

Bright
 *Futures* for
Babies



*Three Appropriate Feeding Practices
in Early Infancy*

Prepared for
Supplemental Food Program Division
Special Nutrition Programs
Food and Nutrition Service
Department of Agriculture

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Bright Futures_{for} Babies

Three Appropriate Feeding Practices in Early Infancy

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*"Bright Futures for Babies" was developed for presentation at the September, 2000
National Association of WIC Directors Nutrition Services and Breastfeeding Promotion Conference.*

Bright *Futures* for Babies

Explanation of These Materials

This set of training materials, *Bright Futures for Babies*, provides:

- Background material on healthy feeding relationships in infancy
- Chapters on three appropriate feeding practices in infancy, including anticipatory guidance for clients
- Educational materials to use with clients and partners
- Guidance on doing inservice training using *Bright Futures for Babies*
- Selected resources

The *Bright Futures in Practice: Nutrition* guide, described on the next page, provides a foundation for the *Bright Futures for Babies* training materials. All excerpts from the guide are boxed and the page number of each excerpt (preceded by “BFP:N”) is indicated for your reference.

Two other sources are quoted in *Bright Futures for Babies*, as well. Excerpts from each are introduced by a statement of the source. The end of each excerpt is indicated by this symbol: ■

In the *Bright Futures in Practice: Nutrition* guide, as in these training materials, the word “parent” is used to refer to the adult or adults responsible for the care of the infant.

Welcome to Bright Futures for Babies!

Desired Outcomes for Infants and Families from Bright Futures in Practice: Nutrition

*Bright Futures in Practice: Nutrition** is a comprehensive resource on delivering nutrition services to the families of infants and children. It is an implementation guide of *Bright Futures Guidelines for Health Supervision of Infants, Children, and Adolescents.***

Bright Futures in Practice: Nutrition was written by dozens of contributors and was reviewed by over 150 health professionals, educators, and representatives from family organizations. Organizational reviewers include the National Association of WIC Directors, the Society for Nutrition Education, The American Dietetic Association, the American Academy of Pediatrics, the American Nurses Association, and the American Public Health Association...as well as 31 other organizations. (For more details on the guide and ordering information, see *Selected Resources*.)

Bright Futures for Babies builds on the *Bright Futures in Practice: Nutrition* "Desired Outcomes for the Infant and the Role of the Family." These desired outcomes, listed on the next page, are grouped into three categories:

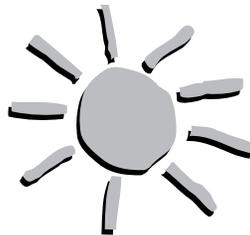
- educational/attitudinal outcomes
- behavioral outcomes
- health outcomes.

All three of these areas are important targets of nutrition services.

By studying the *Bright Futures* desired outcomes for infants and their families, nutrition educators can learn more about why the desired outcomes are important. Then these outcomes can be targeted in practice by:

- analyzing nutrition services in relation to the desired outcomes and making changes as indicated
- reviewing current nutrition education materials and revising them to include targeted information that promotes the desired outcomes
- using the desired outcomes to advocate for more resources and support for nutrition services
- utilizing the desired outcomes in community outreach and in forming partnerships.

Bright Futures for Babies will make nutrition educators aware of the importance of optimal nutrition to lifelong healthy eating behaviors, and the important role of feeding in parenting. The training focuses on the beginnings of the feeding relationship in early infancy, and its importance to physical health and development, as well as to social and emotional health.



* Story, M, Holt K, Sofka D, eds. 2000. *Bright Futures in Practice: Nutrition*. Arlington, VA: National Center for Education in Maternal and Child Health.

** Green M, Palfrey JS, eds. 2000. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*, Second Edition. Arlington, VA: National Center for Education in Maternal and Child Health.

Bright Futures for Babies addresses the outcomes in this table which are in bold.

Desired Outcomes for the Infant, and the Role of the Family

*from Bright Futures in Practice: Nutrition**

Infant

Educational/Attitudinal	Behavioral	Health
<ul style="list-style-type: none"> • Has a sense of trust • Bonds with parents • Enjoys eating 	<ul style="list-style-type: none"> • Breastfeeds successfully • Bottle feeds successfully if not breastfeeding • Consumes supplemental foods to support appropriate growth and development 	<ul style="list-style-type: none"> • Develops normal rooting, sucking, and swallowing reflexes • Develops fine and gross motor skills • Grows and develops at an appropriate rate • Maintains good health

Family

Educational/Attitudinal	Behavioral	Health
<ul style="list-style-type: none"> • Bonds with the infant • Enjoys feeding the infant • Understands the infant's nutrition needs • Acquires a sense of competence in meeting the infant's needs • Understands the importance of a healthy lifestyle, including healthy eating behaviors and regular physical activity, to promote short-term and long-term health 	<ul style="list-style-type: none"> • Meets the infant's nutrition needs • Responds to infant's hunger and satiety cues • Holds the infant when breastfeeding or bottle feeding and maintains eye contact • Talks to the infant during feeding • Provides a pleasant eating environment • Uses nutrition programs and food resources if needed • Seeks help when problems occur 	<ul style="list-style-type: none"> • Maintains good health

(BFP:N, p. 50)

* Story, M, Holt K, Sofka D, eds. 2000. *Bright Futures in Practice: Nutrition*. Arlington, VA: National Center for Education in Maternal and Child Health.

Introduction:

Healthy Feeding Relationships Begin in Infancy

The desired outcomes for infants and the role of the family go far beyond meeting the infant's nutritional needs, as this excerpt from *Bright Futures in Practice: Nutrition* indicates:

Feeding is crucial for developing a healthy relationship between parents and infants. A parent's responsiveness to an infant's cues of hunger and satiation and the close physical contact during feeding facilitate healthy social and emotional development. During the first year, being fed when hungry helps infants develop the trust that their needs will be met. For optimum development, newborns need to be fed as soon as possible when they express hunger. As they grow older and become more secure in that trust, infants can wait longer for feeding.

Quickly responding to their infant's cues also strengthens parents' sense of



competence. As they feed their infant, they learn how their actions comfort and satisfy.

Over time, parents become more skilled at interpreting their infant's cues, and they increase their repertoire of successful responses to those cues. Physical contact during feeding enhances communication between the parent and infant because it provides the infant with essential sensory stimulation, including skin and eye contact, and strengthens the psychological bond between the parent and infant. A sense of caring and trust evolves and lays the groundwork for communication patterns throughout life.

(BFP:N, p. 26)

The first sentence excerpted states that "Feeding is crucial for developing a healthy relationship between parents and infants." This statement is pivotal. It is a way of looking at nutrition that profoundly impacts nutrition education. *Bright Futures in Practice: Nutrition* promotes the idea that nutrition educators can help their clients not only with nutrition but also

with parenting, since appropriate anticipatory guidance can help parents develop healthy relationships with their infants. These healthy relationships, which start with bonding, and develop into security, attachment and love, help set the groundwork for healthy relationships throughout life.

Anticipatory guidance is counseling or education that prepares parents for the various developmental stages infants and children are likely to go through. Anticipatory guidance helps parents know what to expect, what to look for, how to cope, and how to be helpful to their infants or children in predictable developmental stages. Anticipatory guidance helps parents understand that many behaviors at mealtime are normal and typical. It allows parents to think through their responses to predictable behaviors and develop options and a repertoire of appropriate behaviors. Anticipatory guidance can support the development of healthy children, healthy family relationships, and healthy feeding relationships.

Bright Futures in Practice: Nutrition views parents themselves as developing, as they care for, feed and learn about their children:

When feeding their infant, parents clarify and strengthen their sense of what it means to be a parent. They gain a sense of responsibility by caring for an infant, they experience frustration when they cannot interpret the infant's cues, and they further develop their ability to negotiate and solve problems through their interactions with the infant. They also identify their values and priorities, and expand their abilities to meet their infant's needs. Anticipatory guidance from health professionals can reinforce parents' strengths and encourage good parenting.

(BFP:N, p 26)

The *parent* develops, as the parent acquires a sense of competence in meeting the infant's needs. The *infant* also develops, physically, emotionally and socially. At the same time, something special develops between them: *their relationship!* A basic foundation is laid for the future of the family, as well as for the infant's long-term health.

What actually sets the foundation? As the "Desired Outcomes" table outlines, outcomes during early infancy that can contribute to the foundation are that:

- the infant and parent bond with each other
- the infant develops a sense of trust
- the infant enjoys eating and the parent enjoys feeding

In addition to understanding and meeting the infant's nutrition needs, the role of the family includes these appropriate behaviors:

- responds to infant's hunger and satiety (fullness) cues
- holds the infant when breastfeeding or bottle feeding and maintains eye contact
- talks to the infant during feeding, and
- provides a pleasant eating environment

Although feeding a healthy, full-term infant looks simple and natural, it is actually more complex than it looks. These materials will explore what is going on developmentally at feeding time, and will also provide nutrition educators with anticipatory guidance to share with parents so that parents can understand why feeding time matters.

To begin, let's review the concept of a "feeding relationship." What does that term mean, and specifically what does it mean in infancy? The following excerpt offers some definitions and underscores the importance of infant feeding practices.

Healthy Feeding Relationships

The material that follows is excerpted and adapted from Infant Nutrition and Feeding, A Reference Handbook for Nutrition and Health Counselors in the WIC and CSF Programs, 1994, p. 29 -30. See Selected Resources for further information on this handbook.

What is a “feeding relationship”?

The interactions and communication between a caregiver and infant during feeding influence the infant’s ability to progress in feeding skills and consume a nutritionally adequate diet. These interactions comprise “the feeding relationship,” defined as “the complex of interactions that take place between the parent and child as they engage in food selection, ingestion, and regulation behavior” (Satter, 1986a).

This relationship is nurtured when the caregiver correctly interprets the infant’s feeding cues, is attentive to the infant’s needs, and responds appropriately to satisfy those needs.

The infant’s health and nutritional status is promoted when the feeding relationship is positive (the caregiver is sensitive and responsive to an infant’s feeding cues) and the infant is fed a nutritionally balanced diet.

What is a “dysfunctional feeding relationship”?

A dysfunctional feeding relationship results when a caregiver consistently misinterprets, ignores, or overrules the infant’s feeding cues, such as when a caregiver regularly forces an infant to consume additional food after he or she has become full and satisfied (Satter, 1986a).

A dysfunctional feeding relationship can result in poor dietary intake and impaired growth (Ainsworth and Bell, 1969; Satter, 1986a; 1990a).

Infants, whose feeding cues are not getting the expected response from their caregiver, tend to become dissatisfied, confused about their sensations of hunger and fullness, and may become unusually passive (Satter, 1986a).

What behaviors result in positive feeding relationships between parents and infants?

To develop positive feeding relationships between caregivers and their infants, nutrition educators can encourage caregivers to: (Satter, 1984; 1986a)

- Observe and be sensitive to their infant’s hunger, satiety (fullness), and food preferences, and act promptly and appropriately to meet their feeding needs.
- Calm the infant before and during eating to reinforce the infant’s view that eating is a positive, pleasant, and anxiety-free experience.
- Avoid putting the infant on a rigid feeding schedule. An older infant can be offered food at around the time when he or she usually eats, but in general, the caregiver should watch for the infant to indicate hunger. However, feeding at specific intervals of time may be necessary if an infant has certain medical conditions or is a sleepy infant who needs to be awakened to feed.
- Remember their infant’s developmental capabilities and nutritional needs when deciding the type, amount, and texture of food and the method of feeding (such as, use a spoon for feeding; allow child to self-feed with fingers.)
- Offer food in a positive and accepting fashion without forcing or enticing the infant to eat. Avoid withholding food. Infants are biologically capable of regulating their own food intake to meet their needs for growth and may vary in the amount and types of food eaten each day.

As the preceding excerpts point out, parental behaviors can either help or hinder the development of healthy feeding relationships. Behaviors are key.

The positive feeding behaviors listed on the previous page are explored in more depth in the upcoming chapters:

1. Responding Appropriately to the Infant's Hunger and Fullness Cues
2. Holding and Interacting with the Infant During Feeding
3. Providing a Pleasant Eating Environment



Could this kind of anticipatory guidance provide benefits to nutrition educators, as well?

Anticipatory guidance is helpful, supportive, and positive. It helps parents understand behavior and deal with it. As nutrition educators provide increased anticipatory guidance in the area of feeding dynamics, parents may feel even more appreciative of the help they receive from WIC staff. Parents' feedback to the nutrition educator is likely to be positive. This dynamic can set the stage for future successful interactions between the parent and the nutrition educator.

Ainsworth, MDS and Bell, S.M. Some contemporary patterns of mother-infant interaction in the feeding situation. In: Ambrose, A. (ed). Stimulation in Early Infancy. New York, NY: Academic Press Inc., 1969.

Satter, E. Feeding guidelines: Developmental guidelines for feeding infants and young children. Food and Nutrition News 56:21-26, 1984.

Satter, E. The feeding relationship. J. Am. Dietetic Assoc. 86: 352-356, 1986a.

Satter, E. Childhood feeding problems. Feelings and Their Medical Significance. vol.32, no 2. Columbus, OH: Ross Laboratories, 1990a.

1:

Responding to the Infant's Hunger and Fullness Cues

During the first year, being fed when hungry helps infants develop the trust that their needs will be met. For optimum development, newborns need to be fed as soon as possible when they express hunger. As they grow older and become more secure in that trust, infants can wait longer for feeding.

Quickly responding to their infant's cues also strengthens parents' sense of competence. As they feed their infant, they learn how their actions comfort and satisfy. Over time, parents become more skilled at interpreting their infant's cues, and they increase their repertoire of successful responses to those cues.

(BFP:N, p. 26)

The infant's major developmental tasks in early infancy are to learn to self-regulate and to develop a sense of security. The infant is helped in both of these tasks when parents respond appropriately to the baby's cues of hunger and fullness.

Some parents, especially inexperienced ones, need to learn that healthy full-term infants will typically communicate hunger and fullness, if the parent watches closely for the baby's signals or cues. Parents also need to learn what those cues are. Some parents need to learn that responding immediately to their

young baby's cues and cries will not "spoil" the baby and make the baby dependent.

Of course, a baby *is* dependent. *Somebody* has to fill the infant's needs in order for the infant to thrive.

The reward for all this effort is a close emotional relationship or bond with the baby. Even in the short term, there are advantages. For instance, studies show that older babies cry *less* if their needs have been tended to quickly and warmly in early infancy.

The following excerpts will help you understand how and why that happens.



*The material that follows is excerpted from the booklet *The First Years Last Forever* which goes with the video of the same name, from the I AM YOUR CHILD Campaign. See Selected Resources.*

————— *Responding to the infant's cues and clues* —————

Infants can't use words to communicate their moods, preferences, or needs, but they send many signals to the adults who care for them. Among the cues and clues they send are the sounds they make, the way they move, their facial expressions, and the way they make (or avoid) eye contact. Children become securely attached when parents and other caregivers

try to read these signals and respond with sensitivity. They begin to trust that when they smile, someone will smile back; that when they are upset, someone will comfort them; that when they are hungry, someone will feed them. Parents who pay close attention to their children's needs for stimulation as well as quiet times help them form secure attachments.



*“BUT WON'T MY NEWBORN GET SPOILED
WITH ALL OF THIS ATTENTION?”*

You might think so, but studies show that newborns who are more quickly and warmly responded to when crying typically learn to cry much less and sleep more at night.

After all, newborns have just come from a warm, snug place where they could hear and feel the rhythmic beating of their mother's heart, and where they were never hungry or cold. Before birth, everything was regulated. After birth, when the baby is hungry, uncomfortable, or upset in his new environment, the brain's stress-response systems turn on and release stress hormones. The baby expresses

his distress by crying. When the caregiver responds and provides food or warmth or comfort, the baby tends to be calmed. The stress-response systems in the brain are turned off and the infant's brain begins to create the networks of brain cells that help the baby learn to soothe himself.

You cannot spoil a newborn baby by responding to his needs.

Caregiving and the Stress Response

- Megan Gunnar, Ph.D., from the University of Minnesota has shown that by the end of the first year, children who have received consistent, warm, and responsive care produce less of the stress hormone cortisol, and when they do become upset, they turn off their stress reaction more quickly. This suggests that they are better equipped to respond to life's challenges.
- Bruce Perry, M.C., Ph.D., and his colleagues at Baylor College of Medicine have shown that infants and young children exposed to abuse and neglect are more likely to produce a strong stress response, even when exposed to minimal stress. ■

One thing nutrition educators can do is help parents, especially young and first-time parents, understand that their baby is communicating all the time, in the best way babies can. The healthy, full-term baby will indicate hunger (often with many cues before resorting to crying) and will also indicate fullness. The

parent has to be tuned in to the baby, watching closely and learning the baby's signals. Here is some information on how newborn and young babies typically signal that they are hungry or full, followed by more information presented as counseling tips.

Hunger and Fullness Cues

The material that follows is excerpted and adapted from "Infant Nutrition and Feeding, A Reference Handbook for Nutrition and Health Counselors in the WIC and CSF Programs," 1994, p. 75. See Selected Resources.

Infants, especially newborns, may be erratic as to when and how often they want to eat. Thus, encourage caregivers to watch for and respond appropriately to the infant's cues of hunger and satiety or fullness.

Since it is normal for infants to have fussy times, an infant may cry and just want to be held or may want to suck and may not actually be hungry. If you perceive

that a caregiver is troubled by or not coping with an infant's fussiness or crying, refer him or her to a health care provider for further assessment or assistance.

A caregiver who is not sure whether her infant is hungry can first attempt to soothe him or her by holding, rocking, and playing before resorting to feeding. ■

Anticipatory Guidance: Hunger and Fullness Cues

The following counseling points are from *Bright Futures In Practice: Nutrition*. For more information, please refer to the guide itself. (See *Selected Resources*.)

Instruct parents to feed the infant when she is hungry. Signs of hunger include hand-to-mouth activity, rooting, pre-cry facial grimaces, fussing sounds, and crying.

(BFP:N, p. 42)

To review what the rooting reflex is:

When an infant's oral area (corner of the mouth, upper and lower lip, cheek and chin) is touched by an object, the head and mouth turn in the direction of the object and the infant opens his or her mouth. The rooting reflex allows the infant to seek out and grasp a nipple. This reflex is seen from birth to about 4 months.

Instruct parents to feed the infant until he seems full. Signs of fullness are turning his head away from the nipple, showing interest in things other than eating, and closing his mouth.

(BFP:N, p. 40)

Reassure parents that infants are getting enough milk if:

- They make swallowing sounds.
- They have one or two wet and/or soiled diapers on the first day, increasing to six to eight wet cloth diapers or five or six disposable diapers and three or four stools every 24 hours. (The urine should be pale yellow, and stools should have the consistency of cottage cheese and be mustard-colored by the fourth day.)
- They are gaining weight appropriately.

(BFP:N, p. 40)

Infants often go through growth spurts between 2 and 4 weeks of age and significantly increase their milk intake during that time.

(BFP:N, p. 43)

Counseling on breastfeeding:

Emphasize that the infant should be allowed to finish feeding at one breast before the other breast is offered. The length of feedings should not be restricted, although 20 to 45 minutes provides adequate intake and allows the mother some time to rest between feedings.

Inform parents that the frequency of feedings is typically 8 to 12 times in 24 hours. In the first 2 to 4 weeks, infants should not be allowed to sleep more than 4 hours without breastfeeding.

Explain that infants have periods when they grow very fast. At these times, it may be necessary to feed them more often to give the mother's milk production a chance to adjust to the infant's needs. Frequent feedings help establish milk supply and prevent the breasts from getting too full.

(BFP:N, p. 34)

Counseling on formula feeding:

Instruct parents to check the following if the infant is crying more than usual or seems to want to eat all the time:

- Is the infant positioned in a semi-erect, comfortable position for feeding?
- Is the formula prepared correctly? Has too much water been added?
- Is the bottle nipple too firm? Is the nipple hole too large?
- Are they responding to the infant's cues of hunger?
- Is the feeding environment too distracting?

(BFP:N, p. 35)

2:

Holding and Interacting with the Infant During Feeding

“Physical contact during feeding enhances communication between the parent and infant because it provides the infant with essential sensory stimulation, including skin and eye contact, and strengthens the psychological bond between the parent and infant. A sense of caring and trust evolves and lays the groundwork for communication patterns throughout life.”

(BFP:N, p. 26)

Babies need close physical contact during feeding, regardless of whether they are breastfed or bottlefed.

Breastfeeding, of course, guarantees that the baby will get the stimulation of touch, smell, sight, sound and taste every couple of hours—in fact, in the newborn period, nearly every waking minute! Bottlefed babies need to be held close and need skin-to-skin

contact to get the same benefits that breastfeeding naturally delivers.

This stimulation is important because it causes the baby’s brain to develop and stimulates the production of hormones that cause growth. Physical touch is also vital to the process of bonding or attachment.

The next two pages will provide you with more information in this area.



Infant Brain Development

*The material that follows is excerpted from the booklet *The First Years Last Forever* which goes with the video of the same name from the I AM YOUR CHILD Campaign. See Selected Resources.*

As a mother feeds her child, she gazes lovingly into his eyes. A father talks gently to his newborn daughter as he changes her diaper. A caregiver sings a child to sleep.

These everyday moments, these simple, loving encounters, provide essential nourishment. Just as their bodies need food to grow, science now tells us that the positive emotional, physical, and intellectual experiences that a baby has in the earliest years are equally necessary for the growth of a healthy brain.

At birth, the infant's brain has 100 billion nerve cells, or neurons. These neurons will grow and connect with other neurons in systems that control various functions like seeing, hearing, moving, and expressing emotion. These systems, activated by

repeated experiences, provide the foundation for the brain's organization and functioning throughout life. The absence of appropriate activation results in the lack of development or the disappearance of these connections.

Children are deeply affected by their early experiences

At birth, the brain is remarkably unfinished. The parts of the brain that handle thinking and remembering, as well as emotional and social behavior, are very underdeveloped. The fact that the brain matures in the world, rather than in the womb, means that young children are deeply affected by their early experiences. Their relationships with parents and other important caregivers, the sights,

sounds, smells, and feelings they experience, the challenges they meet—these don't just influence their moods. These experiences actually affect the way children's brains become "wired." In other words, early experiences help to determine brain structure, thus shaping the way people learn, think, and behave for the rest of their lives.

Principles of Brain Development

- The outside world shapes the brain's wiring.
- The outside world is experienced through the senses—seeing, hearing, smelling, touching, and tasting—enabling the brain to create or modify connections.
- The brain operates on a "use it or lose it" principle.
- Relationships with other people early in life are the major source of development of the emotional and social parts of the brain.

— The need for warm, loving, responsive care —

When children receive warm, responsive care, they are more likely to feel safe and secure with the adults who take care of them. Researchers call these strong relationships “secure attachments,” and they are the

basis of all the child’s future relationships. We have always known that children thrive when they feel secure. Now we know that children’s early attachments actually affect the way their brains work and grow.

“If I just love my child, will that change her brain?”

Not exactly. It is the expression of your love—touching, rocking, talking, smiling, singing—that affects how your young child’s brain is “wired” and helps to shape later learning and behavior. Children experience relationships through their senses. Babies experience the way you look into their eyes. They see

the expressions on your face. They hear you cooing, singing, talking, and reading. They feel you holding or rocking them, and they take in your familiar smells. Touch is especially important. Holding and stroking stimulates the brain to release important hormones necessary for growth.¹

1. L. Alan Sroufe, Ph.D., and his colleagues at the University of Minnesota have found that children who receive warm and responsive caregiving and are securely attached to their caregivers cope with difficult times more easily when they are older. They are more curious, get along better with other children, and perform better in school than children who are less securely attached.



— Why talk or read to infants before they can talk? —

It may seem that very young children can’t take in what you’re saying, but in important ways they do. Infants don’t yet grasp the meaning of words, but it is through these early “conversations” that language capacity grows. When babies hear you say words over and over, the parts of the brain that handle speech and language develop. The more language they hear in these conversations, the more those parts of the brain will grow

and develop. Talking, singing, and reading to your child is not only important for brain development, but a wonderful opportunity for closeness with your child.

You can read picture books and stories to very young children, even to infants. By about six months, infants show their excitement by widening their eyes and moving their arms and legs when looking at a book with pictures of babies or other familiar objects.



Anticipatory Guidance: Feeding Time

*The following counseling points are from “Bright Futures In Practice: Nutrition.”
For more information, please refer to the guide itself.*

Encourage parents to talk to the infant during feedings. As infants develop, they increasingly respond to social interaction.

(BFP:N, p. 45)

If possible, observe the mother breastfeeding her infant. Assess the mother’s comfort in feeding the infant, eye contact between the mother and infant, the mother’s interaction with the infant, the mother’s and infant’s responses to distractions in the environment, and the infant’s ability to suck. Help the mother and infant develop successful breastfeeding behaviors.

(BFP:N, p.39, 41)

2 weeks to 2 months:

Encourage parents to play with the infant, encouraging her to follow objects with her eyes. Playing stimulates the nervous system and helps infants develop head and neck control and motor skills.

(BFP:N, p. 44)

Counseling on breastfeeding, also applies to formula feeding:

Instruct women to breastfeed when their newborns show signs of hunger (e.g., increased alertness or activity, mouthing, rooting). Tell women not to wait until their infants are crying: crying is the last indicator of hunger.⁴

(BFP:N, p. 38)

Counseling on formula feeding:

Encourage parents to hold the infant close, in a semi-upright position, during feeding. The parent should be able to look into the infant’s eyes.

(BFP:N, p. 35)

⁴ American Academy of Pediatrics, Work Group on Breastfeeding. 1997. Breastfeeding and the use of human milk. Pediatrics 100(6):1035-1039

3:

Providing a Pleasant Feeding Environment

Inform parents that infants may be distracted by light and noise and may need help to focus on feeding. A calm, gentle approach, using repetitive movements such as rocking, patting, or stroking, is usually most helpful. Some infants may need to be swaddled or fed in a room with less light and noise.

(BFP:N, p. 42)

Babies do not eat well if they are sleepy or upset. In the early months of life, babies often have difficulty making transitions from the sleeping to waking states. It is often hard for the new baby to reach or maintain a relaxed and alert state or even to stay awake to eat without getting upset. A baby may need help from the parent to stay awake and calm.

It is important for the parent to stay calm, too. Babies do not yet realize that they are separate from the parent. When the parent is upset, the baby tends to get upset, also.

A distracted, upset or excited baby may have trouble settling down to the important business of feeding.

Soothing sounds and a calm, quiet environment can be very helpful to the infant at feeding time. A blaring TV or stereo, a family argument, or active siblings may overstimulate the baby. When overstimulated, babies often “shut down” emotionally and physically, and start crying. Crying helps babies block out excessive stimulation.

Every baby is unique, however, and what bothers one baby will not bother another. As a generality, though, the younger or more developmentally immature the baby, the more calming must be done.

As the baby is able to self-regulate better and wait longer to be fed after feeling hunger, the environment may become more of a distraction.

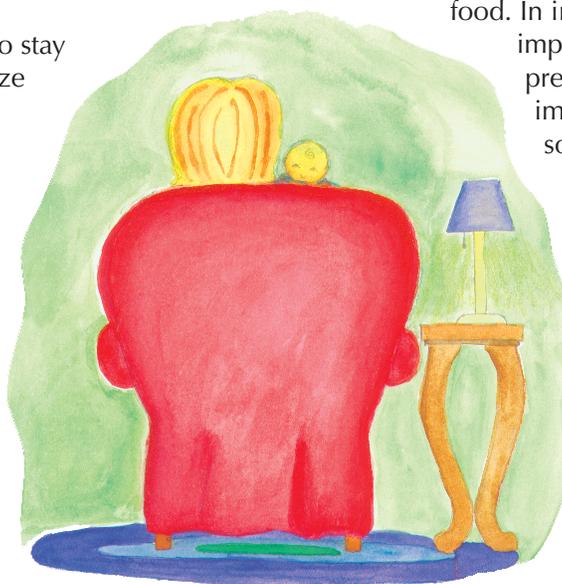
The context of feeding is important, even in infancy. Eating in infancy and childhood helps sets the stage for lifelong eating habits and relationships to food. In infancy, as in early childhood, it is important for eating to be pleasant, predictable and unpressured. It is important for eating to be a time of social connection.

Encourage parents to make feeding time a pleasant, anxiety-free time to relax and enjoy their baby. This may be a particular challenge if the infant has special needs.

However, it is appropriate to point out to all parents that the baby is more likely to eat well, as well as to get all the stimulation he or she needs, if feeding time is calm and enjoyable. There are benefits for

the parent, too. Feeding time can be a time to relax and enjoy. Parents deserve a break. Encourage parents to see feeding time as a reward to themselves for all they do for their baby.

The anticipatory guidance on the following pages may be helpful in your work with parents of young infants.



Anticipatory Guidance: The Feeding Environment

The material that follows is excerpted from Infant Nutrition and Feeding, A Reference Handbook for Nutrition and Health Counselors in the WIC and CSF Programs, 1994, p. 76, 42, 133, 48. See Selected Resources.

Make feeding calm and relaxed

Caregivers can help their infants have positive feeding experiences and learn new eating skills by making the feeding environment relaxed and calm in these ways:

- Find a comfortable place in the home for feeding.
- Act calm and relaxed during feeding.
- Have patience and take time to communicate with and learn about the infant during feeding.
- Show the infant lots of love, attention, and cuddling in addition to feeding. Reassure parents that doing so will decrease fussiness and will not “spoil” the infant.

Comfort During Nursing

Breastfeeding is easier and more enjoyable when the mother and infant are able to nurse in a relaxing setting. Encourage a woman to find a comfortable place for nursing. In the early weeks postpartum, a woman may be more comfortable during nursing if she has privacy and can relax with her infant. During this period, encourage mothers to take time to interact and learn about their infants.

Preparing for Feeding

- Hold, rock, or play with your baby when fussy or crying before concluding that it is time for a feeding. It is important to show love, comfort, and cuddling and talk to your baby during feedings but also between feedings.
- Gently and slowly calm your baby to get ready for feeding.

To wake a sleepy infant

To wake a sleepy infant, a mother can try these methods:

- Playing with and talking to the infant;
- Holding the infant in an upright position (sitting or standing) several times;
- Rubbing the infant’s hands and feet
- Unwrapping or loosening blankets;
- Giving the infant a gentle massage; or
- Changing the infant’s clothing or diaper.

More Tips for a Pleasant Feeding Environment

The following counseling points are from “Bright Futures In Practice: Nutrition.” For more information, please refer to the guide itself. (See Selected Resources.)

Reassure parents that it is normal for infants to spit up a little milk at each feeding. Burping the infant several times during a feeding, and avoiding excessive movement soon after a feeding, may help.

(BFP:N, p. 32)

Encourage fathers to help care for breastfed infants. Fathers can bring the infant to the mother when it is time to breastfeed. When the infant is finished breastfeeding, the father can cuddle the infant and help with burping, diapering, or bathing.

(BFP:N, p. 34)

Encourage parents to burp the infant at natural breaks (e.g., midway through or after a feeding) by gently rubbing or patting her back while holding her against the shoulder and chest or supporting her in a sitting position on the lap.

(BFP:N, p. 40)

Explain that as infants grow, they are more easily distracted during feeding and may need gentle, repetitive stimulation (e.g., rocking, patting, stroking).

(BFP:N, p. 43)

Frequently Asked Questions About Nutrition in Early Infancy



*The following selected questions and answers are from
“Bright Futures In Practice: Nutrition,” pages 53-56.*

Should I breastfeed or use infant formula?

Breastmilk is the ideal food for babies.

Even if you breastfeed for only a few weeks or months, there are many benefits for you and your baby. Breastfeeding helps your baby resist colds, ear infections, allergies, and other illnesses.

If for any reason you feel you cannot breastfeed (for example, you have to work or go to school, or you are worried about not producing enough breastmilk,), talk to a health professional, breastfeeding specialist, or breastfeeding support group. They can answer questions and help you come up with solutions. Your family and friends are also sources of support.

If your baby has special health care needs, you may still be able to breastfeed. You may need help with positioning, special equipment, and additional support from family and friends.

If you decide to use infant formula, your health professional can help you choose the right type of formula and answer your questions about feeding.

How do I know if my baby is getting enough breastmilk?

Your baby may show she is hungry by sucking, putting her hands to her mouth, opening and closing her mouth, or looking for the nipple. She shows she is

full by falling asleep after breastfeeding.

As a general rule, your baby will have five to eight wet diapers and three or four stools a day by the time she’s 5 to 7 days old.

Your baby will be gaining weight. (A full-term baby should be back to her birthweight by 10 day to 2 weeks of age. After that she should gain 5 to 7 oz a week and should double her birthweight by 4 to 6 months of age.)

What is colic?

How can I prevent or manage it?

When your baby cries without apparent reason for several hours on a regular basis, he may have colic. Colic occurs in almost 10 percent of babies. No one knows what causes colic—it is not caused by poor parenting. Colic usually develops between 2 and 6 weeks of age and disappears by 3 or 4 months.

There is no cure for colic. Here are some tips to help manage colic as you wait for your baby to outgrow it:

- If you are breastfeeding, try avoiding some foods, such as cow’s milk, wheat, peanuts, eggs, and seafood.
- Cuddle and rock your baby during crying bouts.
- Swaddle your baby or apply firm but gentle pressure to the stomach.
- Darken the room or play soft music.
- Get help so you can take time off from caring for your baby.

Many members of my family are overweight. How can I prevent my baby from becoming overweight?

- Breastfeed if possible.
- Learn your baby's hunger cues and feed her when she's hungry. Feeding to calm her or to relieve boredom teaches her to use food as a source for comfort.
- Teach your baby to use other means for comfort (for example, cuddling, rocking, talking, and walking.)
- Feed your baby until she is full. Don't force her to finish a bottle or other food.
- Don't add cereal to the bottle—this may cause your baby to eat more than she needs. She may also choke on the cereal.
- Feed your baby slowly. Don't enlarge the hole in the bottle nipple to make the milk come out faster. It takes about 20 minutes for your baby to feel full.
- Do not give your baby sweets during the first 12 months.

What can I expect my baby to do as he grows?

Newborn to 1 month:

- Your baby will have rooting, sucking, and swallowing reflexes.
- He will begin to develop the ability to start and stop sucking.
- He will wake up and fall asleep easily.

3 to 4 months:

- Your baby will smile.
- She will raise her head when she is on her stomach.
- She will drool more.

- She will follow objects and sounds with her eyes.
- She will put her hand in her mouth a lot.
- She will sit with support.

6 months:

- Your baby will begin to eat solid foods at about 4 to 6 months.
- He will smile responsively and babble.
- His torso will move in the direction of his neck when he turns his head while lying on his back.
- He will reach for objects and pick them up with one hand.
- He will hold his hands together.
- He will sit with support.

7 to 9 months:

- Your baby will try to grasp foods (for example, melba toast, crackers, and teething biscuits) with her palms. She will not be able to pick them up with her fingers.

9 to 12 months:

- Your baby will pinch food with his fingers and try to feed himself.
- He will try to use a cup.
- He may be shy and anxious around strangers.
- He will respond to his name and familiar people.
- He will play games such as peek-a-boo.
- He will make a variety of sounds, and by 1 year he may speak several words.
- He will explore toys with his eyes and mouth, and will transfer a toy from one hand to the other.
- He will sit and crawl, and may walk without support.

The logo for "Bright Futures for Babies" features the word "Bright" in a large, black, serif font. Below it is a stylized sun icon with rays. To the right of the sun, the word "Futures" is written in a smaller, black, serif font, followed by the word "for" in a very small font. Below "Futures for", the word "Babies" is written in a large, black, serif font.

Bright Futures for Babies

Selected Resources

Sources Excerpted in *Bright Futures for Babies*:

■ ***Bright Futures in Practice: Nutrition***

The *Bright Futures* project was initiated in 1990, at the National Center of Education in Maternal and Child Health (NCEMCH) at Georgetown University, through a cooperative agreement with the Maternal and Child Health Bureau of the Health Resources and Services Administration, and program support from the Medicaid Bureau of the Health Care Financing Administration, both in the Department of Health and Human Services.

In 1994, NCEMCH published *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents*. This was revised in 2000. Various other materials have been developed at NCEMCH as well, including an implementation guide on oral health in infancy, childhood and adolescence. The second implementation guide, which is the focus of these training materials, is *Bright Futures in Practice: Nutrition*. Upcoming implementation guides include one on physical activity and one on mental health.

Besides being a resource in itself, *Bright Futures in Practice: Nutrition* has "Resources for Health Professionals and Families" at the end of each of the nutrition supervision chapters, as well as "References" and "Suggested Reading" at the end of each of the "Nutrition Issues and Concerns" chapters.

Bright Futures in Practice: Nutrition costs \$28, which includes shipping. The foundation document, *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents* costs \$35, which includes shipping. The complete text of both documents can be downloaded at no charge from the *Bright Futures* website at www.brightfutures.org.

Ordering information for all of the *Bright Futures* materials is available at www.brightfutures.org. To talk with someone about the materials, call the National Maternal and Child Health Clearinghouse at 1-888-434-4624. The Clearinghouse accepts purchase orders.

If trainers use or adapt this set of inservice materials, *Bright Futures for Babies*, trainers are requested to fill out the attached feedback sheet after completing the inservice. This feedback will help the Food and Nutrition Service assess the usefulness of this training material.

■ ***Infant Nutrition and Feeding***

Infant Nutrition and Feeding, A Reference Handbook for Nutrition and Health Counselors in the WIC and CSF Programs is publication FNS-288 of the United States Department of Agriculture, Food and Nutrition Services, published in 1993.

This 190 page, softcover resource covers infant feeding in depth. Topic areas include the nutritional needs of infants, development of feeding skills, breastfeeding, formula feeding, infant foods, special concerns in infant feeding and a selected bibliography.

Most WIC agencies received this handbook after it was published. To help you find it on your agency bookshelves, it is spiral bound with a metal spiral, a little more than a half an inch thick, with line drawings of five babies on the front in dusty pink and blue. If you never got a copy or cannot locate your copy, you may request a copy from the USDA, FNS, Nutrition Services Staff, Office of Analysis, Nutrition and Evaluation. You can call them at 703-305-2585 or write to them at 3101 Park Center Dr., Room 503, Alexandria, VA 22302. They will send the publication free of charge.

■ “The First Years Last Forever” booklet and video

“The First Years Last Forever” is the title of both a video and an accompanying booklet which summarize recent research in brain development and emphasize the importance of the relationship between caregiver and child in the early years of life.

The excellent 12 page booklet is simple and easy to read. It includes a discussion of ten guidelines for promoting young children’s healthy development and school readiness. The booklet is available in English and Spanish.

For more information on the video, see the video section of *Selected Resources*.

The booklet is 20 cents a copy. Order from the I Am Your Child Campaign, P. O. Box 15605, Beverly Hills, CA 90209. You can also visit the I Am Your Child website at www.iamyourchild.org or call them at 1-310-285-2385.

Professional Publications

■ ***Nutrition in Infancy and Childhood*** (6th ed.) by C. M. Trahms and Peggy Pipes, McGraw-Hill, New York, 1997, \$41.95 plus shipping from the publisher at 1-800-262-4729. The ISBN number is 0815184557.

■ ***Pediatric Nutrition Handbook*** (4th ed.) by R.E. Kleinman, ed., American Academy of Pediatrics, Elk Grove Village, IL, 1999, \$54.95 plus \$9.50 shipping, through the AAP at 1-888-227-1770 or online at www.aap.org.

■ ***Infant Nutrition***, by S. Foman, MD, Mosby-Year Book, St. Louis, MO, 1993, \$108 plus \$7 shipping, from Harcourt Health Sciences at 1-800-633-6699. ISBN number 1556642482.

Other resources for suggested reading are noted in *Bright Futures in Practice: Nutrition* on page 51.

Books Available in Bookstores

The two books below are written by noted researchers in the field of brain development.

■ ***What’s Going On In There?***, How the Brain and Mind Develop in the First Five Years of Life, by Lise Eliot, PhD. Bantam, New York, 1999, \$26.95. Dr. Eliot is a neurobiologist and assistant professor at the Chicago Medical School.

■ ***Building Healthy Minds***, The Six Experiences that Create Intelligence and Emotional Growth in Babies and Young Children, by Stanley Greenspan, MD. Perseus Books, Cambridge, Mass., 1999, \$25.00. Dr. Greenspan is Clinical Professor of Psychiatry and Pediatrics at George Washington University Medical School.

Many publications for the general public include information on the impact of development on feeding behaviors. Solid approaches to the subject are included in these books:

■ ***Guide to Your Child’s Nutrition, Making Peace at the Table and Building Healthy Eating Habits for Life***, a publication of the American Academy of Pediatrics, edited by William H. Dietz, MD, PhD, FAAP and Loraine Stern, MD, FAAP. 1999, \$17.95.

■ ***Your Baby and Child, From Birth to Age Five***, by Penelope Leach. Alfred A. Knopf, New York, 1997, \$20.

■ ***Touchpoints***, by T. Berry Brazelton, MD. Addison-Wesley, Reading, Mass., 1992, \$16.

■ ***What to Expect The First Year*** (1996) and ***What to Expect The Toddler Years*** (1996) by Arlene Eisenberg, Heidi E. Murkoff, and Sandee E. Hathaway, BSN. Workman Publishing, New York, \$13.95 each.

Videos

■ ***The First Three Years: Guide to Selected Videos for Parents and Professionals***

This guide, developed by the Families and Work Institute was researched by KIDSNET, and produced with support from The Commonwealth Fund in 1998. The 64 page guide includes reviews of videos in three categories: child development, health and safety, and parenting and family. The research methods used in the video review are explained thoroughly.

The full text of the guide is available online at www.cmf.org. Single copies are available for free from The Commonwealth Fund at 1-888-777-2744 or 1-212-606-3840.

■ ***“The First Years Last Forever” video***

This compelling 29 minute video on infant and child development by the I Am Your Child Campaign is favorably reviewed in the guide above. The video has sections on bonding and attachment; communication; health and nutrition; discipline; self-esteem; and child care. Each segment begins with current theory on child development and ends with practical tips for parents.

This video or segments of it would provide a good overview introduction to an inservice on development, especially in the area of infant development and feeding. It could also be used with community groups to emphasize the message that infant and children need healthy nutrition, healthy relationships and appropriate stimulation early in life, in order to fill their potential.

The video is \$5. Order from the I Am Your Child Campaign, P. O. Box 15605, Beverly Hills, CA 90209. You can also visit the I Am Your Child website at www.iamyourchild.org or call them at 1-310-285-2385.

■ ***“Bonding With Your Baby” video***

This high quality 16 minute video takes the viewer into the homes of four families with new babies. The parents talk about what bonding is, how and when bonding develops, and why bonding is important to their family life. Two of the mothers are African-American, one single and one widowed. The video comes with a discussion guide for facilitators and a one page handout for parents called “You Can Bond with Your Baby.” The video would be excellent for a group class followed by a discussion of how feeding time provides opportunities for bonding.

The video was created by Dr. James Sayre, Clinical Professor of Pediatrics, University of Rochester and is distributed by InJoy Productions at 1-800-326-2082 or www.injoyvideos.com. It costs \$89.95 plus \$6 shipping.

■ ***“I’m Full” video***

The Public Health Foundation WIC Program has developed this great little 4 minute video. Ten different babies and toddlers are filmed while they are eating, to show the different body language babies and toddlers use to say “I’m hungry” or “I’m full.” The video would be very appropriate to use in a group discussion or group class.

The video is available from the Public Health Foundation WIC Program for \$10, which includes shipping and handling, by writing to PHFE WIC, Attn. Warehouse Manager, 12781 Schabarum Ave., Irwindale, CA 91706. To order by telephone, call the Warehouse Manager at 1-626-856-6650.

More Resources

■ **Training Materials in the National Agricultural Library**

WIC staff can borrow many training materials and videos *at no cost* through the National Agricultural Library (NAL). View the list of offerings and order through the NAL website (www.nal.usda.gov/) or address requests to:

National Agricultural Library
Document Delivery Services Branch,
6th Floor
10301 Baltimore Avenue
Beltsville, MD 20705-2351

Documents and videos can also be requested from NAL through your local library using Interlibrary Loan. There may be a small shipping fee if going through Interlibrary Loan.

■ **WIC Works Website**

The WIC Works website went “online” in the spring of 2000. The address is www.nal.usda.gov/wicworks. This website is funded by the WIC Program and hosted by the Food and Nutrition Information Center at the National Agricultural Library.

The website provides a wide variety of resources and links to many others, including the *Bright Futures* website. There is a listserv for WIC staff to communicate with each other. The training area of the website is currently under construction.

■ **Best Start Three Step Counseling Materials**

Best Start’s 3-Step Counseling strategy focuses on breastfeeding issues. The 3-step counseling process is useful in all nutrition counseling, however.

The training module is \$72 plus \$10 shipping, from Best Start Social Marketing, telephone 1-800-277-4975 or 1-813-917-2119.

■ **Resource for Developing Partnerships**

Moving to the Future: Developing Community-Based Nutrition Services is a handbook and accompanying workbook and training manual which were developed

by the Association of State and Territorial Public Health Nutrition Directors (ASTPHND), under a grant with the U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The resource emphasizes ways to integrate nutrition programs with a community’s overall health plan by forming links with other health care programs and professionals, identifying common goals, and sharing resources.

A 124 page spiral-bound book describes the process of nutrition planning. The accompanying 149 page workbook and training manual provides tools for conducting a community assessment; determining goals and objectives; and implementing, monitoring and evaluating an intervention. The material walks the user through the process of writing a nutrition plan. The workbook includes training suggestions.

Moving to the Future is available for \$60, including shipping, through ASTPHND, PO Box 7018, York, PA 17404-0018. The telephone/fax number is 717-764-7938, and the email is ASTPHND@aol.com.

■ **“Thumbs, Fingers and Pacifiers” brochure**

The American Academy of Pediatrics has developed a series of brochures for parents on common concerns, such as diaper rash, toilet training, temper tantrums and discipline. One of the brochures is “Thumbs, Fingers, and Pacifiers, Guidelines for Parents.” The first few sentences of the brochure set the tone: “Does your baby suck his thumb or use a pacifier? Don’t worry, these habits are very common and have a soothing and calming effect. The need to suck is present in all infants.”

This brochure would be excellent material to include as resource material when doing an inservice with *Bright Futures for Babies*.

The AAP will send a free sample of any brochure if you send a request and a self-addressed stamped envelope to:

AAP Publications
P.O. Box 47
Elk Grove, IL 60009-0747

The pacifier pamphlet is sold in bundles of 100. The non-member price is \$35 for a pack of 100, plus shipping. Call the AAP at 1-800-433-9016 to order or visit their website at www.aap.org.

■ ***Parent-child Bonding brochure***

“Parent-child Bonding: The Development of Intimacy” is an 11-page brochure which covers many aspects of infant-parent attachment in a question and answer format. The brochure is by Stanley I. Greenspan, MD, an eminent authority in the field of infant attachment. This brochure would be excellent to include as resource material when doing an inservice with *Bright Futures for Babies*. It is not appropriate for an audience with low literacy skills.

The booklet is available from Prevent Child Abuse America at 1-800-835-2671. The item number—702274— is useful when ordering or when requesting one free copy. Multiple copies are \$.70 each plus shipping.

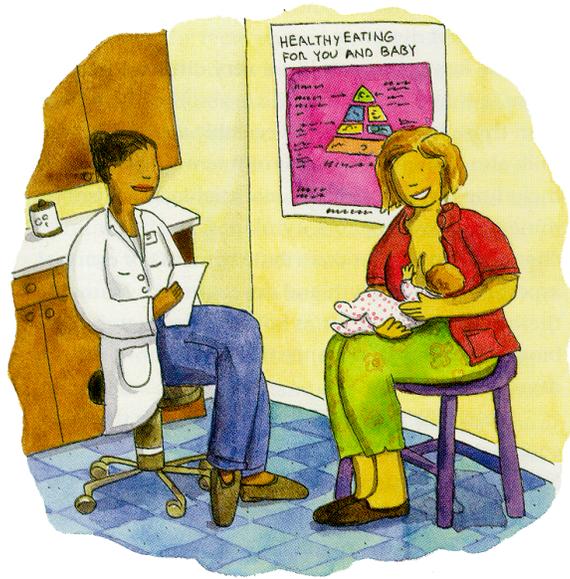
■ ***Review of Scientific Literature***

“Statement on The Link Between Nutrition and Cognitive Development in Children” is a 16 page publication by the Tufts University School of Nutrition Science and Policy, updated in 1998, which provides a review of scientific literature on the relationship between nutritional status and cognitive development during childhood.

It is available free from the Center on Hunger, Poverty and Nutrition Policy by calling 1-617-627-3956 or writing to Tufts University, School of Nutrition Science and Policy, 11 Curtis Avenue, Medford, MA 02155. They also have a speaking points packet (\$10 plus \$2.50 shipping) and a video, “Food for Thought,” (\$5 plus \$2.50 shipping.)

■ ***Zero To Three***

Zero To Three is an organization that focuses on both infant and child development and on building effective partnerships between families and health professionals. They publish a bulletin for health professionals that focuses on a different topic in each issue. Their website at www.zerotothree.org offers resources for both parents and professionals, including complete listings of the contents of all their bulletins.



Nutrition Education Materials to Use With Parents of Young Infants

Nutrition educators need to be able to reach for just the right material to reinforce messages and give clients take-home reminders about the importance of feeding time.

Many states have developed excellent materials for nutrition education and counseling with the parents of infants. Several such materials are included in the following pages, in order to give educators ideas about possibilities for their own nutrition education materials.

The WIC Works website at www.nal.usda.gov/wicworks has a WIC Sharing Center, now under construction. The purpose of this site is for State and local WIC agencies to share materials, project plans, and successful training practices, so that all may benefit. Please check that area of WIC Works in the future for links to tools that other states have developed for use in nutrition education.

In the meantime, here are some samples of materials now in use.

The materials that follow are:

- Five basic nutrition education pamphlets, from the Colorado WIC Program, page 28.
- *Tips on How To Deal With Baby's Crying*, a card from the Louisiana WIC and Maternal and Child Health Programs' "Real Parents Sharing Real Solutions" series, page 41.
- *Feeding Your Baby With Love*, a card with anticipatory guidance from the *Bright Futures for Babies* training, adaptable for client education and for outreach, page 43.

Colorado WIC Program Nutrition Education Pamphlets on Infant Feeding

The Colorado WIC Program has produced nutrition education pamphlets on infant feeding which include information on hunger and fullness cues, holding and interacting with infants during feeding, and providing a pleasant feeding environment, among other topics.

On the following pages, five of the Colorado WIC Program's pamphlets are reproduced.

In Colorado WIC, all of these pamphlets can be used by all staff in nutrition education and counseling:

- 103: Breastfeeding Your Baby, Birth to 4 Months
- 105: Bottle Feeding Your Baby, Birth to 4 Months
- 121: Parents Ask About: Crying, Colic, Constipation, and Spitting Up
- 123: Is My Baby Gaining at a Healthy Rate?
- 125: My Baby Was Born Too Early or Too Small

The actual pamphlets are printed on the back and front of a card 5.5 inches by 8.5 inches, although in *Bright Futures for Babies*, they are copied with all of the text on one page.

For more information about the series, please contact the Colorado WIC Program at 303-692-2400.

Colorado WIC has also produced a "Guide to Using Nutrition Education Pamphlets."

Relevant pages of the guide accompanied each pamphlet as it was distributed.

The relevant pages of the guide are included here after each pamphlet.

The cover page of the guide reads as follows:

Guide to Using Nutrition Education Pamphlets

The Nutrition Education pamphlets were developed to be used during one-to-one counseling with WIC participants. They were not designed to be solely used as handouts without staff providing additional nutritional information. The pamphlets will help guide and reinforce your counseling, and provide the "take home" message. They may not, however, include every point that needs to be discussed with every participant.

To assist you in using the new materials, a pamphlet use guide has been written for each pamphlet that includes the following information:

1. **Intended audience** in terms of age and category and conditions
2. **When to give this pamphlet**, i.e. at what age or WIC visit
3. **Information to provide *before* giving pamphlet**
4. **Additional information/Counseling tips**
5. **Goal setting**
6. **Follow-up**

Read through these guides before using any of the new pamphlets. Note that the pamphlets marked with an "H" are for RD or RN use ONLY when counseling high risk participants. All other pamphlets can be used by any WIC staff.

“Tips on How to Deal With Baby’s Crying” card

The Louisiana WIC Program and the Louisiana Maternal and Child Health Program partnered to produce a series of five cards for parents called “Real Parents Sharing Real Solutions.” The purpose was to give nursing, nutrition, and other professionals tools to use in child health and WIC clinics, in order to address common parenting concerns in a positive way.

The text of each of the cards in the series was derived from actual quotes from parents and caregivers in WIC waiting rooms in Louisiana, with 786 parents sharing over 4000 responses. Respondents wrote “one thing they would share with other parents” on five different topics. The five topics are the following:

- P-1 Tips on **How To Deal With Baby’s Crying**
- P-2 Tips on **Getting Your Child To Listen and Cooperate**
- P-3 Tips on **Boosting Your Child’s Self-esteem**
- P-4 Tips on **Potty Training**
- P-5 Tips on **What Works Better Than Spanking**

Additional information on the series is available from the Louisiana Maternal and Child Health Program at 504-568-5073.

The text of the card **How To Deal With Baby’s Crying** is on the next page.

“Feeding Your Baby With Love” card

This card is designed to include important concepts from the *Bright Futures for Babies* materials, putting the anticipatory guidance from *Bright Futures in Practice: Nutrition* into a readily usable form. The reading level is 6th grade, using the SMOG readability formula.

The card could be used as is or changed to fit with existing materials, if necessary. It could be used in nutrition education with participants or as an outreach brochure. Two versions of it are included here: a nutrition education version and an outreach version.

Although each version is reproduced here on one page, the card is designed as a two-sided card, 5 1/2 inches wide by 8 1/2 inches tall. The card could also be adapted as the inside of a brochure, with the outside designed for a particular outreach activity, with information on WIC sites, phone numbers, eligibility criteria, etc. The information could also be formatted to fit into three columns in a tri-fold brochure.

The outreach version could be used in outreach presentations, at a health fair, in a prenatal class at a hospital, as a brochure for obstetricians' offices, or in a rack at the Food Stamp office.

The nutrition education version could be used in individual counseling or with a group. It could be used in a class or facilitated group discussion in conjunction with the video, “I’m full.” (See *Selected Resources*.)

Bright Futures for Babies

Developing Partnerships in the Community Using This Material

To promote optimal nutrition for infants, children, and adolescents, partnerships among health professionals, families, and communities are key...Partnerships can be as informal as health professionals discussing nutrition issues and concerns with teachers, school food service employees, coordinators of after-school programs, and child care providers. As communities develop strategies to achieve the goals outlined in Healthy People 2010, health professionals have an excellent opportunity to create these partnerships with families, community groups, government and business representatives, and others who are committed to improving the nutritional status of infants, children, and adolescents.

(BFP:N, p. 13)

What community group would your clinic like to partner with or develop a relationship with? Maybe it's a hospital prenatal class full of potential WIC participants, or a hospital that is trying to develop its Baby-Friendly Hospital Initiative to support breastfeeding.

Maybe you want to ask your Kiwanis, Rotary or Civitan club to outfit your waiting area with toys or provide funding for a dozen baby layettes for an outreach promotion.

Perhaps you want to ask your Junior League to purchase children's books for your waiting room or to help fund an early childhood educator to do a parenting class. Maybe you want to approach your local artist's cooperative for help in putting attractive, family-oriented artwork in your waiting areas and clinic rooms. Perhaps a better clinic space is needed and you want to drum up community support or talk with local elected officials. Maybe you want to approach local employers to assist with outreach or ask the local utility company to put your WIC flyer in their billing statements.

Who knows what kinds of partnerships are in your future or could be in your future, if you reach out? If there is something your agency needs or wants—such as to raise community awareness of your mission, revitalize nutrition education, rejuvenate your surroundings, or increase your caseload—it makes sense to look outside your WIC agency for willing partners.

Also, partners may be looking for you! Maybe the local Early Head Start program wants an inservice, or the local child care provider group has requested a speaker at their meeting. Maybe the local public health nurses or nurse homevisiting program wants to know more about referrals to WIC. Maybe the teen parenting program at the high school needs a speaker on nutrition in pregnancy.

It is definitely the era of partnerships. Before partnerships can develop, however, potential partners need to know what WIC is. They need compelling reasons to support the services that your WIC agency provides. You know what WIC does, but does your community?

Here is one WIC agency which has partnered successfully in the community around the importance of infant and child development and nutrition:

A Partnership Case Study:

Lihue, Hawaii

The Lihue WIC staff serves a caseload of 1500 participants on the island of Kauai, Hawaii. Lihue WIC staff and their administrative support in the District Health Office are part of the Good Beginnings Kauai alliance, which works to increase awareness of the importance of the first years of life. The alliance uses the video, "The First Years Last Forever" extensively in the community, on public television, in classes for pregnant teens, and at hospitals.

Last year the county mayor and staff, county council, and other business leaders were invited to a forum on early brain development and shown the video. These leaders were also invited to visit Headstart classes, preschools, and child caregiver homes to gain an appreciation for early childhood efforts on the island.

Good Beginnings Kauai has developed a presentation which Dely Sasaki, the health department's District Program Manager, and other speakers have taken to local Headstart parents, Rotary, grandparent support groups, and teen parenting programs throughout Kauai.

Last year, after a presentation on infant and child development to high school students living in group homes on Kauai, the teens were given

disposable cameras and asked to take pictures that best depict child play activities that enhance brain development. After a similar presentation to a ceramics class at the local community college, the students were asked to do ceramics on the same themes. In addition, the Kauai poet and literary society was challenged to write pieces on what it means to give each child a good beginning. The culmination of all three efforts was a month-long art show, "The Life of a Child," which was covered extensively in the local paper.

The local paper has also become an ally to early childhood issues. It now publishes a bi-monthly column on parenting issues, child safety, child health, and early brain development.

Two other high-profile partners in the community have been supportive: Walmart and K-Mart. In fact, Walmart distributed the video, "The First Years Last Forever," free to hundreds of customers.

Back at the WIC clinic, staff continue to incorporate developmental themes into nutrition services. Their latest project is large posters of infants' and children's developmental milestones by age, illustrated with photos of local children.

WIC does more than provide supplemental food, and WIC needs to get the word out. A compelling message can raise awareness about WIC and make people sit up and take notice. The Lihue WIC clinic has proven that. They have a small caseload and a small staff—but they have extended their reach and influence in their community by partnering and by

using the material that you now have in this training.

Doesn't that make you think about what *you* can do in *your* community? See the next page for additional ideas on how to reach out using the video, "The First Years Last Forever," and the *Bright Futures for Babies* material.

Here are some other ways that the video "The First Years Last Forever" and the information in *Bright Futures for Babies* and the have been used in various settings around the country:

Local dietetic association workshop

Sharon Schroeder, RD, LD, Director of the Siouxland WIC Program, in Sioux City, Iowa, presented a two-hour session using the *Bright Futures for Babies* concepts for the local chapter of the American Dietetic Association. Ms. Schroeder, a 20 year veteran of a hospital neonatal intensive care unit, said, "I am so fascinated by this material. I read the Lise Eliot book, *What's Going On In There*, as preparation for my presentation, and I want to read it again. (See *Selected Resources*.) The role of stimulation in infant brain development is so exciting, and of course so much stimulation and bonding goes on at feeding time."

Ten dietitians attended the training. On the evaluation sheet of the session, attendees were asked if this session affected their view of the importance of what the Siouxland WIC program does in individual counseling on infant feeding. The answer was yes. Respondents were impressed

by the number of people WIC serves in the county and felt WIC provided a needed service by discussing these concepts with parents.

When asked how they planned to use the information and materials they received in the session, the attendees said they would use the materials in these ways:

- Update prenatal handouts and education protocols
- Present materials to nursing students as a part of their nutrition class
- Talk to the Teaching Learning Center at the hospital to see if the video "The First Years Last Forever" could be on the patient closed circuit TV channel
- Use the video in the "Babies and You" prenatal class and the Mothers of Preschoolers group, as well as sharing it with family and friends.

College nutrition class and WIC "baby baskets"

Barbara Mayfield, MS, RD, teaches at Purdue University, as well as working part-time in WIC clinic. She reports:

"Twice I've shared portions of the video 'The First Years Last Forever' with college students in lectures on infant nutrition. I love observing students' expressions as they watch the interaction on the video between parents and babies. Each time it was shown, students asked to borrow the video to share with others, which says a lot.

We also use the video in WIC clinic. In fact, we put the video, along with a number of other gifts,

in 'baby baskets' which we give to exclusively breastfeeding mothers. We have found the baskets to be a highly successful breastfeeding promotion, funded through community support and grant support, including the March of Dimes.

When we ask breastfeeding mothers later what they liked in the baskets, they like everything, of course, but the video gets mentioned a lot. I think the video makes an impact. It makes parents feel supported in their efforts to provide their babies with the best start in life."

WIC and Healthy Start Newsletter

Katherine Harmon, RD, LN, is a WIC nutritionist in the Anne Arundel County WIC Program in Maryland. She writes and distributes a bi-monthly newsletter to 14 WIC staff, 9 Healthy Start homevisiting nurses, and one Healthy Start nutritionist. She has included concepts from *Bright Futures for Babies* in four issues of the newsletter, with an additional issue planned. She finds that staff appreciates continuing education in small doses in newsletter format.

Outreach efforts in Wahiawa, Hawaii

Mary Lou Null, MS, RD, of the Wahiawa WIC Program on the island of Oahu, Hawaii, says, "A big focus of ours right now is outreach. I plan to set up meetings with different community groups to talk about what WIC does and how we contribute to the health and well-being of families in our community. I think these materials will be useful. Too often, our image in the community is that we are a food-giveaway program, when, in reality, WIC is a positive parenting program. We are helping families who are doing something positive for their families. Feeding infants and children is essentially about parenting. We also make many referrals for other services that participants need. *Bright Futures for Babies* will help us convey the importance of what we do, as well as elevate awareness in the entire community about the importance of positive parenting in the early years of life."

Homevisiting Program Inservice Training

Sharon Schroeder, RD, LD, Director of the Siouxland WIC Program in Sioux City, Iowa, also did an inservice training using the concepts of *Bright Futures for Babies*. In attendance were 20 paraprofessionals, public health nurses, and other staff in three countywide programs: HOPES, which is the newborn homevisiting program (Healthy Opportunities for Parents to experience Success); the local early access home intervention program; and the Early Start home-based program. The HOPES staff in attendance represented agencies such as Siouxland District Health Department, Lutheran Social Services, Crittenton Center (maternal health center), and Winnebago Healthy Start (Indian Health Services).

The staff attending the training make home visits to families as a way to reduce the stress associated with the birth of a child. These visits provide support, nurturance, and information to new parents.

An evaluation included comments such as these:

- This opened my eyes to the importance of feedings.
- All parents need to know this.
- I have a better understanding of why it is important to respond promptly to infant crying.
- Spoiling in early infancy is not possible. It's very nice to have a resource reaffirm what I have been saying and showing my families.
- It's great to know that WIC is on the same page as Early Head Start.
- It made me think about how to implement this in our home visiting program.
- This provides information for newsletters, family service workers, and home visits.
- WIC gives positive education. I am impressed by the level of professional guidance given.
- This has reconfirmed what I have felt and known about the WIC program. Keep up the good work!

Bright Futures_{for} Babies

Presenter's Guide

Inservice training using *Bright Futures for Babies*

This Presenter's Guide outlines an inservice session using the material in *Bright Futures for Babies*. The material can be adapted as needed, depending on trainees' training needs, the educational backgrounds of the trainees, the goals and objectives, the training venue, and the time available for training.

The inservice session described here could be done for both professional and non-professional nutrition staff. Support staff might also benefit from the trainings, although the training does focus in the last section on nutrition counseling tips. This is not technical information, however, and support staff may be able to contribute more concretely to your WIC clinic's mission and goals after exposure to the inservice.

Depending on the amount of time spent on group discussion, the training outlined in this Presenter's Guide will take from 1.25 hour to 1.5 hours. It could easily be expanded to 2 hours with discussion and role playing. It is suitable for presentation to either a small or large group.

The handouts can be referred to in the inservice and read as a followup to the session.

This inservice takes advantage of the excellent video, "The First Years Last Forever." Four short segments of the video (3 to 5 minutes each) provide a foundation for discussion of main topics of *Bright Futures for Babies*. The video provides powerful visuals as well as the input of noted experts. (See *Selected Resources* video section.)

To prepare to do this inservice, a presenter will need to schedule time to watch the video and note the segments used in the training, study the *Bright Futures for Babies* written materials, and decide if the training needs to be adapted for local needs. Preparation time should be minimal unless the inservice is substantially altered.

Advance preparation checklist:

- Schedule date and time for session.
- Decide who will participate and invite them.
- Obtain a copy of the video "The First Years Last Forever." Also order brochure that goes with video, if desired. (See *Selected Resources*.)
- Decide how to adapt or expand the inservice, if desired.
- Make copies of the handouts. (From cover through at least *Selected Resources*.)
- Make overheads, if desired.
- Type up and make copies of a feedback sheet.
- If you can think of something that would make the session casual, fun and different, do it!

A feedback sheet at the end of the session could ask:

- What is your opinion of this session overall?
- What is the main idea you are taking away from the reading and the discussion?
- What specific things will you do as a result of this training?
- What additional training would you like in this area?

After the training is complete:

- Complete and return the Trainer Response Form.
- Pat yourself on the back! Good job!



Bright Futures for Babies Presentation Outline

Learning Objectives

Here are several learning objectives from a wide array of possibilities. Feel free to modify these objectives or come up with different objectives for your group, depending on their needs and interests.

- (1) Participants will be able to identify what kinds of stimulation makes the infant's brain develop.
- (2) Participants will be able to explain why attachment/bonding is important in infancy.
- (3) Participants will be able to identify three infant feeding practices that promote infant brain development and attachment.
- (4) Participants will be able to identify three cues of hunger and three cues of satiety in early infancy.

Introduction

This inservice is based on *Bright Futures in Practice: Nutrition*. (Show the guide, if possible.)

- Give brief introduction to guide. (See page 1 of handouts for info.)
- Ask group to look at "Desired Outcomes for Infants and Role of the Family." (p. 3 in handouts)
- Point out bolded outcomes. Discuss importance of these outcomes in general terms. (p. 4 and 5 will help you with that.)
- Point out that this inservice will help the group understand:
 - (1) why these are desired outcomes of nutrition services and
 - (2) how nutrition educators can help make these outcomes happen in everyday nutrition education and counseling.

Part 1: Infant Brain Development

Video:

- Group views the first segment of "The First Years Last Forever" video: the first 3 minutes of the video.
- Where to stop video: at "Bonding and Attachment," spelled out in baby blocks, 3 minutes into video.

Review main points of video segment, using either overheads, having group look at text in handout, or by just speaking, perhaps holding a baby doll. (All points from p. 14.)

- (1) Baby has 100 billion brain cells at birth—but most are not connected, synapses must develop after birth.
- (2) Sights, sounds, smells, feelings, touching—don't just affect a baby's moods—they affect how the baby's brain becomes "wired."
- (3) Principles of brain development:
 - The outside world shapes the brain's wiring.
 - The outside world is experienced through the senses—seeing, hearing, smelling, touching, and tasting. These experiences enable the brain to create or modify connections (synapses).
 - The brain operates on a "use it or lose it" principle.
 - Relationships with other people early in life are the major source of development of the emotional and social parts of the brain.

Group Discussion: (Use one or both of these possible questions, to get group to process information in segment.)

- "What is one experience a baby has, over and over again, every couple of hours, in the early months of life?" ("Feeding" is the response you are looking for.)
- "At feeding time, which of the baby's senses are stimulated, and how?" (All five senses. Sight, looking into feeder's eyes, looking around. Sound of voice, heartbeat. Touch of skin, hands, stroking. Smell of feeder and milk (breastfed babies recognize and prefer scent of mother's breast pads when only days old.) Taste.

Summary point: Infant brains develop as a result of *stimulation*. Infant feeding is a major source of stimulation, especially in the early months of life, when babies basically sleep and eat.

Part 2: Bonding and Attachment

Video:

- Group views next segment of “The First Years Last Forever” video: 3 minutes on “Bonding and Attachment.”
- Where to stop video: at “Communication” spelled out in baby blocks. This point is about 30 seconds after the baby pulls away from nursing at the breast to gurgle up at mother. (This always gets a laugh, so get prepared to stop video about 30 seconds after the laugh.)

Review main points of video:

- (a) Warm, responsive care makes infants feel secure, helps them learn to trust.
- (b) Attachment (another word for bonding) is the basis for all future relationships.
- (c) Touch is vitally important to attachment/bonding and to brain development.

Group Discussion: (Use one or both of these possible questions, to get group to process information in segment.)

- “Has anyone had any experience in the last few years with a premature baby or grandbaby? What do nurses encourage parents to do when the baby is in the ICU?” (Parents are encouraged to touch and talk with baby, sing to them, hold and rock them, when possible.) “Why is this?” (Stimulates hormones for growth, gives necessary opportunity for bonding.)
- “So, which infants are at highest risk for not developing attachment?” (Infants with depressed mothers, born with special health care needs the parent can’t cope with, infants who are difficult (difficult to feed, have colic), very young parents, parents who are afraid to “spoil” the baby.) “These are also infants at nutritional risk, especially for growth, aren’t they?”

Summary Point:

Warm, responsive care and touch are vital to both growth and attachment. Attachment/bonding is essential for mental health, in the short term and in the long term.

Part 3: Interaction

Video:

- Group views next 3 minutes of “The First Years Last Forever” video on “Communication.”
- Where to stop video: This is the only time where you will stop in the middle of a segment. Stop right after this sentence in the crying discussion: “Responding to this special request is critical,” or, if you miss that, the next shot is an African-American dad bending, making noises to his baby. Stop there. View video ahead of time to see where to stop.

Review main points of this segment of video:

- (a) Babies communicate from the moment they’re born.
- (b) It is critical for parents to respond to baby’s cries. Baby needs something, even if it’s only attention.
- (b) Babies often cry if they’re overstimulated, to block out stimulation.

Group Discussion:

- Babies communicate from the moment they’re born—What are some of the things they communicate and how? (Discuss hunger and fullness cues, see pages 10 and 11 in handouts.)

Summary Point:

Attachment happens when infants learn that somebody is there to take care of their needs. This builds security. Security becomes trust over time. Trust becomes love.

Part 4: Talking and singing to your baby

Video:

- Group views the rest of this segment of “The First Years Last Forever” video: 5 minutes. This is the final segment of the video the group will be watching.
- Where to stop video: stop when “Health and Nutrition” is spelled out in baby blocks.

Review main points of this segment of video:

- (a) When babies hear their caregivers repeat words over and over again, the parts of the brain that handle speech and language develop.
- (b) Also, talking, singing, and reading are a wonderful opportunity for closeness with caregivers.

Group discussion:

- So what does talking to a baby or singing to a baby actually do for the baby?
Possible answers from group:
 - Make the baby feel they are important to someone, helps the baby feel connected to the caregiver.
 - Teaches baby language.
 - Sets down some pathways in the brain for learning.
- Do you think parents know that talking with their baby is so important?

Summary point:

Warm, loving, responsive parenting is very important to baby’s development. It is important to take time with baby, to talk and interact, not just rush through taking care of baby. In fact, it’s important to take time to enjoy baby, and what better time than at feeding time?

Part 5: Anticipatory Guidance

This brings us to nutrition education and nutrition counseling. What can nutrition educators do to help parents know the importance of these behaviors and help them with specific “things to do”?

Bright Futures in Practice: Nutrition helps us in this area, with counseling strategies and anticipatory guidance. Go back to the “Desired Outcomes” table on p. 3 of handouts. Review the 4 behaviors of the family that are bolded:

- Responds to the infant’s hunger and satiety cues
- Holds the infant when breastfeeding or bottle feeding and maintains eye contact
- Talks to the infant during feeding
- Provides a pleasant eating environment.

Nutrition educators can help parents understand the importance of these four feeding practices. There are counseling tips from “Bright Futures in Practice: Nutrition” in your handouts. Brainstorm to discover how these counseling tips can be used at your WIC clinic.

Let’s look specifically at 6 counseling tips.

(Walk the group through the actual tips either in the handouts or via overheads.)

1. Cue in to signs of hunger and fullness. (p.11) Crying is the last indicator of hunger. (p. 16)
2. Expect growth spurts. (p. 11, 12)
3. Talk to your infant—Talk a lot, at feeding time and whenever you are with your baby. (p. 16)
4. Look in your infant’s eyes at feeding time. Make a connection. (p. 16)
5. Make feeding time pleasant. (Find a comfortable place to feed; act calm and relaxed; have patience; show infant lots of love, etc.) (p. 18)
6. Encourage fathers to help. (p. 19)

Depending on time, presenter could introduce handout, “Feeding Your Baby With Love.” Is this a handout that the group would like to use or adapt?

Conduct general discussion on fitting these counseling points into current counseling and education. How can staff make time to discuss these things with parents?

Summary

Perhaps make the summary personal:

Tell what you have gotten out of preparing for this session, any increased awareness gained from presenting these concepts, and how you will apply this information in your personal nutrition education efforts. Tell what specific things (if any) have really impressed you in this material.

For instance, they might be:

- (a) Infants need their 5 senses stimulated for growth and brain development. Feeding time provides stimulation for all 5 senses.
- (b) Having someone who is attuned to their needs helps infants become secure. This promotes healthy attachment now and a better chance for healthy relationships later.
- (c) Infants must learn to act on and trust their own internal cues of hunger and fullness. Parents need to be aware of those cues. WIC can help parents recognize those cues. This knowledge can help parents relax about feeding, and avoid underfeeding or overfeeding.

Helping parents know these things—what babies need, what to expect, what to look for— is “anticipatory guidance.” There is more anticipatory guidance in the handouts. Encourage the group to take the time to read the handouts for more information.

If time allows, ask the group for what the main thing is that they got out of the session, or include this question on the feedback sheet.

Thank everyone for attending and participating. Ask them to fill out the feedback sheet you have prepared.