Bright Futures Mini Training Module Script

**Promoting Health Growth During Early Infancy**

**Introduction:** Adequate nutrition during infancy is essential in order to ensure the health, growth and development of infants and children

**Take Away:** The pediatric health care professional will be able to:

* Identify the role of the pediatric health care professional in promoting and protecting breastfeeding.
* Describe the benefits of breastfeeding.
* Identify reasons a mother may decide not to breastfeed.
* Use best practices to promote health weight beginning in the newborn period and address the barriers that may be present.

**Key Resources:**

[*Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*, 4th Edition](https://www.aap.org/en/practice-management/bright-futures/bright-futures-materials-and-tools/bright-futures-guidelines-and-pocket-guide/)

[American Academy of Pediatrics Institute for Healthy Childhood Weight](https://www.aap.org/en/patient-care/institute-for-healthy-childhood-weight)

**Citation:** If you plan to use this resource, please cite or credit as: Barr, J. *Bright Futures:* *Promoting Healthy Growth During Early Infancy* [PowerPoint slides]. 2022. Accessed <date>. <https://www.aap.org/en/practice-management/bright-futures/bright-futures-in-clinical-practice/bright-futures-educational-resources/>

***Note:*** *The recommendations in this presentation/training do not indicate an exclusive course of treatment or serve as a standard of care. Variations, taking into account individual circumstances, may be appropriate.*

=Slide change/title slide =Script for facilitator =Note for facilitator

Slide 1- *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescent*s, 4th Edition - Promoting Healthy Growth During Early Infancy

* This topic focuses on Promoting Healthy Growth During Infancy, primarily focusing on the nutrition and promoting healthy growth following birth.

Slide 2-Author & Disclosure Information

* Please read and review the author & disclosure information before you continue.

Slide 3-Pre-test

* Please complete the pre-test prior to reviewing the presentation.

Slide 4-Main Objective

* As a result of completing this module the participant will be able to:
	+ Promote healthy eating and growth starting in the newborn period.
	+ Identify important aspects of the maternal history.
	+ Develop an approach to assess parent responsiveness to infant hunger and safety cues, breastfeeding in the absences of hunger, sleep duration and quality.
	+ Address sociocultural, economic, or other barriers to food and nutritional needs.

Slide 5- Scope in Pediatrics

* It is important that health care professionals are assuring that infants are being provided adequate nutrition during infancy in order to ensure the health, growth and development of infants and children. The pediatric health care professional will be able to:
1. Identify the role of the pediatric health care professional in promoting and protecting breastfeeding.
2. Describe the benefits of breastfeeding.
3. Identify reasons a mother may decide not to breastfeed.
4. Use best practices to promote healthy growth beginning in the newborn period and address the barriers that may be present. This includes the importance of responsive feeding and healthy habits in infancy on healthy growth.

Slide 6-Disparities Related to Breastfeeding

* As there are disparities noted in infant mortality, there are similar disparities in breastfeeding.
* According to the CDC, demographic characteristics and family breastfeeding history play a role in Hispanic mothers having a higher rate of breastfeeding. While this research suggests Hispanic women have higher rates to initiate breastfeeding, the group is also more likely to supplement formula earlier and to introduce solids earlier.
* From data available from the CDC, 21.2% of Black infants and 19.6% of Native American infants were exclusively breastfed for the first 6 months of life. The CDC also reports 21.5% Hispanic and 26.8% Non-Hispanic Asian rate for exclusive breastfeeding through 6 months. This is in comparison to 28.7% White infants and a national average of 25.6%.
* The low rate for breastfeeding infants through the first 6 months of life is especially true for low-income Black women who return to work earlier in comparison to other racial or ethnic groups. There are also challenges with work schedules, support for breastfeeding or expressing breast milk.

Slide 7-First 6-month breastfeeding by ethnicity

* Data available from the CDC, 21.2% of Black infants and 19.6% of Native American infants ere exclusively breastfed the first 6 months of life. The CDC also reports that 21.5% Hispanic and 26.8% non-Hispanic Asian rate for exclusive breastfeeding through 6 months. This in comparison to 28.7% White infants and a national average of 25.6%.

Slide 8- Any Breastfeeding Initiation

* Compared to exclusive breastfeeding as shown in the previous slide, the national average for ANY breastfeeding initiation rate is 83.9% per the CDC data. The breastfeeding initiation rate is highest for non-Hispanic and Asian population; the breastfeeding initiation rate is higher for non-Hispanic white and Hispanic populations as compared to non-Hispanic black or African-American population

Slide 9-Disparities Related to Breastfeeding

* The disparities in breastfeeding are associated with differences in health outcomes for Black infants, as compared to White infants, with increased cases of narcotizing enterocolitis, acute otitis media and death associated with insufficient breastfeeding.
* Recent research by Mieso and by Kirksey offer insights to the barriers to initiating breastfeeding. Barriers to initiating breastfeeding included absence of lactation support when lactating issues occurred, prenatal and postpartum health complications such as mental health problems, stress related to challenges at home or at work, poverty, and lack of trust in the health care professionals. It was also noted that the implicit biases of health care professionals and/or institution discrimination have an impact with discussions of breastfeeding and the decision for lactation referral.

Slide 10-Overview: What Pediatric Health Care Professionals Can Do

* As discussed in the previous slide, just as there are disparities noted in infant mortality, there are similar disparities in breastfeeding.
* It is important for health care professionals, including residents and trainees, to minimize the disparities in breastfeeding.
* First, professionals need to ensure that there is access to mothers in the hospital for support and education with breastfeeding immediately after birth through discharge.
* Professionals, including residents and trainees, need to assess internal implicit biases that may impact breastfeeding support.
* Professionals, including residents and trainees, have to be trained and educated to understand the cultural, societal, and familial influences that may impact a woman’s decision to breastfeed.
* Health care professionals, including residents and trainees, need to be able to communicate and discuss the health benefits of breastfeeding – such as reduction in respiratory infections, decreased incidence of obesity and diabetes, decreased atopic disease, and decreased infant mortality.
* There is also a need to have an awareness of the alternatives to breastfeeding.

Slide 11-Discussing Alternatives to Breastfeeding

* Approximately 19% of breastfed infants receive supplemental commercial infant formula within the first 48 hours after birth.
* While the AAP recommends exclusive breastfeeding for approximately 6 months and supports continued breastfeeding until 2 years (or beyond), there are considerations which health care professionals should have awareness.
* Contraindications to breastfeeding include:
* Classic galactosemia is an absolute contraindication to breastfeeding
* Maternal infections – untreated brucellosis, active herpetic lesions on the breast
* Maternal marijuana use while breastfeeding is discouraged since there is insufficient data to assess the effects of the infant
* Some medications are contraindicated with breastfeeding
* Supplementation may be medically necessary if breastfeeding technique and frequency is not optimal.
* Families may have preference for commercial formula.
* Breastfeeding may not be possible in cases of adoption.
* Gender-diverse parents have less access to human milk due to social and biological constraints.

Slide 12-Case Study

* Mom is a 30-year-old female who delivered her first child, a boy. There were no complications with the vaginal delivery. The infant weighs 7 pounds 8 ounces and length is 19 inches. Apgar scores are: 7 at 1 minute, 9 at 5 minutes.
* During the prenatal visit, the mother had indicated that she would breastfeed. The mother is inquiring information about feeding her newborn and what to expect.
* She plans on returning to work full-time in about 8 weeks.
* She has asked other family members (including her mother) and friends who have had children. She has received conflicting information about breastfeeding, expressed breast milk, formula feeding, and introducing infant cereal and fruits.

 Slide 13-Self-Assessment

* What does the Bright Futures Previsit Questionnaire reveal about the mother and infant?

Slide 14-Self-Assessment

* What does the self-assessment reveal about the mother and infant?

Slide 15-Self-Assessment Questions

* Let’s discuss some important aspects of this case as we go through the self-assessment questions.

Slide 16-Self-Assessment Feedback #1

* Let's talk about the first question. What are some priorities to address during this visit? In general, we would want to discuss feeding practices, food disparities, psychosocial concerns, financial concerns, and household smoking. The mother has questions regarding breastfeeding. She remarked that it is sometimes painful or uncomfortable. We should review the mother’s breastfeeding technique.
* It is also reported that there were not a lot of wet diapers or bowel movements. We will want to have more information regarding the feeding pattern.
* She was also not giving vitamin D for the infant. We will want to review the importance of prescribing vitamin D drops for breastfed infants. She did note that she is searching the internet to learn how to care for her baby and she is unsure about normal infant development and developmental milestones. This is important to review during this visit.
* There may also be some underlying financial concerns so we may want to have some follow up with WIC or food stamps. We want to remind the mother about household smoking since the grandparent does smoke a pipe.

To screen for questions, health care disparities, psychosocial concerns.

* + The mother has questions regarding breastfeeding
		- Remarked that it was sometimes painful or uncomfortable
			* Review the mom’s breastfeeding technique
		- Reported there not a lot of wet diapers or bowel movements
			* Provide more information regarding feeding
	+ She was not given vitamin D drops for the infant.
		- Review importance and prescribe drops
	+ She is searching the Internet to learn about how to care for her baby
	+ She is unsure about normal infant development and developmental milestones
	+ There may be some underlying financial concerns
		- Follow up on “maybe” needing WIC or food stamps
	+ Grandparent smokes a pipe
		- Remind limiting the infant’s smoke exposure

Slide 17-Self Assessment Feedback #2

* Let’s talk about question 2. While examining the infant during this visit, what would you focus on? It’s important to summarize the information during the visit and your findings during the exam.
* We also want to make sure we address the mother’s concerns. We will want to discuss the benefits of breastfeeding and noting any weight gain and address any of her concerns.
* We should also review the physical exam and, finally, we should highlight the developmental milestones.

Slide 18-Self-Assessment Feedback #3

* The third question-What other maternal history would you need to know? It’s important to gather a complete medical and family history.
* The mother does not indicate mental health issues or depression, but we should take time to remind the mom to ask for help from family/friends; rest and/or sleep when the baby sleeps and voice any mental health concerns to her health care professionals. Finally, we want to have an idea of the mother’s perception of breastfeeding and to understand if there are any barriers to breastfeeding.

Slide 19-Self-Assessment Feedback #4

* Let’s discuss what we want the staff to document and discuss with the mother. The staff should document and discuss the following: addressing mother’s concerns about breastfeeding and development and making referrals to lactation counseling, and also addressing any of the mother’s questions on breastfeeding and development.
* We should always offer lactation counseling and review of milestones of the infant development during each office visit.
* The staff may notice that there are some possible financial concerns and therefore want to be able to provide any local resources.
* We also want to make sure that there is education provided on limiting smoke exposure especially as, in this case, the grandparent does smoke a pipe.

The staff should document and could discuss the following:

* + Address mother’s concerns about breastfeeding and development
	+ Refer to lactation counseling
	+ The mother has a lot of questions on breastfeeding and development
	+ Offer lactation counseling and review milestones of infant development
	+ Possible financial concerns, therefore, provide local resources
	+ Discuss importance of limiting smoke exposure (grandparent smokes a pipe)

Slide 20-Self-Assessment Feedback #5

* What do we want to focus on subsequent visits particularly the 1 Month (4 Week) visit as well as the
2-month visit - regarding nutrition, promoting healthy weight, and what other areas should we, as pediatric health care professionals, discuss or review? We should focus on feeding strategies, healthy growth, tracking weight for length, holding, burping, and understanding hunger and satiety cues.
* We also want to discuss about preparing for returning to work either breast pumping, feeding plans and choices, and general guidance on feeding, childcare alternatives and we also want to look at surveilling the parent and family health as well as well-being such as postpartum checkups, perinatal depression screenings, and family relationships.
* We should be assessing feeding and also looking at postpartum concerns such as the need for any areas of counseling to provide to the family and other caregivers.
* In terms of assessing of feeding, we want to know and have the parent understand that there are cues of when the baby is hungry such as putting their hands to their mouth, sucking, rooting, or fussing.
* We also want them to understand cues to knowing when the baby is full such as turning away, closing their mouth, relaxing arms and hands.

Now, we want to review and discuss the newborn assessment and newborn behavior.

* Spending time with the child, holding them, cuddling them, reading, singing, playing, and learning what things the child and baby likes is really important for the Pediatric health care professional to discuss.
* We want to ask about the social determinants such as food insecurity, environmental tobacco exposure, and making them aware of any community resources and family support.

Feedback for question 5.

* + Focus on feeding strategies, weight gain, holding, burping, hunger and satiation cues
	+ Discuss preparing for returning to work – breast pumping, feeding plans and choices, general guidance on feeding, childcare alternatives
	+ Surveil parent and family health and well-being (postpartum checkup, perinatal depression screen, family relationships), feeding assessment
		- Postpartum concerns: Assess areas of counseling to provide to the family and other caregivers.
		- Assessment of feeding
			* Cues to knowing when baby is hungry (putting hand to mouth, sucking, rooting, fussing)
			* Cues to knowing when baby is full (turning away, closing the mouth, relaxed arms and hands)
	+ Review and discuss the Newborn assessment and newborn behavior
		- Spending time with child holding taking, cuddling, reading, singing, playing; learning what things your baby likes
	+ Ask about social determinants (food insecurity, environmental and tobacco exposure)
	+ Provide community resources and family support

Slide 21-Self-Assessment Feedback #5 Continued

* At the 2-month visit:
	+ Provide general guidance on feeding, breast pumping, feeding plans and choices, avoid feeding your baby solid foods or juice.
	+ Ask about parent and family health and well-being (postpartum checkup, perinatal depression screen, family relationships); assess areas of counseling to provide to the family and other caregivers.
	+ Ask about social determinants (such as food insecurity, environmental tobacco exposure)
		- Provide community resources and family support.

Slide 22-Priorities for the First Week Visit

* The first priority of every Bright Futures visit is to attend to the concerns of the parents.
* This is a visual of the First Week Visit priorities which you can refer to in the *Bright Futures Guidelines,* 4th Edition.
* Note: one of the priorities includes addressing nutrition and feeding issues, including breastfeeding guidance

Slide 23-Recommended Screenings for the First Week Visit

* Universal screening means you conduct the screening on every patient, no matter if they are at risk or not.
* At this visit, confirm that both the newborn hearing and blood screening has been completed. Follow-up as needed based on results.
* If the infant has specific risk conditions, measure the infant’s blood pressure.
* If the infant is positive on risk screening questions regarding their vision, or if a parent has a concern, refer to an ophthalmologist for further evaluation.

Slide 24-Anticipatory Guidance

* What the “experts” would focus on…
	+ Nutrition and feeding
		- Recognize signs of hunger, fullness; develop feeding routine.
		- Exclusive breastfeeding for about the first 6 months provides ideal nutrition, supports best growth and development.
		- Iron-fortified formula is a recommended substitute, if needed
	+ Social Determinants of Health
	+ Programs like WIC and SNAP are available to help you if you have concerns about your food situation.
* Parent and family health and well-being
	+ Make sure to ask for help from family or friends.
	+ Rest and sleep when baby sleeps

Slide 25-Use of Visit Documentation Form

* Here is a mocked-up documentation form based on the case study. Some information that can be documented are:
* Concerns and questions: questions about breastfeeding and weight.
* Language: English/Spanish
* Birth history: full-term 39 weeks vaginal delivery. Apgars 7, 9. Birth weight 7.5 pounds (3.5kg). length 19 inches. Hearing screen passed. Newborn blood screening not back yet. Maternal blood type A+. maternal serologies negative.
* Vitamin K given. Hep B vaccine given.
* Newborn Screen pending.
* Weight today 7.2 pounds (3.27 kg).
* Nutrition: Breastfeeding 10 minutes on each breast every 3 hours.
* Did not receive vitamin D prescription.
* 4 wet diapers; 1-2 stools.
* Sleeps on his back.
* Development: typical.

Slide 26-What Else Can You Discuss?

* Discuss the infant’s weight and ways to promote continual breastfeeding. This can include exclusive breastfeeding for 6 months and continued breastfeeding for as long as mutually desired.
* Explore any barriers to breastfeeding*.*

Slide 27-Reinforcing the Anticipatory Guidance

* With the parent educational handout, reinforce the information discussed during the visit around nutrition and feeding, as well as other health and safety topics for this infant and family.

Slide 28-Summary: Teaching Points

* Remember to use of Previsit Questionnaires and Visit Documentation templates that are useful for consistency and to provide areas for discussion.
* Assessment of infant development, as well as growth parameters, must be done at each visit.
* Pediatric health care professionals can provide counseling and reassurance regarding breastfeeding.

Slide 29-Summary: Teaching Points

* Understand the benefits of breastfeeding.
	+ Breastfeeding exclusively for the first 6 months is beneficial for growth and development.
	+ Health care professionals should identify reasons or barriers a mother may decide not to breastfeed and to know resources to assist a mother to continue to breastfeed.
* Educational handouts are helpful for teach back.
* Disparities in breastfeeding exist due to socioeconomic factors such as income and earlier return to work.
* Solids should not be introduced until the infant is 6 months old and is developmentally ready for introduction to solids.

Slide 30-Post-test

* Please complete the post-test prior to ending the presentation.

Slide 31-32-Clinical Resources

* Here are some clinical resources to support your learning and practice to promote healthy growth in early infancy.

Slide 33-Resources for Families

* Here are some family-focused resources to support and promote healthy growth in early infancy.

Slide 34-35-References