.



Inverted nipple

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### Activity

Check box when completed ✓

### Breast surgeries

Women should also be asked if they have had any breast surgeries. Breast surgery, including breast augmentation, reduction, or biopsy, does not prevent a woman from breastfeeding, but the mother requires careful evaluation of her milk production in each breast. The woman should be referred to their primary care physician for a full evaluation.

### Unusual breast appearance

Unusual breast appearance, such as marked breast asymmetry or tubular hypoplastic (incompletely developed) breasts, does not necessarily mean a woman will be unable to breastfeed successfully. However, women with such breast variations may be at increased risk for producing insufficient milk and should be referred to their primary care physician for a full evaluation.

Using the *Breastfeeding Education Guide*, pages 20 and 21, what would you tell a mom who tells you she has flat or inverted nipples?

- a. She most likely will not be able to breastfeed.
- b. She may need to use breast shells prenatally or a pump after delivery to help pull the nipples out before each feeding.
- c. You would like to refer her to the WIC RD/RN so that a further evaluation could be made.
- d. Both b and c

Answer: d

### **Anatomy of the breast**

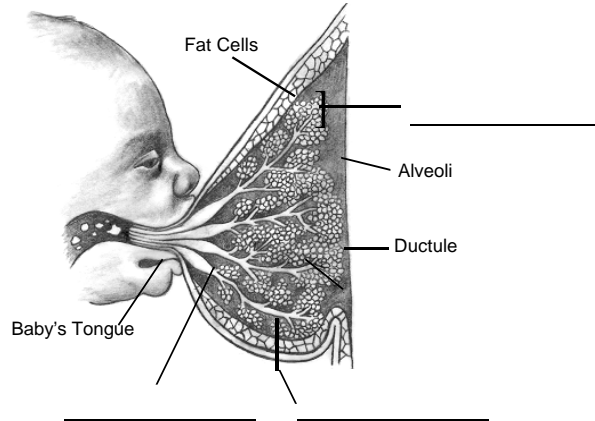
Understanding the anatomy of the breast can assist you in teaching moms how important correct positioning is to successful breastfeeding.

### Activity

Check box when completed ✓

Read pages 15-18 in *The Breastfeeding Answer Book* before proceeding.

Indicate and label the following parts of the breast below: lobule, duct, and milk sinus.



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Check your answers by referring to *The Breastfeeding Answer Book*, page 17.

### **Hormonal influences**

There are two main hormones:  
prolactin and oxytocin

Hormones play an important role in milk production and milk ejection. There are two main hormones: prolactin and oxytocin. Prolactin is the hormone that stimulates milk production. Prolactin levels rise with nipple stimulation during feedings. Cells in the breast tissue respond to these higher levels by making milk when the baby suckles at the breast.

Oxytocin helps with milk ejection or milk let-down. Oxytocin is released into a mother's blood stream when the baby sucks on the breast. Milk ejection or let-down makes the milk available to the baby.

### **Colostrum**

Colostrum (also known as liquid gold) is the first milk produced. It comes in small amounts and is all the infant needs for the first few days of life until a mother's mature milk comes in at 2 to 4 days. Sometimes leaking of colostrum occurs prenatally; this is normal. Women should be instructed not to express colostrum prior to giving birth as this can cause premature labor.

## Activity

Check box when completed ✓



**Cradle hold**

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**Football hold**

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**Side-lying hold**

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## Positioning

Poor positioning and latch-on is the number one cause of sore nipples. You can help women prevent soreness by teaching them the correct technique.

Use a doll (if available) to practice the following holds.

**Cradle hold:** This is the most common hold used by mothers. The baby's head should rest in the crook of mom's arm or forearm. The forearm supports the baby's back and mom's hand holds the baby's buttocks or thigh. Instruct mom to have her baby in close so that her infant's chest touches her chest while the baby's lower arm comfortably rests around mom's waist.

The cradle hold is the most common hold used by breastfeeding women and is easy and convenient.

**Football hold:** Baby's bottom rests on a pillow on mom's lap and his back rests on her forearm. The body is tucked under mom's arm along her side while baby faces mom. Have mom support baby's neck with her hand.

The football hold is a good position for women with large breasts or flat or inverted nipples; moms who have had cesarean birth; and moms who are nursing twins or small or premature infants.

**Side-lying hold:** Have mom position herself on her side with pillows under her head, behind her back, and under the knee of her upper leg. The baby faces mom with a pillow, towel, or blanket supporting baby's back.

Side-lying hold is good position for women who have had a cesarean birth or want to rest while nursing.

## Activity

Check box when completed ✓

- 1) The baby is positioned to nurse on the same side of the supporting arm. Which position does this describe?
- 2) Baby and mom are chest-to-chest with baby's head resting in the crook of mom's arm. Baby's lower arm is around mother's waist. Which position does this describe?

**Answer**  
1) Football hold  
2) Cradle hold

## Latch-on

Proper latch-on is essential for successful breastfeeding and preventing sore nipples. An infant who does not correctly latch-on to the mother's breast is at risk for not receiving adequate nourishment. At the same time, if the infant does not remove the milk from the breast, mom is at risk for inadequate milk production. Poor latch-on can lead to an unsuccessful breastfeeding experience, even in the most determined moms, if it is not corrected. The following information can help you help moms correctly latch-on their infants and consequently prevent serious feeding problems, including nipple soreness.



**A**

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Instruct mom to hold baby "chest to chest" to help line up the infant's mouth perpendicular to the breast.

The breast should be held in a "C" hold. Mom's hand should curve like a "C" to support her breast. The mother's fingers should not touch the areola tissue (figure A).

Note: Did you know that the "cigarette hold" or "scissor hold" (holding the breast between the middle finger and index finger) is no longer recommended? It can result in the mother offering only the nipple instead of the areola, reducing the amount of milk taken by the baby and increasing the risk for plugged ducts in the mother.



**B**

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**C**

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Having the baby open his mouth wide before putting him on the breast is key to successful latch-on. Think of a baby bird waiting for a worm. This can be accomplished by having mom tickle the baby's lower lip with the nipple. Once the baby opens his mouth, instruct mom to wait until he opens wide—like a yawn—and then pull him quickly on to the breast (figure A). Mom needs to be patient to make sure her baby's mouth is opened wide before pulling the baby onto the breast. (figure B)

Signs of a good latch-on (figure C)

- baby's chin should be pressed into the mother's breast
- the baby's nose may rest on the breast but is not compressed
- the baby should have an inch or more of the areola in its mouth
- the lower jaw should be pulled far from the nipple
- the baby's lips are flanged out

Removing the infant correctly from the breast can minimize soreness. The feeding should be ended by mom placing her small clean finger in the corner of the baby's mouth to break the suction. The baby should be burped and the other breast offered. Air drying the breast after each feeding can help prevent soreness.

## Activity

Check box when completed ✓

This is a number game. Each number corresponds with a letter of the alphabet, but they do not correspond to the position of the letter (i.e., #1 is not necessarily letter A). Read the clue and try to solve the puzzle.

This is another description used to depict how wide an infant's mouth should open before pulling to the breast:

11 6 11 6 2 6 13 4 21 1 11 13 24 13 10 9 5 3 4 11 1 3 4 7

*Hint: #6 = B, #4 = R, #11 = A, #1 = W*

Answer:  
A baby bird waiting for a worm.

## Length and Frequency of Feedings

The amount of time a baby breastfeeds greatly affects milk production and, consequently, growth and development. Many moms receive conflicting information about whether they should feed on demand or by the clock.

### Feed on demand

It is recommended that babies be "fed on demand" rather than feeding according to a set schedule (by the clock). By feeding on demand babies learn to feed according to their hunger and satiety needs. Newborns (less than one month old) will usually feed every 1½ to 3 hours (8 to 12 times in a 24-hour period). A feeding will take approximately 10 to 15 minutes on each breast once a mother's milk has come in. Feedings that last for 40 to 50 minutes should be evaluated—the infant may have a weak or poor suck or poor positioning and latch-on.

A hungry baby will begin feeding with rapid sucking and swallowing. When swallowing substantially slows down, the baby should be burped and switched to the other breast. This assures the infant receives adequate hindmilk. Hindmilk is the milk towards the end of the feeding which is richer and higher in fat. If a baby does not receive the hindmilk they may gain weight slowly or fuss between feedings or at the breast because they are not getting the higher calorie milk.

Newborns nurse frequently—8 to 12 times in a 24-hour period.

Hindmilk is richer and higher in fat.



Refer to the WIC RD/RN



Growth spurts usually occur at 2 or 3 weeks, 6 weeks, and 3 months.

### Signs a newborn is getting enough milk:

- at least 4 stools per day
- 6 to 8 wet diapers per day
- gaining 5 to 7 ounces a week

### Referrals

Some babies experience weight loss in the first few days of life but they should not lose excessive weight. A baby will typically start gaining weight once a mother's milk comes in. A referral should be made to the baby's doctor and the WIC RD/RN immediately for further evaluation if a baby:

- is not back to birth weight by 2 weeks or has lost ½ pound or more in the first 2 weeks
- is not gaining 5 to 7 ounces each week during the first 2 to 3 months of life
- has inadequate stooling or wet diapers (as appropriate for age)

### Sleepy baby

Sometimes a baby is sleepier than normal—delivery was hard on him and he is tired. If a baby is sleepy it is important for mom to wake the baby to feed. It becomes a concern when a baby sleeps through feedings or doesn't stay awake long enough during a feeding. A newborn who does not nurse frequently can become dehydrated and malnourished very quickly. The following suggestions can help a mom wake her sleepy infant.

- ▶ Remove or loosen the baby's blanket
- ▶ Remove clothes
- ▶ Talk to and make contact with the baby
- ▶ Rub baby's hand's feet, back, and bottom
- ▶ Change diaper
- ▶ Give the baby a bath or massage
- ▶ Express milk onto the baby's lips
- ▶ Burp the baby
- ▶ Use a cool, damp cloth on baby's head and hands
- ▶ Manipulate baby's hands

### Growth spurts

Moms will often express their concern about not having enough milk because their baby is nursing all the time. Increased frequency and duration of feedings is often the result of growth spurts. Growth spurts usually occur at 2 or 3 weeks, 6 weeks, and 3 months though they may occur every two weeks. During these spurts of growth, moms may feel like all they do is breast-feed. Moms need reassurance that if she nurses liberally and on demand during these growth spurts, her milk supply will increase to meet the baby's needs. It is very common for a mom to start

The older baby is more efficient at feeding and may void and stool less frequently.

## Key Points



supplementing formula during this time if she does not understand her infant is going through a growth spurt.

### The older baby

The length and frequency of breastfeeding will naturally decline as the baby gets older (around 4 to 6 weeks of age). The baby gets more efficient at feeding and is able to consume more milk in a shorter amount of time. The older baby may also void and stool less frequently. It is not uncommon for the older breastfed baby to have only one stool a week without signs of constipation (hard, dry stools).

### Offering solids

As moms start to introduce solids at 4 to 6 months, she should be advised to breastfeed prior to offering solids. Solids in the first year of life should complement a breastfeeding, not replace feedings. However, after one year of age the opposite should occur — solids should be offered before a breastfeeding.

- Breast/nipple preparation is not necessary.
- Women with inverted or flat nipples may benefit from wearing breast shells prenatally or pre-pumping before feedings.
- Colostrum comes in small amounts and is present in the first days postpartum and is all the newborn needs for nourishment.
- Common breastfeeding positions include: cradle hold, football hold, and side-lying hold.
- Proper latch-on is essential for successful breastfeeding and preventing sore nipples.
- Newborns should feed every 1½ to 3 hours (8 to 12 times in a 24-hour period).
- A feeding should last 20 to 30 minutes.
- Signs of successful breastfeeding in a newborn include:
  - ▶ at least 4 stools per day
  - ▶ 6 to 8 wet diapers
  - ▶ infant gains 5 to 7 ounces a week
- Growth spurts usually occur at 2 or 3 weeks, 6 weeks, and 3 months.

## Section II — Activities

Check box when completed ✓

Watch video "Breastfeeding Techniques that Work! First Attachment," Volume 1, by Kittie Frantz (12 minutes)

A woman comes to her second prenatal visit and has decided to breastfeed after having time to think about all you discussed with her at the previous visit. She's really excited about how much healthier breastfeeding is for her and her baby. You assess that she is now ready for more information on the "how-to" of breastfeeding. Using Section II- "Getting Ready" in the *Breastfeeding Education Guide*, practice out loud what information you would give mom.

Review each of the education pamphlets listed at the end of Section II of the *Breastfeeding Education Guide*.

## Section II — Quiz

(22 possible points)



(1 point)

1) T or F The breast excretes natural conditioners that moisten the nipple.

(3 points)

2) Name the two nipple types that may need an intervention so mom can successfully breastfeed.

(1 point)

3) What is one of the most common reasons for sore nipples?

(3 points)

4) Name the three common breastfeeding positions.

(1 point)

5) What type of hold should mom use to support her breast?

(1 point)

6) T or F Fingers should touch the areolar tissue when supporting the breast.

(3 points)

7) List when growth spurts usually occur.

(1 point)

8) T or F Mom needs to supplement formula during a growth spurt.


- (1 point) 9) What milk contains the most fat and calories?
- (2 points) 10) Name two ways to wake a sleepy baby.
- (1 point) 11) How often should a newborn nurse?
- (1 point) 12) How long does a feeding usually last?
- (3 points) 13) What are the three best indicators that the baby is receiving adequate milk?

**Answers**

1) T  
 2) flat nipple or inverted nipple  
 3) poor positioning or latch-on  
 4) cradle, football, and side-lying  
 5) "C" hold  
 6) F  
 7) 2 or 3 weeks, 6 weeks, 3 months  
 8) F; as moms nurse more, their milk supply increases  
 9) hind milk  
 10) (any of the two suggestions listed under the section "sleepy baby")  
 11) every 1½ to 3 hours or 8 to 12 times in a 24-hour period  
 12) 10 to 15 minutes on each breast  
 13) at least 4 stools and 6 to 8 wet diapers in a 24-hour period and 5 to 7 ounces of weight gain per week once a woman's milk comes in

**How Do I Rate?**

22 points = Expert!  
 18-21 points = Good Job!  
 14-17 points = Go back and look over major points  
 <14 points = Review section



## Optional Reading

*Dr. Mom's Guide to Breastfeeding*, by Marianne Neifert, M.D.,  
Chapters 3 and 4.

*The Breastfeeding Answer Book*, La Leche League International,  
Chapter 3: Breastfeeding Basics.

*The Nursing Mother's Companion*, Kathleen Huggins, RN, MS,  
Chapter 2: Off to a Good Start: The First Week.