LEVEL 2

WIC Certification Program

Breastfeeding Module

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IOWA WIC

STATE OF IOWA DEPARTMENT OF
Health AND Human
SERVICES

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You Matter!

You make a difference to the WIC families in your care. As a WIC staff member, you provide support and guidance to help Iowa families grow and thrive. You also play a critical role by supporting moms to achieve their breastfeeding goals.

As you will soon discover, supporting breastfeeding can be one of the most rewarding parts of your job. By providing breastfeeding information, encouragement, and support, you empower women to make an informed infant feeding choice with health benefits that last a lifetime.

This breastfeeding training module will help you gain the knowledge necessary to inform and support WIC participants and their families and friends.

How to Use This Module

Pace yourself - take time to complete all of the activities and to enjoy your learning process. The module has eight learning sections with many activities, including observations, videos, reflections, and much more. The module incorporates portions of the USDA WIC Breastfeeding Support, *Learn Together. Grow Together.* campaign. As you proceed through the module you will be linked to corresponding videos.

Check out the available resources on the USDA WIC Breastfeeding Support website, including many useful videos, posters, and more that you can share with your families.

https://wicbreastfeeding.fns.usda.gov/

Section I: Introduction

Reflection

Unlike other trainings you may have taken in the past, infant feeding is an area in which many people have both experience and opinions. Breastfeeding can be a very passionate topic for some people. Take a few minutes to think about what you know and feel toward breastfeeding. By answering the following questions, you can identify your own relationship with breastfeeding and perhaps identify any stigmas we sometimes associate with the topic.

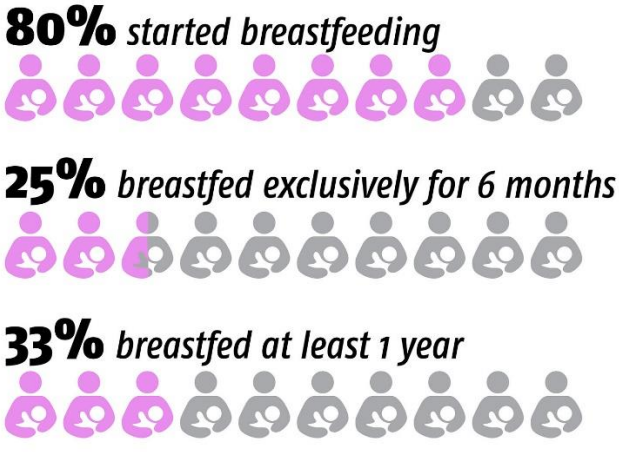
- Were you breastfed?
- Did you or a significant other breastfeed your child or children?
- What do you already know about breastfeeding?
- What has been your experience with breastfeeding, either personally or in a professional setting?
- Do you think you can influence how families choose to feed their children?

Try and let go of any stigmas you may hold and take in the information provided during this course with an open mind.

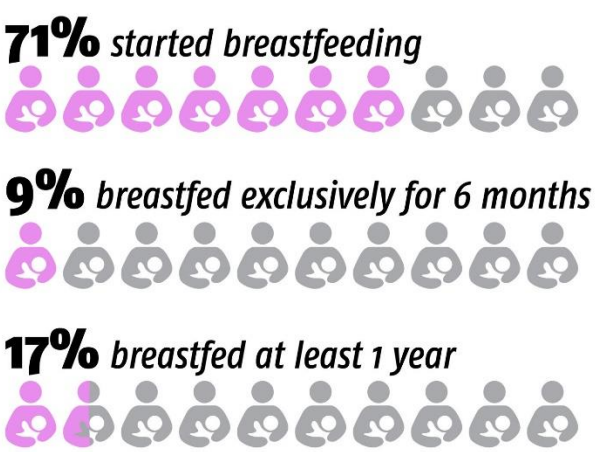
Breastfeeding in Iowa

Iowa moms want to breastfeed. In order to breastfeed exclusively and for longer, moms need support. Below are the breastfeeding rates in the state compared to WIC participants in Iowa:

CDC 2020 Breastfeeding Report Card
Iowa Breastfeeding Rates



WIC Breastfeeding Prevalence Report
Iowa WIC Breastfeeding Rates



Source: CDC National Immunization Survey (NIS), 2020 Breastfeeding Report Card, 2017 births and Focus Breastfeeding Prevalence Report, 2017 births.

The majority of moms start breastfeeding. The drop off in breastfeeding that occurs over time may be because of the barriers and challenges that sometimes come with breastfeeding, such as lack of breastfeeding knowledge, poor family or social support, and lack of supportive employers and work schedules, to name a few.

Moms with lower incomes, are less educated, are of a racial/ethnic minority, and that are less than 20 years old may have less access to breastfeeding support, more barriers, and may stop breastfeeding earlier. Therefore, these moms need even more support!

We want to help all moms and families in Iowa reach their breastfeeding goals, whatever they may be, by removing barriers and increasing knowledge and support.

WIC's Commitment to Breastfeeding

The WIC Program has always been a passionate promoter and supporter of breastfeeding. In 1989, the United States Congress strengthened WIC's efforts by giving funds specific to breastfeeding promotion and support. Since then, WIC Programs nationwide have implemented numerous activities and programs to increase breastfeeding rates among the WIC population.

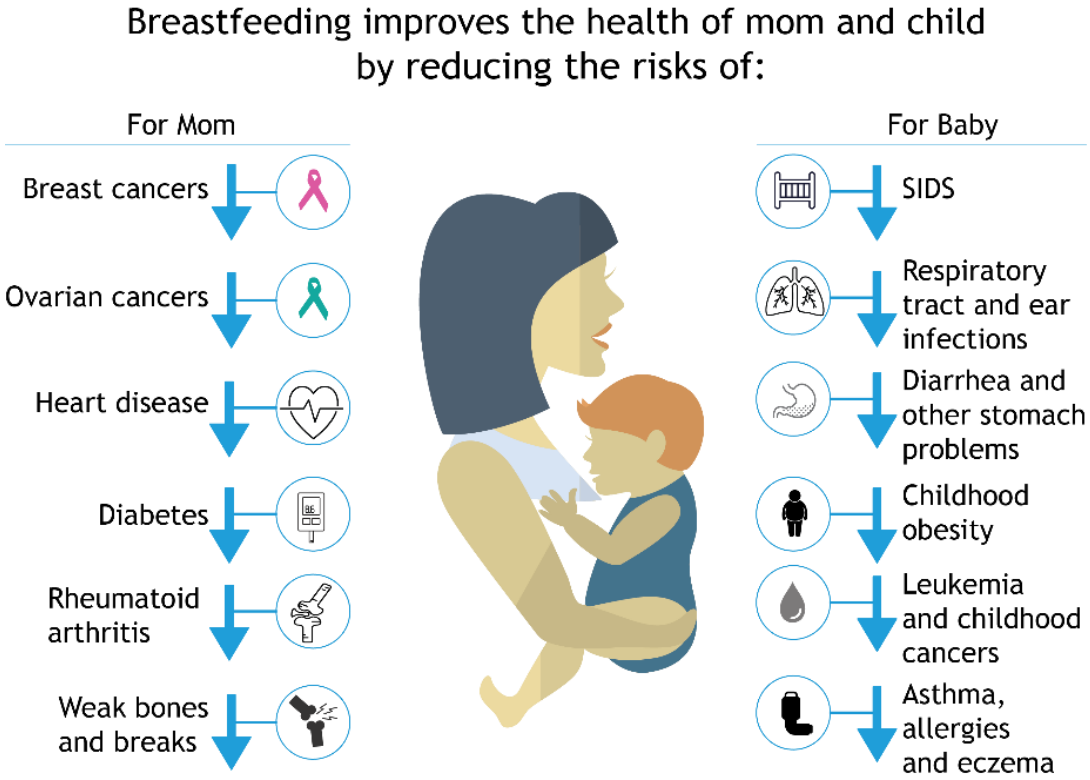
Want to know the WIC breastfeeding rates for your county? Focus has several reports a clinic or agency can run to get helpful information and track your efforts. Reports are accessed from the Reports section of the Focus navigation tree. Some featured reports are:

- **Breastfeeding Prevalence:** This report is used to evaluate the number, proportion, and length of time children breastfeed. It shows breastfeeding duration and exclusivity data
- **Reasons Breastfeeding Ceased:** This report is used to review breastfeeding data on children who started breastfeeding or "ever breastfed". Use this report to be aware of breastfeeding trends with your breastfeeding families at your agency or clinic.
- **Breastfeeding Prevalence by Equipment Issuance:** This report shows the rate of breastfeeding (including ever, exclusivity, and duration rates) for babies whose moms were issued breastfeeding equipment by the type of serialized (i.e. loaned multi-user pumps) or non-serialized equipment (i.e. single user pumps, etc.).

Benefits of Breastfeeding

Breast milk is the normal first food and promotes good health for children. All major medical organizations promote breastfeeding for optimal child health and development and recommend breastfeeding for as long as both mom and child want to continue.

The American Academy of Pediatrics (AAP) recommends all babies receive only breast milk for the first six months. Also called, "exclusive breastfeeding," this means babies receive no formula, solid foods, or water.



Source: Pediatrics, March 2012, 129 (3).

Breastfeeding benefits a family, a community, and the environment. Additional breastfeeding benefits not mentioned in the picture above include:

- Breastfed babies are healthier than formula-fed babies.
- Breast milk is easily digested by babies, so they may be less fussy.
- Promotes a higher learning ability and correct growth of jaws, teeth, and speech patterns.
- Improved mom and baby bonding.
- Can build mom's confidence and self-esteem.
- May help lower mom's risk of blood loss after delivery, helps the uterus to return to pre-pregnancy shape quicker, and may help mom lose weight and return to pre-pregnancy weight faster.
- Saves time – safe and fresh milk is always available, less time spent making formula, and feeding can occur anywhere at any time with no preparation necessary.
- Peace of mind – breast milk is always available (even in emergencies, snow storms, etc.). No worrying about proper mixing, correct temperature, expiration, or safety recalls of formula.
- Saves money – no need to buy formula, saving $1,200-$1,500 per year.
- Lower healthcare costs and more productive workforces because babies are sick less often and parents miss less work.

- Saves lives – research shows if 90% of U.S. babies breastfed exclusively for 6 months, nearly 1,000 deaths each year could be prevented and 13 billion dollars would be saved in medical and other costs.
- Sustainable and good for the environment – fewer formula cans, bottles, and nipples in landfills. Breastfeeding requires no packaging and its production does not harm the environment.

Sources:
1. Pediatrics, March 2012, 129 (3).
2. Surgeon General's Call to Action to Support Breastfeeding, January 2011.
3. Pediatrics, April 1999, 103 (Supp 1).
4. Pediatrics, May 2010, 125 (5).

The longer breastfeeding occurs, the more health benefits mom and baby receive!

Iowa Breastfeeding Laws to Know

It is important to know and understand Iowa laws that protect the rights of families to breastfeed. You can support and inform families of these laws so all families know their rights.

Breastfeeding in Public

The Iowa law (§ 135.30A) states: A woman may breastfeed the woman's own child in any public place where the woman's presence is otherwise authorized.

Workplace Accommodations for Nursing Mothers Act

President Obama signed the Affordable Care Act (ACA) on March 30, 2010. See the combined full text of Public Laws 111-148 and 111-152 here. Among many provisions, Section 4207 of the law amends the Fair Labor Standards Act (FLSA) of 1938 (29 U.S. Code 207) to require an employer to provide reasonable break time for an employee to express breast milk for her nursing child for one year after the child's birth each time such employee has need to express milk. The employer is not required to compensate an employee receiving reasonable break time for any work time spent for such purpose. The employer must also provide a place that is free from intrusion, other than a bathroom, for the employee to express breast milk. If these requirements impose undue hardship, an employer that employs fewer than 50 employees is not subject to these requirements. The federal requirements shall not preempt a state law that provides greater protections to employees.

For more information:

- *Fact Sheet on Break Time for Nursing Mothers under the FLSA*, U.S. Department of Labor
- *Break Time for Nursing Mothers,* U.S. Department of Labor
- *Frequently Asked Questions – Break Time for Nursing Mothers*, U.S. Department of Labor

Postponement of Jury Service for a Person Who is Breastfeeding a Child Act

The Iowa law (§607A.5) allows a woman to be excused from jury service if she submits written documentation verifying, to the court's satisfaction, that she is the mother of a breastfed child and is responsible for the daily care of the child.

WIC Breastfeeding Activities and Responsibilities

The WIC Program is a valuable source of breastfeeding information and support.

Many WIC participants report that WIC staff played an important role in their decision to breastfeed and to continue breastfeeding.

WIC agencies provide breastfeeding education and support in various ways throughout the state, including:

- Breastfeeding information is provided by WIC staff through individual education and group sessions.
- Many agencies provide postpartum support through telephone follow-up programs, community resources, and breastfeeding support groups.
- All agencies have a peer counseling program. A Breastfeeding Peer Counselor is a mom that is a current or previous WIC participant who has successfully breastfed at least one child and has received training to provide breastfeeding advice and information to WIC families.
- All agencies have a breast pump program.

Many WIC staff have completed higher level breastfeeding training and may counsel participants with high risk breastfeeding complications or breastfeeding concerns. Such certifications include:

- **Certified Lactation Consultant (CLC) and Certified Lactation Specialist (CLS):** An individual who has successfully completed the 45-hour Healthy Children Project's Certified Lactation Counselor Training Program, the Lactation Education Consultants' Course, or another comparable 45-hour course. Competencies and skills required to provide evidence based counseling, breastfeeding assessment, and support skills for pregnant, lactating, and breastfeeding women are demonstrated through an examination following completion of the course. CLCs work in hospitals, pediatrician

offices, community programs, and at WIC. All certifications are official credentials that are maintained with continuing education.

- **International Board Certified Lactation Consultant (IBCLC):** An IBCLC is certified by the International Board of Lactation Consultant Examiners and has many hours of clinical practice experience in management of lactation and breastfeeding, as well as education in human lactation, breastfeeding, and general health science. IBCLCs typically work in hospitals or in private practice. IBCLC is the highest credential you can receive for breastfeeding management.

Staff Responsibilities

To ensure women receive adequate breastfeeding information and support, all WIC staff are responsible for:

- Encouraging all women to breastfeed, except for in a few situations discussed later in the module.
- Providing information and support at each prenatal visit, including information on the process of breastfeeding, such as "how to breastfeed," positioning, avoiding formula supplementation (especially in the first month), preventing problems, breastfeeding when returning to work or school, and expressing/pumping and storing breast milk.
- Providing education and support during the postpartum period.
- Identifying breastfeeding problems and making referrals, as indicated.
- Honoring and supporting the parents' right to choose how they will feed their baby. Talking to parents about the reasons to breastfeed and addressing any barriers will allow them to be empowered and make the choice that is best for their family.

Feeling Good About Providing Breastfeeding Education

Learning more about breastfeeding and becoming comfortable with how you feel about breastfeeding is important for you to provide the best possible support for Iowa families. Many WIC staff have not breastfed and do an excellent job promoting and supporting breastfeeding. Below are some tips for you to remember:

- **Fear of breastfeeding pressure**. Some WIC staff may be afraid of making a participant feel guilty about not breastfeeding. It is important to recognize that WIC's role is to provide information so that women can make an informed decision. Information is empowering – it allows women to make the best choice for themselves and their families. If a woman has the information and chooses not to breastfeed, WIC staff can know that it was an informed choice.

- **Concerns over direct breastfeeding**. Some women may decide not to breastfeed because they are uncomfortable putting a baby directly to the breast. Women need to

know that there are options when it comes to providing breast milk for their child. A woman could decide to only pump their milk and feed from a bottle.

- **Mom says she plans to formula-feed.** What should you do if you ask a mom what she knows about breastfeeding and she tells you she is going to formula-feed? To find out why mom plans to formula feed use open-ended questions such as, "Tell me a little more about why you're planning to use formula." Often moms have decided to formula-feed because of wrong information they have heard about breastfeeding. You can acknowledge that many women have heard the same thing (provide affirmation) and then share what you know to be true about breastfeeding.

Some women may choose to formula-feed despite your efforts to promote breastfeeding. If a woman chooses to formula-feed after you provide her with information, show your support by acknowledging the mom's informed decision, and remind her that if she changes her mind, WIC will be here to give support.

Making the Most of an Education Session

Repeat yourself. People learn best if information is provided over and over, in small amounts. Research shows that the number of times breastfeeding is discussed has a bigger impact than the total amount of time spent discussing the topic. WIC prenatal and early post-partum visits provide an excellent opportunity for you to repeat information in small amounts.

Identify the woman's intentions and needs. It is important for WIC staff to first address a woman's goals and needs. This prevents you from overwhelming a participant with too much information and shows your interest in meeting her needs. For example, if a woman has already decided to breastfeed and recognizes the many benefits, it is a better use of time to address the "how-to" of breastfeeding.

Previous breastfeeding experience. Previously breastfeeding a child does not mean a woman was informed about breastfeeding or that the experience was successful. If a woman has previous breastfeeding experience, ask her about her concerns and be sure to invite her to a breastfeeding class, if available. You might ask, "What was the best thing about breastfeeding?" "What are some of the challenges, if any, that you had with your previous breastfeeding experiences?" If a woman has had an unsuccessful breastfeeding experience, you might discuss options she could try to ensure a successful experience. By tailoring your education, you show your interest in the participant's needs and save time.

Open-ended questions. Open-ended questions are helpful in identifying a participant's needs and getting a discussion started. For example, asking a participant "What have you heard about breastfeeding?" or "How often is your baby breastfeeding?" can help a participant share how she feels about breastfeeding. Using closed-ended questions that

only require a yes or no answer, such as, "Are you planning to breastfeed?" or "How is breastfeeding going?" will shut-down the conversation.

SELF-CHECK: PRACTICE YOUR KNOWLEDGE

The following begins a series of Self-Checks that occur throughout this module. The answers are located at the end of each Self-Check.

1. True or False? The longer breastfeeding occurs, the more health benefits mom and baby receive.

2. True or False? Breastfed babies get sick less often and are healthier than formula-fed babies.

3. True or False? Breastfed babies are as likely to die from Sudden Infant Death Syndrome (SIDS) compared to formula-fed babies.

4. True or False? Employers must provide a space that is free from intrusion for an employee to express milk as needed.

5. WIC's role is to provide information and education so women can make an _____ decision.

6. If a woman tells me she is <u>not</u> going to breastfeed, I should first:
   a) discuss other feeding options
   b) ask her how she has come to that decision
   c) discuss the benefits of breastfeeding
   d) respect her decision and discuss formula-feeding

7. True or False? Repeating breastfeeding information over and over has a bigger impact than total amount of time spent discussing a topic.

ANSWERS

1. True! To get the most health benefits, all major medical organizations recommend breastfeeding for at least 6 months and as long as both mom and baby want to continue.

2. True! Breast milk helps to boost a baby's immune system. Breastfeeding can lower the risk of respiratory and ear infections, diarrhea and other stomach problems, and leukemia and childhood cancers.

3. False! Breastfeeding can reduce the risk of a baby dying from SIDS.

4. True! Employers must provide a place free from intrusion, other than a bathroom, for an employee to express her breast milk.

5. Informed

6. b. First ask mom why she came to that decision and provide any information to correct wrong information she may have received.

7. True! WIC prenatal and early postpartum visits are an excellent time to repeat breastfeeding information in small amounts.

Section II: Yes, You Can Breastfeed

The decision to breastfeed a baby is a personal choice. An important role you play is to help each woman to make an informed choice about breastfeeding and support her decision. You can help mom by knowing and sharing the many benefits and advantages of breastfeeding, discussing any possible concerns, and explaining to her the ways WIC supports breastfeeding.

Most breastfeeding information and resources are available in both English and Spanish. WIC supports breastfeeding by providing:

- Breastfeeding information (individual sessions, classes, written materials)
- Breast pumps (manual, personal use, and hospital-grade/multi-user)
- Breastfeeding support groups
- Breastfeeding Peer Counselors
- Community breastfeeding resources and referrals
- Extra food
- Certification for a year for breastfeeding moms

Prenatal Education is Key!

Educating women prenatally on what they can expect in the hospital, in the first few weeks, and beyond can mean the difference between success and failure in a mom's breastfeeding experience. Women need to hear that breastfeeding in the first few weeks takes time and adjustment as mom and baby get to know each other.

> **Research shows that the more times breastfeeding is asked about or educated on, especially prenatally, the more breastfeeding success for a mom.**

As breastfeeding educators we must be careful not to portray the first weeks as being "easy" or coming naturally. Breastfeeding is a learning experience for both mom and baby – it takes time to feel comfortable and time to develop routines. If moms are told breastfeeding is "easy," they may feel like failures if breastfeeding is not so easy for them. Be positive and encouraging while being realistic about the challenges during the first few weeks.

Preparing for Birth

It is important to prepare moms so they can know what to expect of their birthing experience and how it can affect breastfeeding success, for better or worse. While many maternity hospitals around Iowa are adopting policies and practices that improve breastfeeding support, moms should be informed of the most important practices to look for and what to advocate for during and after their child's birth.
Encourage all women prenatally to choose a birthing hospital that is Baby-Friendly designated or that follows evidenced-based practices which are supportive of breastfeeding. Suggest women request of their hospital (especially if the hospital is not Baby-Friendly designated) that they at least practice the Baby-Friendly Hospital Initiative's *Ten Steps to Successful Breastfeeding.*

Ten Steps to Successful Breastfeeding

WHO and UNICEF launched the Baby-friendly Hospital Initiative (BFHI) to help motivate facilities providing maternity and newborn services worldwide to implement the Ten Steps to Successful Breastfeeding. The Ten Steps summarize a package of policies and procedures that facilities providing maternity and newborn services should implement to support breastfeeding. WHO has called upon all facilities providing maternity and newborn services worldwide to implement the following Ten Steps:

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

2. Ensure that staff have sufficient knowledge, competence and skills to support breastfeeding.
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.

There is substantial evidence that implementing the Ten Steps significantly improves breastfeeding rates. A systematic review of 58 studies on maternity and newborn care published in 2016 demonstrated clearly that adherence to the Ten Steps impacts early initiation of breastfeeding immediately after birth, exclusive breastfeeding and total duration of breastfeeding.

Baby-Friendly Designation

Becoming a Baby-Friendly designated hospital is a detailed and thorough journey and means the facility follows the *Ten Steps to Successful Breastfeeding* and is able to successfully assist all moms with the information, confidence, and skills needed to successfully start and continue breastfeeding.[1]

Challenges and how to help

Moms may experience challenges to the important breastfeeding supportive practices listed above. Some common challenges and ways you can prepare and support moms are:

- **Separation:** Moms should provide expressed breast milk or colostrum for times when they are separated from their babies due to infant or maternal illness. In order to assist moms who must express milk, hospitals may provide them with a quality breast pump. Make sure you're familiar with what birthing hospitals in your service area offer.
- **Cesarean births:** This type of birth is not usually a problem; most mothers can hold their babies skin-to-skin in the operating room after delivery and during recovery. There are different positions that are more comfortable for the mom who just had a C-section. Recent research shows that a father providing skin-to-skin contact with his newborn immediately after a cesarean birth offers benefits as well. It is especially

important that the mom and/or partner discusses her desire to breastfeed and have the baby skin-to-skin as soon as possible after a cesarean birth as facilities may not be prepared to automatically offer this important first step to successful breastfeeding.

What you can do to help moms prepare for breastfeeding success in the hospital

- Educate moms about the benefits of skin-to-skin contact immediately after birth and the importance and benefits of early breastfeeding.
- Encourage moms to talk prenatally to their healthcare provider and hospital about her requests for birth and breastfeeding.
- Encourage moms who have a choice to choose a hospital that is designated as Baby-Friendly or that follows breastfeeding friendly practices.
- Encourage moms to discuss breastfeeding and birth wishes with hospital staff upon arrival at the hospital and as soon after birth as possible. Help mom to know the importance of her voice in her hospital care!

Key Points

- **Putting baby skin-to-skin and breastfeeding within 1 hour after delivery is important. Frequency of breastfeeding should be every 1 ½ to 3 hours. Frequency of feeding and emptying of breasts build a mom's milk supply.**
- **Room-in with baby at the hospital.**
- **Avoidance of pacifiers and bottles the first 3 to 4 weeks after delivery helps to get breastfeeding off to a good start and helps mom establish her milk supply.**
- **Mom should leave the hospital with a phone number to call for help with breastfeeding.**

Breastfeeding Counseling Goals

Good counseling skills, techniques, and strategies that are supportive of breastfeeding are key to helping moms with their breastfeeding goals. Good counseling involves tailoring information that is appropriate to each woman's situation and background. Listen and gather information using open-ended questions. Breastfeeding counseling goals are:

- Mom feels heard and valued
- Baby's needs are taken into account
- Listen and provide information about breastfeeding and what to expect
- Provide practical help with positioning the baby to breastfeed
- Ensure mom, baby, and you are fully involved in any problem solving
- Provide referrals and community resources as needed

Acknowledge every mom's individual experiences and feelings and remember to be reassuring and encouraging.

Addressing Common Myths and Concerns

Concerns and myths about breastfeeding can contribute to poor decision making. Addressing a woman's concerns or misinformation by providing accurate and helpful information helps a woman make an informed choice and increases the likelihood that she will breastfeed.

The following are common myths and concerns you might hear from moms. Possible responses are listed to the right. Practice saying the responses out loud in your own words.

Moms Say:	**You Respond:**
"I can't breastfeed because I don't eat very healthy."	You don't have to follow a special diet to breastfeed; eat as well as you did while you were pregnant and your baby will grow well on your milk.
"I don't think I will make enough milk for my baby."	Tell me more about why you are concerned. Learning how to breastfeed now will help to ensure a good milk supply. I can provide you with some tips and information. There are also signs I can teach you to watch for so you know that your baby is getting enough milk.
"Even if I breastfeed, I know I will have to give my baby formula in order to give her all the vitamins she needs to grow."	Breast milk provides a baby with what they need to grow and thrive. Breast milk contains nutrients, vitamins, growth factors, antibodies, hormones, and much more that are <u>not</u> available in formula.
"I can't breastfeed because I have to go back to work/school soon after the baby is born."	There are options for combining working and breastfeeding. You can pump your milk during your work day on breaks or meal times to give the babysitter/child care provider, have the baby brought to you on your breaks so you can feed directly, or take a split shift or change your hours, are a few examples. Tell me where you work and what your work schedule is like and perhaps we can find some ways to incorporate breastfeeding into your work day. (If a mom is unable or unwilling to pump breast milk, suggest she breastfeed when she is with the baby, like at night, and supplement with formula when away at work. Any breastfeeding is better than none.)

Moms Say:	You Respond:
"I won't be able to breastfeed because my mom couldn't breastfeed. "	Breastfeeding is different for everyone and with every baby. By learning about breastfeeding now and getting support you may be able to successfully breastfeed. When our moms were breastfeeding they didn't have as much information and support. We know so much more about breastfeeding now. WIC will provide you with information at each visit and will be here for you if you have any questions or needs when you start breastfeeding.
"My sister breastfed and she said it hurt."	It is not uncommon to experience some discomfort during the early weeks as you and your baby get to know each other and learn about breastfeeding together, but it should not be painful. Pain is usually caused by poor positioning. I can teach you proper positioning so it isn't painful. We are here to help you if you have any issues after you have the baby as well.
"I am afraid breastfeeding will tie me down too much."	During the first few weeks, all moms need extra rest and time to recover from birth, adjust to a new baby, get breastfeeding off to a good start, and build a good milk supply. After that, breastfeeding moms can take their babies with them most anywhere and don't have to carry bottles and formula. You can breastfeed anywhere and anytime, no preparation needed. If you need to leave your baby, you can leave a bottle of your expressed breast milk.
"I've heard that once you breastfeed, you can never be away from the baby because the baby won't want to take a bottle."	Once your baby is a few weeks old and your milk supply is well established, if bottles will be needed, it's a good idea to introduce a bottle of breast milk so your baby becomes familiar with a bottle nipple.

Moms Say:	You Respond:
"I want my baby's dad to be able to feed our baby too."	Dads can bond with the baby by holding the baby skin to skin, reading a book, giving the baby a bath, or doing the bedtime routine. After your baby is a few weeks old, you can pump your milk and dad can feed breast milk from a bottle. When your baby gets older, dad can also help feed other foods too.
"I don't want anyone to see me breastfeed."	What a lot of moms tell me is that with practice they got so good at breastfeeding no one could tell they were feeding their baby. If you choose to breastfeed in public and you want more privacy, you can drape a cover or blanket over you while nursing, find a nursing room, or feed a bottle of expressed breastmilk.
"I heard you leak all over—how embarrassing!"	Not everyone leaks breast milk. If your breasts leak you can wear breast pads. Often times simply putting pressure on your breast with the palm of your hand or your forearm will stop the leaking.
"I heard that my breasts will sag after breastfeeding."	Pregnancy is the actual cause of your breasts sagging after childbirth, not breastfeeding. Changes to breast firmness or stretch marks are hereditary and due to pregnancy.
"My mother/sister/friend said my baby is not gaining enough weight. Shouldn't I start giving formula?"	No. If the baby's growth assessment is within normal limits, then your baby is growing very well and your breastmilk is the best food for her right now. Keep breastfeeding your baby when she is hungry, and she will get the best nutrition and continue to grow.

Here are some other concerns:

Unsupportive family and friends ... Make breastfeeding your own decision. Seek out people who will support your decision and educate those who don't. Invite them to attend your WIC appointments with you.

Breastfeeding babies cry a lot ... Babies are born with the ability to communicate. They use their bodies to make noises to let you know when they need to eat, learn, play, or rest. The

closeness with breastfeeding helps babies feel secure and loved. Babies who feel secure usually cry less often.

Do not know how to breastfeed or fear it will be complicated ... Breastfeeding may seem complicated, but learning about breastfeeding ahead of time will help it go more smoothly.

Breastfeeding will make my partner jealous ... Sharing the baby with your partner and having him near during feedings helps everyone.
Think breasts have to be a certain size ... Women with any size breasts can breastfeed. Breast size does not determine how much milk a woman may make, hold, or how successful breastfeeding may be.

Think baby will be allergic to the breast milk ... Breast milk is made just right for babies. It is very rare that a baby will be allergic to a mom's milk.

Inverted or flat nipples ... You can still breastfeed. Breast shells worn during the third trimester and after your baby is born, or pumping a little before feedings may help by drawing the nipple out. Breast shields are sometimes used for inverted nipples to help breastfeeding be successful. WIC can help you with this.

Breast milk is bad or can go bad in the breast … Some women may have heard that their milk is bad, sour, or can go bad while in their breast, especially in the case of engorgement, but this is **not** true. Breast milk in your breast is always the perfect food for your baby, with the right nutrition and at the right temperature.

Having multiples ... A mom of multiples can breastfeed; the body will produce milk according to the need. WIC has hospital-grade electric breast pumps that can be helpful to build your milk supply.

Inconvenient . . . Actually it is easier to breastfeed than formula-feed because no equipment, formula, access to clean, hot water, or preparation time is needed. Breast milk is always available (even in emergencies, snow storms, etc.). No worrying about proper mixing, temperature, expiration, or recalls of formula.

Breast surgeries, unusual appearance, or piercings … refer to Section III under the Breasts, Breast Type header for complete information.

Previous lactation failure … Understanding the reasons for previous failure can improve success with subsequent pregnancies.

Is presently breastfeeding another baby while pregnant ... It is possible to breastfeed throughout pregnancy. Some babies may wean spontaneously due to changes in flavor and milk volume when their mom becomes pregnant. Once the baby is born, the new baby should be fed first and more often.

Prefers combination feeding of formula and breast ... Understanding that breast milk has everything formula contains and more. Be honest with moms to try and understand their concerns.

SELF-CHECK: PRACTICE YOUR KNOWLEDGE

What concerns and myths have you heard about breastfeeding? List a few.

Mark the following statements True or False:

_____ 1. Breastfeeding moms have to eat a special diet to make good milk.

_____ 2. If a woman is returning to work within the first 3 weeks after her baby is born, it is recommended she formula-feed.

_____ 3. If a woman's mom could not breastfeed, she will not be able to breastfeed either.

_____ 4. Breastfeeding hurts a lot.

_____ 5. A woman with small breasts can make enough milk to feed her baby.

_____ 6. Breastfeeding ties a mom down and keeps her from having a social life.

_____ 7. Breastfed babies cry a lot.

_____ 8. Once a mom starts breastfeeding, her baby won't want to take a bottle.

_____ 9. In the middle of the night, when a baby is crying, a mom can get her baby and lie back down in bed to breastfeed.

_____ 10. Breast milk can go bad in the breast.

ANSWERS

1. False
2. False
3. False
4. False
5. True

6. False
7. False
8. False
9. True
10. False

Support of Family and Friends

Lack of support is one of the biggest reasons why women do not start breastfeeding and why women quit breastfeeding. Women need to know before they deliver what options are available to them. You play an important role in helping women identify their support systems.

Questions you can ask to assess a woman's support system are:

- Have you talked to your family and friends about breastfeeding?
- Did your mom, sister, or friends breastfeed?
- How does the baby's dad feel about your breastfeeding?
- Do you have anyone who can help you at home with breastfeeding questions or concerns?
- Have you spoken to your healthcare provider about your plans to breastfeed?
- Have you spoken to your employer about your plans to return to work after you have your baby?

Family and Friends

Often family and friends are not supportive because they feel left out. Encourage moms to let others develop their special times with the baby. Provide suggestions for how dads, grandmothers, family, and friends can be supportive including:

- Bringing the baby to mom at feedings
- Burping the baby
- Bathing the baby
- Changing diapers and clothes
- Holding the baby during non-feeding times
- Feed pumped breast milk from a bottle (after the baby is a few weeks old and breastfeeding is well established)
- Help put the baby to bed
- Hold, talk, sing, and read to the baby

A friend or family member who has had a positive breastfeeding experience can be an excellent resource to a new breastfeeding mom. Encourage women to talk with friends and family about their interest in breastfeeding and how they can help when the baby comes.

Sometimes friends and family are not supportive. If a mom expresses her concerns about others not supporting her decision to breastfeed, encourage her to include them in their WIC visits, hospital and WIC breastfeeding classes, and to share any educational materials she receives about breastfeeding. Educating family and friends on how important breastfeeding is can help turn that person into a breastfeeding supporter.

Resource Time!

Review the following USDA WIC Breastfeeding Support pages and consider sharing them with your participants:

- *WIC Breastfeeding Support- Dads*
- *WIC Breastfeeding Support- Grandparents*

Community Resources

At the last prenatal visit, make sure to provide women with a list of breastfeeding resources with phone numbers as well as your name and number. Connect her with the breastfeeding peer counselor program at your agency.

Community resources may include:

- La Leche League, a volunteer organization which offers breastfeeding information and holds monthly group meetings.
- Hospitals have breastfeeding follow-up and support programs, lactation consultants, and phone support lines. Encourage moms to tour the hospital where they are planning to deliver and to ask about the lactation services available.

Healthcare Providers

Ask women to also discuss their breastfeeding plans with their healthcare provider and their baby's healthcare provider. Consider looking at the *Making Breastfeeding Work for Medical Offices* toolkit developed in Colorado for providing to families and using it as a resource when you reach out to healthcare professionals in your community.

Work , School, and Child Care

Returning to work after having a baby is often a difficult time for any mom. If a mom does not believe she will be supported by her employer or child care professional, she may decide not to breastfeed, or may stop breastfeeding early.

Ask women to talk about their breastfeeding goals and needs with their employer or school before they deliver. Under Iowa law, all employers must accommodate a breastfeeding

woman by providing her with a private space, other than a toilet stall, and reasonable paid or unpaid break time for her to pump breast milk during the work day. It is best if the woman discusses with her employer before delivering about where she can pump and how she will adjust her schedule to pump during the day once she returns. Women can provide their employer with an official letter asking for support and detailing her needs. Resources for women returning to work are available at www.womenshealth.gov/breastfeeding.

Breastfeeding-friendly child care professionals have knowledge and provide support to families to help increase the length of time babies are breastfed, leading to better health for moms and babies. Suggest mom find a breastfeeding-friendly child care professional or provide her child care professional with the USDA's *Feeding Infants in the Child and Adult Care Food Program*. Another great resource for WIC staff is the *Colorado Breastfeeding in Child Care Toolkit*. The toolkit provides useful information for anyone caring for a breastfed child.

Video Time!

Watch the following USDA WIC Breastfeeding Support videos and consider sharing them with your participants:

- *Going Back to Work or School*

You Matter!

You are an important support system. Share with moms that you are available to them to answer any questions, and if you do not have all the answers, you will direct them to someone who does. Let them know that you want to see or talk to them within the first week after the baby is born so you can follow up on any breastfeeding questions or concerns. Sometimes WIC is a woman's only support system so it is essential that you tell her that you are there for her if she needs help.

SELF-CHECK: PRACTICE YOUR KNOWLEDGE

On a piece of paper write how you might respond to these scenarios.

1. ***Scenario 1***
   At her WIC visit, a woman shares the following conversation she had with her best friend.

Pregnant "My doctor said it would be best if I breastfeed my baby. He said

Woman: my baby would be healthier if I do."

Friend: "Are you going to? My mom breastfed for a little while and she said it hurt and it was so inconvenient. I don't know if I would put myself through that."

Pregnant Woman: "Really? I may at least try it. My doctor said that besides being healthy for my baby it is really healthy for me too."

Friend: "I don't know. It sounds like a big hassle to me! Your breasts will hurt and you will be leaking all over the place. Plus, you will be the only one able to feed your baby. You will have to be there for every feeding."

How do you think this pregnant woman feels? Do you think her friend's reaction may influence her choice to breastfeed? Write down suggestions you would offer the pregnant woman.

2. ***Scenario II***
   Amy is at your office for her WIC appointment. She is thirty weeks pregnant and has just told you she does not want to breastfeed.

   How would you respond?

3. ***Scenario III***
   Sara is 28 weeks pregnant. She is not sure she wants to breastfeed. This is her first pregnancy. Her mom did not breastfeed, nor did any of her friends.

   How would you respond?

4. ***Scenario IV***
   Araceli is not planning to breastfeed because she will be returning to work 3 weeks after the baby is born.

   How would you respond?

5. True or False. If a woman has small breasts she cannot breastfeed.

6. Which formula would a breastfeeding mom need to provide to her baby to be sure the baby gets all the necessary vitamins?

7. Name two places a woman can turn to for breastfeeding support.

8. List two breastfeeding options mom can choose when she returns to work.

ANSWERS

Possible Responses to Scenarios

1. ***Scenario I: Possible response***

   - Identify any concerns of the woman and address any fears or myths she may have based upon her friend's opinion.
   - Ask the woman how her friend's comments made her feel about her decision to breastfeed.
   - She is likely feeling unsupported by her friend. Ask the woman to invite her friend to attend a breastfeeding class with her or have her bring her friend to her next WIC appointment so she can learn more about breastfeeding.
   - Ask the woman to share some of the breastfeeding educational materials with her friend. Have the friend visit a friend who is breastfeeding.

2. *Scenario II: Possible response to Amy*
   - Inquire: "Tell me a little more about why you're planning to use formula." Identify the myths or concerns.
   - Help mom make an informed choice. Provide information to resolve the concern or myth.
   - Providing supportive information. As appropriate, discuss some of the advantages and benefits of breastfeeding.
   - Make sure mom knows however she decides to feed her baby will be supported by WIC and she can ask any additional questions at any time.

3. *Scenario III: Possible response to Sara*
   - Find out what mom has heard about breastfeeding. Identify what her concerns are.
   - Help mom make an informed choice. Provide information to resolve the concern or myth.
   - Help identify possible support systems within the mom's life that can support her to breastfeed, if she chooses.

4. *Scenario IV: Possible response to Araceli*
   - Tell mom: "Many moms think they can't work and breastfeed. But did you know that breastfed babies are healthier which means you'll miss work/school less often? There are many options for breastfeeding and working."
   - Discuss possible options such as hand expression, pumping milk for her baby, and storing breast milk. Inform the mom about Iowa state law that her employer must accommodate her need to express breast milk by providing her with reasonable break time and a private space to pump. If necessary, supplementing with formula while mom is at work and breastfeeding when mom is with the baby is another possible option to consider.

5. False. The size of a woman's breasts does not determine her breastfeeding success or how much milk she can make.

6. None, breast milk provides a baby with what they need to grow and thrive. Breast milk contains nutrients, vitamins, growth factors, antibodies, hormones, and much more that are **not** available in formula.

7. WIC, La Leche League, community support groups, the hospital where she delivered, healthcare providers, family, and friends.

8. 1) Express her milk during the work day to leave for the child care provider to feed.
   2) Have someone bring the baby to her to feed during her breaks.
   3) Work part-time or split shift.
   4) Breastfeed when she is at home and supplement with formula while at work.

Key Points

- **Myths and concerns - Providing facts to clarify misinformation or address concerns is critical in helping a woman make an informed infant feeding choice.**

- **Support of family and friends - Lack of support is one of the main reasons women quit breastfeeding or don't even start. WIC plays an important role in helping a woman identify her support systems and resources.**

- **Ask your supervisor which clinic/agency have staff have extended breastfeeding education, such as CLS, CLC, or IBCLC if you don't already know.**

Section III: Breastfeeding and Breast Milk

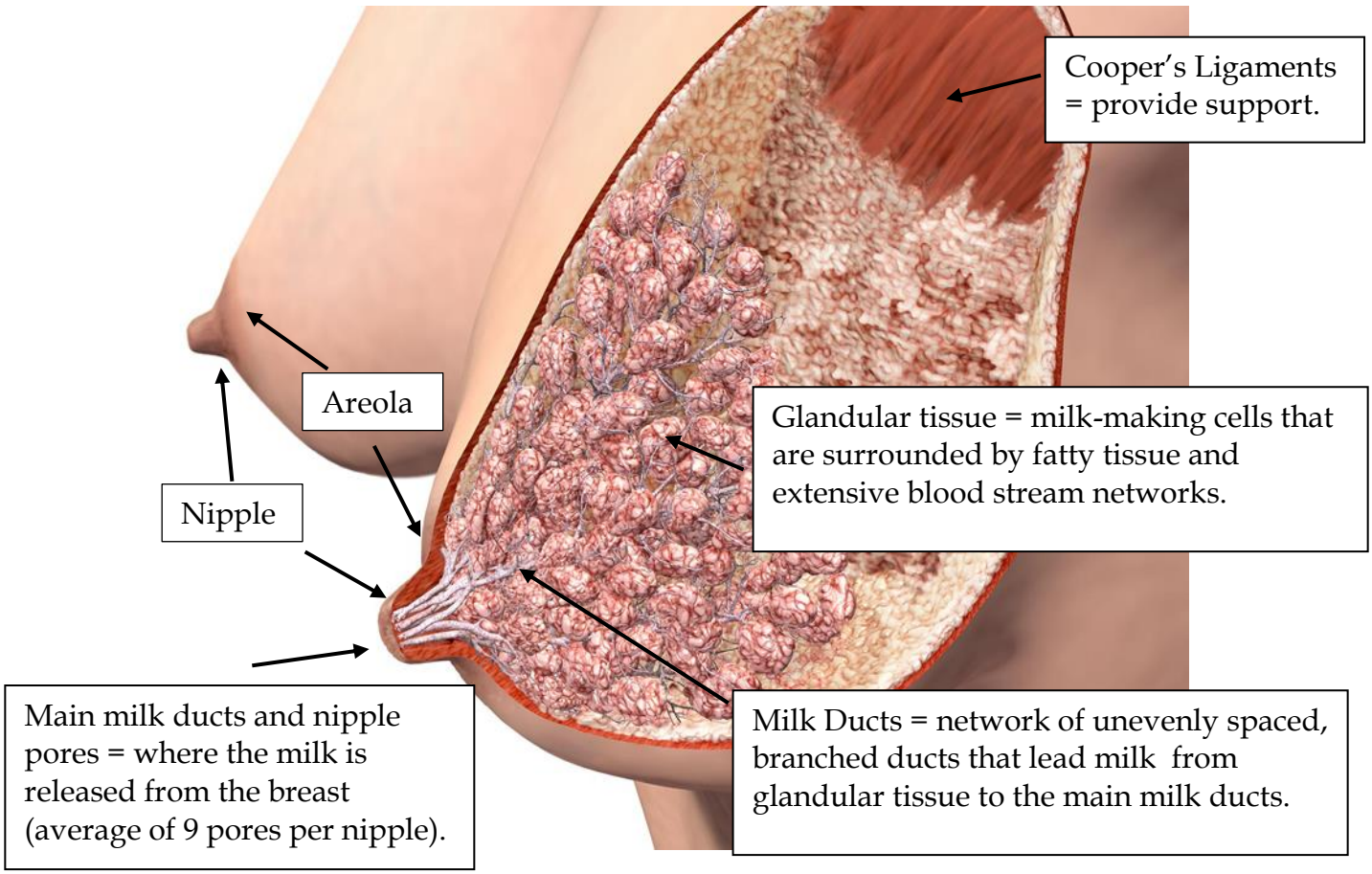
For most moms, breastfeeding is a learning experience. It may be natural, but it is not always instinctive or easy for every woman. The women you meet will have varied experiences and knowledge about breastfeeding, whether or not they breastfed previously.

In this section you will learn about the anatomy of the breast, breast milk and supply, breast preparation, positioning, latch, 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 and help each woman meet her own breastfeeding goals.

Breasts

Anatomy of the Breasts

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



Breast Preparation

In the past, many women believed nipple preparation was necessary to "toughen up" their nipples for breastfeeding, which is not correct. 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, such techniques used to be taught to moms to help prevent nipple soreness. All of these techniques are completely unnecessary and should be avoided.

Fortunately, research shows the breasts prepare for the experience naturally. 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 harsh soaps (e.g., deodorant soaps), lotions, and creams can remove these protective conditioners and can result in dry, cracked, and damaged nipples. Encourage women to use plain water and mild, unscented soaps when washing their breasts in the later weeks of their pregnancy and while breastfeeding.

Practices to Avoid

- Using harsh soaps or other drying agents on the nipple
- Rubbing nipples with a towel or washcloth or pulling and stretching the nipple
- Expressing colostrum while pregnant
- Using a pump while pregnant
- Wearing tight or restrictive clothing
- Using lubricants on the nipple
- Exposing the breast to the sun or a hair dryer
- 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 breastfeed and produce breast milk. Some women may believe there is not enough room in their small breasts to store enough milk and other women with larger breasts may believe they will smother their baby if they attempt to breastfeed. Reassure women that the size and shape of the breasts do not affect milk supply. Inform woman with larger breasts that positioning can help her baby successfully breastfeed.

Breast Assessment

Encourage all women to have a breast exam by their healthcare provider, or conduct a self-exam to identify flat or inverted nipples or any breast anomalies. It is best to have an

assessment prenatally to identify any potential concerns before giving birth. 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 baby, especially if it is not identified prenatally.

Nipple assessment

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 partially imitates the motion her baby will make while breastfeeding. Nipples can be different on each breast.

- Normal nipples: Normal nipples stick outward and remain protruded when pinched.

- Flat or inverted nipples: Flat or inverted nipples do not become erect or protrude when stimulated. Inverted nipple may have a central indentation or retract, or go into the breast, when compressed.
    - Inverted nipples have different degrees to how much they invert and, similarly, different difficulties for a baby to properly latch onto the breast. Although some babies may have difficulty latching on correctly to flat or inverted nipples, with proper guidance and persistence babies can learn to breastfeed successfully from a wide range of nipple shapes.
    - Wearing breast shells (see Section VI: References) over flat or inverted nipples may be an easy and effective treatment that can be started in the last trimester of pregnancy by women who choose to do so.
    - Another alternative is to pump prior to each breastfeeding in the early days postpartum.
    - Both shells and pumping before a breastfeeding session work to pull the nipple out before latching the baby.

If a woman is identified as having flat or inverted nipples, refer her to a WIC CPA with extended breastfeeding education (CLS, CLC, or IBCLC credentials) or her healthcare provider for further evaluation and a treatment plan.

Breast surgeries

Ask women if they have had any breast surgeries. Breast surgery, including breast augmentation (implants), reduction, or biopsy, does not prevent a woman from breastfeeding, but the mom requires careful evaluation of her milk production in each breast. If a woman had breast cancer and had a lumpectomy or radiation, milk production will depend on the amount of breast tissue that was damaged or removed. The woman should be referred to their healthcare provider for a full evaluation.

Unusual breast appearance

Unusual breast appearance, such as noticeable breast asymmetry (each breast looks very different in size/shape from the other) or tubular hypoplastic breasts (incompletely developed – breasts appear widely spaced from each other, with a narrow base at the chest wall, and appear elongated or tubular), 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 healthcare provider for a full evaluation.

Piercings

Breastfeeding is generally not affected by nipple piercings and a woman with piercing can successfully breastfeed. Recommend women with pierced nipples remove the jewelry as soon as their pregnancy is confirmed or for each feeding to reduce the risk of the baby aspirating, choking or having latch issues. Nipple piercings may cause scar tissue that can impede drainage. It is good to let moms know that breast milk may come out of the piercing holes.

Breast Milk

Breast milk is very complex, consisting of just the right amounts of fat, protein, and carbohydrates that a baby needs to grow and thrive. It also contains nutrients, vitamins, growth factors, antibodies, hormones, and much more that are not available in formula.

Hormones and Milk Production

Breasts make milk in response to hormones. Hormones play an important role in milk production and milk release, or ejection. Messages from the breast travel to the brain and tell it to release hormones in the blood stream. Hormones travel in the blood to the breast to receptors within the breast tissue.

There are two main hormones:

- **Prolactin** makes milk. 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. Infrequent or long periods between feedings lead to lower prolactin levels and less of an increase with the next nipple stimulation.

- **Oxytocin** moves milk. Oxytocin helps with milk ejection or milk let-down. Oxytocin is released into a woman's blood stream when the baby stretches and sucks on the nipple and massages the breast. Milk ejection makes the milk available to the baby.

Supply and Demand

The more milk removed from the breasts by the baby breastfeeding or mom pumping/expressing, the more milk the breasts will make.

A mom will make more or less milk depending upon:

- **How much** – How completely milk is removed from the breasts – drained breasts mean better milk production. If both breasts are not completely drained after each feeding or pumping session, the breasts will make less milk over time.
- **How often** – The more often the breasts are drained, the more milk the breasts will make over time.

To maintain a milk supply, a mom should:

- Always try to remove milk completely from both breasts at each feeding or pumping session.
- Feed often, as much as baby wants when together (on demand, not on a schedule). Mom should feed baby directly at the breast, if able, to maintain her supply.
- Pump or express breast milk as often as baby usually eats to maintain her supply when away from baby.
- Pump as often as baby is eating if she is choosing not to, or is unable to, put her baby to breast.

Colostrum

Colostrum is the first milk produced. This special milk is a yellowish, thick, sticky fluid. Colostrum is very easy to digest, it comes in small amounts (measuring in teaspoons and not ounces). It is all the baby needs for the first few days of life until a mom's mature milk comes in at 2 to 4 days postpartum. Colostrum is the perfect nutrition for a baby and contains many immune boosting cells to help protect the baby, essentially providing it with the first immunization. Colostrum also helps to seal and develop the gastrointestinal tract, helps the baby remove meconium (black, tar like stools), and prevent jaundice. Sometimes, leaking of colostrum occurs prenatally; this is normal. Women should be instructed not to express colostrum prior to giving birth as this may cause premature labor.

Baby's stomach size

Just after birth a newborn baby's stomach is very little and small amounts of breast milk fill it up quickly. This is why newborns need to feed frequently and the small amount of colostrum is perfect.

Below are general baby stomach sizes to know and share with moms:

- Day 1: 1 teaspoon - the size of a marble or a cherry
- Day 3: approximately 1 ounce - the size of baby's own fist or a walnut
- Day 10: approximately 1.5 to 2 ounces - the size of a golf ball or ping pong ball
- 1 Month: approximately 2.5 to 5 ounces - the size of a large egg

Engorgement

Colostrum is replaced with breast milk usually between 2 to 4 days after delivery. Breast milk is more abundant and white in color. As colostrum is replaced with milk, the breasts become larger, somewhat firm, and slightly tender. This natural occurring process is called engorgement. Engorgement will normally last a few days until the body adjusts to making and releasing milk. Frequent breastfeeding and emptying of the breasts is the key to the prevention of severe engorgement and building an ample milk supply. Infrequent feedings will cause breasts to become full and hard, causing them to produce less milk.

Severe, painful engorgement is a breastfeeding emergency and a mom should be quickly referred to a WIC CPA with extended breastfeeding education or her healthcare provider for further assessment and treatment. To prevent engorgement, encourage moms to feed early (as soon as the baby shows early feeding cues, see further below for more) and frequently (every 1 ½ -3 hours).

Most women find hand expression helpful to relieve engorgement or to handle situations when they are without their baby and need to express milk. Hand expression will be covered later in this module. Women can also apply cool compresses between feedings to reduce inflammation and apply moist heat, or take a warm shower, just before breastfeeding to trigger letdown.

Appearance

Breast milk does not look like formula or cow's milk.

- **Color –** Breast milk can be different in color and it is normal for it to be tinted yellow, blue, green or even brown.

- **Separation –** Breast milk naturally separates into layers of milk and cream or fat during storage. This is normal and does not mean the milk is spoiled. If the milk separates, swirl gently to mix. Do not shake. Shaking breast milk can damage some of the nutrients and can add air to the milk which may lead to

gassiness.

- **Soapy Smelling Milk** – Breast milk naturally contains an enzyme called lipase, which helps to breakdown fats and helps with digestion. During storage, including in the freezer, lipase can continue to breakdown fats and may cause the breast milk to have a soapy smell and taste. Soapy smelling milk is okay to feed to babies and is not harmful. Most babies do not mind this mild change in taste.

Donor Milk

Donor breast milk can be a great, and sometimes lifesaving, alternative to formula supplementation. This is especially true for premature and medically fragile babies who are at a higher risk of infection, complications, and even death. If mom's own milk is unavailable, donor milk should only be obtained from a non-profit milk bank following strict guidelines of the Human Milk Banking Association of North America (HMBANA), which ensures the milk is safe. Milk donors provide complete medical and lifestyle histories and undergo blood tests similar to those used at blood banks. Donated milk is gently pasteurized to kill any bacteria or viruses before it is dispensed to hospitals and families. It is tested post pasteurization for bacteria. Donor milk is dispensed by prescription or hospital order only, with the highest priority recipients being premature and ill hospitalized babies.

Informal, mom-to-mom milk sharing is not recommended. Milk shared informally has no guarantee it was collected and stored safely and no assurance the donor was not taking medications, drugs, and supplements that could cause harm to another mom's baby.

Sense of Milk Let-Down

After 2 or 3 weeks, the new mom might be aware of the sensations associated with milk ejection, or milk let-down reflex. This can be a tingling, "pins and needles" sensation in the breasts as the milk begins to flow. The baby may start to gulp milk and milk may drip or spray from the other breast. Just hearing a baby cry might cause mom's milk to let-down, even before the baby latches-on.

Nipple Soreness

Nipple discomfort varies from woman to woman. Typically, most women experience some mild discomfort in the first week of breastfeeding. Usually the discomfort is at the beginning of a feeding until a mom's milk lets-down. 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, or may indicate a breast infection. If the baby is not latched on correctly, not only will the mom experience pain with feedings, but the baby is also at risk of not getting enough milk. If milk is not removed from the breast, mom's milk supply will

decrease.

Severe sore nipples require the woman to be referred to a WIC CPA with extended breastfeeding education or her healthcare provider for further evaluation.

Leaking Milk

Many women experience leaking milk, especially during their baby's early months, and sometimes during the last months of pregnancy. Assure mom that this is normal. Leaking can occur on one side when baby is breastfeeding on the other; it can also occur when it's almost feeding time. The sight sound or even thought of her baby may trigger leaking. Leaking is not related to how much milk a woman has in her breasts.

Tips to manage leaking:

- Apply gentle pressure to the nipples. Mom can fold her arms across her chest, put the heels of her hands directly on her nipples or put her hands under her chin and lean into her forearms pushing her nipples back towards the chest wall to stop the leaking. Emphasize the importance of using only gentle pressure.
- Breast pads can be useful. However, caution moms to avoid using disposable pads with plastic liners, as these may retain too much moisture and lead to soreness and possibly infection. Some breast pads are cloth and are washable and reusable.

Explain to mom that if she is feeling very full or engorged, she should allow the milk to flow in order to relieve the fullness rather than hold it back. She can catch the overflow in an absorbent towel or cloth diaper to keep herself dry or can collect it in a clean container or bottle to store and give to baby later.

Video Time!

Watch the following USDA WIC Breastfeeding Support videos and consider sharing them with your participants:

- *Milk Supply*

Self-check: Practice your knowledge

1. 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 refer her to a WIC CPA with extended breastfeeding education or her

healthcare provider so that further evaluation could be made.

d. Both b and c

2. List 2 recommendations you would tell a mom to prevent engorgement.

3. List 2 suggestions for managing leaking.

4. *Scenario I*
   Yesenia delivered four days ago. The nurse at the hospital helped her with positioning and Yesenia feels that she knows how to position her baby on the breast. Breastfeeding was going well the first few days and she was breastfeeding every two hours. Her milk came in yesterday and her breasts are very full and are becoming painful. The baby is having problems latching on and keeps slipping off the breast during the breastfeeding session. Yesenia is breastfeeding about every 3 to 3½ hours and is concerned because her nipples are becoming more sore.

   What do you suspect is the problem?

   What recommendations would you give to mom?

5. *Scenario II*
   Mary delivered six days ago. Breastfeeding seemed to be going well the first two days but now Mary states she is having a lot of problems and is thinking of bottle feeding. Her breasts are very full, painful, hot, and shiny-even her underarms are painful. The baby can't seem to latch on to the nipple and becomes frustrated and fussy while breastfeeding.

   What do you suspect is the problem?

   What recommendations would you give to Mary?

6. True or False? Colostrum helps a newborn baby eliminate meconium.

7. True or False? A newborn should breastfeed every 3 to 4 hours.

8. True or False? Breastfed babies need a bottle of water every day.

9. True or False? A mom's milk comes in between 4 to 6 days.

10. True or False? A newborn baby should have around 4 bowel movements a day if they are getting enough milk.

11. True or False? A newborn should breastfeed at least 8 to 12 times a day.

12. True or False? Engorgement should be treated immediately.

13. True or False? Colostrum is bluish-white in color.

ANSWERS

1. d

2. Frequently breastfeed and drain the breasts well at each feeding and feed on cue rather than a schedule.

3. Press hands or arms into nipples, try breast pads

4. *Scenario I*
   Yesenia has symptoms of engorgement which could be caused by infrequent feedings and poor positioning as indicated by her complaint of sore nipples. Yesenia should be encouraged to increase the frequency of feedings to every 1½ to 3 hours (8 to 12 times in 24 hours). Review tips for managing engorgement with Yesenia. If you determine her engorgement to be severe, refer her to a WIC CPA with extended breastfeeding education or her healthcare provider within 24 hours.

5. *Scenario II*
   Mary has symptoms of severe engorgement or possibly a breast infection. Refer her to a WIC CPA with extended breastfeeding education or her healthcare provider immediately for further assessment. If neither is available, refer her to a community lactation specialist or her healthcare provider.

6. True

7. False, a newborn should breastfeed every 1½ to 3 hours (8 to 12 times in 24 hours)

8. False, breast milk is all the baby needs

9. False, between 2 to 4 days

10. True

11. True

12. True

13. False, colostrum is yellowish to clear in color

Activity: Work with your supervisor to schedule a time when you may observe a breastfeeding class, a lactation consultant in your agency or community, or a WIC CPA during a breastfeeding education session. Be sure to take notes and list comments or ideas that you can use in your own counseling sessions with WIC families.

Section IV: Feeding the Baby

Positioning

Teaching good breastfeeding technique can help women have an enjoyable and successful time breastfeeding. Poor positioning and latch are the main causes of sore nipples. You can help women prevent soreness by teaching them the correct technique.

For all positions, it is important that the baby is in the best position for comfortable breastfeeding. The baby should be:

- Tummy-to-tummy or chest-to-breast with mom
- Baby's ears are in line with baby's shoulders
- Baby's shoulders are aligned with baby's hips
- Baby's arms and hands should be around the breast

Cradle hold: This is the most common hold used by moms and is easy and convenient. The baby should be lying on her side with her head resting on the inside of mom's bent elbow (in the crook) or forearm. Mom's 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 baby's chest touches her other breast while the baby feeds from the breast on the same side as the arm supporting the baby.

Cross-Cradle hold: This hold allows mom to have maximum control of baby's head and mom's breast. It is commonly used with newborns and smaller babies. Baby is supported on a pillow across mom's lap to help raise baby to mom's nipples. If preparing to breastfeed on the left breast, mom's right hand supports the baby at the back of his neck, not his head, to allow baby to open his mouth widely. Using her left hand, mom can support and direct her left breast to baby by holding her breast in a "U" or "C" hold with her thumb directly across from baby's nose. The baby should be on his side with his chest touching his mom's other breast.

Football (or Clutch) hold: 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 breastfeeding twins or small or premature babies. If preparing to breastfeed on the left breast, mom supports her baby at the back of her neck, not her head, in her left hand with baby's body tucked under mom's arm along her side. Baby should be facing mom with her mouth at nipple height. Baby's bottom rests on a pillow on mom's lap and her back rests on mom's forearm. Mom's right hand can support her breast in a "U" or "C" hold. Most newborns are very comfortable in this position and it may help with a mom who has a powerful milk ejection (let down) because the baby can handle the flow better.

Side-lying hold – Mom and baby lie on their sides, facing each other. Mom may position herself on her side with pillows under her head, behind her back, and under the knee of her upper leg to increase comfort. The baby faces mom with a pillow, towel, or blanket supporting baby's back. Remember to be sure baby's ear, shoulder, and hip are in one line.

Laid-back breastfeeding hold (or biological nurturing) – Mom lies down, slightly elevated, leaning back comfortably and well supported. Baby lies tummy down on mom, but this can be accomplished in many different positions (vertically below mom's breast, diagonally below both breasts, across her other breast, at her side, etc.). In laid-back positions, mom leans back far enough so her baby can rest comfortably without needing support and she can maintain eye contact.

Side-lying hold and laid-back breastfeeding are good positions for women who have had a cesarean birth or want to rest while breastfeeding.

> **Caution:** In any hold, especially those with mom lying down, ensure the baby's face is uncovered and baby can breathe properly. Be sure mom knows to watch that the baby's nose is free and not covered by mom's breast or soft bedding.

Caution moms against sleeping with their baby. It is great to share your room, but not your bed. Bed sharing puts babies at risk of sleep related deaths, such as suffocation, SIDS, and others. Always put baby to sleep on his or her back in a sleep area with only a firm mattress and tight-fitting sheet. No pillows, blankets, comforters, clothes, bumper pads, stuffed toys, or other soft things should be in a baby's sleep area, as soft surfaces can lead to suffocation.

Video Time!

Laid-back breastfeeding or biological nurturing is a position gaining popularity in the U.S. Watch the following video on biological nurturing and read more about it here.

SELF-CHECK: PRACTICE YOUR KNOWLEDGE

1. The baby is positioned to breastfeeding on the same side of the supporting arm. Which position does this describe?

2. Baby is on a pillow and chest-to-chest with mom. Mom is breastfeeding on her left breast, holding the back of baby's head with her right hand. Mom is holding her left breast in a "U" hold with her thumb across from baby's nose to assist with proper latch. Which position does this describe?

3. The baby is resting tummy-to-tummy on mom. Mom is laying down, semi-reclined (propped up), and mom supports baby to find mom's breast. Which position does this describe?

ANSWERS

1. Football/clutch hold or cradle hold

2. Cross-cradle hold

3. Laid-back breastfeeding

Latch

Proper latch is essential for successful breastfeeding and preventing sore nipples. A baby who does not correctly latch on to the mom's breast is at risk for not receiving adequate nourishment. At the same time, if the baby does not remove the milk from the breast, mom is at risk for inadequate milk production and other complications. Poor latch 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 their babies, preventing serious feeding problems, including nipple soreness.

Instruct mom to hold baby "chest to chest" with baby's body and legs wrapped tightly against mom to help line up baby 's mouth with the breast. Keep baby's ear, shoulder, and hip in one line.

The breast should be held in a "C" or "U" hold. Mom's hand should curve like a "C" (thumb on top) or "U" to support her breast behind the areola (top image). The mom's fingers should not touch the areola tissue.

Note: Did you know that the "scissor hold" (holding the breast between the middle finger and index finger) is no longer recommended? It can result in mom 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 mom.

Having the baby open his mouth wide before putting him on the breast is key to a successful latch.

The baby's head should be tilted back slightly. Be sure mom is not holding the back of baby's head, which can prevent baby from opening his mouth wide, but instead at the back of baby's neck at the base of the head. Have mom lightly stroke baby's upper lip with the nipple. Move baby slightly away and repeat until baby opens his mouth wide. Use mom's arm to move baby close and pull him quickly on to the breast so that chin and lower jaw make first contact (top image), not nose. Babies latching through laid-back breastfeeding or biological nurturing are able to latch with much less concern with how to hold the breast and baby's head. It is more about mom's body supporting the baby in these positions.

The baby's lower lip should be on the areola as far from the base of the nipple as possible. Mom needs to be patient to make sure her baby's mouth is opened wide before pulling the baby onto the breast.

Video Time!

Watch the following USDA WIC Breastfeeding Support videos and consider sharing them with your participants:

- *Latches and Holds* - https://wicbreastfeeding.fns.usda.gov/video-latches-and-holds

View Dr. Jack Newman teaching a good latch:
https://www.youtube.com/watch?v=Ox8ht-EVnQA

Signs of a GOOD latch

- Baby's mouth is opened wide on the breast (like a yawn)
- Baby's chin should be pressed into the mom's breast
- Baby's nose may touch the breast, but is not compressed
- Baby should have an inch or more of the areola in its mouth, not centered but asymmetrical (more of the lower part of the breast is drawn in)
- Baby's lips are flanged out and not curled in
- You can hear swallowing, with a rounded cheek and ears wiggling with swallows
- The latch should feel comfortable and be pain-free
- Nipples look rounded and similar to pre-feeding shape after a feeding

Signs of a BAD latch

- Baby's mouth is barely open
- Baby only has the nipple in their mouth (no areola) or symmetrically taken areola into her mouth
- Baby's chin barely touches (or does not touch) the breast
- Baby's lips are dimpled or caved in during sucking (indicates poor seal)
- Baby's lips are curled in and there is pain
- You can hear clicking or smacking noises from baby
- Milk leaks from the corner of baby's mouth
- There is pain
- Nipples are misshapen (look pointed like new lipstick) or have compression line down the middle after a feeding
- Nipples are damaged, cracked, or bleeding

If a baby is not latched properly, removing the baby correctly from the breast can minimize soreness and damage to the nipple. Mom can reposition baby or end the feeding by placing her small (pinkie), clean finger in the corner of the baby's mouth to break the suction. Reposition and try the latch again. Remind mom to burp the baby as needed and offer both breasts during a feeding.

Air drying the nipples after each feeding can help prevent soreness. Have mom express a few drops of milk after a feeding, massage gently into the nipple, and let air dry. Remind mom to avoid using soaps or substances that could dry or damage skin, nipples, or areolas. Avoid any kind of non-breathable or plastic linings in breast pads or bras.

Feedings

Healthcare providers recommend that all babies, breastfed and formula fed, be fed in response to feeding cues, not on a schedule. Every baby is different. How long a baby breastfeeds, how much he eats, and how often is unique to each baby and mom.

Timing

Remind moms to feed on demand as often as baby wishes and not on a schedule.

Feeding "on demand" means that baby is fed as often as baby asks and needs. By feeding on demand, babies learn to feed according to hunger and fullness cues. Breast milk is digested quickly, and baby may need to eat more often, usually every 1½ to 3 hours (8 to 12 times in a 24-hour period) for newborns.

While some babies may develop a schedule over time, it is best to feed each baby in response to his/her changing appetite. Babies may be more or less hungry at different times, on different days, just like you!

The amount of time a baby breastfeeds can affect the amount of milk removed from the breast, and thus impact milk production, as well as baby's growth and development. A typical feeding may take around 15 minutes on each breast once mom's milk has come in. Baby should be allowed to breastfeed as long as she wishes. For baby's growth and mom's milk supply, a newborn baby should not go longer than 3 to 4 hours without breastfeeding, even in the night.

A newborn should suck rhythmically, with some pauses occasionally, for at least 10 minutes on each breast. A baby will get more milk from breastfeeding at both breasts than breastfeeding from one side only. After the sucking and swallowing begins to slow or she comes off the breast or falls asleep, instruct moms to try and burp her at this point. Burping, changing position, and sometimes changing a diaper will wake baby up to take mom's other breast. Tell mom she should alternate breasts – start on the side on which she ended the last feeding. This way both breasts receive about the same stimulation and drainage.

Sometimes a baby is sleepier than normal. This is often common for babies born early (34 through 36 weeks gestation) or following a difficult delivery. Moms often talk about how baby is such a good sleeper or sleeps through the night. It becomes a concern when a baby sleeps through feedings or does not stay awake long enough during a feeding. A newborn who does not breastfeed frequently can quickly become dehydrated and malnourished. If a baby is sleepy and mom is having difficulty keeping her awake to breastfeed, suggest some tips in the side bar.

Tips to wake a sleepy baby:

- Talk to and touch baby
- Remove or loosen baby's clothes
- Rub baby's hands, feet, back, and bottom
- Change baby's diaper
- Gently rub baby's head and hands
- Give baby a bath or massage
- Express breast milk onto baby's lips
- Burp baby

Very short (few minutes) and extremely long (more than 50 minutes) breastfeeding sessions may show there is a feeding problem, such as poor suck, positioning, or latch. Refer her to a WIC CPA with extended breastfeeding education or her healthcare provider for further evaluation and a treatment plan.

Amount

Babies digest and use breast milk completely, so less breast milk is needed at a feeding compared to formula. There is no way to predict exactly how much a baby will eat at each feeding. A good way to know if a breastfed baby is getting enough breast milk during the day is to check their diapers.

To ensure breastfed babies are getting enough breast milk, babies should:

- Have at least 6 wet diapers a day. Babies often wet their diapers after every feeding. (Red or pink "brick dust" appearance on the diaper suggests the newborn is not getting enough milk.)
- Have around 4 regular bowel movements (see info in side box). Bowel movements may happen during or after every feeding and are less often as babies grow older.
- Gain ½ to 1 ounce a day in weight (once mom's milk has come in).

Exclusively breastfed baby bowel movements:

- Soft and looser than formula-fed babies stools
- Can look watery
- Yellow-orange (mustard like) color (after meconium has passed)
- Seedy or cottage cheese like texture

It is normal for a baby to lose weight in the first few days after birth, especially if the baby is breastfed. Healthy full term babies typically regain their birth weight by 10 to 14 days of age.

If you suspect a baby has lost greater than 10% of its birth weight during the first week of life, this is cause for concern and mom should be directed to see her healthcare provider immediately.

If you or the family have concerns a baby does not have enough wet or soiled diapers in a day, has dark-colored urine, hard or strange colored stools, or is not growing well, refer to a WIC CPA with extended breastfeeding education or her healthcare provider for further evaluation.

Growth Spurts

Every baby is different, but typical growth spurts often occur at:

- 2 to 3 weeks
- 4 to 6 weeks
- 3 months
- 4 months
- 6 months
- 9 months

Most babies' appetites increase around the same time they grow. During a growth spurt, babies' schedules may change and they may eat and sleep more than usual. Families may not be aware of or expect growth spurts and may be concerned their baby wants to eat more or that they are not making enough milk. Babies simply need more milk as they grow. Talk to mom, prepare her for these spurts, and encourage her to feed and pump more often during these spurts so her milk supply will likely increase within a few days.

"**Cluster feeds**" occur when baby feeds frequently then goes for an extended time without feeding. This feeding pattern typically happens in the evening or after the baby has gone a stretch without eating. Some babies cluster feed during fussy time or before a growth spurt. Cluster feeding often occurs during the first few days after birth, typically on the second day of life. It is important to explain this feeding pattern to mom and that it has nothing to do with mom's breastmilk or having enough milk.

Feeding Cues

Babies are born with the ability to communicate. They use their bodies and make noises to let you know when they need to eat, learn, play, or rest. These are called cues. Babies usually give several feeding cues at one time.

On the next page are photos showing some of the hunger cues. **All babies should be fed when showing early cues, or at the latest, mid cues**.

Early cues: "I'm hungry."

Stirring

Mouth opening

Turning head, seeking, rooting

Mid cues: "I'm really hungry."

Stretching

Increasing physical movement

Hand to mouth

Late cues: "Calm me, feed me."

Crying

Agitated body movements

Turning red

Feeding based on hunger cues is better because babies are calm for feedings, rather than crying, so they eat better. Babies also learn to stop eating when they are full, which may help prevent obesity later in childhood.

Video Time!

Not all crying is from hunger. Watch the following short videos on baby behavior:

- Baby Cues - https://www.youtube.com/watch?v=2AfUUQF6f_w
- What is my baby trying to tell me? https://www.youtube.com/watch?v=fIAyKLLm5CE
- Crying - https://vimeo.com/37203311

Watch a video on how to calm a crying baby here:
https://www.youtube.com/watch?v=j2C8MkY7Co8

Referrals

Some babies experience weight loss in the first few days of life but they should not lose excessive weight (no more than 7-10%). **Excessive weight loss after birth can be very dangerous to a baby's health, damaging organs, and even the brain.** Most babies regain this lost weight by 10-14 days of life (and start gaining after mom's milk comes in). A referral may be needed to the baby's healthcare provider if the below risks are present:

Nutrition Risk Factor 135 - Slowed/Faltering Growth Pattern:
Infants birth to 2 weeks of age:

Excessive weight loss after birth, defined as ≥ 7% birth weight.

Infants 2 weeks to 6 months of age:

Any weight loss. Use two separate weight measurements taken at least eight weeks apart.

Nutrition Risk Factor 603 - Breastfeeding Complications/Infant:
A breastfed infant with any of the following complications or potential complications for breastfeeding:

a) Jaundice
b) Weak or ineffective suck
c) Difficulty latching onto mother's breast
d) Inadequate stooling (for age, as determined by a physician or other healthcare professional), and/or less than 6 wet diapers per day

The Older Baby

How often and how long a baby breastfeeds will naturally decrease as a baby gets older. The baby gets better at feeding and is able to take more milk in a shorter amount of time. The older baby may also urinate 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).

Solid Foods

Medical experts agree it is best to wait until babies are around 6 months old before offering any food other than breast milk. This includes NOT adding cereal to bottles or feeding babies cereal, juice, or any other foods. Offering cereal or formula does not help a baby sleep better or longer. Research shows introducing solid foods (also called "complementary foods") before four months, can cause allergies to develop, lower mom's milk production, and may lead to early cessation of breastfeeding, or weaning.

The American Academy of Pediatrics (AAP) recommends a gradual introduction of iron and zinc-enriched solid foods to complement the breast milk diet after 6 months of age. Iron and zinc stores the baby received from mom during pregnancy are decreasing and both minerals are important for baby to grow and thrive. Iron and zinc-rich foods for babies include fortified infant cereals and soft, pureed meats.

> **Cow's milk should NOT be given to babies under 1 year of age because it is difficult to digest and is hard on baby's organs, especially the kidneys.**

Sometime after 6 months, as baby begins eating more solid foods, breast milk intake may decrease for some babies. However, **breast milk is still the main source of nutrition for babies under 12 months**. During the first year of life, solid foods should complement breastfeeding, not replace feedings.

Cup Feeding

After about 6 months of age, babies begin to sit up, crawl, and explore their world. This is a great time to introduce a cup. Suggest providing breast milk in a cup for a snack or one feeding during the day. Start with small amounts until baby is used to and likes drinking from a cup to avoid wasting breast milk. It is best to encourage most babies to no longer use a bottle after 14 months of age.

Beyond 12 Months

Many women choose to breastfeed their children beyond 12 months. Health experts **encourage longer breastfeeding for more health benefits**:

- The AAP now supports continued breastfeeding until two years or beyond, as mutually desired by mother and child.
- The World Health Organization (WHO) states breast milk is an important source of nutrition for children and suggests breastfeeding at least 2 years or beyond.

Vitamin D Supplementation

The AAP recommends all babies, including those who are breastfed, have a minimum intake of 400 IU of vitamin D per day starting within the first few days of life to prevent vitamin D deficiency and rickets (a disease characterized by softening and weakening of the bones). People, including babies, make some vitamin D when the skin is exposed to the ultraviolet light (UV) in sunlight or through intake of vitamin D-rich foods. However, the American Academy of Dermatology and the AAP do not recommend exposing the skin to direct sunlight due to risk of skin cancer. Baby's skin is also much more sensitive to UV light and can burn easily. Poor vitamin D status may be due to anything that limits the body's ability to produce vitamin D through the skin (e.g., deep skin pigmentation, clothing, sunscreen use, aging, winter season, cloud cover, smog, and the northern latitudes).

For partially breastfed babies, WIC Nutrition Risk Factor 411k applies when they are drinking less than 32 ounces of formula fortified with vitamin D and not getting a supplement or for fully breastfed babies not being given a vitamin D supplement. WIC staff are not to assess a baby's risk for vitamin D deficiency but rather to recommend moms talk with their baby's healthcare provider about the specific risks their child has for vitamin D deficiency, including possible vitamin D supplementation.

Fluoride Supplementation

Breast milk contains small levels of fluoride. Fluoride in mom's milk reflects the level in the local water supply. It would be appropriate to assign WIC Nutrition Risk Factor 411k if infants 6 months and older are ingesting <0.25 mg of fluoride daily when the water supply contains less than 0.3 ppm fluoride. It is recommended families talk with their healthcare provider to determine if a fluoride supplement is necessary.

Key Points

Messages for Getting Ready for Breastfeeding

- **Breast/nipple preparation is not necessary.**

- **Women with inverted or flat nipple(s) may benefit from wearing breast shells during pregnancy or pumping before feedings.**
- **Colostrum comes in small amounts; it is present in the first days postpartum and is all a newborn needs for nourishment.**
- **Proper latch 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).**
- **Sleepy/sleeping babies must be awakened to breastfeed.**
- **A newborn feeding may last about 30 minutes.**
- **Signs of successful breastfeeding in a newborn include:**
  - **At least 4 stools per day**
  - **6 to 8 wet diapers**
  - **Baby meets expected weight gain (see NRF 135 definition)**
- **Growth spurts usually occur at 2 to 3 weeks, 4 to 6 weeks, 3 months, 4 months, 6 months, and 9 months.**
- **Offering solids foods should occur around 6 months of age.**
- **Babies, especially on day 2 of life, tend to cluster-feed, as a way of increasing mom's milk supply and adjusting to the world outside of mom. Cluster feeding is not a sign mom does not have enough milk.**

SELF-CHECK: PRACTICE YOUR KNOWLEDGE

Scenario I

Sue comes to the WIC clinic 10 days after delivery. She reports her baby is such a good baby because he already sleeps through the night at 10 days of age. You weigh him and find he is 5 ounces below birth weight. He is feeding about 6 times in 24 hours.

How would you respond?

1. True or False? The breast excretes natural conditioners that moisten the nipple.

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

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

4. Name three common breastfeeding positions.

5. What is another way to position a baby when the mom lays back semi-reclined and allows baby to take the lead?

6. List when growth or appetite spurts typically occur.

7. True or False? Mom needs to supplement formula during a growth spurt.

8. Name two ways to wake a sleepy baby.

9. How often should a newborn breastfeed?

10. How long does a feeding usually last?

11. What are the three best indicators that the baby is receiving adequate breast milk?

12. True or False? Crying is the first sign of hunger.

13. List two feeding cues that show baby is hungry.

ANSWERS

Scenario I

"I know you need the rest, but newborns need to feed at least 8-12 times in a 24-hour period. We like to see babies back to their birth weight by 2 weeks of age. To help increase his weight and your milk supply, do you think you could wake him to feed during the night? If you can make sure he feeds at least 8-12 times in 24 hours, his weight should increase so that he gains 1 or more ounces a day. Would you like to bring him back to the clinic at 2 weeks of age so we can weigh him to make sure he has started to gain weight adequately?"

1. True

2. Flat nipple or inverted nipple

3. Poor positioning or latch

4. Cradle, football, and side lying (other options are cross-cradle or laid-back breastfeeding or biological nurturing)

5. Laid-back breastfeeding

6. 2 to 3 weeks, 4 to 6 weeks, 3 months, 4 months, 6 months, and 9 months

7. False, the more the baby takes, the more the mom makes

8. Any 2 suggestions listed under "Tips to Wake a Sleepy Baby" sidebar

9. Every 1 ½ to 3 hours or 8 -12 times in a 24 hour period

10. 10-15 minutes on each breast

11. At least 4 stools and 6 to 8 wet diapers in a 24 hour period and 5 to 7 ounces of weight gain a week once a mom's milk comes in

12. False, crying is a late hunger sign and baby should be calmed and then fed

13. Any 2 cues in hunger cues graphic

Section V: Caring for Mom

During the first 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, baby's temperament, and how well breastfeeding is going.

To help mom during this time period, discuss the following:

- Drink plenty of fluids, especially water, throughout the day
- Eat three meals and snacks
- Sleep when the baby does, including at least one nap a day
- Ask for help or let some household chores go. Dad, family, and friends can help with household chores, cooking meals, errands, or caring for other children.
- Dad, family, and friends, can help with diapering, bathing, cuddling, etc.
- Call a friend or relative who has breastfed for support

Remind mom that WIC is a resource and schedule her and her baby for a WIC appointment shortly after delivery, preferably within the first two weeks. Make sure she has the WIC agency phone number and knows she can call for more information or to discuss any concerns. Be sure all moms are aware of the Breastfeeding Peer Counselor program, and have appropriate contact information.

It is also important to recognize that many new moms experience depression. Depressed women are often more socially isolated and may have trouble with breastfeeding and caring for their baby. Moms experiencing postpartum depression should be referred to their healthcare provider.

Share resources with your moms, such as the USDA WIC Breastfeeding Support website as well as the Iowa's Perinatal Depression Project.

Video Time!

Watch the following USDA WIC Breastfeeding Support videos and consider sharing them with your participants:

- *Moms Emotional Wellbeing*

Talk with your supervisor or trainer to learn about your local agency breastfeeding resources. The Iowa Breastfeeding Coalition website also lists additional resources across the state.

Nutrition During Lactation

Fluids

Women need extra fluids while breastfeeding. Advise women to get a glass of water before sitting down to breastfeed and to always drink to thirst, as in drink enough fluids to replace what you are losing in breast milk. Many women find they become quite thirsty while breastfeeding.

No special diet is necessary to breastfeed.

The same principles of good nutrition during pregnancy apply during breastfeeding. Moms should be encouraged to eat a variety of foods. Eating a varied diet helps introduce different flavors to the baby which may better prepare them for eating solids when they are older.

Some women may choose not to breastfeed because they believe that they will need to follow a special diet. There are no foods that must be eaten or avoided by breastfeeding moms and their diet does not need to be perfect to breastfeed. Research shows if a mom is not eating well, she will still produce high quality milk but she will compromise her own nutritional needs. For individualized recommendations on calorie needs and food group servings refer moms to www.choosemyplate.gov.

Suggest all moms continue taking prenatal vitamins while breastfeeding, as these can help ensure adequate intake of important vitamins and minerals.

Eat to Hunger

Advise the breastfeeding woman to eat to satisfy her hunger. She should be told to trust her appetite - breastfeeding does take additional calories and she may feel hungry more often. Eating smaller meals throughout the day can help satisfy an increased appetite.

Lose Weight Gradually

Healthy eating should be the goal, with weight loss being secondary. Breastfeeding requires additional calories (approximately 500 calories a day if exclusively breastfeeding) to produce milk. The fat stored during pregnancy and additional calories consumed in the diet are used for milk production. To ensure a woman recovers from childbirth, rebuilds her own nutrient stores, and meets the calorie demands of breastfeeding, dieting is not recommended in the early weeks postpartum. The breastfeeding woman generally loses 1 to 2 pounds a month during the first 4 to 6 months of breastfeeding without dieting. Exclusive breastfeeding leads to greater weight loss. A diet lower than 1800 calories

should be avoided, it is not possible to consume adequate nutrients from a diet so low in calories.

Exercise

Exercise may be started or resumed at 6 weeks postpartum, with doctor approval. Moderate exercise is generally appropriate and beneficial for the breastfeeding mom. If women are doing higher impact exercise, suggest wearing a good supportive bra.

Caffeine

Caffeine intake of one or two caffeine-containing beverages per day generally does not cause problems for most breastfeeding moms and babies. Consumption of larger quantities of caffeine may cause a baby to become fussy and wakeful. Sources of caffeine include chocolate, coffee, sodas, energy drinks, some sports drinks, and black teas.

Smoking and Tobacco Use

Though we highly recommend quitting smoking, **smoking is not a contraindication to breastfeeding**. Smoking and tobacco use are viewed as a matter of risk/benefit ratio: the risk of some nicotine exposure versus the tremendous benefit of breastfeeding. Smoking may lower milk production and supply and women who smoke tend to wean sooner. Women who cannot quit smoking should be encouraged to cut-back on the number of cigarettes smoked, to never smoke in the same room as the baby, and to smoke after a feeding rather than before. Breastfed babies of smokers are known to have a lower incidence of infections and asthma when compared to formula-fed babies whose moms smoked. Because the effects of vaping are unknown, it's recommended to avoid vaping while breastfeeding.

Drugs and Alcohol

Alcohol and many drugs are secreted into breast milk. Women who are abusing drugs (including abuse of prescription medications) and/or alcohol should not breastfeed. For women who have an occasional drink, the American Academy of Pediatrics Committee on Drugs suggest intakes limited to 2-2.5 ounces of liquor, 8 ounces of wine, or 2 cans of beer (servings based on a 132 pound woman). The breastfeeding woman who chooses to have an occasional alcoholic drink should be advised that alcohol does pass into breast milk. It is recommended to wait at least 2 hours after consuming alcohol to breastfeed. Therefore, if a mother does drink, she should do so only occasionally, in small amounts, with a meal, and after breastfeeding.

Some moms report using marijuana. **Whether or not the mom is using marijuana for medical or recreational purposes, breastfeeding moms should avoid smoking or consuming marijuana.** Currently, there is not much research showing a safe limit for marijuana use while pregnant or breastfeeding. Many components within marijuana, including THC, are fat soluble, meaning they are stored in fat. It is unknown currently how long the active ingredients in marijuana can remain in fat and be secreted into breast milk. There is potential for marijuana to effect the growth and development of a child, with long lasting effects. If mom states she must use marijuana for a medical purpose, refer her to her healthcare provider, as each case should be evaluated by a medical expert.

WIC staff can inform moms that there hasn't been much research on the effect of THC (the chemical in marijuana) on a developing baby (fetus) or young baby, so it is recommended to avoid using marijuana during pregnancy and breastfeeding. More information about breastfeeding and marijuana use can be found at the Infant Risk Center website.

Refer back to the Orientation Module for more information about smoking and tobacco, drug, and alcohol use during breastfeeding.

Medications

Most medications are excreted to some degree in breast milk, however, many medications taken by the breastfeeding mom are safe for the baby because minimal quantities of the medicines usually appear in the milk. Advise breastfeeding women to check with their healthcare provider and/or pharmacist prior to taking any over-the-counter or prescription medications. If a medication is not recommended, a medication that is safe can sometimes be substituted. There are several sources to refer moms and healthcare professionals to for information about medications and breast milk, including the Infant Risk Center, an online resource and hotline, available at 806-352-2419.

Supplements, Herbal Remedies, and Environmental Contaminants

Caution women against the use of supplements or herbal products as some may contain psychoactive substances or even could be toxic to her baby. Some examples of commonly-used herbs include: licorice, comfrey leaves, sassafras, senna, bark, chamomile, and some herbal teas, such as Mother's Milk Tea. If an herbal product is being taken in excessive amounts, the contents need to be evaluated. Refer the woman to her healthcare provider or a pharmacist for further evaluation of the product. You may also refer her to the Infant Risk Center. Iowa Poison Control can also be of some assistance if there is a concern.

Family Planning

It is important for mom to consider a family planning method prior to delivery. Spacing children at least 18 to 24 months apart is recommended because it allows a woman time to rebuild her nutrient stores which were decreased during pregnancy and lactation. **Breastfeeding is not a reliable method of contraception (birth control).** Many women begin ovulating while breastfeeding and could get pregnant before they realize their menstrual cycle has returned. The good news though is that most forms of contraception are safe during lactation. However, it is important that care be taken as to when contraception is initiated.

Contraception Methods

Non-hormonal methods
Non-hormonal methods include sterilization, intrauterine devices (IUDs), barrier (condoms, cervical cap, etc.), spermicide methods, and natural family methods. Permanent methods of contraception include tubal ligation, hysterectomy, and vasectomy and should only be considered by couples who are confident in their decision to end childbearing. These non-hormonal methods of contraception have no known effect on lactation.

Hormonal Methods-Containing Progesterone-only
Norplant implants, DepoProvera injections, hormone containing IUDs, and "mini-pills", or progesterone-only oral contraceptive pills are examples of progestin only methods. Use of these methods during lactation are considered safe, however, may affect mom's milk volume. It is recommended that breastfeeding women not use progestin-only methods in the first 6 weeks postpartum.

Hormonal Methods-Containing Estrogen
Contraceptives containing estrogen have been shown to suppress milk production and should not be used by the breastfeeding mom.

Key Points

Advise mom to:

- **Eat a varied diet to satisfy hunger.**
- **Drink to thirst.**
- **Eat and drink frequently throughout the day.**
- **Sleep when baby sleeps.**
- **Accept help.**
- **Expect weight loss to be gradual.**
- **Limit caffeine intake.**
- **Avoid cigarettes, alcohol, and drugs, including marijuana.**

- **Check with healthcare provider before taking any medications or herbal remedies.**
- **Choose a family planning method prior to delivery.**
- **Wait to start progesterone-only hormonal methods until 6 weeks postpartum.**
- **Do not use estrogen-containing contraceptives while breastfeeding.**

SELF-CHECK: PRACTICE YOUR KNOWLEDGE

1. List two suggestions you would give a mom to help her during the early weeks postpartum.

2. What recommendations would you give to a woman who is unable to stop smoking?

3. True or False? It's best for the breastfeeding mom to limit her consumption of caffeine to no more than 2 cups per day.

4. True or False? If the breastfeeding mom smokes cigarettes, she should be told not to breastfeed.

5. True or False? If a mom uses marijuana for medical reasons it is fine if she breastfeeds her baby.

6. True or False? There is no specific amount of fluid mom should drink each day. Moms should be told to drink to thirst.

7. True or False? A breastfeeding mom needs to follow the MyPlate dietary recommendations precisely in order to produce enough milk.

8. True or False? Hormonal-type contraceptives should be started immediately after delivery.

9. True or False? Breastfeeding is a good method of contraception if a mom's menstrual period has not returned.

ANSWERS

1. Drink plenty of fluids, especially water, throughout the day; eat three meals and snacks; sleep when the baby does, including at least one nap a day; ask for help or let some household chores go (Dad, family, and friends can help with household chores, cooking meals, errands, or caring for other children); Dad, family, and friends, can help with diapering, bathing, cuddling, etc.; call a friend or relative who has breastfed for support.

2. Try to cut back on the number of cigarettes smoked, always smoke away from the baby, smoke after a feeding instead of before, wash hands and change clothes after smoking before holding the baby.

3. True

4. False, the benefits of breastfeeding outweigh the risks of smoking.

5. False, moms should not breastfeed if they use marijuana.

6. True

7. False, women should be encouraged to eat a variety of foods, using ChooseMyPlate.gov as a guide. A "perfect" diet is not necessary to breastfeed.

8. False, hormonal contraceptive methods should not be started until breastfeeding is well established-wait until at least 6 weeks postpartum.

9. False, breastfeeding should not be used as a method of contraception.

Section VI: Breastfeeding Doesn't Have to Tie Moms Down

Women who are not aware of the ways to combine work/school and breastfeeding may quit breastfeeding early or choose not to start breastfeeding. This section reviews the different options available to breastfeeding moms, methods for expressing milk, and the features of different pumping systems.

Early Planning is Key to Continued Breastfeeding

You can help moms breastfeed longer by talking with her about her breastfeeding goals during her pregnancy. Some questions you may ask mom during pregnancy include:

- How long does she want to breastfeed?
- Will she be returning to work or school after having the baby?
- How soon after birth will she return?
- If she is separated from her baby does she know she can still breastfeed?
- Is she familiar with hand expression and the different breast pumps available?

Note: Remember to use open ended questions when talking to moms about breastfeeding.

The American Academy of Pediatrics now supports continued breastfeeding until two years or beyond, as mutually desired by mother and child. You can support this recommendation by educating women on options for continued breastfeeding when they are separated from their baby. Understand that you need to support whatever goal a mom has for breastfeeding and help her achieve that goal.

Any breastfeeding is better than not breastfeeding.

The following questions can assist moms in developing their plan:

When is mom expected back to work or school? What is the employer's policy on family leave?

Moms who can wait until their baby is 6 weeks old to return to work/school find combining breastfeeding and working easier. Six weeks allows a mom time to establish her feeding pattern and milk supply.

If a mom needs to return to work/school before 6 weeks postpartum she may need to pump more frequently to ensure an adequate milk supply.

Does the employer have a lactation policy? Is there a place where she can express her milk or breastfeed in the event she is able to bring her baby to work/school or have her baby brought to her during the day?

If the employer does not have a lactation policy, discuss with mom the Break Time for Nursing Mothers Law and determine how mom can approach her employer. It's helpful to moms to know what space is available to her. If there is not a space readily available, asking her employer early, including during pregnancy, allows time for the employer to locate an area and develop understanding for mom's needs.

Moms should be encouraged to ask for a small, clean, private area (not a restroom). If she will be using an electric pump, the room will need to have access to an electrical outlet.

Is mom returning to work full-time? Will it be possible to take breaks during the day to express milk or breastfeed her baby?

Moms working or going to school full-time will usually need to express or breastfeed their baby three times a day-during two breaks and over lunch.

Can she return to work part-time? If she needs to work full-time, is it possible to start back part-time for a few weeks or months? When moms return to work part-time it helps both mom and baby adjust to being separated.

Moms working part-time, 4 to 6 hours a day, usually need to pump 1 to 2 times a day depending on the number of hours worked and time away from baby.

Pumping during morning or afternoon breaks and at lunch is ideal.

Can mom start back to work on a lighter schedule or mid-week?

Returning to work on a lighter schedule or mid-week can reduce fatigue and help mom adjust to her new routine.

If a mom is returning to work/school full-time or part-time, can she start to collect her breast milk prior to returning to work/school?

Encourage mom to start pumping her milk as soon as she knows she is returning to work, or at least 2 weeks before returning. Suggest mom pump after the morning feeding when supply is usually the highest, or after a feeding where baby has not completely drained both

breasts. This can help to increase her supply, get comfortable with pumping, and provide additional stored supply of breast milk, all while still breastfeeding her baby.

Can mom visit the child care program during the day to breastfeed her baby?

If the child care program or sitter is located near mom's place of employment, mom may choose to visit her baby during the day to breastfeed.

Does the baby's child care provider support breastfeeding?

Moms should be encouraged to interview the child care provider to determine if they support breastfeeding before selecting a child care program. Moms may find the *Breastfed Babies Welcome Here! A Mothers Guide* toolkit helpful. You also may suggest that moms give *USDA's Feeding Infants in the Child and Adult Care Food Program* toolkit to her child care provider before starting her baby in their care.

Suggest mom work with her child care provider to develop a feeding plan or a written schedule to let the provider know when baby typically eats and if mom will be there to nurse her baby directly.

A backup plan should be included for the times mom may be late or the baby is hungry before she can arrive. The child care provider can sometimes distract the baby for a few minutes with an activity or by giving a small amount of expressed milk.

Does the mom plan to exclusively breastfeed or will she be using supplemental formula?

Moms should be encouraged to exclusively breastfeed because of the many benefits for both mom and baby. However, some moms will decide to provide supplemental formula because they do not want to or cannot express their milk during the day.

In the event that supplemental formula is provided, mom should wait until she has a well-established milk supply (approximately 6 weeks). Offering formula too soon can interfere with a mom's milk production. One to two weeks prior to returning to work, moms may find it helpful to offer formula-feedings in place of breastfeeding they will miss while at work. It is possible, however, for women to wait to start supplementing until they return to work. These women will most likely experience some over fullness until their body adjusts to the missed feedings. Moms who supplement while they are at work should breastfeed as much as possible in the early morning, evenings, and on weekends to maintain their milk supply. Remember any breastfeeding is better than not breastfeeding at all.

Video Time!

Watch the following USDA WIC Breastfeeding Support videos and consider sharing them with your participants:

Going Back to Work or School

Milk Expression

Regular emptying of the breast is key to maintaining a milk supply. If moms are not able to empty their breasts by nursing, they can express the milk by using a breast pump or hand expression. A mom's pumping/expression schedule should match her breastfeeding pattern if she were at home breastfeeding her baby.

Hand or Manual Expression

All moms should be instructed on hand or manual expression. Some moms prefer to hand express their milk rather than using a breast pump. Readily available to all moms, hand expression can be a very quick and convenient method of expression as well as to relieve temporary engorgement.

Click on the links to observe instruction on hand expression. Each video emphasizes different steps in hand expression. Provide these videos and the suggested handouts below with WIC moms.

Videos:

- The Basics of Breast Massage and Hand Expression: https://vimeo.com/65196007
- Hand Expression After Pumping for Working Moms: http://bit.ly/2mkVWva
- Stanford Medicine – Hand Expression: http://med.stanford.edu/newborns/professional-education/breastfeeding/hand-expressing-milk.html
- Marmet Technique of hand expression: https://www.youtube.com/watch?v=vl0tvZUjSNc or https://www.youtube.com/watch?v=y1iZjBYoUj0

Handouts:

- In Joy Expressing Milk by Hand: http://injoyhealtheducation.com/staffdevelopment/pieb-cc/pdfs/Module4_HandExpressionParentHandout.pdf
- Lactation Education Resources (multiple languages available): https://www.lactationtraining.com/resources/educational-materials/handouts-parents

Selecting the Right Breast Pump

The type of pump a mom uses depends on a number of considerations, including her working status (part-time or full-time), whether she is wanting to exclusively breastfeed, ease of expressing milk, time available for pumping, and volume of mom's milk supply. A breast pump should mimic, as closely as possible, a baby breastfeeding at the breast.

Type of Breast Pumps

Manually-Operated Breast Pump

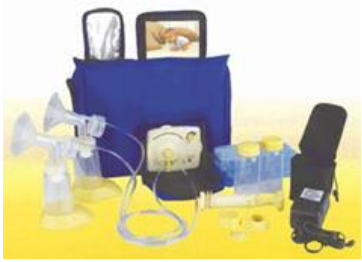
Manually-operated breast pumps are commonly used for situations where pumping is infrequent or of short duration. Manual pumping takes practice; suction is achieved by either pulling on a piston or pressing a lever.

Manual pumps are a good option when an electric pump is not available, for:

- Relieving normal engorgement
- Healing sore or cracked nipples
- Weaning a baby from the breast
- Occasional separation from baby (i.e. mom has an appointment)
- Work/school with flexible schedule and limited separation from baby

The manual pump does not stimulate hormonal levels well, therefore it may be difficult for women to maintain an adequate milk supply if using the manual pump frequently in place of putting the baby to breast.

Personal Electric Breast Pumps



Personal electric breast pumps are easy to use and can be supportive for women who are returning to work/school and are separated from their babies for longer periods of time. Moms using these breast pumps should have interest in continuing to breastfeeding their baby longer term. Refer to the Issuing Breastfeeding Equipment policy for full details. Use of these breast pumps alone may not be enough to adequately maintain a mom's milk supply.

The single-user electric breast pumps are designed for a single person to use only; they should not be shared between moms because the breast pump itself cannot be properly cleaned or sterilized and could pose potential risks if shared.

Hospital-Grade Electric Breast Pumps

The hospital-grade electric breast pump is most efficient (second to baby) in removing milk from the breasts. This type of breast pump is superior to personal breast pumps because of a stronger motor, gentler suction options, and capabilities that more closely mimic baby at the breast for improved breast milk removal. Iowa WIC agencies have the option to rent or loan hospital-grade electric breast pumps to their breastfeeding participants.

The following are potential and acceptable reasons for providing a hospital-grade breast pump or a personal electric breast pump to a breastfeeding mother:

- Mother is returning to work or school,
- Mother or infant is hospitalized,
- Premature infant is unable to nurse effectively,
- Infant has severe feeding problem (e.g., cleft lip or palate),
- Infant is sick and unable to nurse,
- Mother is sick for an extended period of time,
- Mother is on medication that is contraindicated for breastfeeding,
- Mother and infant are separated for more than 24 hours,
- Mother has multiples,
- Mother is physically unable to use a manual breast pump, or
- Other reasons as approved by the local agency Breastfeeding Coordinator or WIC Coordinator.

Video Time!

Review the USDA WIC Breastfeeding Support information and video on Pumping and Hand Expression Basics and share with your participants: https://wicbreastfeeding.fns.usda.gov/pumping-and-hand-expression-basics.

SELF-CHECK: PRACTICE YOUR KNOWLEDGE

1. Talk with a co-worker or friend who combined working and breastfeeding. Ask her to share some tips for making breastfeeding and working a positive experience.

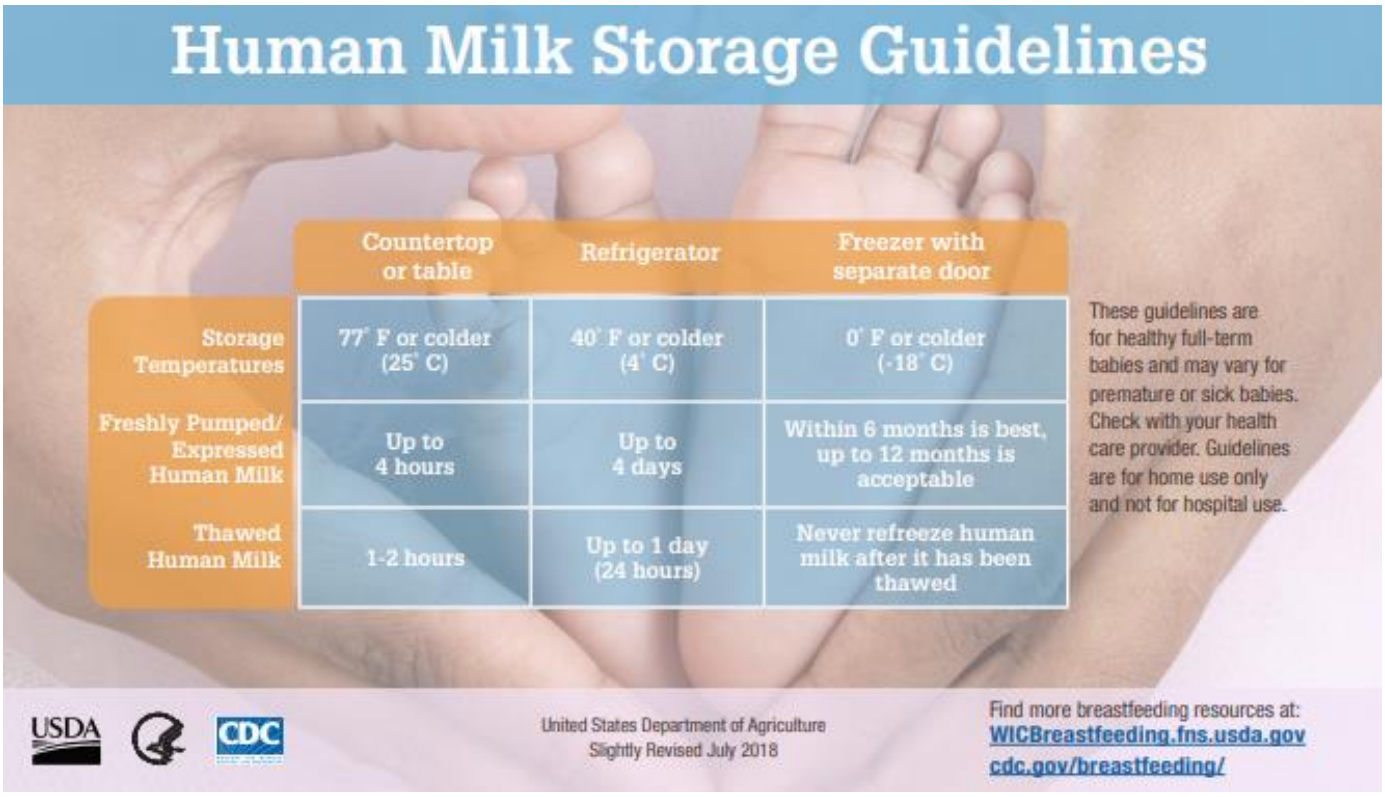
2. Find out about your agency's breast pump loan program. List the types of breast pumps available and the common reasons to issue breast pumps.

Collection, Storage, and Preparation of Breast Milk

Encourage moms to store milk in the amount normally consumed at a feeding (freeze no more than 2 to 4 ounces of breast milk per container) to reduce the chance of discarding leftover milk not finished by baby. Breast milk can be stored in a variety of containers. Glass or plastic containers (BPA free) and storage bags approved for breast milk are preferred for freezing and storing breast milk. Encourage mom to label each bag with the date and amount of breast milk. This will allow mom to use the milk in the order that it was expressed.

Storage guidelines may differ. You may see other storage guidelines from other sources (such as pump manufactures) that are slightly different. Iowa WIC follows recommendations from the USDA and CDC.

Refer to WIC recommendations for the storage of breast milk using the WIC Breast Milk Storage Guidelines handout or magnet.



When thawing frozen breast milk, always practice first in, first out, using the oldest milk first. To thaw, place the frozen milk in a bowl or warm water or hold under lukewarm running water. After warming, swirl the milk to mix. Some baby's may prefer breastmilk

that is still cold or room temperature and this is okay too. It is NOT recommended to microwave frozen breastmilk as it can create hot spots that may burn the baby's mouth.[2]

Issuing Supplemental Formula

Promoting and supporting breastfeeding is the responsibility of all WIC staff. Staff need to carefully assess the amount of formula needed by a breastfeeding woman. Offering too much formula can undermine a mom's confidence and interfere with her milk supply. Supplemental formula is not to be routinely offered or provided to breastfed infants before they reach one month of age. Any request for formula for breastfed infants also requires breastfeeding support and advice from WIC staff trained to provide breastfeeding education and support. If a mom requests supplemental formula, it is the staffs' role to educate the mom on the impact that supplemental formula may have on her milk supply and to tailor the formula package to best meet the baby's nutritional needs.

When formula is issued to breastfeeding infants under one month of age, a nutrition care plan is required in Focus. This plan must, at a minimum, identify the reason for issuing formula.

For more information about issuing formula to breastfeeding infants, see the policy, Breastfeeding Promotion and Support.

Key Points

- **Hand expression is a good option for moms who need to express their milk on occasion.**
- **Helping moms develop a breastfeeding plan when separated from their baby is essential for continued breastfeeding.**
- **Regular emptying of the breasts is key to maintaining a mom's milk supply.**
- **Manually-operated breast pumps are commonly used for situations where pumping is infrequent or of short duration.**
- **The hospital-grade electric breast pump is most efficient (second to baby) in removing milk from the breasts.**
- **Personal electric breast pumps are an option for women returning to work or school.**

- **When supplemental formula is requested, staff need to promote continued breastfeeding and carefully assess how much formula the baby is currently consuming at the time of the appointment and adjust the food package appropriately.**

- **Any breastfeeding is better than no breastfeeding – encourage moms to continue breastfeeding anytime they are with baby.**

SELF-CHECK: PRACTICE YOUR KNOWLEDGE

1. True or False? Moms are encouraged to talk to their employers during their pregnancy about their decision to return to work and continue breastfeeding.

2. True or False? Moms who work full-time (e.g. an 8 hour day) will need to express their milk at least 5 times a day.

3. True or False? Moms returning to work before 6 weeks postpartum may need to express their milk more frequently to maintain their milk supply.

4. True or False? A manual or hand pump is the best type of pump for a mom who is returning to work full-time.

5. True or False? WIC advises that breast milk can be stored in the refrigerator up to 7 days.

6. True or False? Moms wanting to provide supplemental formula should wait until 4-6 weeks postpartum as not to interfere with their milk production.

ANSWERS

1. True
2. False; at least 3 times a day.
3. True
4. False; ideally moms returning to work full-time should use a single-user electric breast pump.
5. False: according to WIC guidelines, breast milk should not be stored in the refrigerator more than 4 days.
6. True

Section VII: When Breastfeeding May Not Be Recommended

You can feel confident you have a good foundation for providing breastfeeding education and support. There will be times, however, when you may not have the answer to a participant's question or when you'll need more information about a topic.

This section includes a list of breastfeeding contraindications, referral protocol with educational guidelines, postpartum assessment, and commonly asked questions and answers.

Situations When a Woman Should NOT Breastfeed

There are very few medical reasons when a mom should not breastfeed. Identify contraindications that may exist for the participant.

Breastfeeding is contraindicated when:

- The mom has tested positive for **HIV (Human Immunodeficiency Virus) or has AIDS (Acquired Immunodeficiency Syndrome)**. She should be counseled NOT to breastfeed her baby since the virus has been found in breast milk and can be transmitted through breastfeeding. WIC staff are responsible for advising all pregnant, postpartum, and breastfeeding women to know their HIV status so that if they are HIV-positive, they can receive medication prenatally to reduce the risk of transmission to their baby and they can avoid breastfeeding.

- The mom who has tested positive for **human T-cell lymphotropic virus type I or type II (HTLV-1/2)** should be counseled NOT to breastfeed as the virus has been found in breast milk and can be transmitted through breastfeeding. Refer mom to a healthcare provider to be tested and receive treatment.

- The mom is using illicit street drugs, such as PCP (phencyclidine), cocaine, methamphetamine, marijuana, or opioids. This includes abuse of prescription opioid medications. These drugs can pass to baby through breast milk and can cause serious impairments to baby. IV drug users also have a higher risk of contracting hepatitis and HIV, which can be transmitted to the breastfeeding baby. The exception to this is narcotic-dependent moms who are enrolled in a supervised methadone program and have a negative screening for HIV and other illicit drugs can breastfeed.

Breastfeeding may be <u>temporarily</u> contraindicated when:

- The mom is infected with **untreated brucellosis**, a bacterial infection spread from animals to people, mostly by unpasteurized dairy products.

- The mom has an **active herpes simplex virus (HSV) infection with lesions present on the breast**. The lesion present on the breast can pass the herpes virus to baby while breastfeeding. Mom can breastfeed directly from the unaffected breast if lesions on the affected breast are covered completed to avoid baby touching the lesion and transmitting the virus to baby. Mom should pump the effected breast with the lesion to maintain supply in that breast until the lesion resolves completely and all breast milk from this breast should be discarded. Moms should follow appropriate hand washing practices to avoid transmission of herpes to her infant.

- The mom is undergoing diagnostic imaging with radiopharmaceuticals, which can transfer in breast milk to baby and may harm baby. Such imaging is typically done for cancer or other breast complications.

- The mom is taking certain medications or illicit drugs. Once the harmful medications or drug use has ended, breastfeeding may resume.

  *Note: Moms may be able to resume breastfeeding after consulting with a physician to determine when their breast milk is safe for their baby. These moms should be provided with lactation support, as well as a breast pump, to learn how to maintain milk production and feed their babies with formula while temporarily not breastfeeding.

<u>Direct</u> breastfeeding may be <u>temporarily</u> contraindicated and mom should be temporarily isolated from her baby when:

- The mom has **untreated, active tuberculosis** (TB). Mom should refrain from close contact with the baby, including direct breastfeeding, due to potential transmission through respiratory droplets. Women with tuberculosis who have been treated appropriately two or more weeks and who are considered non-contagious may directly breastfeed. Pumping and/or manual expression of breast milk during the contagious period is possible and necessary to maintain milk supply.

- The mom has **active varicella (chicken pox) infection** that developed within the five days prior to delivery to the two days following delivery. Mom should refrain from close contact with baby, including direct breastfeeding, to prevent the virus from spreading.

  *Note: Moms can express breast milk that can safely be fed by another individual to their baby. Moms may be able to resume direct breastfeeding after consulting with a physician to determine if they are no longer contagious. These moms should be provided with lactation support, as well as a pump, to learn how to maintain milk

production.

Counseling on the Contraindications to Breastfeeding

When a mom has a condition that contradicts breastfeeding, encourage her to change her behavior (alcohol and/or drug use), receive medical treatment, or, in the case of some medical conditions, avoid breastfeeding altogether. A woman who is unable to change her behavior or condition should not be made to feel guilty. Provide her with information specific to her contraindicated behavior or condition, while remaining as encouraging and positive as possible.

Advise women to avoid drug use and excessive alcohol consumption while breastfeeding. A negative or threatening tone usually has the opposite effect than you want, making the mom defensive and resistant to change. Inform her that alcohol and many drugs, including prescription, over-the-counter, herbal supplements, marijuana, and other illegal drugs, can pass into breast milk and harm her baby. If the woman is using marijuana, or other illegal drugs or alcohol, warn her of the dangers and refer her for further assistance. Advise women to inform their healthcare providers that they are breastfeeding so medications can be prescribed that are not contraindicated.

Postpartum Assessment

Moms are very vulnerable to stopping breastfeeding during the first weeks of breastfeeding. With early hospital discharge practices, many women are discharged before their milk has come in and breastfeeding is well established. You play an important role in identifying women who need additional help and support to successfully breastfeed.

Conducting an early assessment (ideally within the first week of delivery) of breastfeeding can help identify and resolve problems before they become bigger. A great place to start to assess breastfeeding is with the WIC Nutrition Interviews for both breastfeeding women and babies. Questions are included on the questionnaires to address how many times feedings are occurring, the length of feeding, the number of wet and soiled diapers, and whether mom has any questions about breastfeeding.

Staff should ask opened-ended questions such as:

- How is <baby's name> feeding?
- Tell me about any challenges you are having.
- Tell me about what led to <baby's name> getting something other than breast milk.
- What questions do you have about breastfeeding <baby's name>?

Additionally, a baby's weight is another key factor in assessing how breastfeeding is going. After a mom's milk comes in, a baby should gain 1 ounce per day for the first few months of life.

A baby who has excessive weight loss (≥ 7% of birth weight) should be referred to the healthcare provider immediately.

Referral Protocol

The Iowa WIC Nutrition Risk Factors are designed to ensure that breastfeeding women who have a breastfeeding complication or potential complication receive additional support and/or intervention in a timely manner. See the Nutrition Risk Factor Module for more information on Nutrition Risk Factors. Breastfeeding women or babies identified with a complication should be seen by a WIC CPA with extended breastfeeding education or referred to their healthcare provider.

> **Both early assessment and intervention are key to helping a woman successfully breastfeed.**

Key Points

- **All women should be advised to know their HIV status so that if they are HIV-positive they can receive treatment to reduce the risk of transmission to their baby and can avoid breastfeeding.**
- **Some women may have medical conditions that warrant advising them not to breastfeed or require further follow up by her healthcare provider before recommending breastfeeding.**
- **Smoking is not a breastfeeding contraindication because the benefit of breastfeeding outweighs the risk to the baby.**
- **Early assessment (within a week of delivery) is key to helping a woman successfully breastfeed. The Woman and Infant Nutrition Interviews, infant weight gain, and discussion with the mom are tools for conducting an assessment.**
- **Prenatal women identified to have a potential complication must be provided with education and referred to her healthcare provider, as appropriate.**
- **Breastfeeding women and babies identified to have a breastfeeding complication or potential complication must be referred to a WIC CPA with extended breastfeeding education or to their healthcare provider immediately.**

Section VIII: Breastfeeding Complications or Potential Complications Reference Section

Identifying breastfeeding complications or potential complications is critical for helping women successfully breastfeed. This section provides a list of complications that can interfere with a woman and baby's breastfeeding success. An explanation of each condition, with education points, guidelines for goal setting, referral, and follow up are included to assist staff in providing information and guidance to WIC participants.

Prenatal women, breastfeeding women, and their babies should be assessed at each WIC visit for breastfeeding complications or potential complications by going through the nutrition interview.

Early identification is key to helping a mom and baby have a positive and successful breastfeeding experience.

Prenatal women identified as having a complication or potential complication (listed below) should be provided with educational information and referral during their routine WIC appointments.

Be sure to ask pregnant women if they have experience with breastfeeding and continue to ask if breastfeeding was successful for them previously. Many women may simply state yes they have breastfed before and without additional probing questions you may never know the past experience was not successful according to the woman. For prior breastfeeding failure, discuss the previous problems the woman experienced and correct any misinformation she may have. If appropriate, encourage the woman to try breastfeeding again. Emphasize practices that promote success and arrange for close follow up after delivery. Be sure to invite all pregnant women to a breastfeeding class, regardless of previous breastfeeding experience.

Breastfeeding women and babies identified with a complication or potential complication of the risk factors listed below may need to be seen by a CPA with extended breastfeeding education. The CPA would be responsible for conducting a full evaluation of the situation, determining the need for an additional referral, and follow up with the breastfeeding woman.

Complications or Potential Complications:

- Flat or inverted nipple(s)*
- Breast surgery including augmentation (implants), reduction, and biopsy
- Unusual breast appearance, such as marked breast asymmetry or tubular hypoplastic breasts
- History of breast radiation

- Pregnant woman who is presently breastfeeding
- Carrying/breastfeeding multiple babies
- Severe breast engorgement*
- Recurrent plugged or obstructed ducts*
- Mastitis (fever or flu-like symptoms with localized breast tenderness)*
- Cracked, bleeding or severely sore nipples*
- Mom with systemic illness such as diabetes, hypertension, PKU, cystic fibrosis, etc.
- Mom who is abusing medications, drugs, or alcohol
- Mom 40 years or older*
- Young mom
- Failure of milk to come in by 4 days postpartum*
- Tandem nursing (breastfeeding siblings who are not twins)*
- Jaundice*
- Weak or ineffective suck*
- Difficulty latching-on to the mom's breast, neuromuscular problems, including down syndrome, oral anatomic problems, such as cleft lip and/or palate*
- Excessive weight loss (greater than or equal to 7% of birth weight)
- Inadequate baby weight gain
- Inadequate stooling for age: less than 6 wet diapers per day*
- Baby with galactosemia, maple syrup urine disease, or phenylketonuria

*Complications of breastfeeding risk factor.

Pregnant Woman – Complications or Potential Complications

Flat or Inverted Nipple(s)

Nipples do not become erect when stimulated; an inverted nipple may have a central indentation or move inward when compressed. Some babies may have difficulty correctly latching-on to flat or inverted nipples, however, with proper guidance and support moms can successfully breastfeed.

Education points:

For flat or inverted nipple(s), the woman should be encouraged to have an initial examination by her healthcare provider early in pregnancy and again at the beginning of the third trimester. If indicated by the exam, a healthcare provider can recommend the use of breast shells during the last month or two of pregnancy, with the authorization of the woman's obstetrical (OB) care provider. Breast shells put pressure against the areola to gradually allow the nipples to stick out. Holding off on treatment until after delivery and then using a breast pump to pull out the nipples prior to feedings may be the preferred option for some women.

Breast Surgery

Surgery including breast augmentation (implants), reduction, or biopsy does not prevent a woman from breastfeeding, but the mom requires careful evaluation of her milk production in each breast. A special breastfeeding plan may be needed for the mom with a history of previous breast surgery.

Education points:

For a woman with previous breast surgery, encourage her to discuss breastfeeding with her healthcare provider. Reassure her that even if supplementation with formula becomes necessary, partial breastfeeding may still be possible and still provides benefits to both mom and baby. Refer moms to her healthcare provider and a lactation expert for additional assistance in assessing and monitoring her milk supply.

Unusual Breast Appearance or Lack of Breast Changes in Pregnancy

Unusual breast appearance, such as marked breast asymmetry or tubular hypoplastic breasts, or a lack of changes in her breast during pregnancy can be a risk factor for milk production issues. Unusual breast appearance or lack of changes does not necessarily mean a woman will be unable to breastfeed successfully, but could mean she may be at increased risk for low milk production.

Education points:

Ask a pregnant woman if she has noticed breast changes during pregnancy (such as breast growth, darkening of areolas, etc.). When a pregnant woman has unusual breast appearance, such as marked breast asymmetry or tubular hypoplastic breasts, or a lack of changes in her breast during pregnancy she should not be discouraged from initiating breastfeeding. Close follow up of the baby after delivery will be required to assure the baby receives adequate milk. Even if formula supplements become necessary, partial breastfeeding may still be possible. Refer the woman to her healthcare provider for further evaluation.

Breast Radiation

Women who have been treated for breast cancer with lumpectomy and radiation of the affected breast usually produce insufficient milk from the irradiated breast due to irreversible damage to the milk-producing glands. However, women can still breastfeed from the unaffected side. While some women are able to produce sufficient milk for their babies with frequent breastfeeding from one breast only, others may need to give formula supplements to keep their babies adequately nourished.

Education points:

A woman with a history of breast cancer treated with breast radiation should be advised that the treated breast is unlikely to produce significant milk. She should be encouraged to maximize her milk production in the untreated breast by frequent breastfeeding, beginning as soon after delivery as possible. Early follow up of her baby after delivery will be necessary to determine whether her untreated breast can serve as the baby's sole source of nutrition. Refer the woman to her healthcare provider for further evaluation.

Pregnant Woman Breastfeeding

A pregnant woman who is currently breastfeeding may choose to continue to breastfeed as her pregnancy progresses. Breastfeeding during pregnancy can potentially influence the mom's ability to meet the nutrient needs of her growing fetus and breastfed baby.

Education points:

When the pregnant woman is breastfeeding, explain that her milk supply may decrease and that her breastfed baby may need other sources of nutrition. If she wants to continue breastfeeding as pregnancy progresses, refer her to her healthcare provider (specifically her OB) for further evaluation. The provider may discourage the practice for women with high risk pregnancies. Explain that both she and her baby may find breastfeeding less enjoyable as the milk supply decreases and she may experience some nipple discomfort.

Carrying Multiple Babies

The birth of multiple babies should **not** prevent a woman from breastfeeding, although multiple babies may need special assistance if they are premature or low birth weight. The woman who is expecting multiples will need reassurance that she is capable of breastfeeding successfully and producing enough milk for her babies.

Education points:

Encourage moms wishing to breastfeed multiple babies to do so. Offer the reassurance that she is capable of producing adequate milk and provide the necessary guidance to achieve adequate milk production, including: adequate calorie, nutrient, and fluid intake; ample rest; appropriate frequency of breastfeeding; and the loan or rental of a hospital-grade electric breast pump. As with other participants, provide information on breastfeeding basics, invite mom to attend a breastfeeding or infant feeding class, and offer specific educational materials on breastfeeding multiple babies. Encourage her to find sources of support during the postpartum period.

Next Steps

Based on information presented, encourage participants to choose one or two specific action(s)/goal(s) which will help in reducing or eliminating the potential breastfeeding complication. This may include reading educational materials, attending a breastfeeding or infant feeding class, watching educational videos, or making an appointment with their healthcare provider for further evaluation.

Pregnant women with potential breastfeeding complications may need further evaluation and should be referred, as appropriate, to a WIC CPA with extended breastfeeding education or to their healthcare provider.

Encourage **ALL** pregnant women to attend prenatal breastfeeding classes or infant feeding classes prior to deciding how to feed their baby. Women with previous breastfeeding experience should be encouraged to attend. The previous experience may have not been successful, prior education may not have been provided, or the woman may have inaccurate knowledge of breastfeeding. Women who have successfully breastfed in the past can benefit from new information and provide valuable support to other expectant moms who attend.

At the next WIC visit, follow up with the participant regarding her progress toward achieving the behavior change action(s)/goal(s) and her experience with the provider to whom she was referred. As appropriate, provide breastfeeding information and education at each subsequent visit.

All follow up and communication with the participant and the provider should be documented in the participant's education record.

Remember, early identification, support, and follow up are keys to helping mom and baby have a positive and successful breastfeeding experience.

Breastfeeding Woman – Complications or Potential Complications

Breast Engorgement

Engorgement occurs temporarily in all new moms when the milk comes in a few days after delivery. Continued severe engorgement (risk factor) is often caused by infrequent breastfeeding and/or ineffective removal of milk. This severe breast congestion causes the breast(s) to become hard, shiny, and painful to the touch; and the nipple-areola area to become flattened and tense, making it difficult for the baby to correctly latch on.

Education points:

For engorgement/severe engorgement, encourage the mom to breastfeed as frequently as possible with the baby latched on correctly to help reduce breast firmness enough to relieve discomfort. This will require breastfeeding 10 to 15 minutes on each breast every 1 - 3 hours. Other recommendations, include: (1) using moist heat on the breasts for 10 minutes before a feeding (applying a wash cloth or baby diaper soaked in warm water or standing in a warm shower); (2) expressing some milk by hand or with a breast pump to soften the nipple-areola area and breast (relieves discomfort and can allow baby to latch better); (3) gently massaging the breast in a circle motion from the outer margins toward the nipple to help move milk through the ducts; and (4) applying cold compresses to the breast(s) after feedings to reduce swelling and pain.

Recurrent Plugged Ducts

Recurrent plugged ducts (risk factor) can be a frustrating problem for breastfeeding women. A clogged duct (tender, hard knot) is a temporary back-up of milk that occurs when one or more of the lobes (glandular tissue) of the breast does not drain well. This usually results from incomplete emptying of the breast.

Education points:

For recurrent plugged or obstructed ducts, encourage the mom to breastfeed more frequently and start several consecutive feedings on the affected breast. Moist, hot packs and gentle massage or pressure applied to any tender knots (try applying massage away from the nipple) will help milk flow from the obstructed area. Breastfeeding in different positions will also help. Instruct the mom to breastfeed at least 10 minutes per breast; if the breasts are not well emptied, she should pump or express enough remaining milk to become comfortable. Determine possible risk factors that predispose a woman to recurrent plugged ducts and encourage the woman to avoid such behaviors, including: infrequent or skipped feedings, allowing the breasts to remain overly full, wearing tight, constrictive clothing or underwire bras, roughly massaging the breast, and consistently breastfeeding on one breast only. Any lump that persists for days or weeks must be accurately diagnosed to rule out the possibility of malignancy and additional problems. Refer the woman to her healthcare provider.

Mastitis

Mastitis (risk factor) is a breast infection that causes a miserable, "flu like" illness accompanied by an inflamed, painful area of the breast. A mom with mastitis may experience the following symptoms: tenderness or redness of the breast, flu-like symptoms, headache, nausea, fever, chills, malaise, or fatigue.

Education points:

If you suspect a breastfeeding mom has developed mastitis, recommend that she call her healthcare provider immediately so antibiotics can be prescribed promptly if needed. Encourage her to rest as much as possible, drink plenty of water, and continue breastfeeding from both breasts frequently. She can begin breastfeeding on the unaffected side until her let-down is triggered, then move the baby to the affected breast until it is well emptied. Not removing the milk from the affected side will lead to more engorgement, pain, and a possible abscess. The milk is safe for baby to consume. Moist hot packs applied prior to feeding may help facilitate milk flow. Symptoms usually improve dramatically within 48 hours of beginning antibiotic therapy and treatment should continue for at least 10 days. Mastitis is a serious medical condition and should be treated as such.

Flat or Inverted Nipple(s)

Flat or inverted nipple(s) **(**risk factor) do not become erect when stimulated; an inverted nipple may have a central indentation or retract inward when compressed. Babies may have difficulty latching on correctly to flat or inverted nipples, however, with proper guidance and support moms can successfully breastfeed.

Education points:

Flat or inverted nipple(s) may interfere with proper latch on. Moms with flat nipples should be instructed to compress the breast and areola between two fingers to provide as much nipple as possible to the baby. Wearing a breast shell (see right, note smaller hole for nipple) between feedings may help make the nipple more erect. Drawing the flat or inverted nipple out with an electric or manual pump before each feeding also can facilitate latch on. Usually such pre-feed pumping is necessary for only a few days until the baby learns to attach correctly.

Breast shells

Breast shell with small hole for flat or inverted nipple(s).

Breast shell with large hole for cracked, bleeding or severely sore nipples.

Cracked, Bleeding, or Severely Sore Nipples

Sore nipples are most often caused by improper baby positioning, latch, or suckling. Severe nipple pain, discomfort lasting throughout feedings, or pain lasting beyond one week postpartum is not normal. Improper latch not only causes sore nipples, but impairs milk flow, leads to decreased milk supply, and can cause inadequate intake for the baby. There are several other causes of severe or persistent nipple pain, including Candida (yeast) or staph infection.

Education points:

If a woman complains of cracked, bleeding, or severely sore nipples, the cause of the soreness needs to be determined in order to fix the problem and prevent it from recurring. Review proper positioning and latch, frequency and duration of feeds, and breast care, as appropriate. Review the nutritional status of the mom, focusing especially on protein, zinc, and vitamin C, to assure adequacy for wound healing. Reassure the mom breastfeeding on the affected nipple(s) is recommended with proper positioning and latch and that small amounts of blood will not harm her baby. Recommend that the mom apply lanolin to her nipples after breastfeeding to prevent excessive moisture loss and promote healing. This is safe for baby to consume. The mom may also allow some breast milk to air dry on her nipple(s) as breast milk contains healing properties. Wearing breast shells (see above, note larger hole for sore nipples) will allow the nipple area to dry without irritation from clothing. If infection is suspected, refer the mom to her healthcare provider and suggest she refrain from direct breastfeeding until properly diagnosed and instead use an electric breast pump to maintain her milk supply.

Systemic or Other Illness

Moms with **diabetes** should be offered the opportunity to breastfeed unless specific problems are present that prohibit successful breastfeeding.

Systemic hypertension (high blood pressure) is usually treated with medication. Some medications are secreted in breast milk and may affect the baby, while others may decrease milk production.

Other systemic illnesses include:

- **PKU** – Pregnancy and breastfeeding can be successful if strict dietary controls are begun before pregnancy.
- **Cystic fibrosis** – Moms with cystic fibrosis may have limited milk production due to low body fat or they may lose excessive weight while breastfeeding.
- **Depression** – Those with depression may take medications that are contraindicated during breastfeeding, however, not all medications for depression are contraindicated. It is important mom checks with her healthcare provider and/or pharmacist.

Education points:

The breastfeeding mom with diabetes should be reassured that, despite her special challenges, she is capable of breastfeeding successfully. She should be encouraged to follow her prescribed diet, drink adequate amounts of fluid, get moderate exercise, and maintain close communication with her healthcare provider and/or dietitian. Referral to a diabetes specialist may be necessary if the mom is having any problems regulating her blood sugar level and/or is not under the care of a specialist.

For other health conditions, refer the woman to her healthcare provider. For conditions that require **prescribed medications,** individual consideration must be made by the woman's healthcare provider. Encourage the woman to communicate with her healthcare provider about all medications, including those purchased over-the-counter, that she may be taking.

Alcohol and Drugs

Alcohol and some drugs are transmitted into breast milk. Women who are abusing drugs and/or alcohol should not breastfeed. Refer to the previous section on contraindications to breastfeeding. Marijuana use during breastfeeding is not recommended, is passed to baby through breast milk, and not considered safe. Other drugs are passed through breast milk to baby and should be avoided while breastfeeding.

Education points:

The breastfeeding woman who chooses to have an occasional alcoholic drink should be advised that alcohol does pass into breast milk. For women who do have an occasional drink, the American Academy of Pediatrics Committee on Drugs suggests if alcohol is used, intake should be limited to 2-2.5 ounces of liquor, 8 ounces of table wine, or 2 cans of beer (servings based on a 132 pound woman), and should occur with a meal and after a breastfeeding. The breastfeeding woman should be advised to not use marijuana or other drugs while breastfeeding, as they are passed through breast milk and are not safe for the developing baby.

Young Moms

Young breastfeeding women have often not completed their own growth and development and may have already compromised their nutritional stores during pregnancy, which places them at nutritional risk when breastfeeding. Additionally, many teens are emotionally immature and do not fully understand the magnitude of care a baby requires, as well as the increased demands of breastfeeding.

Education points:

If a young mom chooses to breastfeed, provide encouragement, support, and assurance that she can do so, and emphasize the importance of getting sufficient rest and an adequate diet and fluids. Be available as necessary to provide guidance and support for her decision and to help her prioritize her baby's needs. Show her how to breastfeed and explain pumping options to maintain her milk supply if she must be separated from her baby due to work or school commitments. Arrange for close follow up to ensure that an adequate milk supply is produced.

Moms 40 Years or Older

Breastfeeding women 40 years of age or older (risk factor) are more likely to experience fertility problems and perinatal risk factors that could impact the initiation of breastfeeding. Because evolutional breast changes may begin in the late 30s, older moms may have fewer functioning milk glands than younger moms, resulting in greater difficulty producing an abundant milk supply.

Education points:

If an older mom (40 years or older) chooses to breastfeed, provide similar support and assurance given to other clients. Arrange for close follow up to ensure that an adequate milk supply is produced. Help the mom prioritize other competing demands in her life to enable her to breastfeed often and get breastfeeding well established.

Failure of Milk to Come in by 4 Days Postpartum

Failure of milk to come in by 4 days after delivery (risk factor) may be a result of maternal illness or perinatal complications. Some common reasons for a delay in mature milk production include having a C-section delivery, taking certain medications, obesity, hormonal issues, etc. Failure of a mom's milk to come in may place the baby at nutritional and/or medical risk, making temporary supplementation (donated human milk or formula) necessary until mom's milk supply is established.

Education points:

If a mom reports her milk has not come in by 4 days postpartum, both mom and baby need to have a full breastfeeding assessment. The evaluation will help guide appropriate changes in feeding frequency or technique and determine if there is a need to begin supplementation of the baby. Close follow up will be necessary until breastfeeding is well established or an appropriate feeding plan has been tailored.

Breastfeeding Multiple Babies

Breastfeeding multiple babies should be encouraged, yet recognizing it will present some planning and coordination. Moms breastfeeding multiple babies need to produce more milk than moms of single babies, which may require the use of a hospital-grade electric pump at first to increase milk supply. It may also require attention to dietary and fluid intake and rest. Feeding triplets is possible, but may be complicated by baby hospitalization due to prematurity and extreme maternal fatigue.

Education points:

Encourage moms wishing to breastfeed multiple babies to do so. Offer reassurance that it is possible to produce adequate milk for multiples and provide the guidance necessary to achieve adequate milk production, including adequate calorie, nutrient, and fluid intake, rest, and frequent, on demand breastfeeding. Provide a hospital-grade electric pump.

Tandem Nursing

Tandem nursing (risk factor) refers to breastfeeding two siblings who are not twins or from the same birth. It requires patience and understanding on the mom's part to meet the unique needs of two breastfeeding babies at different developmental stages.

Education points:

The mom who chooses to tandem nurse two babies who are not twins requires support and understanding for her decision. She will need to prioritize the nutritional and comfort needs of two babies at different stages, without allowing herself to become physically or emotionally depleted. The older baby may compete for breastfeeding privileges, and care must be taken to ensure that the younger baby has first access to the milk supply. Follow up to ensure the younger baby is growing adequately.

Next Steps

Based on information presented, work with the participant to determine specific action(s) to assist mom with reaching her breastfeeding goals. This may include reading educational materials, attending a breastfeeding class, attending the scheduled WIC appointment, or making an appointment with their healthcare provider for further evaluation. Referral to a breastfeeding support group, such as La Leche League or hospital-based breastfeeding group, may also be helpful for the new mom.

At the next WIC visit with the CPA, follow up with the participant regarding her progress toward achieving the behavior change goal(s) and her experience with the provider to whom she was referred. Follow up on any additional recommendations made by the WIC CPA with extended breastfeeding education that were documented in the participant's record. As appropriate, provide breastfeeding information or education at each subsequent visit.

All follow up and communication with the participant and the provider should be documented in the participant's care plan. The CPA determines the frequency of follow-up visits for breastfeeding moms. Schedule appointments as indicated.

Video Time!

Watch the following USDA WIC Breastfeeding Support videos and consider sharing them with your participants:

- *Overcoming Pain*

Breastfeeding Baby – Complications or Potential Complications

Jaundice

Jaundice (risk factor) in a baby may become evident within 2 to 10 days after birth. The baby appears to have a yellow/orange tinge to his or her skin, the whites of the eyes, and mucous membranes. Jaundice occurs when bilirubin accumulates in the blood because red blood cells break down too quickly, the liver does not process bilirubin as efficiently as it should, or intestinal excretion of bilirubin is impaired.

Jaundice in the newborn requires monitoring because bilirubin is toxic if allowed to accumulate. Excessive bilirubin can be deposited in the tissues of the body, especially the brain, resulting in brain damage, hearing loss, cerebral palsy, and even death. Furthermore, the underlying cause of jaundice needs to be diagnosed and treated, if necessary, as jaundice sometimes results from serious medical illness, such as infection, liver disease, heart failure, severe anemia, or hypothyroidism. Early visits to the WIC clinic can help identify and refer these babies to their healthcare providers.

> **The baby who appears jaundiced needs to be seen by their healthcare provider for determination of the cause and the appropriate treatment.**

When jaundice occurs in an otherwise healthy, breastfed baby, it is important to distinguish "breast milk jaundice" from "breastfeeding jaundice" and understand the appropriate treatment.

In the condition known as **"breast milk jaundice,"** the onset of jaundice usually begins well after the baby has left the hospital, 5 to 10 days after birth, and can persist for weeks and even months. Breast milk jaundice is a normal physiologic phenomenon in the thriving breastfed baby and is due to a human milk factor that increases intestinal absorption of bilirubin. The stooling and urinating pattern is normal (>4 yellow, seedy "milk" stools/day and >6 clear urinations/day).

A baby with "breast milk jaundice" may need to temporarily stop breastfeeding to lower bilirubin levels for 24-36 hours, IF recommended by a healthcare provider. An electric breast pump should be used to maintain milk supply. The expressed milk is safe and can be stored and fed at a later date.

"**Breastfeeding jaundice**" is an exaggeration of physiologic jaundice, which usually peaks between 3 and 5 days of life, though it can persist longer. This type of jaundice is a common marker for inadequate breastfeeding. A baby with breastfeeding jaundice is underfed and displays the following symptoms: infrequent or ineffective breastfeeding, failure to gain appropriate weight, infrequent stooling with delayed appearance of yellow stools (i.e., prolonged passage of meconium), and scant dark urine with urate crystals. Improved nutrition usually results in a rapid decline in serum bilirubin concentration.

If the baby is determined to have "breastfeeding jaundice", the baby should continue to breastfeed. Breastfeeding technique and routines need to be optimized to maximize breast milk intake. Encourage the mom to frequently breastfeed, to wake a sleepy baby, and not to limit the length of feeds. Twice-weekly weight checks should occur until the baby has regained the birth weight or is gaining at least 1 ounce/day.

Weak or Ineffective Suck

A weak or ineffective suck (risk factor) may cause a baby to obtain inadequate milk with breastfeeding and result in a decreased milk supply and an underweight baby. Weak or ineffective suckling can be due to prematurity, low birth weight, a sleepy baby, or physical/medical problems.

The baby with an ineffective or weak suck must be evaluated by their healthcare provider.

Since the condition may contribute to or be the result of an insufficient milk supply, the mom should be advised to use a breast pump to express any residual milk after breastfeeding in order to increase her milk supply. As the mom's milk supply increases and the baby becomes stronger, the baby's ability to suck will improve. In some cases, supplemental milk can be provided simultaneously during breastfeeding, using a feeding tube device (the Supplemental Nursing System). This recommendation should be made after consultation with a lactation consultant or a WIC CPA with extended breastfeeding education.

Difficulty Latching On

Difficulty latching on to the mom's breast (risk factor) may be due to flat or inverted nipple(s), breast engorgement, incorrect positioning, or breastfeeding technique. Early exposure to bottle feedings and frequent pacifier exposure may make it difficult for some babies to learn how to attach to the breast correctly and effectively extract milk.

Evaluation of the baby with difficulty latching on needs to be conducted by the WIC CPA with extended breastfeeding education (CLC, CLS, or IBCLC).

If problems with correct breastfeeding technique are identified, gentle encouragement and demonstration of proper technique may be all that is necessary. If a mom has flat or inverted nipple(s) or breast engorgement that interferes with latch, briefly pumping prior to feeding may be necessary to elongate the nipples or soften the breasts. This is usually required for only a few days.

Neuromuscular Problems

Neuromuscular problems, such as those associated with Down Syndrome, may result in ineffective suckling and inadequate breastfeeding. The baby with Down Syndrome may be extremely placid, difficult to awaken or keep awake, and have low muscle tone that results in poor suckling ability. Because babies with Down Syndrome are highly susceptible to infections, the immune benefits of human milk make breastfeeding particularly advantageous to these babies. With skilled guidance and patience, many babies with Down Syndrome and other neuromuscular conditions can learn to breastfeed effectively.

> **The mom with a baby with neuromuscular problems, including Down Syndrome and other anomalies, should be referred to the WIC CPA with extended breastfeeding education or their healthcare provider for evaluation and counseling.**

Mom may need to use an electric breast pump to create and maintain an abundant milk supply. Mom will need ongoing encouragement and guidance to successfully breastfeed her baby. She should be encouraged and supported to breastfeed as long as possible and/or to consider pumping her breasts to supply her baby with her milk. Breastfeeding or pumping milk for a baby with a neuromuscular problem can be a trying experience. Whatever feeding decision she makes, support for the mom is critical and she should be praised for providing any breast milk for her baby.

Oral Anatomic Problems

Babies with oral anatomic problems, such as cleft lip and/or palate, can have significant feeding problems and other complications, such as ear infections, dental abnormalities, and speech and language problems. These babies require extra time and patience to learn to feed successfully.

> **The mom of a baby with oral defects who has successfully initiated and maintained breastfeeding will need ongoing encouragement and support.**

The baby may be hospitalized to repair the defect and the mom will need support to maintain her milk supply while her baby is hospitalized. During some hospitalizations she will be able to and should breastfeed her baby, while at other times it will be necessary to pump her breasts and store the milk for hospital feedings or future feedings at home.

Use of an electric breast pump to help make milk expression easier may be needed. Counsel the mom to pump each breast for at least 10 minutes to empty them well. Double pumping not only saves time, but it may help produce more milk.

Tongue tie or lip tie may be another cause for concern with breastfeeding and infants should be referred onto healthcare providers for further evaluation to address the issue.

Excessive Infant Weight Loss

Infant weight loss greater than or equal to 7% of birth, inadequate stooling for age, and/or less than 6 wet diapers per day (risk factor) are probable indicators that the breastfed baby is not receiving adequate milk. Not only is the baby at risk for failing to thrive, but the mom's milk supply is at risk for rapidly diminishing due to ineffective removal of milk. The breastfed baby with inadequate caloric intake must be identified early and the situation remedied promptly to avoid long-term consequences of dehydration or nutritional deprivation. By 4 to 5 days of age, breastfed babies should start to gain about an ounce each day, or 5 to 7 ounces each week. Most will surpass their birth weight by 10 to 14 days.

> **A baby with excessive weight loss, inadequate stooling, and/or less than 6 wet diapers per day needs immediate evaluation to identify and remedy the cause.**

If the baby is not getting enough milk, not only will the baby be undernourished, but the mom's milk supply will rapidly decrease. The baby may be an otherwise healthy, "slow gainer", or may be having difficulty gaining because of ineffective breastfeeding, infrequent feedings, a low milk supply, a poor letdown reflex, or other feeding or physiological problem. Explain to the mom that let-down is a conditioned reflex and that she should breastfeed her baby whenever she perceives her milk letting down. Using relaxation techniques and drinking fluids prior to breastfeeding can help stimulate the milk ejection reflex. Review proper positioning and appropriate frequency and duration of feeds. Encourage the mom to breastfeed or pump frequently to maintain her milk supply and to get as much breast milk into her baby as possible.

The mom can pump after feedings and use any expressed milk she obtains to supplement her baby's intake at the breast. Supplementing with expressed breast milk or formula may be required to achieve catch-up weight gain and maintenance growth until the baby begins breastfeeding more effectively and the mom's milk supply increases. If ongoing pumping becomes necessary, the mom will need encouragement and frequent contacts to continue breastfeeding.

Galactosemia, Maple Syrup Urine Disease, and Phenylketonuria

Galactosemia is a rare hereditary disorder of galactose metabolism. Breast milk contains high levels of lactose, which breaks down to glucose and galactose. Breastfeeding is contraindicated, as the baby is unable to metabolize galactose. A galactose-free diet is essential to prevent rapid progression of disease leading to brain damage and death.

Maple Syrup Urine Disease is a disease in which the body is unable to breakdown certain portions of proteins leading to the build-up of harmful substances that can cause damage to the brain and other organs. A special formula free of leucine, isoleucine and valine is needed.[3]

Phenylketonuria (PKU) is an inherited disorder that causes the body to be unable to process a portion of a protein called phenylalanine, which is in all protein-containing foods. If the phenylalanine level gets too high, the brain can become damaged, causing intellectual and developmental disabilities. Some breastfeeding is possible under careful monitoring in combination with using a special phenylalanine-free formula.[4]

Moms who are unable to breastfeed their babies because they have a genetic disease or disorder may feel enormous disappointment about the loss of this aspect of their mothering role. They also may have a sense of failure. These women will need the opportunity to grieve the loss of their anticipated breastfeeding experience and should be given support and reassurance that their baby will receive adequate nutrition from formula to be healthy.

Next Steps

Based on information presented, work with the participant to determine specific action(s) to assist mom with reaching her breastfeeding goals. This may include reading educational materials, attending a breastfeeding class, attending the scheduled WIC appointment, or making an appointment with their healthcare provider for further evaluation.

Breastfeeding babies with complications or potential complications identified in the breastfeeding risk factors may require immediate intervention by a WIC CPA with extended breastfeeding education. If the expert is not available the day the problem is identified, and you believe the baby needs immediate attention, the baby should be referred to their healthcare provider and/or a professional in the community with lactation management expertise.

Referral to a breastfeeding support group, such as La Leche League or hospital-based breastfeeding group, may be helpful for the new mom.

At the next WIC visit, question the participant regarding her progress toward achieving the behavior change action(s)/goal(s) and her experience with the provider to whom she

was referred. Follow up on any additional recommendations made by the CPA with extended breastfeeding education documented in the participant's chart. As appropriate, breastfeeding information and education should be provided at each subsequent visit.

All follow up and communication with the participant and the provider should be documented in the participant's record. The CPA determines the frequency of follow-up visits. Schedule appointments as indicated.

SELF-CHECK: PRACTICE YOUR KNOWLEDGE

1. True or False?
   a. _____A woman abusing alcohol should be told not to breastfeed.

   b. _____ A woman who has hepatitis should be referred to her healthcare provider to determine if she can breastfeed.

   c. _____ Women using any medication while breastfeeding should be told not to breastfeed.

2. What do you do when a breastfeeding woman reports that her nipples retract when her baby feeds?

3. A breastfeeding baby appears jaundiced at his WIC appointment. What should you do?

4. You just weighed a 1-week-old breastfeeding baby at her certification visit and the baby has lost 8% of her birth weight. What should you do?

5. A mom tells you her 2-week-old baby is breastfeeding 8 times in 24 hours, is having 4 bowel movements, and 7 wet diapers each day. The baby's weight is 4 ounces above birth weight. What should you do?

6. A breastfeeding mom complains to you that her nipples are cracked and bleeding. The CPA with extended breastfeeding education is not available today to see the mom. What would you do?

ANSWERS

1.
    a. True
    b. True
    c. False, most medications are safe while breastfeeding, though further evaluation of the specific medication needs to be made by the woman's healthcare provider.

2. Refer the mom and baby to a CPA with extended breastfeeding education for further evaluation. If the CPA is not available, a referral should be made to the participant's healthcare provider. Additionally, you would want to discuss the educational points outlined in the section above if the participant will not see the CPA with extended breastfeeding education immediately.

3. Refer the mom and baby to a CPA with extended breastfeeding education for counseling and refer to the participant's healthcare provider. Additionally, you would want to discuss the educational points outlined in the section above if the participant will not see the CPA with extended breastfeeding education immediately.

4. Assess for breastfeeding complications that might lead to weight loss. Provide education accordingly. Refer the baby to the healthcare provider.

5. Congratulate mom on what a great job she is doing breastfeeding. Her baby is really thriving on her milk!

6. Refer the mom to her healthcare provider for further assistance and evaluation.

Section IX: Resources

Books for Parents

- "Medications & Mothers' Milk" by Thomas Hale, RPh, PhD
- "Breastfeeding: A Parent's Guide" by Amy Spangler, BSN, MN, IBCLC
- "Breastfeeding 101" by Sue Tiller, RN, IBCLC
- "Breastfeeding Made Simple" by Nancy Mohrbacher, IBCLC and Kathleen Kendall-Tackett, PhD, IBCLC
- "The Essential Guide to Breastfeeding" by Marianne Neifert, MD
- "The Nursing Mother's Companion" by Kathleen Huggins, RN, MS
- "The Womanly Art of Breastfeeding" by La Leche League International

Books for Healthcare Providers

- "Breastfeeding: A Guide for the Medical Profession" by Ruth Lawrence, MD
- "Breastfeeding Handbook for Physicians" by the American Academy of Pediatrics and The American College of Obstetrics and Gynecologists
- "Lactation Management: Techniques, Tips, and Tools for Health Care Providers" by Maureen Hoag Dann, PNP, IBCLC
- "Medications & Mothers' Milk" by Thomas Hale, RPh, PhD
- "The Breastfeeding Atlas" by Barbara Wilson-Clay, MS, IBCLC and Kay Hoover, MEd, IBCLC
- "The Breastfeeding Answer Book" by La Leche League International

Videos for Healthcare Providers

- Stanford Medicine – Getting Started with Breastfeeding videos
- Best Feeding Lactation Services LLC – Paced Bottle Feeding: https://www.youtube.com/watch?v=TuZXD1hIW8Q
- The Basics of Breast Massage and Hand Expression: https://vimeo.com/73054360.
- Hands on Pumping: http://med.stanford.edu/newborns/professional-education/breastfeeding/maximizing-milk-production.html
- Hand Expression After Pumping for Working Moms: http://bit.ly/2mkVWva

Websites for Parents

- USDA WIC Breastfeeding Support: https://wicbreastfeeding.fns.usda.gov/
- Iowa Breastfeeding Coalition: https://iabreastfeeding.org/
- Office on Women's Health – Breastfeeding: https://www.womenshealth.gov/Breastfeeding/
- Kelly Mom: http://www.kellymom.com/

Websites for Healthcare Providers

- Drugs and Medications Database: https://www.ncbi.nlm.nih.gov/books/NBK501922/
- Infant Risk Center: Drugs and Medications: Hotline (806) 352-2519 or online https://www.infantrisk.com/
- Jack Newman, MD latch video clips: http://www.nbci.ca/index.php?option=com_content&view=category&layout=blog&id=6&Itemid=13
- Hand expression with Jane Morton, MD of Stanford School of Medicine: http://newborns.stanford.edu/Breastfeeding/HandExpression.html
- Academy of Breastfeeding Medicine Breastfeeding Protocols: https://www.bfmed.org/protocols
- Office on Women's Health: https://www.womenshealth.gov/breastfeeding
- Business Case for Breastfeeding (employer information): https://www.womenshealth.gov/Breastfeeding/

Congratulations!

You are now better informed about breastfeeding and can provide encouragement, support, and assistance to all WIC women. Thanks to you, more women and babies can receive the best nutrition and the best start to life!

Training Activity

Now that you have completed this module, please take the Breastfeeding Module on-line post-test located on the Web Portal Training Personnel page. **Good Luck!**

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