

# *Breastfeeding Module - II*

## *Continuum of Support*

*Promote, Protect and Support Breastfeeding  
Guidelines for Healthy Full Term Infants*



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*Utah Department of Health  
Division of Community and Family  
Health Services  
WIC Program  
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## *Forward*

Breastfeeding is the normal method of feeding and is recommended by the World Health Organization, American Academy of Pediatrics, WIC, and many other health organizations. These guidelines will provide *you* with information that will help *you* to counsel our WIC families in order to Promote, Protect and Support Breastfeeding!

These guidelines are intended for use by health professionals who have a basic understanding of breastfeeding and who will provide support to WIC mothers and their generally healthy, full term babies. (High-risk mothers and babies should be referred to their primary care physician and their board certified lactation consultant or certified lactation educator.)

*Be prepared to have feelings of satisfaction and accomplishment when mothers express gratitude for the help and assistance you provide to them and their baby.*

## *Acknowledgments*

Iowa Lactation Task Force, Iowa WIC Program  
Breastfeeding Promotion and Support Guidelines for Health Full Tern Infants  
August 2001

Colorado Department of Public Health and Environment  
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Breastfeeding Module and Resource Manual  
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## *Table of Contents*

	Page
<b><i>Chapter 1 Continuum of Support</i></b> . . . . .	4
○ Early Assistance	
○ Engorgement	
○ The First Weeks	
○ Work / School	
○ Pumping	
<b><i>Chapter 2 Challenges</i></b> . . . . .	20
○ Prevention	
○ Engorgement to Mastitis	
○ Sore Nipples to Yeast	
<b><i>Chapter 3 Caring for Mom</i></b> . . . . .	29
○ Simple Nutrition	
○ Exercise / Weight Loss	
○ Baby Blues / Depression	
○ Smoking, Alcohol, Drugs	
○ Family Planning	
<b><i>References / Resources</i></b> . . . . .	39

## *Chapter 1*

### *Continuum of Support*

- Early Assistance
- Engorgement
- The First Weeks
- Work / School
- Pumping

### *Continuum of Support*

Just as it is very important women receive breastfeeding education and support *early* into, as well as *throughout* their pregnancy, the same applies *early* into, as well as *throughout* breastfeeding.

### *Early Assistance*

#### Day 2 - 3

Moms really need assistance the first few days! This is when so much is happening. Hospital stays are very short and rushed. Moms are recovering from giving birth. And, there is a new baby!

Help moms to know her baby's feeding cues. Hunger signs may include:

- Baby is awake and alert, looking around  
....."Mom, I am hungry"
- Mouth is open, tongue is moving, lips are licking  
....."Mom, look at me, I am really hungry!"
- Baby is rooting, sucking its fists  
....."MOM! I am so hungry I could eat my fist!"
- Baby is crying. This is a LATE sign of feeding  
....."MOM, where were you? I am too upset to nurse well now"

Some babies are very patient and slowly transition from the first cue to the last. Other babies wake up crying. Help moms watch for baby's cues when possible.

It is common for breastfeeding to start out well in the hospital (day 1) while a lactation consultant is by her side. Then, when she is alone at home (day 2- 3), usually with other responsibilities, things become more complicated. This is also the time that her milk will “come in” or transition from colostrum to mature milk. Mom will have many changes to deal with at this time.

### Milk!

A woman’s body is designed to produce plenty of milk for their baby or babies. As her milk comes in the first few days, she will likely have more than the baby is taking. Until her body determines only the amount needed to support her baby, she will experience very full and engorged breasts. This process is natural but must be managed.

In theory, this is a good thing. We want mom to have plenty of milk for her baby or babies. In reality, if this is not managed, mom may get uncomfortable and it can lead to *engorgement*.

### *Engorgement*

#### Natural Process

Breast engorgement is a natural process that occurs temporarily in most new mothers when their milk comes in. Breasts will get full, swollen, heavy, and may feel warm. With appropriate management, such as frequent breastfeeding, she can feel better in one to two days.

Some moms that nurse frequently, and have cooperative babies who are efficient at transferring milk, can manage this influx of milk production without experiencing significant engorgement.

However, if the breastfeeding is not occurring frequently, her production may exceed what her baby is able to take at breast, and engorgement is likely.

#### Severe Engorgement

If it is not managed at this time, it can accelerate to severe, painful engorgement and should be considered a breastfeeding emergency. This mother needs to be quickly referred for care. (This is further covered in chapter 2.)

Continued severe engorgement can lead to difficulties breastfeeding. Pressure builds within the breast, milk flows less easily and the milk producing glands receive a signal not to produce additional milk. This compounded with a full round breast that baby will have difficulty latching to, can lead to moms stopping breastfeeding.

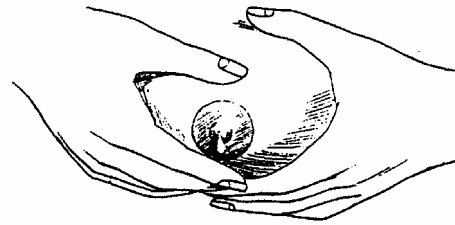
## Management

Mom can still manage engorgement and continue to breastfeed successfully. It is easiest to manage in its earliest stages by frequent feedings when her milk comes in.

Full, round, hard breasts are difficult for a baby to latch on to well.

### Suggestions to soften the breast so that baby can resume feeding include:

- Warm compresses. Wrap the breasts and allow the warmth to penetrate. Leaning over and dropping breasts into a container of warm water, or taking a warm bath or shower also works. Massaging the breasts can also be incorporated.
- Pumping or hand expression. A hospital grade electric breast pump (available at WIC or hospital) can be used. Gentle massage working from chest toward nipples can be done in conjunction with pumping. Hand expression may also be effective.
- Resume frequent feeding!



You can help her prevent severe engorgement by giving her proper anticipatory guidance. Let her know that when her milk starts to “come in” she must nurse frequently and watch for engorgement. She should have a number to call such as a WIC warm line, La Leche League, or her hospital or clinic staff.

## *The First Weeks*

### Week 1 – 2

By week 1, milk should be in, engorgement should be managed, and the baby should be nursing every 1 ½ to 3 hours. This is a very important time to check up on the mom. Encourage mothers to call in to their WIC Peer Counselor at this time. Peer Counselors love to help other moms *before* problems develop. Waiting until week 2 maybe too late to effectively help.

### Nipple Soreness

Nipple discomfort varies from woman to woman and often occurs in the first week. Usually the discomfort is at the beginning of the feeding and subsides after the milk lets-down.

Encourage good positioning, a wide mouth to get baby on, and get baby as far back on to the breast as possible. Severe nipple pain during the entire feeding, or pain persisting beyond one week, probably means the baby is poorly positioned or is not properly latched-on to the breast. Severe nipple pain requires this mother to be quickly referred for care. Baby is at risk for not getting enough milk.

### Week 3 – 4

By this time, breasts have adjusted to making only what the baby needs. They are no longer producing excess amounts. Moms will notice this reduction in fullness and will inevitably say while placing their hands on their breasts:

“I think I don’t have enough milk”.

If mothers were told this information in advance, do you think they would lose confidence and think they really don’t have enough milk?

Did you know that the #1 reason moms quit breastfeeding or supplement with formula is because they think they don’t have enough milk!

Does your WIC clinic educate moms about this important process?

At this point, you will have to review “The Check List” of indicators in (Module I, Chapter 2, page 38) and assess her situation to make sure baby is getting enough breast milk.

## *Work / School*



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Many mothers return to work or school after the birth of their baby. And more and more mothers are managing breastfeeding while resuming their wide variety of activities.

There are many benefits of breastfeeding for a mother going to work or school. She will take fewer sick days off due to a sick baby. Breastfeeding helps compensate for the time spent apart and it provides extra comfort and security for both mom and baby.

Women use a variety of feeding patterns to accommodate separation from their babies yet still continue breastfeeding. Explore options and help women problem solve how they can continue breastfeeding.





World Alliance for Breastfeeding Action  
(WABA)

[www.waba.org.br](http://www.waba.org.br)

### Clothing

Button down blouses or shirts that can be pulled up from the waist make it easy to pump or breastfeed at work or school. Nursing blouses and tops can be purchased at lactation stores or through catalogues. Sewing patterns are also available.

WIC has educational pamphlets on breastfeeding while going to work or school that can be offered to moms. You should be familiar with the content as well.



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### Feeding Options:

- Breastfeed when she is with baby and collect and store breast milk while separated or between feeds
- Work shorter blocks of time
- Bring baby to work
- Have child care provider close to work or school (or on site)
- Use lunch and breaks to go to baby, or have baby brought to her, or use time to pump
- Nurse before work and as soon as she sees baby (at the child care provider)
- Call childcare provider if anticipate a delay; baby can hold off for bottle-feeding or can be given a small amount until mom arrives.
- Nurse more frequently when with baby so that baby may not feed as much when separated
- Nurse exclusively on days off
- Additional pumping (between breastfeeding) on her day off
- Breastfeed when together, not use bottles

### Last and least favorable option...

- Supplement with formula (make sure moms know this will decrease her breast milk supply)



### Formula

If supplemental formula is used, it is very important for it to be used judiciously. If a WIC mom comes into WIC asking for formula, she *must* be seen by a CPA (preferably a Certified Lactation Educator or “CLE”) to be assessed and counseled on her feeding situation *prior to receiving any formula*.

Some moms may not know that their baby is going through a normal growth spurt and continued and frequent nursing will allow her milk production to increase with her baby's growth. If formula is given, it will interfere with this natural process.

Too often, close attention is not made to the amount or frequency formula is used. Other times family members may think they are assisting in feeding bottles and inadvertently end up sabotaging mom's efforts. Overfeeding can also occur which may lead to overweight children and adults.

Did you know that the sooner mothers start formula, the sooner they are more likely to wean from breastfeeding?

This is a very important concept for mothers to understand. WIC provides this information at classes and at individual counseling appointments before moms return to work or school. Without this follow up information, women may rely on WIC for formula. This is not the mission of WIC. WIC's mission is to promote, protect and support breastfeeding!

It is also important to remember that if baby is not receiving adequate breast milk and has compromised growth (i.e. weight gain), that this mother and baby must receive appropriate guidance and care. A WIC RD/CLE may need to be involved and/or referral to her primary care provider or mid wife may be necessary.

In this case, formula may be warranted as to not compromise the baby's health and growth. Formula may also be used temporarily, but in any case, she would need to be supported in breastfeeding.

#### "Supply and Command"

Carefully plan when formula bottles are needed. Allow for "supply and command" to continue and be in effect during the many growth periods babies experience. Babies will double their birth weight by 5 months of age and triple by 1 year!

Formula will interfere with this intimate relationship and counseling a woman to extend her breastfeeding experience will be both satisfying to you and her.

You want to empower her so that she has control over when she chooses to end breastfeeding and not submit to it due to default.

#### School

Have her talk with the school nurse, school counselor or other health care providers about pumping arrangements, schedule changes, and other issues. She can network with other breastfeeding moms to learn about their experiences. Sharing positive support policies and practices from other schools to key counselors or staff may help support breastfeeding.



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### Child Care Provider

It is important that a woman has a supportive child care provider. Especially if the mom is young, encourage her to interview providers to see if they are compatible with her views. Family members caring for her baby should also be respectful of her views as well.

“A Guide for use in the Child Nutrition Programs” produced by USDA is available on the web at: [www.fns.usda.gov/tn/Resources/feeding\\_infants.html](http://www.fns.usda.gov/tn/Resources/feeding_infants.html).

### Employer

It is also important for women to feel empowered to discuss their feeding options with their employer. Women can tell their employers that breastfeeding moms take fewer sick days from work since breastfeed babies are less sick. Breastfeeding moms are often well organized and conscientious about their work and pumping schedule. Many employers allow work hour flexibility for pumping and feeding. This flexibility is an inexpensive “perk” that they can offer their breastfeeding employees.



Some employers offer a room for pumping. If a room is provided, it should be clean and have an inside door lock for privacy.

## *Pumping*

### Hand Expression

Hand expression is a useful technique to learn. In the case of a missed feeding, or without access to a pump, hand expression can be helpful to collect milk or alleviate fullness. Some women also find that they are very efficient due to the tactile nature of the hand stimulation.

### Tips for Hand Expression

- Wash hands
- Collect milk into a clean, wide mouthed container
- Place the thumb and first two fingers about 1" – 1 ½" behind the nipple on the margins of the areola, forming a "C" with the hand. Use the right hand for the right breast, and the left hand for the left breast.
- Once the index finger and thumb are positioned around the areola, the thumb and finger should be pressed in toward the chest wall and pressing down and rolling forward on the breast tissue (without sliding).
- Moving together in a press-and-release- rhythmic way, may also be helpful in stimulating milk flow. The mother may need to press and release more than once before milk begins to flow.
- Express each breast for 5-7 minutes, until the flow of milk slows down, then repeat.

This process may take 20 –30 minutes for breasts to be fully emptied. This process does take practice, so patience is necessary. Use of a breast model can be helpful for demonstration. (Do your co-workers have their breast models on their shelves for display, use and instruction?)



\* \* \* View Hand Expression Video \* \* \*  
Recommended: Kittie Frantz, Breastfeeding, Techniques That Work,  
Vol. 6, Hand Expression

### Hand Pumps

Hand pumps are portable and fairly inexpensive. Hand pumps are recommended for mothers who need to pump only occasionally. They are not effective in *maintaining* milk supply during extended separations.

WIC provides hand pumps for WIC breastfeeding moms. You should be comfortable with the assembly and instructions for use. Proper assessment must be made to determine that a hand pump is needed, or that the mom is truly interested in pumping. Some moms either prefer to hand express or do not like to pump at all.



Medela  
Spring Express  
Hand Pump



Ameda-Egnell  
One Hand Pump

### Tips for Hand Pumps

- Choose a good quality hand pump (such as Medela, Ameda-Egnell, or Advent brands)
- Read instructions prior to use
- Choose a comfortable pump style (i.e. one or two handed use)
- Choose a nipple flange that fits breast size

### Small to Medium Electric Breast Pumps

Battery Operated Hand Pumps, Mini Electric Pumps, Small to Medium Grade Electric Breast Pumps are all available for more frequent pumping. These pumps vary in range of cost.



Bailey Nurture III

Batteries make pumping portable but battery replacement can be costly if used frequently. Others often have car adaptor plugs as well as wall adapters. Most pumps come with carry tote, milk storage bags or containers, and freezer ice packs.

Many are designed for single users and are not designed to be used between mothers. It is important that directions are read and followed before use. These pumps are not designed to maintain or increase milk production for medical needs. WIC also provides a limited number of these pumps for moms attending work or school.

### Hospital Grade Electric Breast Pumps

These pumps are designed to help moms when either increasing or maintaining breast milk supply. WIC loans these pumps to breastfeeding mothers who need assistance in increasing their milk supply, in getting baby to breast, or who have a medical need.

These pumps come with single or double breast pump kits. WIC also provides these kits free of charge to WIC breastfeeding participants.



Medela Lactina  
with Double Kit



Ameda-Egnell  
Double Kit

### Pedal Pumps

Pedal Pumps are also a creative option for mothers to single or double pump. Pump kits attach to a pedal stand that the mother can pump by foot to create vacuum pressure for pumping. These are also available for WIC participants.



Medela Pedal Pump  
with Double Kit

You should be familiar with providing proper instruction to a mom for use of these pumps and kits. Your local breastfeeding coordinator, or the breast pump manufacturer representative must train you, before you may issue to clients.



\* \* Stop, Assemble a Hand Pump Kit \* \*  
(Use a demonstration kit to disassemble and rebuild.)

### Prepare for Separation

Before mom returns to her work or school schedule, she should feel comfortable with practicing her routine, practice using her pump, and pumping in her work or school clothes. Returning mid week can also ease the transition.

To achieve easier let down when pumping at work or school, moms can use their different “senses” of sight, smell or sound, to remind her of her baby. She can take her baby’s photo, or digital images for her computer, for visual stimulation. She can take gently worn baby’s clothes for using her sense of smell. She can even record baby cooing sounds for audio stimulation.

### Collection

Breast milk can be expressed, collected and stored for future use. Collect and store breast milk in clean, hard plastic airtight containers or disposable nursing bags. Containers and bags specifically designed for storing breast milk can be purchased. Thinner bags should be double bagged. Hospitals sometimes provide containers as well.

### Storing

Store in small amounts the baby usually takes for a feeding, so as not to waste. Allow room at the top for expansion if freezing. Date to rotate and use breastmilk. Label with name if in child care environment.

### Cleaning

Clean and sanitize bottles and their parts before reusing. Follow container instructions for sanitizing. Top rack dishwasher cleaning will provide adequate cleaning, as well as rinsing with cool water and then washing with hot soapy water.

### Appearance

Breast milk varies in color (often looks bluish and thin) and will separate into layers with the fat rising to the top. Gently swirl or mix before feeding.

There are several recommendations regarding the storage of breastmilk. The following USDA's are more conservative to assure safety.

### Refrigeration

Refrigerated milk (at  $\leq 40^{\circ}$  F) can be kept for up to 2 days (48 hours).

An ice chest or cooler can be used during the day to keep milk cold until it can be refrigerated. It is not recommended to save or use breastmilk leftover from bottles.

### Freezing

Refrigerators (with a separate door from the freezer) can store breastmilk up to 3 months. Store containers in the coldest part (back) of the freezer (but not touching sides), and not in the door. (Freezer compartments contained within the refrigerator can store breastmilk for 2 weeks.) Deep freezers ( $\leq 0^{\circ}$  F) can store for 6 months.

Newly expressed (warm) breast milk can be refrigerated and then added to other refrigerated breast milk (cold added to cold). It is best to not add refrigerated milk to frozen milk to prevent partially thawing. Thawed milk should be used within 24 hours and should not be refrozen.

### Thawing

Use the oldest milk first. Frozen milk can be placed in the refrigerator to thaw. Containers can also be put under cool/warm running water or set in a container of warm water, both while gently mixing. Breast milk thaws quickly.

To feed, breast milk only needs to be warmed in this manner. It does not need to be warmer than body temperature and should never be microwaved. Severe burning can occur during feeding as well as properties in breastmilk can be destroyed.

### Weaning

Weaning, or the gradual change from breastfeeding to other foods, cup or bottle, is different for every woman. It is important that moms receive support about continuing breastfeeding for as long as her and her baby mutually desire.

Moms have the right to be informed that breastfeeding into the second year (or longer) is appropriate and that the benefits of breastfeeding are "dose related" (that it the longer the breastfeeding, the greater the benefits).

If a mom brings up the subject of weaning, it may not mean that she is ready to wean, just curious about how to go about it.

WIC moms are at risk of early weaning. They will need more encouragement and support during the first 6 months. If moms are not empowered, they may wean earlier than desired.

Prior to weaning, encourage the mother to talk over all considerations and decisions with other family members. Affirm the value of what she has already given her infant by breastfeeding no matter how long she has nursed her baby.

Moms have a right to have control over their choice of feeding methods. When a mom makes an informed decision to wean, her decision must be respected. Weaning is best done gradually for the emotional separation between mom and baby. It also allows time for gradual decrease in her physiological milk production so she does not experience engorgement.

The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of life and up to a minimum of 12 months and thereafter as long as mutually desired.

The Healthy People 2010 Objectives state to increase breastfeeding initiation rate to at least 75%, 6-month duration rate to at least 50%, and 1-year rate to at least 25%.

The World Health Organization (WHO) recommends that all babies around the world be breastfed with appropriate complementary foods for up to 2 years and beyond.

Breastfeeding toddlers is part of normal human feeding. It is important to remember that many countries outside the U.S. feed for averages of closer to 3 years.

## *Chapter 2*

### *Common Challenges*

- Prevention
- Engorgement to Mastitis
- Sore Nipples to Yeast



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### *Common Challenges*

Some women breastfeed without problems or challenges. But for many, it is natural for minor problems to arise at first, especially if it is their first time breastfeeding.

### *Prevention*

Most problems can be overcome with a little help and support. That is why it is important you are aware of these common challenges and provide her with information to prevent some of these problems from occurring.

Other problems are more serious and may require you to know the warning signs to refer mom to her primary care physician or midwife to prevent these problems from becoming more complicated.

Breastfeeding women and their infants should be assessed at each WIC visit for breastfeeding complications or potential complications. Early identification is key to helping a mother and infant have a positive and successful breastfeeding experience.

Be familiar with the nutritional risk factors that identify potential complications for mother and baby. It is important to elicit information and assess the overall breastfeeding situation to prevent many of these problems from occurring.

## *Engorgement to Mastitis*

### Engorgement

Remember, engorgement can occur when the milk first comes in during the first 3 – 5 days after giving birth. It may also happen at any age when there is a change in the feeding pattern.

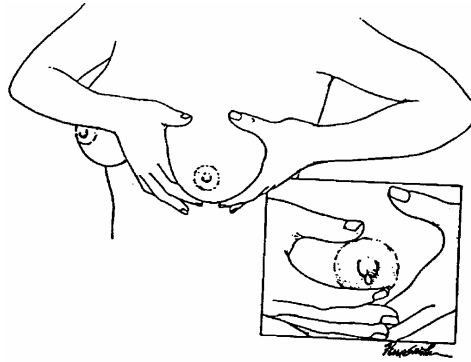
Engorgement can be managed but severe engorgement is considered a medical emergency. Mom will need assistance and support at this time.

### Engorgement may occur due to:

<ul style="list-style-type: none"><li>○ Missed feedings</li></ul>	<ul style="list-style-type: none"><li>○ Mom clustering activities such as grocery shopping and errands</li><li>○ Mom is working</li><li>○ Mom has to leave town</li></ul>
<ul style="list-style-type: none"><li>○ Incomplete feedings</li></ul>	<ul style="list-style-type: none"><li>○ Baby is sick and not nursing well.</li><li>○ Sleepy baby</li></ul>
<ul style="list-style-type: none"><li>○ Infrequent feedings</li></ul>	<ul style="list-style-type: none"><li>○ Baby gets bottles from others</li><li>○ Baby is not feeling well (i.e. due to teething, ear infection)</li></ul>
<ul style="list-style-type: none"><li>○ Change in feeding pattern</li></ul>	<ul style="list-style-type: none"><li>○ Baby has a “nursing strike”</li><li>○ Baby spitting up often (mom feed more often); then spitting up resolves (mom has excess milk)</li><li>○ Mom misses a pumping</li></ul>

### Strategies to resolve engorgement include:

- Breastfeed frequently (10 –15 minutes on each side every 1 – 1 ½ hours)
- Soften breast for baby to latch by:
  - Hand express or pump (electric pump is recommended), and
  - Gently massage (work from the outer margins toward the nipple to help move milk through the ducts)
  - Apply warm moist heat to breasts before and during pumping and nursing



- Start feeding on the more engorged side
- Keep baby alert and actively nursing at breast (massage baby's feet); use breast massage and gentle compression to keep milk flowing
- Use a variety of nursing positions to empty different areas of the breast
- Apply cold packs after feeding for 10 minutes for comfort and to reduce swelling
- Wear a well fitting, adjustable but not restricting bra

If some areas of the breast still remain uncomfortable and firm to the touch, mom should pay special attention to that area at next feeding by:

- Massaging the breast before and during the feeding, and
- Nurse with baby's chin placed under that area

### Plugged Ducts

A plugged duct is a temporary back up of milk that can occur when one or more of the lobes of the breast do not drain well. Plugged milk ducts are usually identified as a small, tender lump or tender area in the breast tissue.

Plugged ducts result from the milk not being moved out along the ducts or from incomplete emptying of the breast. This can occur from missed, infrequent, incomplete feedings or change in feeding patterns.

Plugged ducts can also occur if there is tight or restrictive pressure on the breast-line from:

- Under-wire bras, sports bras
- Tight fitting clothing during sleep
- Shoulder straps of purse, diaper bag or backpacks
- Not effectively nursing a particular quadrant of the breast

Treatment and strategies to remedy are the same as for engorgement in that she will try to get the milk moving to unplug the area. The techniques that are particularly effective are:

- Moist heat to encourage flow
- massage during feeding (or pumping), and
- nursing with baby's chin under plugged duct area

### Prevention

Assist mom in identifying the cause of her plugged duct. Have her plan strategies to prevent it from occurring in the future.

Have mom complete breast exams in the shower to feel for small lumps and tenderness. Start intervention early.

### Mastitis

Mastitis is inflammation and infection in the breast tissue. Mom will experience symptoms of a fever (101°F or more), chills, achy flu-like symptoms, breast tenderness, redness, and swelling. If severe engorgement is not treated, it may lead to mastitis.

Mastitis should be considered a breastfeeding emergency and she should be referred to her primary care physician or midwife for lactation and medical care.

Treatment will most likely include antibiotics. It is also very important to continue breastfeeding and applying the same strategies as mentioned with engorgement and plugged ducts! (Refer to previous sections.) She should feel relief within 24 – 48 hours.

The breast milk will not harm baby, nor will the antibiotics. Some cultures may believe when the mother becomes sick or has a fever, that her milk “spoils” and is not good for the baby. It may be helpful to explain that today's antibiotics are safe and mom's milk is ok for the baby. Convey the rationale for treatment such as frequent nursing is necessary to help relieve mom and is important for baby.

### Sore Nipples

Some nipple tenderness is normal during the early weeks of breastfeeding. Pain during feeding is not normal and requires follow-up to prevent early weaning.

### Nipple Check

When the baby comes off the breast, the nipple should appear elongated and symmetrical. It should not look blanched, pinched, wedged, misshapen, creased, or blistered. Sore nipples are often caused by improper positioning or latch.

Occasionally, poor tongue extension due to a short frenulum (tongue-tie) can also be the cause. This baby should be referred to a supportive pediatrician for assessment.

Mom needs to receive assistance to determine the cause of her soreness, i.e. if the baby is latched well.

### Nipples need to heal. This can be facilitated by having mom:

- Review appropriate positioning and latch. Make sure baby takes a large mouthful of breast, not just the tip of her nipple. Use wide, open mouth before latch.
- Begin nursing on breast that is less sore
- Hold baby in different positions to nurse
- Express or pump milk enough before a feeding to stimulate milk flow
- Use short, frequent feedings
- Always break suction with finger and lift baby appropriately off breast
- Wear breast shells (to protect and to help keep the nipples relatively dry and not soaking in breast milk)
- Change wet nursing pads
- Avoid soaps, alcohols and drying agents on nipples
- Small amounts of purified lanolin (intended for breastfeeding mothers) can be applied after feedings
- Small amount of breast milk can also be applied to promote healing
- Discourage use of other cream, ointments or salves
- Discourage use of pacifiers



Breast Pad



Breast Shells



If putting baby to breast is too painful, mom can hand express or pump to maintain milk supply. It will be important that baby does not wean off of breast and on to bottles.

Excessive soreness can also be caused by a yeast infection

### Yeast / Thrush

Yeast or thrush is caused by an overgrowth of the fungal organism called Candida. A thrush infection can occur on a lactating woman's nipple or inside an infant's mouth. (It can also be in the infant's diaper area.)

### Physical Signs Mom

Physical signs of thrush for mothers include:

- Sore nipples
- Bright pink or red nipples (shiny appearance)
- Severe burning or "hot" nipples
- Shooting pain deep within the breast
- Possible vaginal yeast infection

### Physical Signs Infant

Physical signs of thrush for infants include:

- White patches in mouth, on tongue and gums
- Bright red diaper rash
- General irritability, not breastfeeding well, coming off breast often

### Antibiotics

Thrush is often associated with recent antibiotic use. If mom reports these symptoms and also recent use of antibiotics, thrush may be suspected.

When either mom or baby shows signs of thrush infection, refer them to her health care provider for treatment. Thrush is easily passed back and forth from the infant's mouth to the mother's breasts, making treatment for BOTH essential.

### Strategies include:

- Follow through on medical treatment prescribed such as consistently applying cream to nipples and medication to inside baby's mouth as recommended (usually 2 times per day, for 10-14 days).
- Topical creams best applied when excess breast milk is removed first.
- Keep nipples from soaking in breast milk (change pads often, use shells)
- Begin nursing on breast that is less sore

- Frequent but shorter breastfeeding may be more comfortable
- If you pump your milk, do not save or store for later use, since yeast may pass into milk and interfere with resolving infection
- Wash all bras in warm to hot water
- Discourage pacifier use
- Wash all objects baby put in mouth (bottles, pacifiers, toys) on top rack of dishwasher or by boiling for 20 minutes daily
- Wash hands after diaper changes

Mom and baby should both feel relief within a couple days of treatment. Refer mom to her health care provider if thrush persists.

## Baby Issues

### Sleepy Baby

Delivery can be tiring for both mom and baby. Many infants are sleepy during the first few days after birth. These infants may refuse to nurse or may fall asleep after a few minutes of breastfeeding. It is important to wake these infants and feed every 1 – 1 ½ hours, at least 8 –12 times every 24 hours.

If babies have inadequate feeding, they may become sleepier. It is important that babies get enough nutrition.

### Mom may try the following tips:

- Remove or loosen baby's blanket
- Remove baby's clothes; allow stimulating "skin to skin" contact
- Talk to baby and make contact with her baby
- Rub baby's hands, feet, back and bottom
- Change baby's diaper
- Give baby a bath or massage
- Express breast milk onto baby's lips
- Burp baby
- Use a cool wash cloth on baby's body, hands or face

This is another important time mom will need support. Your WIC clinic should have handouts for mothers on these "Sleepy Baby" techniques.

## Feeding Refusal

It is not unusual for a baby, often an older baby, to suddenly refuse to nurse. These are sometimes referred to as “nursing strikes.” With time, most infants will return to breast. It is important mom gets support and guidance during this time. She needs to know that this is not uncommon, and the baby is not “rejecting” her but that it is often due to one of the following reasons:

- Teething
- Ear infection or cold
- Thrush (which will need treatment)
- Too many bottles have been offered
- Change in deodorant, perfume or powder
- Distractions or noise during feedings
- Return of menstruation
- Unknown reasons
- Mom and baby have too many hurried breastfeeding sessions
- Mom and baby being separated for a period of time
- New pregnancy and breast milk changes in taste



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Offer moms tips along the way to help her prevent early weaning.

### Tips to help her encourage baby back to nursing:

- Continue to offer the breast patiently and gently
- Breastfeed skin to skin
- Breastfeed frequently; watch for early signs of hunger, before crying
- Offer breast when baby is sleepy
- Try different nursing positions
- Nurse in favorite places (i.e. in bed)
- Minimize distractions; find a quiet, dark, place to nurse (younger babies can have blanket over head while nursing; older babies need a more quiet less distracted environment for nursing)
- Pumping or expressing milk may be necessary to maintain breast milk production

Mothers often welcome support or ideas when babies refuse breastfeeding. Moms often feel rejected and frustrated during this time. Have her call her health care provider if she has concerns or if refusal persists.

### Biting

Sometimes infants will bite during nursing. This often occurs at the end of the feeding with non-nutritive sucking.

### Suggestions for coping with biting include:

- End feeding when her infant loses interest in the feeding. This helps prevent biting done by the playful baby.
- If her baby bites, remove from breast and say “ouch!” Pause breastfeeding. If baby is still hungry, offer breast again. If baby bites again, pause a little longer or end feeding.

If babies are teething, they may look for relief by biting. If her baby is teething or has swollen gums, just before breastfeeding, she may provide comfort by:

- Offer baby a clean cold washcloth or teething ring
- Massage gums with a clean finger
- Ask doctor or midwife about a topical anesthetic

## *Chapter 3*

### *Caring for Mom*

- Simple Nutrition
- Exercise / Weight Loss
- Baby Blues / Depression
- Smoking, Alcohol, Drugs
- Family Planning

### *Caring for Mom*

During the first few weeks of motherhood, it is not uncommon for women to feel tired and fatigued and to have emotional lows and highs. All women's experiences are different depending on a number of circumstances, including how much support they have at home, whether they had an easy or hard labor, and how well breastfeeding is going.

#### Less is More!

A good rule of thumb is to make things simple for her to understand and follow. Less is more! If she has rules to follow for everything, then she may perceive it as another barrier to successful breastfeeding.

#### Resource List

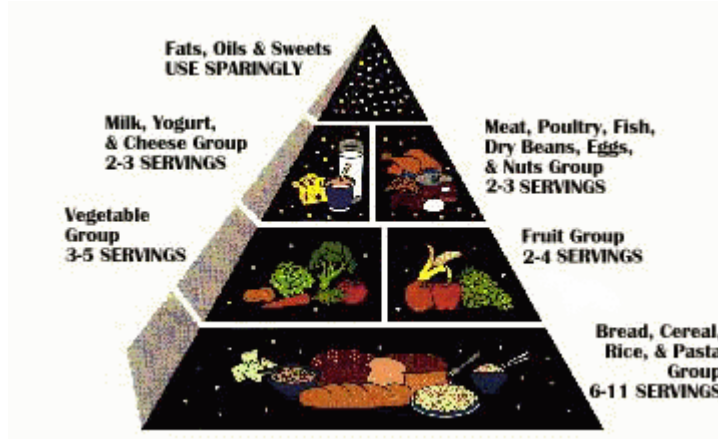
Providing her with a resource list of breastfeeding services in her community, including her WIC Peer Counselor, can allow her to have access to numbers when she needs them. Does your WIC clinic have one?

### *Simple Nutrition*

Encourage mom to follow the food guide pyramid and dietary guidelines that promote a generous intake of nutrients from the fruits and vegetables, whole-grains breads and cereals, calcium rich dairy products and protein-rich foods such as meats, fish and legumes.

Many women, including breastfeeding women, have poor intakes of foods containing calcium, zinc, magnesium, vitamin B6, and folic acid. After giving birth, women are also at risk for iron deficiency anemia.

Using the food guide pyramid is a simple method to teach sound nutrition.



Food Group	Recommended Serving / Day
Grains, breads and cereals <ul style="list-style-type: none"> <li>○ Whole grains</li> </ul>	6 – 11 including <ul style="list-style-type: none"> <li>➤ at least 3</li> </ul>
Fruits and juices <ul style="list-style-type: none"> <li>○ Citrus, melon and berries</li> </ul>	2 – 4 including <ul style="list-style-type: none"> <li>➤ at least 1</li> </ul>
Vegetables <ul style="list-style-type: none"> <li>○ Dark green or deep yellow</li> <li>○ Starch vegetables</li> </ul>	3 – 5 including <ul style="list-style-type: none"> <li>➤ at least 1</li> <li>➤ at least 1</li> </ul>
Milk, yogurt and cheese	3 – 4 servings
Meat, fish, poultry, eggs, dried beans and peas 1 oz Protein equivalent = <ul style="list-style-type: none"> <li>• 2 Tbsp peanut butter</li> <li>• ½ cup cooked dry beans or peas</li> <li>• 1 egg</li> </ul>	2 – 3 servings (7 ounces / day)

If you have concerns that mom is eliminating major nutrient sources or may be particularly deficient in certain areas, she should be referred to her WIC Registered Dietitian.

### Misconception

It is a common misconception for a woman to believe her diet is responsible for her not having enough breast milk. You will want to remind her that she is capable of producing adequate amounts and that the most significant factors that affect milk production are the infant nursing (transferring milk) and emptying the breasts.

### Folic Acid

Breastfeeding women should be reminded to continue taking a multivitamin with folic acid.

### B 12

Strict vegetarian breastfeeding women, or vegans (those not eating meat, fish, dairy or eggs) can be deficient in vitamin B12, and more importantly, her baby can be deficient as well. (B12 is only found in animal products.) These moms need to be advised to include a supplement of vitamin B 12 in her diet.

### Food Restrictions?

Most babies do not have bad reactions to foods the mother eats. Spicy foods, strongly flavored foods and chocolate are thought by many to be foods that make the baby fussy, but these are not likely to be the cause.

In fact, some studies have shown that babies prefer breast milk that is flavored from a variety of foods moms eat. Also remember, some cultures may practice certain food habits during lactation.

Occasionally, a baby may not do well with certain foods that mom eats. This is the uncommon situation and can be managed with elimination of suspected allergenic foods such as cow's milk, dairy products, eggs, nuts, citrus fruits or wheat. This mom should be referred to a RD, CLC.

### Caffeine

Caffeine intake of one or two caffeine-containing beverages per day generally does not cause problems for babies. Consumptions of larger quantities has been known to cause an infant to be fussy or wakeful.

## Baby's Nutrition

### Vitamin D

The American Academy of Pediatrics recommends that all infants, including those who are exclusively breastfed, have a minimum intake of 200 International Unit (IU) of vitamin D per day beginning during the first two months of life. Moms need to be advised to talk to their physician about following these recommendations.

### Fluoride

Fluoride supplementation is based on an infant's age and the fluoride content of the household's drinking water. Before 6 months of age, no supplementation is recommended. After 6 months of age, a supplement is recommended if the drinking water is < 0.3 ppm fluoride. Tell moms to consult their baby's health care provider or family dentist.

## *Weight Loss / Exercise*

Breastfeeding requires additional calories to produce breast milk. The fat stored during pregnancy and additional calories consumed in the diet are used for milk production.

To ensure a woman rebuilds her own nutrient stores and meets the calorie demands of breastfeeding, dieting is not recommended in the early weeks postpartum.

### Weight loss

A lactating woman generally loses about 1 –2 pounds per month during the first 4 – 6 months. If a woman is overweight, a weight loss of up to about 4.5 pound per month probably won't have any adverse effects on her milk supply. More rapid weight loss is not recommended.

General recommendations are for women to consume at least 1800 Kcal / day in order to achieve a satisfactory intake of nutrients. Women should be discouraged from taking liquid weight loss diets, diet pills or appetite suppressants.

Some women actually gain weight while they are breastfeeding. Watching her dietary intake closer and including regular exercise will help her manage her weight better.



### Exercise

Exercise usually may be resumed at 6 weeks postpartum, with medical approval. Women should be referred to their primary care for exercise specifics.

Moderate exercise is generally appropriate, beneficial and recommended for the breastfeeding mother. Exercise can be invigorating and provide a sense of well-being.

Suggest ways to combine exercise with other activities mom can do with her baby such as:

- Walking with baby in a stroller or baby carrier outdoors or in a shopping mall.
- Exercise videotape or books intended for a mother to exercise along with her baby.
- Bicycling, water aerobics, and swimming may be more appropriate with an older baby

If women are doing a higher impact exercise, suggest wearing a good supportive bra. Bras that are too tight or restrictive can lead to plugged duct or infections. Occasionally, strenuous upper body exercise can cause milk stimulation or leaking. Breastfeeding or pumping prior to this type of exercise may be helpful.

Another misconception is that women shouldn't breastfeed after exercise. Women who make appropriate health choices such as breastfeeding and exercising should receive positive support and praise.

### Fluids

Drink to thirst is a recommendation. An adequate fluid intake (8 – 10 cups / day) helps breastfeeding women maintain their health. Advise women to get a glass of water, juice or milk before sitting down to breastfeed or pump.

Some women believe the misconception that drinking *large* amounts of water will help them make more milk. Mom's body just needs to stay adequately hydrated.

### *Baby Blues / Depression*

Many women get the "Baby Blues" after giving birth. Some moms feel "emotional" and may have feelings of irritability, exhaustion, anxiety, and sleeplessness. The "blues" usually do not last more than a few weeks.

If the symptoms get worse or do not go away, it may be a sign of depression. Depression can be a very serious illness. Depression can occur at anytime, and can be stimulated by “stress” or a stressful life experience.

### Referral

Be alert to a women’s mental health status at any time, including early postpartum (first couple months) and mid postpartum periods (around 6 months postpartum). If a mother expresses signs of, or verbalizes statements of depression, she should be provided with appropriate referral information. Depression is treatable.

## *Smoking, Alcohol, Drugs*

### Smoking

It is best for mom and baby to quit smoking. Nicotine and other harmful tobacco by-products pass into breast milk. Second-hand smoke is also harmful and can increase her baby’s risk for SIDS, respiratory illness, and ear infections.

While smoking is harmful to both the mother and baby, breast milk contains immunological properties that will help decrease her baby’s risk for these health concerns. For moms that smoke less than 20 cigarettes a day, the benefits of breastfeeding may out-weigh the risks of smoking.

Many women decrease smoking during their pregnancy, and some women try even harder when baby is born. Encourage women to try at their level:

- Quit
- Decrease the number of cigarettes smoked
- Make car and house smoke-free
- Smoke outside, or in a room away from the baby
- Wear an over-shirt when smoking, remove before contacting baby
- Breastfeed before smoking
- Seek help (refer her to a community smoking cessation program)

### Alcohol

It is best not to drink alcohol while breastfeeding. Alcohol passes into the breast milk and can harm her baby. It is best not to drink any alcohol in the first month of the baby’s life.

For women who choose to have an alcoholic drink, it should be occasionally, in small amounts, with a meal, and after breastfeeding. After the last breastfeeding of the night, preferably of a longer sleep stretch of an older infant, is the better strategy to follow.

The American Academy of Pediatrics Committee on Drug suggest intakes (based on a 135 lb. women) limited to: 2 – 2 ½ oz of liquor, or 8 oz of wine, or 2 cans of beer.

If you suspect mom to be abusing alcohol, it is important that you provide her with an appropriate referral to seek help.

### Drugs / Medications / Herbs

Women should be advised to contact their primary care physician or midwife before taking any medications. Drugs taken by breastfeeding mothers, (including over the counter, prescription and illicit drugs), all can have potential effects on the baby. Most over the counter medications and prescription drugs are compatible with breastfeeding. Those that *are* compatible with breastfeeding should be prescribed over those that are *not* compatible.

If a medication was prescribed that was contraindicated, women should be advised to discuss with their physician or midwife alternative medication choices that are compatible. It is not convenient for a woman to have to “pump and dump” or discontinue breastfeeding for a day or two, when alternative medications exist.

Compatible choices include medications that have short “half-life,” or are not long acting. Some medications can be taken just after a breastfeeding, or before a long infant sleep period, or only “as needed.”

The American Academy of Pediatric Committee on drugs has a current list of contraindicated drugs available on line at: <<http://www.aap.org>>

### They include:

- Illicit or illegal drugs
  - Amphetamine
  - Cocaine
  - Heroin
  - Marijuana
  - Nicotine
  - Phencyclidine
  
- Radiopharmaceuticals (radioactive compounds) for therapeutic use. For diagnostic doses, breastfeeding can be resumed once the compound has cleared the mother’s plasma.
- Antimetabolites
- Cancer Chemotherapy Drugs

If you suspect mom is abusing drugs or medications or if she admits that she is using drugs, it is important that you provide her with an appropriate referral to seek help from her health care provider. Breastfeeding while on illicit drugs is dangerous to the infant. You can explain that the risks may cause lethargy and decreased feedings in the infant along with the dangers of toxicity. You may also refer her to the Pregnancy Riskline (1-800-822-BABY).

Herbs and herbal remedies also have chemical properties that can have an effect the mother or her baby. Doses may be more difficult to measure if they are in forms of teas or leaves.

Some herbs have been identified as galactogogues or having the ability to increase breast milk production. Some have been determined to be safe and some have not. Although these are also sold over the counter, it is best to advise women to check with their physician or midwife for its safety before use or call the Pregnancy Risk Line.

Other contraindications to breastfeeding include:

- Infant that has galactosemia
- Mother with untreated active tuberculosis
- Mother tested positive for HIV (human immunodeficiency virus)

These contraindications are generally accepted in the U.S. as contraindicated to breastfeeding. If a woman does not know the status of any of these conditions, she should be referred to her primary care physician or midwife to undergo testing.

In Utah, The Pregnancy Risk Line can be contacted for information on the effect of drugs, medications or other substances on the breastfed baby.  
The Pregnancy Risk Line: 1 - 800 - 822 - BABY (1 - 800 - 822 - 2229)

## Family Planning



World Alliance for Breastfeeding Action  
(WABA)  
[www.waba.org.br](http://www.waba.org.br)

It is important for mom to consider a family planning method prior to delivery. The link between short birth intervals and poor pregnancy outcome (especially repeated pregnancies) is well established. Spacing pregnancies 16 months apart is recommended for this reason as well as to allow a woman to rebuild her nutrient stores that were compromised during pregnancy and lactation.

Information on family planning for breastfeeding mothers may enhance the health of mothers and babies. If women request information about family planning or contraception refer her to a local family planning clinic or her primary care physician or midwife.

It has been known for generations that mothers who fully breastfeed experience longer periods of lactational amenorrhea than women who do not breastfeed.

### These patterns include:

- a woman fully breastfeeds on demand with day and night feedings, *and*
- the baby receiving no supplemental foods or liquids, *and*
- the baby is under six months of age and is growing adequately, *and*
- the mother's menses has not returned.

In most situations in the U.S., breastfeeding women do not practice this type of unrestricted feeding, and so the protective effects are not reliable against pregnancy. Therefore, breastfeeding is not considered to be a reliable method of contraception.

Most forms of contraception are safe during lactation. Women should know that they can continue to breastfeed while using a safe and effective form of contraception.

Forms of contraception that are compatible with breastfeeding include:  
(Except during the first 6 wks. postpartum)

#### Hormonal Methods

- “mini pill” or progesterone-only birth control pill
- DepoProvera injections

These are examples of progesterone-only contraceptives. Use of these methods during lactation are safe and will not decrease milk production. However, it is recommended that breastfeeding women not use the above listed progestin-only methods the first 6 weeks postpartum.

The “patch” is a hormonal method that is not recommended to be used during breastfeeding.

#### Non-Hormonal Methods

- IUDs (Intrauterine devices)
- Barrier (condoms, cervical cap, diaphragm)

Barrier methods need to be used properly to be effective. Spermicide methods and natural planning methods are also not considered reliable.

Permanent methods of contraception include tubal ligation and vasectomy and should be considered by couples who are confident in their decision to end child bearing. These non-hormonal methods of contraception have no know effect on lactation and are considered to be safe.

#### Conclusion

Hopefully these modules have provided you with a basic understanding of breastfeeding. Take this information and practice it daily in your WIC clinic when counseling WIC mothers and families. You will be an invaluable resource to them!

Along the way, you will receive many thanks for your assistance. You *will* make a difference! Good luck and enjoy your role in promoting, protecting and supporting breastfeeding!



## References / Resources



### *Modules / Publications*

1. Breastfeeding Module, Unit II, Module No. 1. Utah Department of Health, Division of Community & Family Health Services, WIC Program, November 1992.
2. Breastfeeding Promotion and Support Guidelines for Healthy Full Term Infants. Iowa Department of Public Health, Iowa WIC Program, Iowa Lactation Task Force, August 2001.
3. Breastfeeding Module and Resource Manual. Colorado Department of Public Health and Environment, Nutrition Services, WIC Program, January 2000.
4. Breastfeeding: Wyoming WIC Program Training Module VI. Wyoming Department of Health, WIC Program, August 1997.
5. U.S. Department of Health and Human Services. HHS Blueprint for Action on Breastfeeding, Washington, D.C. U.S. Department of Health and Human Services, Office on Women's Health, 2000.

### *Book List*

1. Bengson D. *How Weaning Happens*. Schaumburg, Illinois; La Leche League International; 1999.
2. Eiger MS, Wendkos-Old S. *The Complete Book of Breastfeeding*, 3<sup>rd</sup> ed. New York, NY; Workman Publishing, Co. 1999.
3. Gotsch G. *Breastfeeding Pure and Simple*, 2<sup>nd</sup> ed. Schaumburg, Illinois; La Leche League International; 2000.
4. Hale T W. *Medications and Mother's Milk*, 10<sup>th</sup> ed. Amarillo, Texas; Pharmasoft Publishing; 2002.
5. La Leche League International. *The Womanly art of Breastfeeding*, 6<sup>th</sup> ed. Schaumburg, Illinois; La Leche League International; 1997.
6. Lauwers J, Shinskie D. *Counseling the Nursing Mother*, 3<sup>rd</sup> ed. Sudbury, Massachusetts; Jones and Bartlett Publishers; 2000.
7. Lawrence RA. *Breastfeeding: A guide for the medical profession*, 4<sup>th</sup> ed. St. Louis, Missouri; Mosby, Inc; 1994.
8. Newman J, Pitman T. *The Ultimate Breastfeeding Book of Answers*. Roseville, California; Prima Publishing; 2000.
9. Institute of Medicine, National Academy of Sciences. *Nutrition During Lactation*. Washington, DC; National Academy Press; 1991.
10. Pryor G. *Nursing Mother, Working Mother*. Boston, Massachusetts; The Harvard Common Press; 1997.

11. Riordan J, Auerbach K.G. *Breastfeeding and Human Lactation*, 2<sup>nd</sup> ed. Sudbury, Massachusetts; Jones and Bartlett Publishers; 1999.
12. Sears M, Sears W. *The Breastfeeding Book*, 1<sup>st</sup> ed. Boston, MA; Little, Brown and Company; 2000.
13. Spangler A. *Amy Spangler's Breastfeeding A Parent's Guide*, 7<sup>th</sup> ed. Abby Drue, Inc; 2000.
14. Tamaro J. *So That's What They're For!*, Holbrook, MA; Adams Media Corporation; 1998.
15. The American Academy of Pediatrics. *New Mother's Guide to Breastfeeding*. New York, NY; Bantam Books; 2002.
16. Wiggins PK. *Why Should I Nurse my Baby?* Franklin, Virginia; L.A. Publishing Co; 2001.
17. Wiggins PK. *¿Por Qué Debería Amamantar a mi Bebé?* Franklin, Virginia; L.A. Publishing Co; 2001.
18. Wiggins PK. *Breastfeeding A Mother's Gift*, 2 ed. Franklin, Virginia; L.A. Publishing Company; 1998.

### *Websites*

1. Academy of Breastfeeding Medicine: <http://www.bfmed.org/>
2. American Academy of Pediatrics: <http://www.aap.org/>
3. Breastfeeding and Human Lactation Study Center:  
<http://www.cdc.gov/breastfeeding/compend-bhlsc.htm>
4. Bright Future Lactation Resource Center: <http://www.bflrc.com>
5. La Leche League International: <http://www.lalecheleague.org/>
6. Physician's Breastfeeding Support Kit: <https://secure.aafp.org/cgi-bin/catalog.pl?uid=cat100949>
7. Wellstart International: <http://www.wellstart.org/>
8. International Lactation Consultants Association (ILCA): <http://www.ilca.org/>
9. Breastfeeding Promotion and Support in the WIC Program:  
[http://www.phila.gov/health/units/decywh/Special\\_Prog/Breastfeeding/apinkJune20021.PDF](http://www.phila.gov/health/units/decywh/Special_Prog/Breastfeeding/apinkJune20021.PDF)
10. AAP Policy Statement- The Transfer of Drugs And Other Chemicals Into Human Milk: <http://www.AAP.org>
11. The National Women's Health Information Center. A Project of the office on Women's Health in the U.S. Department of Health and Human Services: <http://www.4woman.gov/breastfeeding>



## *Other*

1. HealthONE Alliance Lactation Program  
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3. Hollister Incorporated Ameda Egnell  
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