They Can Do It, You Can Help: Building Breastfeeding Skill and Confidence in Mother and Helper

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In cultures past, we breastfed during our own first few years of life, then observed it frequently and at very close range as we grew. By the time we were mothers, we had a rock-solid confidence in our own and our babies' abilities. But personal memory and observation had largely vanished by the second half of the 20th century. By the beginning of the 21st century, our culture had lost its belief that birth and breastfeeding work. Mothers and babies who might have managed by following the instinctive flow of behaviors from birth to breastfeeding found that flow destroyed by birth interventions and inappropriate breastfeeding do help. Today, mothers and helpers alike tend to *hope* that breastfeeding will work and *know* that bottle feeding will work.

This chapter is a work in progress, an ongoing attempt to relearn breastfeeding and to regain confidence in the normal interactions of mother and baby that have made lactation so successful throughout all of human—and indeed, all of *mammalian*—history.

Because all mothers are female, and with apologies to all of us mothers of girls, we will be referring to all of the babies as male throughout this chapter for the sake of an easy distinction between mothers and babies.

Self-Efficacy Theory and Breastfeeding

Throughout life, the healthy human brain grows new connections in response to the environment, the tasks at hand, and thoughts and imaginings (Doidge, 2010). Repetition of these experiences and thoughts—like the repetition of piano scales—builds stronger and more lasting neural pathways, making future successes more likely. We too often overlook the fact that the expectation of success provides neural reinforcement through a process called self-efficacy.

Self-efficacy is a person's belief in his or her ability to accomplish a task or deal with a challenge. It is quite different from self-esteem, which relates to one's sense of self-worth. The higher a person's sense of self-efficacy—his or her expectation that success will be the result of effort and perseverance—the more likely that person is to make the effort and persevere to attain success (Noel-Weiss, Bassett, & Cragg, 2006; Noel-Weiss, Ruppe, Cragg, Basset, & Woodend, 2006).

Since Bandura first published his theory of self-efficacy in 1977, a large body of academic papers and studies has shown that an individual's expectation of success has a powerful influence

on his or her accomplishments in fields as diverse as education, health, athletics, business, and international affairs (Stajkovic, & Luthans, 1998). People with a strong sense of self-efficacy

- see problems as challenges to be mastered;
- develop increased interest in and commitment to the activities in which they are involved;
- recover readily from setbacks and disappointments.

People with a weak sense of self-efficacy

- avoid challenging situations, believing that they will fall short;
- focus on their shortcomings and negative outcomes;
- quickly lose confidence in the face of problems (Bandura, 1994).

It is no surprise that a strong sense of breastfeeding self-efficacy can be a great help to the breastfeeding mother who experiences early problems. Dunn, Davies, McCleary, Edwards, and Gaboury (2006) found that maternal confidence was a stronger predictor of breastfeeding outcomes than supplementation or perception of support. The importance of maternal self-efficacy has been demonstrated or discussed by Blyth et al. (2002); Buxton et al. (1991); Creedy et al. (2003); Dennis (1999, 2006); O'Campo, Faden, Gielen, and Wang (1992); Papinczak and Turner (2000); Kingston, Dennis, and Sword (2007); and many others. Dennis has been instrumental in promoting breastfeeding self-efficacy in numerous ethnic and social groups (2010), yet it remains an often-neglected part of breastfeeding support.

Pathways to Breastfeeding Self-Efficacy

There are four main routes by which we build self-efficacy:

- 1. Performance accomplishment or task mastery
- 2. Vicarious experience
- 3. Verbal persuasion
- 4. Emotional and physiological state

Performance accomplishment, as it pertains to breastfeeding, means that every successful experience increases a mother's belief in her ability to breastfeed. Success breeds success, highlighting where we should focus our efforts initially. Supporting birth practices that minimize interventions and mother-baby separation; facilitating extended postbirth skin-to-skin contact; and encouraging the Biological Nurturing approach described in this chapter together form a package that can help convince a mother of her own and her baby's competence and ability to succeed. However, because "successful experiences increase self-efficacy, [and] repeated failures diminish it" (Dennis, 1999, p. 196), the second half of this chapter will discuss how the remaining sources of self-efficacy information can culminate in breastfeeding success if the previously described experiences do not.

Vicarious experience is what mothers would have gained by seeing other women breast-feed. "Much human behavior is developed through modeling: observing others" (Bandura, 1977, p. 192). Modeling is especially important for people who have limited prior experience or are uncertain of their own abilities (Pajares, 2002). Having successful behaviors modeled for them helps mothers avoid excessive trial and error; the repetition of errors can diminish self-efficacy.

Vicarious experience is the concept underlying step 10 of the Baby-Friendly Hospital Initiative: (BFHI) "Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic" (WHO & UNICEF, 1989, p. iv). Its placement (last) among the steps is unfortunate, for mothers need to have successful breastfeeding modeled repeatedly *before* their babies are born. Prenatal and postnatal attendance at mother-to-mother groups deserves our strong, early, enthusiastic, repeated support. We need to understand that unless mothers observe successful breastfeeding behaviors, they will turn automatically to what our culture perceives as successful infant feeding, for bottle feeding models abound (**Figure 5-1**).

Repeated modeling of successful outcomes and breaking a complex behavior into easy steps have been shown to improve self-efficacy (Bandura, 1977). Given the many stumbling blocks 21st-century mothers face, breastfeeding success will not always be immediate, but when we



Courtesy of La Leche League of Hong Kong

Figure 5-1 Mother-to-mother groups enhance breastfeeding self-efficacy.

can accurately demonstrate innate breastfeeding behaviors to a mother, it can be achieved one step at a time. The use of visual media, such as videos and DVDs, pictures, graphics, and demonstrations with a doll, can provide mothers with effective vicarious learning experiences. Participatory modeling, discussed in more detail later in this chapter, is an especially effective form of vicarious experience.

Verbal persuasion includes encouragement and additional verbal information that is relevant, comes from a source the mother finds credible, and clearly contributes to improved success. It can be a valuable tool for us, but it is easier to undermine a person verbally than to build his or her self-efficacy verbally. Raising expectations without providing the conditions for success "will most likely lead to failures that discredit the persuaders and further undermine the recipients' perceived self-efficacy" (Bandura, 1977, p. 198). The helper who says breezily, "You're looking great; just keep trying," builds no self-confidence in a woman who is breastfeeding in pain, and too many such comments may prompt her to look elsewhere for help or leave her feeling that breastfeeding simply doesn't work. Inappropriate verbal persuasion is perhaps our least effective way to help. Appropriate verbal persuasion combined with participatory modeling can be one of our best ways to help.

Emotional and physiological state, which can include negative feelings such as pain, stress, fatigue, anxiety, and fear, of course affect a new mother, reducing her self-efficacy. Simply alleviating a new mother's pain or stress and making her comfortable physically and emotionally can improve her belief in her breastfeeding abilities; when we help a mother with breastfeeding, her own emotional and physical comfort should always come first.

Participatory Modeling to Enhance Self-Efficacy

Your most helpful colleague—assuming you don't always have a group of successfully breastfeeding mothers at your elbow—may be a floppy newborn-sized doll. Too often, the breastfeeding helper tries to use verbal persuasion techniques alone. For example, "You need to close the gap between you and your baby." ("Close the gap?" the tired, frustrated new mother thinks. "I don't even know what that means!") But the helper with a doll in tow can demonstrate, step by step, how to ensure that the baby is closely applied to the mother's body while explaining what she is doing and why it is important. A helper with a doll represents a highly effective form of vicarious experience combined with verbal persuasion. At each step, the new mother returns the demonstration (repeats the helper's actions with her own baby) so that, by the end of the session, both mother and helper are confident that at least this stage of the breastfeeding experience has been well integrated. Participatory modeling has been shown to promote strong feelings of self-efficacy, whether it involves a breastfeeding mother and her helper or an athlete and his coach. Demonstration, repetition, and repeated small successes are a powerfully effective route to success. Even before breastfeeding itself is successful, participatory modeling that leads to or enables a series of smaller successes can strengthen a mother's self-efficacy so that she remains eager to reach her breastfeeding goals. Imagine the pleasure the mother of a nonlatching baby can derive simply from knowing how to make herself and her baby fit comfortably together.

Self-Efficacy and the Breastfeeding Helper

In assisting a mother learn to breastfeed her baby, you are actually helping the mother lay down neural pathways for success. Just as a baby's early stress level may have lifelong implications for his or her ability to handle stress (Teicher, Andersen, Polcari, Anderson, & Navalta, 2002), the kind of support a mother receives from you can influence whether her breastfeeding efforts are made from a position of confidence or defeat. But to help her gain that confidence, you need to exude confidence yourself. Reread the characteristics of high and low self-efficacy, substituting an image of a breastfeeding helper for your image of a new mother, and it will ring just as true.

This book is all about strengthening your own sense of self-efficacy by giving you a capacious tool kit with which to approach breastfeeding problems. Mothers and babies have innate abilities that you will learn how to recognize and encourage, contributing greatly to the likelihood of breastfeeding success when there are problems. In realizing that you can build a mother's self-confidence, we hope you will build your own as well.

Use Your Expertise Only as Needed

With today's proliferation of highly medicalized, disempowering births and counterproductive cultural learning, you will often find yourself needing to use your expertise with normal breastfeeding pairs, in addition to helping mothers and babies with abnormal issues. In either situation, remember that unnecessary and excessive interference, insistence on a specific approach, and a rigid adherence to guidelines force a mother out of her normal peripartum right-brained learning mode and have caused a great deal of breastfeeding failure in recent decades. Explanations (which are inevitably somewhat left-brained) should be kept to a minimum. They should be simply stated and be rich in analogies, playfulness, demonstrations, and confidence in breastfeeding success. Examples of analogies and playful demonstrations appear in boxes throughout the text, phrased as you might talk to the mother. The concept that the title of each analogy and demonstration supports follows in parentheses.

Think of yourself as an interpreter. You need to know as much breastfeeding language as possible. And from that vast vocabulary, you need to select only those words that *this* mother and *this* baby need in *their* situation to progress to their next step. You have many options to choose from. Use them sparingly.

Biological Nurturing, or Laid-Back Breastfeeding

A first-time mother, postcesarean, with damaged nipples and a hard-to-latch baby about 1 month old, slumped back against the pillows on her couch one afternoon. The mother had just struggled through another feeding, and she knew her baby enjoyed napping prone between her breasts, his cheek against her skin. After a little while he stirred, lifted his head, and began to search drowsily for her breast. Too tired to sit up again, she shifted her breast and supported his head with her upper arm. He latched easily and comfortably. Throughout his half-asleep feeding, the mother found herself giggling at the ridiculous position they had invented. But because it broke all the rules and because she lacked further reinforcement, at their next feeding

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she returned to the rigid, ineffective but "correct" approach she had been taught. Her nipple pain did not resolve for another 2 months.

This mother's experience as she leaned back encapsulates all that is good about what Colson has termed Biological Nurturing (2008), or *laid-back breastfeeding*. The mother was relaxed and comfortable, neither completely upright nor completely supine, her baby had plenty of room to maneuver, he was able to use his powerful rooting reflex along with many other reflexes, gravity was a help to both of them, she found the experience to be extremely pleasant, and they were both entirely free of rules. Let's take those one at a time (**Figure 5-2**).

Mothers Need to Be Comfortable

The mother described above was fully supported—head, neck, shoulders, back, arms, legs—in a relaxed and sustainable position. It was an ideal—indeed, a necessary—starting point for the mother's and infant's success.

Babies Belong to an Upright Species

Gorillas, chimpanzees, and other upright apes hold their infants upright against their chests to feed. Modern humans might do the same, but sitting creates a lap, the lap shortens the torso, and there is no room on a sitting-shortened torso for a nearly upright infant. Some paintings from centuries past show the mother with one foot on a low stool and her baby sloping downward across her lap. Experienced mothers often cross one leg over another to create that slope, dropping the baby's hip onto their thigh to angle the baby's body further.

Current instruction, as well as modern nursing stools and nursing pillows, in contrast, encourage a completely horizontal baby lying completely on his side with his legs unsupported, while his mother is completely vertical—an arrangement not usually seen among other primates and probably not selected instinctively by mothers. Indeed, mothers who are told to position their babies at right angles to their own torsos may complain that they can't see the baby's face or can see only one eye; the urge to be *en face* with their babies (the mothers' eyes in alignment with theirs) is a powerful one (Kashiwagi & Shirataki, 1995). In recent years, mothers have also been instructed to lie supine and let their babies do all the work of breastfeeding. No mother would do this without instruction, of course; we are not only a vertical species, but we are also interactive. Breastfeeding is something mothers and babies engage in together.

It is worth noting that babies in Biological Nurturing positions may "ground" themselves by planting the sole or ball of at least one foot on a maternal body part, often her thigh. Alternatively, mothers may instinctively play with their baby's feet, as if supporting the bottoms of the feet. These are behaviors that may take on greater meaning as we add to our knowledge of maternal and infant feeding interactions in more upright postures. Colson (2008) lists "plantar grasp" as one of the primitive neonatal reflexes (PNRs) that facilitates feeding (see Figure 5-2b).

Leaning Back Opens the Torso

Because she leans back, the laid-back mother's lap disappears, in effect creating a longer torso that allows her baby considerable freedom of movement and a whole range of possible



Courtesy of Karl B. Walker



Courtesy of Julie Nathanielsz

Figure 5-2 Biological Nurturing, or laid-back breastfeeding. Note the smiles!



Suzanne Cols

positions. Indeed, her baby can lie anywhere on her body, like the hour hand on a clock face centered on her nipple. With his torso alongside his mother's, the range of possible baby positions is truly 360 degrees and allows for the baby's placement that, for instance, completely avoids a cesarean incision (Colson, 2010; Colson, Meek, & Hawdon, 2008). When a mother leans back, the location of the nipple itself changes. Babies need good access to the part of the breast below the nipple (from the baby's perspective); an open torso tends to lift the underside of the breast away from the abdomen, allowing the baby access from any direction that mother and baby choose. When a mother lies back comfortably, a new world of positioning possibilities presents itself.

Babies Who Are with Their Mothers Feed on Their Own Timetable

A newborn's feedings are driven by more than hunger. Shifting hormones and levels of alertness, no doubt along with undiscovered triggers, can result in numerous feedings, which are important to the establishment of good milk production. These opportunities are missed when mother and baby are not together. Indeed, a baby at breast may feed without waking at all. Whereas Western culture can usually count early-day feedings on one or two hands, mothers who begin motherhood with Biological Nurturing may have difficulty counting them at all.

The Rooting Reflex Is Not a Mistake of Nature

In the early 1980s, lactation consultants in our fledgling profession realized that a common cause of nipple pain was the baby who fed while supine in his seated mother's arms. When a supine baby's cheek brushed his mother's nipple, his powerful rooting reflex caused him to turn in that direction with a gaping, seeking mouth, but the tugging and shallow mouthful that often resulted tended to cause the mother pain. Starting with the baby already facing the breast, reasoned the lactation consultants, eliminated the head turn, along with any torque on the nipple. Next, they reasoned that a baby already facing the breast should be held away from the nipple until his mouth was fully open, so that he took a full mouthful of breast. However, newborns normally attach to the breast by feel and smell rather than by sight, anchoring their chin deeply in the breast first, and attaching at a moment of their—not their mother's—choosing.

Backing the baby away from the breast, which was often done to avoid a premature latch, also prevented the baby from understanding his location or anchoring his lower jaw on the breast, contributing to his difficulties and perhaps making clamping and tugging more likely. The precise moment of latch was determined, no doubt to the baby's complete surprise, by someone other than the baby. The phenomenon of healthy babies who wouldn't latch began.

In contrast, when a baby lies on his mother's sloping chest, he lies fully supported with his face turned to the side. His cheek now touches her skin, stimulating him to lift his head and right it—a move that both aligns his head and body and triggers a wide, searching mouth. Rooting to the side, a powerful reflex that was avoided for decades, comes so readily into play in Bio-

Hard-to-Get Ice Cream (Seeking)

Imagine yourself blindfolded. Now imagine the frustration of having an ice-cream spoon being touched to your lips by someone else and then having it retreat into the darkness. If you finally figure out "ice-cream spoon!" you're likely to make a grab for it with your mouth when you think it will work. Babies find the breast by feel, and they land their chins before they start to suck. The lip tickling that was recommended in the past tended to end in forwardreaching lips, a barely open mouth as the baby tried to understand what was happening and why, and a tight grip to try to hang on if he were to successfully attach.

logical Nurturing that babies can feed without fully waking, as the woman described earlier found when she broke the rules and lay back with her baby. Indeed, many babies who have difficulty attaching and feeding in more alert states can do so with much greater ease and maternal comfort if they are offered the breast from a Biological Nurturing position during light sleep.

A Biological Nurturing position tends to trigger many more reflexes that just the rooting reflex. Some of these reflexes had not previously been associated with feeding, and some had been assumed to interfere with feeding (because babies were oddly held or poorly stabilized). But as Colson (2010) has pointed out, why would a baby have readily released reflexes that run counter to his own best interests? Gravity holds at least part of the answer.

Gravity as an Ally

The mother who sits bolt upright and flat lapped fights gravity at every step. To keep herself upright and maintain a hold on her baby, she must stay fully awake. ("Breastfeeding is exhausting me," she may complain.) She may need to apply additional pressure to keep him truly stable against her.

("My arm gets so tired.") If the baby senses any instability, he may begin flailing in an attempt to stabilize himself, to which his mother may respond with swaddling or arm holding. ("This takes three hands!") If he begins the normal behavior of head bobbing to find her nipple, gravity pulls his head away from her instead of toward her. ("I don't think he likes breastfeeding.") While most of these vertically positioned mothers' difficulties can be overcome with instruction, the very need for instruction is a problem. Gravity is her enemy.

If, however, the mother leans back comfortably against pillows or bedding that support her head, neck, shoulders, back, and body, with her baby prone on top of her, gravity maintains her position for her. It also maintains her baby's position. It keeps the baby solidly and stably against his mother with their bodies closely applied. It draws the baby's head toward the mother with every head bob and helps him maintain his attachment once he latches. Its consistent, persistent, whole-body support facilitates the release of at least 20 infant reflexes, some of which had not previously been associated with feeding (Colson, 2008). For example, the arm cycling and fighting behavior that a baby often displays when loosely held by an upright mother reverts to a series of instinctive behaviors that support effective feeding when she lies back somewhat. Gravity becomes her friend.

Hormonal Complexion

The mother who giggled through her experiment in laid-back breastfeeding may well have been responding to the high level of oxytocin that the casual, instinct-based positions of Biological Nurturing seem to encourage. Colson (2008, 2010) has sometimes seen a "hormonal complexion"—flushed cheeks, drooping eyelids, gentle smile or half smile, and even an apparent disconnection from the world associated with high oxytocic pulsatility—when mothers have a relaxed, gravity-as-friend feeding. The mothers in Figure 5-2 certainly express a degree of pleasure not often seen when mothers follow a checklist.

Rules? What Rules?

Colson (2010) describes, rather than prescribes, the Biological Nurturing positions that mothers and babies assume: a longitudinal lie when mother's and baby's long axes are parallel, and a transverse lie when they are roughly at right angles. The most commonly chosen lie is an oblique one, with the baby angling somewhat across the mother's body, for example, from her left breast toward her right hip. When one lie isn't effective, or for other reasons of their own, mother or baby may spontaneously shift. Some mothers hold or manipulate their breast; others do not. Some wait for the baby to self-attach, while others may plop the baby's mouth directly over the nipple. Most opt for light clothing on both themselves and their babies. Before the helper intervenes, it would be beneficial to observe patiently for a while! Biological Nurturing is not about rules; it's about a mother and baby creating their own success.

The Importance of Fumbling

Mothers who are not following instructions tend to make numerous small movements as they help their baby attach. While the first edition of this book described a baby's innate ability to

find the breast and attach, it is important to remember that a baby does not normally manage this alone. Baby-led shouldn't mean "mother-dead." Left alone, a mother will stroke the baby from head to foot, shift his position or head or limbs, shift her own position and breast, play with his hands or feet, and perhaps do it all again. An onlooker may see her actions as delaying the attachment. A closer look will probably reveal that they help. New-mother fumbling offers the baby a rapid-fire smorgasbord of arrangements, often made in response to his own movements. Because the baby is geared to seize the moment, the mother's arrangements and rearrangements tend to shorten the time it takes him to find what works best and increase the likelihood of success. Over time, the mother's motions subside to those few she has learned that work.

A Summary of Biological Nurturing (Laid-Back Breastfeeding)

Whatever feeding position a mother uses should offer physical and mental ease, appropriate breast availability, flexibility, and close application of the baby's body to the mother's body. Biological Nurturing, although not the only arrangement that meets these criteria, is a very easy, flexible approach for most new mothers, and it is one that can be encouraged for all mother-baby pairs between feedings, regardless of how they choose to feed, because of the pleasure it offers both mother and baby. The mother chooses her angle of recline, her baby's position, whether and how they are clothed, and whether and how to hold or move her breast and her baby. She is the organizer and brain that arranges and rearranges conditions to which the baby responds reflexively. Gravity helps the mother and baby fit together in a manner of their choosing and re-choosing, without gaps or strain. Biological Nurturing is relaxing and hor-



Courtesy of Scott Pryor

Figure 5-3 Sacral sitting.

monally advantageous to both mothers and babies and allows them a freedom similar to what they no doubt enjoyed in eons past, when mothers came to the breastfeeding experience with a powerful sense of self-efficacy and were able to transition without interference through birth to feeding.

Some mothers continue to use some variation of Biological Nurturing for many months. Others quickly begin to use a more upright posture for breastfeeding after a few days or weeks of lying back, but an opened torso while seated in an ordinary chair continues to be useful to many. Colson (2010, p. 46) uses the term "sacral sitting" for this use of the sacrum rather than ischial tuberosities for primary chair contact, usually with the mother's shoulder blades against the back of a chair (Figure 5-3). In any case, Biological Nurturing can be thought of as one form of training wheels for breastfeeding—an approach that gives new mothers extra rest and gives babies a stable base and a rich source of feeding stimuli while they both learn their roles.

Leaving a mother and baby to find their own path, with a bit of help in finding a comfortable laid-back position, is proving to be a highly effective starting point for successful breast-feeding. One hospital (Taubman, personal communication, October 2009) now posts in every maternity room a photograph of a mother semi-reclining in her hospital bed, one arm loosely cradling her breastfeeding newborn, while she gently holds her baby's hand. "This is so easy," the poster says, quoting the mother. And most of the time, it is!

Undoing the Recent Past

What about those times when a mother and baby can't just do it? Self-efficacy studies tell us that breaking a new skill into small steps is helpful. However, the steps that many mothers learn today are counterproductive. Mothers learn these steps—sideways baby, lift the breast, tickle the lips, pull the baby on—from websites, books, and "experts." They try their best to follow a left-brained checklist at a time when they should be happily settled in their right brains. As one mother explained, "I didn't breastfeed because the nurse never came to show me how." And the checklist approach, so foreign to the normal start of breastfeeding, resulted in this comment from another mother: "Women of my generation are convinced that breastfeeding doesn't work." Do we hear you whispering "poor self-efficacy"?

A bonus of Biological Nurturing is simply that it is different. A mother can't apply the rules that she learned from her books and websites and "experts," because the topography has changed. Along with that change, she becomes open to a new set of ideas explained in a new way.

Presucking Behaviors: A Closer Look

Babies need first to be *stabilized* so they can concentrate on feeding and have a position of security and strength from which to move. Once they are stable, they begin *seeking* behaviors that bring them to the breast, using an instinctive, forward-reaching head position and head bobbing, both of which require that their heads be free to move. When they sense the nipple nearby, they find a place where they can anchor the lower jaw and perform a *scooping* motion that brings adequate breast and nipple into the mouth. The *sucking* that results is the focus of other chapters in this book.

Stabilizing: Bodies Facing Each Other, Open, and Closely Applied

All newborn mammals are uneasy if they are placed on their backs. They struggle to right themselves—to feel the ground, nest, or mother's body against their chest and belly. Human infants are calmer when their chest and belly are against a firm support—preferably against an adult body. The Moro reflex (startle response) does not occur when the baby's entire front is held securely, without gaps, against an adult body. The human baby who rides on the mother's hip, the gorilla baby who clings to the mother's back, the premature infant in kangaroo care, even the baby in a colic hold—facing away from the adult but with firm pressure from the adult's forearm along the baby's chest and belly—are all stabilized by the position in which they are



Courtesy of Rebecca Glover

Figure 5-4 Open torso, positionally stable baby.

held. This externally generated stability is called *positional stability* (Morris & Klein, 1987). For smooth, calm execution of the complex sequence of movements required for attachment and feeding, babies work best from a stable base, just as the position of a golfer's feet on solid ground affects the strength and accuracy of the swing. But unlike the golfer, a baby younger than 3 to 4 months cannot provide that stability independently. Gravity or adult hands must help. Gravity provides stability for a baby in Biological Nurturing positions. A seated mother provides stability for her infant when she holds her prone baby's back across the shoulder blades against her body (**Figure 5-4**).

Adult mammals—and older babies—are capable of internally generated *postural stability*; their more mature nervous systems allow them to feel stable in a variety of positions. However, "in the newborn stability is dependent on the development of neck and shoulder girdle stability *which are in turn* dependent upon trunk and pelvic stability." [emphasis added] (Morris & Klein, 1987); for true stability, the baby's whole body must be turned toward and supported against the mother's body.

Creating a stable base for a breastfeeding infant also involves ensuring both midline and proximal stability. *Midline stability*—the stabilization of an imaginary line down the center of the infant's body—provides a stable base from which the infant can move the muscles on each side of the midline more effectively. Symmetrical movement of the muscles in the infant's neck, head, jaw, tongue, pharynx, and larynx allow for easier feeding. If the infant's midline is compromised, those muscles will be compromised to an equal degree; babies who have any form of physical asymmetry usually exhibit difficulty with effective feeding. Midline stability also gives babies a "sense of center," helping them focus their attention on their mouth and the breast in front of them (Morris & Klein, 1987, p. 18).

Once a baby is at or near the mother's breast and nipple, midline stability is not quite enough. The baby now needs to be able to lift his head and neck to refine his search. Physical and occupational therapists point out that *proximal stability* promotes distal mobility: Stabilizing a body part closer to our core lets us move more skillfully a related body part that is farther away. When our forearm rests on a firm surface, our hand moves a computer mouse more accurately. With our wrist braced on the desktop, we have a steadier hand for the finer motion of placing the cursor. In the same way, stabilizing a baby's shoulders gives proximal stability to his head, neck, and oral area, allowing him much better mobility and control (Morris & Klein, 1987).

A baby in a Biological Nurturing position achieves midline and proximal stability almost automatically; the seated mother must help her baby maintain stability by holding her baby



Figure 5-5 The instinctive position.

firmly against her open torso, with as wide an angle as possible between her torso and lap. Supporting the baby behind his back and shoulders helps to open *his* body as well, and ensures close, gap-free contact. Allowing the baby's lower hip to drop toward or onto the mother's thigh means that gravity helps her maintain whole-body stability for him.

Seeking: Lower Face Contacts Breast, Baby Is Free to Move

In order to bob about in search of and finally to reach for his mother's nearby nipple, an infant needs considerable strength in the neck's extensor muscles. Parents may say, proudly, "He could lift his head up when he was only a week old." In fact, that ability exists in all healthy babies from birth, provided they have a stable shoulder girdle from which to lift (Morris, &

Klein, 1987). The baby will use those extensor muscles to adopt a distinctive posture—head lifted and tilted back, so that the baby approaches the breast with the chin and mouth leading. This is the infant's "instinctive feeding position" (Glover, 2004, p. 87) (**Figure 5-5**).

Lifting the head into the instinctive feeding position is not entirely the work of the neck's extensor muscles. The hyoid bone and the muscles that attach to it have a key role (Wolf & Glass, 1992). The hyoid, a U-shaped bone in the neck located between the mandible and the larynx, is the only bone in the body that does not articulate with another bone. It is the attachment site for a number of muscles involved in large and small motor skills for

What Do Baby Mammals Do? (Stabilizing)

Picture a mammal, any mammal, as a newborn. Imagine it on its back. What does it do? It thrashes and tries to get onto its stomach, where it feels stable and in control. Human newborns are no different. A baby needs to hug its mother's body, front-to-front, in order to feel truly secure.

Yes, You Have Instincts! (Self-Efficacy)

When you pick up your crying baby and hold him against your shoulder, swaying and patting his back, you have instinctively made him positionally stable and vertical, both of which are calming to him, and you have also "put the baby in the kitchen"; from your shoulder, a hungry baby can move surprisingly quickly to your breast. No instincts for breastfeeding? Assuming your breast is uncovered, you have just done all you really need to do to help your baby nurse. Your baby can make the trip from your shoulder to your nipple all by himself.

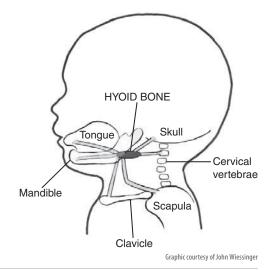


Figure 5-6 Schematic of hyoid bone and its muscle attachments to other bones.

First Stability, Then Supper (Stabilizing)

Imagine being offered a sandwich while you're walking on a narrow beam. "Not now," you say, "wait until I'm more stable." It's hard to think about a meal when you're feeling wobbly. No wonder babies who feel a gap between themselves and their support surface may flail their arms or pedal with their feet; they don't feel secure. One thing at a time, please! Stability first! Lean back with your baby, even very slightly, stabilize the baby's whole front in a prone position on your own front, with no gaps between you, and observe the flailing stop.

breastfeeding. Some of these muscles connect to the clavicle, scapula, and cervical vertebrae (the shoulder girdle). Others connect to the skull, mandible, pharynx, and larynx; and still others control and support the tongue. Collectively, the muscles attached to the hyoid bone are responsible for most of a baby's seeking, scooping, and suckling behaviors, and infants' ability to function is directly affected by the position of their head and neck (Figure 5-6). Positional stability of the baby's body allows for proximal stability of the shoulder girdle, which allows for the strong and controlled movements of the head and neck that are part of the rooting reflex.

As noted in the previous chapter, a whole constellation of stimuli and responses can

be considered part of the rooting reflex. Cheek or lower-face contact is especially helpful to the infant who is trying to locate lunch. A baby in a Biological Nurturing position automatically lies with his cheek on his mother's skin. The seated mother can begin by bringing any part of the baby's cheeks or lower face into contact with her breast; if the baby gets lost, the mother can quickly reorient the baby by resting his cheek on the skin near her nipple. This maneuver can also "unstick" a baby who is caught in a reflex loop, repeatedly sucking his hands at breast, pushing away, and coming back to his hands rather than to the breast. In either maternal position, placing the baby so that he will ultimately need to lift his chin and mouth to reach for the nipple will probably elicit the instinctive feeding position.

When gravity is his ally, the baby will lift and drop, lift and drop, bobbing his head about to find exactly where he wants to be. This normal woodpecker-like behavior is problematic for a baby in a seated mother's arms, unless she leans back enough to allow gravity to pull his head toward her body. A mother who sits with her torso completely vertical may report that the baby doesn't want to feed because she sees him swinging his head away from her breast. In fact, the baby is performing a

normal behavior in an abnormal position; when gravity becomes the mother's ally, she can see the behavior for what it is: competently performed breast seeking.

Have a Sandwich (Scooping)

Consider keeping a thick toy sandwich among your tools—more fun for helper and mother alike!

When we eat a thick sandwich, we don't hold it vertically. Our jaws run horizontally; the upper one is fixed, the lower one is moveable. (See what happens when a finger rests on your upper lip when you chew, and when it rests on your chin. Only the chin finger moves.) To take the biggest mouthful, we plant our moveable jaw—our working jaw—well underneath the sandwich. We don't worry about the fingers on top of the sandwich; we may even use them to help tuck some of the bread under our upper lip.

The more deeply we plant our lower jaw under the sandwich, the bigger the bite we can take as we rock the top of the sandwich into our mouth. We don't focus on our upper jaw; it's the lower one that needs a big hunk of sandwich on it, so we keep the fingers under the sandwich (in this case our thumbs) well out of the way.

If the sandwich were suspended hands free, as a breast is, we wouldn't approach it straight on if we wanted a big bite. We certainly wouldn't approach it from above, which would require that we swing our working jaw—our chin—away from the food as we dip our head toward it. Instead, we would approach from slightly below, head tipped back, with our lower jaw lifting toward the underside of the sandwich. Babies like that same head-back postion.

In the instinctive feeding position, an infant's head is neither fully flexed nor fully extended. The baby maintains it in a comfortable midrange, optimizing both his strength and his control as he gapes. In essence, the baby is about to take a very large bite from a very large sandwich.

Scooping: Clear Access Below the Breast Allows the Chin to Anchor

We aren't finished with stability yet. Once a baby finds the right spot near the nipple, his lower jaw swings open and he anchors his chin and bottom lip on the breast. Anchoring is just another word for stabilizing. The baby's head, well-controlled as it is, is still a newborn head; without a solid breast attachment, the baby may grip or tug with his lips or jaws to maintain his position—ouch! That solid anchoring of the chin and lower lip on the breast benefits both baby and mother.

Ultrasound studies (Woolridge, 1986) indicate that when attachment is good, a baby takes in enough breast to fill his mouth. The nipple comes to rest close to the junction of the hard and soft palate, and the infant's bottom lip, tongue, jaw, and chin lie deeply and securely under the breast tissue. With this essential mouthful in place (**Figure 5-7**), the baby can feed comfortably and effectively. The "critical area for attachment" is described as the "region below the nipple [from the baby's perspective], apposed to the baby's lower jaw and tongue" (Woolridge, 1986, p. 175). The mouthful is asymmetrical, with as much breast as possible on the lower jaw; the upper jaw may be placed just past the nipple base.

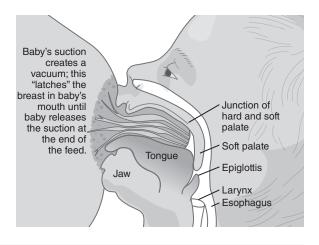


Figure 5-7 The essential mouthful.

As a baby prepares to attach to the breast, his lower lip tends to be 3–4 cm from the nipple base and is usually folded back against his chin. Babies tend not to anchor their chins in the breast until the nipple is near their nose or upper lip—within reach but a head tilt away.

If the mother chooses to hold her breast, she needs to remember that any fingers on the lower-jaw side need to be far away from her nipple to ensure that her baby has a clear runway and landing place for his chin and bottom lip on the breast below her nipple.

A baby who is positioned so that he must tuck his chin to reach the nipple

will find his all-important lower jaw actually swinging away from the breast, destabilizing his jaw and making it all but impossible to attach to a short-shafted nipple. While he may be able to attach to a longer nipple with his chin tucked, the nipple must stretch, the latch is likely to be painful, and the lack of breast tissue over the tongue may compromise milk intake. One of the most valuable forms of help a mother can give her baby as he attaches to the breast is to bring him back below her nipple if he moves past it. Babies simply cannot attach easily with a tucked chin, and although they are quite good at creeping forward or dropping sideways, they are not skilled at going backward.

The Helping Continuum

The previously described basics apply to almost every baby, from birth to 3 or 4 months old, who is learning to breastfeed. Simply being aware of babies' needs and sequences and making them available through the mother-baby interactions of Biological Nurturing is often all that is needed. Help the mother recognize and respond to her baby's presucking behaviors, reminding her of their normalcy, and make sure she has access to a local mother-support group. Mother and baby will learn from each other and will shorten their latching process and alter their positioning considerably as they go. The mother will skip over steps that her baby no longer requires, and the baby will correctly read signals that are sloppily, absent-mindedly, or only partially given in the shorthand style of every comfortable nursing couple. Attend a mother-to-mother breastfeeding group and you will see a wide range of normal latching behaviors among experienced mothers and babies. A technique—any technique—that allows for mutual comfort and an efficient transfer of milk at the breast is correct breastfeeding.

Chin Lifted Means Wide Mouth (Seeking, Scooping)

Press on the back of your head, tuck your chin toward your chest, and open your mouth wide. You'll find the size of your gape restricted. Notice where the back of your tongue is during this exercise: probably humped up against the soft palate, where the nipple would normally go. Now cradle your neck and let your head fall back. You can open your mouth in a cavernous gape, and your tongue lies on the floor of your mouth, out of the way of where the nipple would be and almost unable to retract or hump. Pressing on a baby's head makes latching much more difficult for him.

The gag reflex is also less sensitive with your head in the instinctive feeding position. Try touching your soft palate with your finger, first with your mouth wide open and your chin down, then with your mouth wide open and your head in the instinctive feeding position.

Try taking several large, quick swallows from a full glass of water, first with your chin down, then with your chin slightly—not dramatically—raised. The mouth is bigger and swallowing is more comfortable, for both adults and babies, when the head is in the instinctive feeding position.

However, some babies may need a more hands-off approach, and still others may need extra guidance or specialized equipment. All these babies form a continuum of helping situations.

Baby-Led Self-Attachment

Some babies have been overhelped or have had interventions that distressed them; these babies may need to feel completely free to do it all themselves at first. It may be helpful for the mother to find a Biological Nurturing position in which she can see her baby comfortably when he lies between her breasts, low enough that he needn't twist to reach them. In truly baby-led self-attachment, the mother keeps her role almost entirely passive, limiting her help to ensuring stabilizing, seeking, and scooping behaviors.

Stabilizing. If the baby draws his knees up, creating an ongoing gap, the mother can gently, with soothing and stroking, restore full frontal contact. If you or she senses that even light clothing is a hindrance, discuss with her the value of skin-to-skin contact.

Seeking. If the baby fusses, the mother can return him to her midline, gently arranging for his cheek or lower face to contact her breast, or she can use other calming measures, including sitting or standing to settle him.

Scooping. If the baby overshoots the target by sliding his mouth past the mother's nipple, the mother can place the baby's cheek near her nipple or reposition the baby on her body so he must move forward to reach her breast.

Infant Feeding Sequence (Seeking)

Every mammal is born with the ability to move instinctively to its mother's nipple. This infant feeding sequence, or series of predictable and standardized moves that end with suckling, often involves a little bit of help from the mother. A horse stands up and may nudge her newborn in a general direction, a dog lies down and may do the same, but finding the nipple and latching on is basically the baby's role for each mammal species. For some, the infant feeding sequence is so preset that they can't latch on if they are placed directly in front of a nipple. The human infant feeding sequence is much less rigid, but a baby who seems confused or angry at the breast may do fine if he is allowed to go through his sequence from the start, especially if his mother is in a laid-back position.

A mother whose baby needs a truly baby-led approach at first will find that he accepts and appreciates her input more and more as they both gain confidence in breastfeeding. As they both relax, they will also begin to rely on techniques of their own devising.

When Technique Is Necessary: Mother-Sped and Mother-Led Breastfeeding

Sometimes a mother must take a more active role from the start. The helping situations along this part of the continuum all involve the same general stabilizing, seeking, scooping, and sucking components as Biological Nurturing. However, they also require that mother and helper pay attention to these components in finer detail (**Table 5-1**).

Mother-Sped Breastfeeding

Mother-sped attachments range from simply speeding up the process by bringing the baby directly to the breast (common to almost all mothers once they and their babies gain some experience) to mothers being required to step in and help. Birth medications, separations, or minor anatomical variations, such as tongue-tie or a very receding chin, can leave a baby confused about his mother's landscape or how to make use of it. Prematurity, neurological issues, and other more substantial anomalies may require an even more active role on the mother's part; some gentle maternal guidance can help any normal, hungry baby who does not latch spontaneously.

When a mother needs to take the lead, either by nudging the process along or actually taking over, we can be of the most use by helping her to help herself through the processes described in the self-efficacy section of this chapter: modeling, participatory modeling, vicarious learning (visual images), and verbal persuasion (relevant information broken into simple steps that show the mother how to support and work with her baby's innate reflex behaviors).

Mother-Led Breastfeeding

If possible, share video footage of babies seeking, finding, and attaching by feel. DVDs are wonderful because they allow you to pause on a frame and talk to the mother about an image. If you do not have a video at hand, use a doll and demonstrate what the baby can do while describing

Table 5-1 The Helping Continuum: A Summary of Presucking Behaviors and Approaches

These seven fundamental behaviors apply to all holds and positions.

Approach

		Biological Nurturing	Baby-Led	Mother-Sped	Mother-Led
		Mother's behaviors stimulate but don't direct (normal baby); mother is active partner.	Mother almost entirely passive; fundamental behaviors are nonetheless triggered (useful for triggered (useful for	Mother provides proactive guidance to trigger fundamental behaviors (useful for reluctant baby.	Mother may provide total guidance at every step (useful for prematurity, neurological issues).
Fundame	Fundamental Behaviors		reluctant baby).	anatomical variations).	
Stabilizing Triggers the release of innate responses	 Mother and baby face each other Allows midline stability 	Mother chooses angle of recline, places baby prone on her chest/abdomen, close to her breast	frecline, places baby domen, close to her	Mother makes herself comfortable, turns baby's whole body to face her own body	omfortable, turns face her own body
in both mother and baby and leads to	2. Mother and baby's bodies are open against each other <i>Eliminates gaps</i>	Mother's semi-reclining posture and baby's prone position open their bodies	posture and baby's heir bodies	Mother sits with a straight back, upright or slightly reclined, holding baby's back and shoulders; mother places baby in prone position on her open body	ght back, upright or ing baby's back and aces baby in prone body
	3. Baby is closely applied to mother's body <i>Calms, triggers reflexes,</i>	Gravity keeps baby closely applied to mother's body; mother repositions baby when and as she sees fit	ely applied to mother's ons baby when and as	Baby's chest is closely applied to the base or side of the breast with baby's body completely supported on his mother	ipplied to the base with baby's body I on his mother
	provides a stable base	Prevents random reflex r	responses (arm cycling, h	Prevents random reflex responses (arm cycling, hand to mouth, head shaking, and back arching)	ing, and back arching)
Seeking Stimulates rooting, gaping, and tongue extrusion reflexes,	4. Baby's lower face is in contact with the chest/breast Stimulates seeking behaviors	Gravity keeps baby's lower face, cheeks, chin, and lips against mother's body/breast	ver face, cheeks, chin, er's body/breast	Baby's lower face makes good contact with breast (provided baby is stabilized as abo	aby's lower face makes good contact with breast (provided baby is stabilized as above)
and leads to	5. Baby can move to the breast/nipple Especially his head	Baby moves freely on mother's abdomen; mother shifts breast, body, and baby as she sees fit, holds breast as she sees fit	Baby moves freely on mother's abdomen; mother prevents excessive motion, moves baby if he "overshoots"	Holding baby across the shoulders, ensures baby's head is free to life and orient to the nipple	Mother may gently support her baby's head in the instinctive position as she aligns mouth and breast

(continues)

Table 5-1 The Helping Continuum: A Summary of Presucking Behaviors and Approaches (continued)

		Biological Nurturing	Baby-Led	Mother-Sped	Mother-Led
		Mother's behaviors	Mother almost entirely	Mother provides	Mother may provide total
		stimulate but don't	passive; fundamental	proactive guidance to	guidance at every step
		direct (normal baby);	behaviors are	trigger fundamental	(useful for prematurity,
		mother is active partner.	nonetheless	behaviors (useful	neurological issues).
			triggered (useful for	for reluctant baby,	
Fundamental Behaviors	ors		reluctant baby).	anatomical variations).	
Scooping 6. Baby ha	6. Baby has clear access	Baby moves his mouth up the breast	p the breast	Mother may tilt her nipple up, centering it	ople up, centering it
Results in large to the b	to the breast below	"mountain" to find the nipple, before	e nipple, before	above baby's top lip, offering baby more	offering baby more
mouthful of breast the nipple	ple	swinging his jaw down	swinging his jaw down to anchor on the breast	breast below the nipple	ole
and leads to Allows adea	Allows adequate mouthful				
7. Baby a ı	7. Baby anchors chin	Gravity keeps baby's chin and lips "in touch"	ι and lips "in touch"	Mother keeps baby's chin and lips "in touch"	hin and lips "in touch"
and bot	and bottom lip on	with the breast as he opens wide, anchors	pens wide, anchors	with the breast below	with the breast below the nipple and, as he
breast		his chin and lower lip, and scoops in a good	and scoops in a good	opens wide, hugs him	opens wide, hugs him extra close, helping to
Allows fine	Allows fine motor control of	mouthful of breast		anchor the chin and l	anchor the chin and lower lip at the moment
mouth w	mouth without tugging on			oflatching	
breast or nipple	r nipple				
Sucking See Chapt	ters 1 and 8 for a	See Chapters 1 and 8 for a detailed discussion of infant suck	ant suck		

each fundamental behavior, what stimulates it, and the action the baby is likely to take in response to the stimulus (Table 5-1). Mothers are predisposed to follow their baby's lead; knowing what their baby can do is the first step toward knowing how to help.

Sitting Up—Almost

When a laid-back posture isn't working, many mothers will want to sit more upright. But even though the mother's arms and hands must now take over gravity's role to some extent, an open posture remains the foundation for all of the other fundamental behaviors. What the mother sits on can help a great deal. Chairs with arms can restrict the mother and baby's freedom of movement; couches that are too low, saggy, or deep can produce a curled posture. The addition of a cushion or some extra foam under the couch seat and extra cushions behind the mother's back can help open her posture. A small cushion or rolled-up towel can provide lumbar support, improving the mother's comfort and maintaining an open upper body.

In this seated-but-open posture, the mother sits on her sacrum rather than her ischia, her back is comfortably straight (though angled backward slightly), her shoulders are wide, and her arms drop to her sides. Her straight, slightly reclined back lifts her breasts and flattens her abdomen, creating a more open space for the baby to be positioned prone on her

body, with arms and hands resting against the mother's body, one on each side of the breast. Much of the baby's weight falls onto her body, while the weight of her hands and forearms falls on the baby's body, and gravity is once again their ally (**Figure 5-8**).

A mother who needs or wishes to be fully vertical when helping her baby to attach can relax backward against good support once her baby is attached and feeding well. A forward-leaning position (common in Western culture, with a nursing pillow holding the baby) is rarely helpful, in part because of the gaps it creates. However, remember that *rarely* does not mean "never"; no position should be rejected out of hand.

As well as optimizing infant-maternal contact, the baby's stability, and the strength and effectiveness of reflex movements, the baby's prone posture on the mother's body prevents some reflex responses that appear to hinder or distract the baby from attaching well. It is common to see a mother struggling with a baby who is reflexively responding to random stimuli with arm cycling, hand-to-mouth movements, head shaking, and back arching simply because he is not positioned closely enough against his mother's body.

Think Flat to Flat (Stabilizing)

You, the helper, can curl your body forward, displaying how this tilts your breasts and nipples down toward your abdomen. (Postpartum breasts often rest on a postbirth tummy, especially in larger women.) Then, with a bit of dramatic flourish, uncurl. As you lift your shoulders up and back, the mother can see that this lifts the breasts and flattens the abdomen. Immediately position a doll on your body (as in Figure 5-4), modeling how a straight, uncurled upper body opens the mother's posture, creating space for her baby's body. Mother and baby can "fit together like two pieces of a jigsaw puzzle" (Colson, 2008).



Figure 5-8 The seated-but-open posture: seated, straight back, angled back slightly, shoulder blades against chair, good lumbar support.

A Cradle Hold That Makes Sense

Mothers in modern cultures have often learned vicariously to cuddle the baby in the crook of the arm with a hand on the baby's bottom—a practice that curls the baby into a comma-like position; pulls the baby's torso away from the mother's body; restricts the baby's head movement; tucks his chin; and puts the mother, not the baby, in control of his approach to the nipple. Combining all that with modern cultural practices of swaddling and bottle feeding and the cultural norm of supporting a baby's head, and the accumulated images tell the mother to cradle her cueless, clueless baby supine in her arms and support the head while trying to point a nipple into his mouth.

With participatory modeling, and using your own body or a model breast and a doll, you can quickly help a mother understand that the way she holds her baby affects his posture and access to her breast. Using demonstrations and clear descriptions, calmly walk her through a more effective approach, ensuring that she succeeds at each step, breaking the approach into smaller steps as needed.

Participatory modeling steps: Cradle hold:

- Hold the baby's back with one hand across his shoulder blades (same hand and breast). With your wrist in a neutral position, fitting snugly into the nape of the baby's neck, drop your shoulder and arm into a normal posture.
- 2. Use your hand to uncurl the baby, turn his flat, open body to face you, and place the baby in a prone position underneath your breasts, closely applied to your open body. The baby's chest will be snuggled against the base or side of the breast, and his arms may encircle it like an underwire bra (see the box titled Hands Up!) (Figures 5-9 and 5-10).
- 3. Position the baby's chest and upper shoulder against the lower inner quadrant of the breast (just below the cleavage). When the baby reaches up for the breast, his chin and mouth can find the sweet spot just below the nipple.
- 4. Use an appropriate angle for the baby's body. Sitting up—and even sacral sitting—can reduce the area in which the baby's body can fit; the mother's breast size and length will determine the extent to which the baby must be swung sideways. For very long-breasted women and very large women, see the variations discussed later. In general, however, the baby will be angled downward, his feet clearly lower than his head.

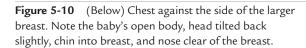


Courtesy of Rebecca Glover

Hands Up! (Stabilizing)

Imagine lying prone and lifting your head, first with one hand across your chest and then with a hand on each side of your body near your shoulders. Which position gives you the most strength and stability?

Figure 5-9 (Left) Baby uncurled, prone, closely applied, with chest to breast, arms encircling breast, instinctive head position.





Courtesy of Shaughn Leach



Courtesy of Rebecca Glove

Figure 5-11 Cradle hold, with baby's leg resting on mother's thigh.

How Close Is Close Enough? (Stabilizing)

If your baby lies in your arms without your leaning back a bit, there may be a gap between the baby's body and yours. The baby's body may be against yours in a nice, straight line, but he may not be as well supported as you think. Try standing up while you hold the baby's front against yours and notice how you hug him more closely. Now your two bodies fit together like two pieces of a jigsaw puzzle, with the baby's flat, open body against your flat, open body. That's what gravity can do for you if you lean back a bit while you nurse. Now, have a seat, but keep that closeness.

 After you have modeled the necessary step or steps for a mother, coach her to accomplish them successfully with her own baby (Figure 5-11).

Cross-Cradle Hold: Another Training-Wheels Option

The cross-cradle hold (left breast, right hand) can be helpful in specific circumstances, but its use has many more potential problems than the alternatives of laid-back breastfeeding and the cradle hold. Once the baby understands his role, it is important for mother and baby to experiment with more relaxed, interactive approaches. For many mother-baby

combinations, the mother's hands will eventually rest on the baby's back, one hand over the other, at her midline. For these mother-baby combinations, the cradle hold and cross-cradle hold become irrelevant. Rest your hands on your own stomach, one over the other. Now change which one is on top. Does it really matter?

Participatory modeling steps: Cross-cradle hold:

- Hold your baby's lower shoulder in the palm and heel of your hand (opposite breast and hand), with your fingers extending well past the lower shoulder and your pointer finger and thumb *lightly* positioned just behind the baby's ears, forming a passive cradle at the nape of the baby's neck.
- Allow your baby's body to drape downward at an oblique angle, from your breast to your opposite thigh. This not only improves the baby's position, but it also moves your wrist, forearm, and elbow closer to your body, increasing the strength and comfort of the hold. You will instantly feel the difference.
- 3. Keep your wrist straight and flattened out against your baby's back. Remember, muscles work best in the midrange, neither flexed nor extended. A flat, straight wrist keeps your baby's body uncurled (chest to breast) and optimizes the strength, function, and comfort of your hand and wrist.
- 4. Turn your baby's open body to face you, and place him in a prone position on your open body. As described for the cradle hold, the baby's chest will be snuggled

against the base or side of the inner lower quadrant of your breast, with his lower shoulder tucked under your breast and his upper shoulder just below your cleavage.

Keep your body and your shoulders in a normal posture at all times (Figure 5-12).

Coaching: Hitches and Hints. It is common to see a mother who uses the cross-cradle hold by twisting her body, moving her shoulder, and therefore moving her breast away from her baby. What follows is a chain reaction as she tries to chase the breast with the baby. A blanched thumbnail indicates that the mother is gripping the baby's head with her thumb and fingers rather than holding the baby's shoulder with the heel of her hand and flattened wrist. This usually occurs in combination with a cocked wrist that curls the baby's body forward, and the mother uses her grip to push her baby's head onto or over the nipple. This overriding of all the baby's innate reflexes is usually unsuccessful. Keeping

Cross-Cradle Training Wheels (Stabilizing)

What adult would want to ride a bicycle with training wheels still attached? Just as those training wheels can slow you down or catch in potholes, the mother-controlled, baby-restricting cross-cradle hold is more tiring and can even cause a resentful baby in later months. If you use cross-cradle training wheels at the start, experiment with ways that allow you just to hold your baby, start to finish, once you both know your roles. You'll both be glad you did!

her hand and wrist in a more neutral—not cocked—position helps prevent wrist strain, keeps the baby's chest to the breast, and provides the baby with solid positional stability and all that flows from it.

Mothers may have been told to hitch the baby's bottom up under the arm, but this shifts her attention to holding the baby's bottom against her body instead of holding his chest and shoulders against the base or side of her breast. Consider this an unhelpful hitch.

As a final check for all mothers, observe that the mother's shoulders and arms are relaxed and dropped into a neutral position, the baby is closely applied to her body with no gaps, and she is relaxed against good back and lumbar support.

When there are latching problems, human babies, like other primates, often attach more easily in oblique or vertical (long-axis-to-long-axis) positions. There is one common exception: A postbirth tummy, nature's pillow, can be an impediment to a gap-free position. Try positioning the baby horizontally, closely applied to the mother's body *directly* under the breasts, and supported on her postbirth tummy (**Figure 5-13**).

Seeking Behavior with a Seated Mother

Whether the mother lies back or sits, her baby needs the sensory stimuli of the breast on his



Courtesy of Rebecca Glove

Figure 5-12 Cross-cradle hold.





Courtesy of Shaughn Leach

Figure 5-13 Horizontal baby in space (a) between breasts and (b) postpartum tummy.

lower face to seek the nipple and attach well. The introduction in Smillie's DVD (2007) provides some excellent seeking footage of a baby working her way cheek-by-cheek to the nipple. However, nothing will top the personal experience of a mother seeing her own baby respond to the touch of his face on her breast. This is easy to arrange: Healthy, hungry babies free of birth medications can be relied on to do it every time!

Breast and Mouth Alignment

If a baby is positioned well, as previously described, good breast and mouth alignment can be almost automatic for many mother-baby pairs. However, if a mother has large breasts or there are other anatomical variations, she may need some additional modeling or relevant information.

Participatory modeling steps: Breast and mouth alignment:

- 1. Keep your baby's chest snug against the base or side of your breast, with no gaps. Remember that the baby moves best from a stable base and must be uncurled, with hands near his head, to lift his head into the instinctive feeding position.
- 2. Keep some part of your baby's lower face in good contact with the breast. Keep it uppermost in your mind that your baby *feels* his or her way on your breast. The *unbroken touch* of face on breast stimulates the baby to look up the mountain and find the nipple.
- 3. Keep your nipple at or above your baby's top lip and watch his chin and lips center on the breast just below the nipple—the starting block from which his jaw swings open to anchor his chin and lower lip and scoop up a good mouthful of breast. This may occur automatically or it may be helpful to use a finger or thumb to position your nipple for your baby.
- 4. To use a finger or thumb to tilt your nipple up, place the pad of your finger (if using the cradle hold) or thumb (if using the cross-cradle hold) just *above* your

nipple and parallel to your baby's top lip. Press gently to tilt your nipple up and shape the top of your breast like an appropriately angled sandwich. (See the box titled Have a Sandwich.) Use your finger or thumb to move and center your nipple above your baby's top lip, so that your nail, nipple, and baby's nose are aligned. Your finger may even be under your baby's top lip briefly at the moment of attachment (Figures 5-14 and 5-15).

Coaching: Hitches and Hints. If a baby must tuck his chin toward his chest while trying to reach a nipple directly in front of or below his mouth, he may, in frustration, end up *lifting* his chin into the instinctive position, only to find his mouth in open space, well past the breast and nipple, rooting near his mother's elbow! Show the mother how her baby is seeking the breast but needs his whole body moved toward her midline to position his chest against the inner lower quadrant of her breast, with his chest and upper shoulder effectively in her cleavage. Now when the baby reaches up for the nipple, it will be right in front of his nose.

Some babies may have learned to reach down rather than up for the nipple. If the mother keeps her nipple above her baby's top lip, rather than chasing his mouth with it, he will begin to look up for it. Rushing the baby or trying to bring the nipple to his mouth during this brief period of relearning will likely confuse him.



Courtesy of Rebecca Glover

Figure 5-14 A well-placed finger or thumb.



Courtesy of Rebecca Glover

Figure 5-15 Keeping the nipple above the top lip allows the bottom lip to "anchor" lower on the breast.

The mother may feel that her nipple should be in front of her baby's mouth. ("I can't see how the nipple is going to fit in his mouth!" she may exclaim.) However, if her nipple is presented directly to her baby's mouth, he will probably respond with forward-reaching lips and fall short of a deep mouthful. The exercises described in the box titled Chin Lifted Means Wide Mouth can give the mother firsthand insight into the value of good breast and mouth alignment.

If a mother complains of strained, painful wrists, you may find that she flexes her wrist and holds her elbow away from her body as she uses her thumb to position her nipple for the baby. Physical pain and discomfort will lower her sense of self-efficacy. Show her how to flatten the heel of her hand and wrist against the side of her body. This improves her comfort and turns the pad of her thumb toward her baby's mouth instead of away from it. When using a finger to tilt her nipple



Figure 5-16 Good breast and mouth alignment.

in the cradle hold, the mother's wrist and arm should be relaxed across the top of her breasts.

A mother who is using the cross-cradle hold may be frustrated because her baby attaches for only a few seconds and then comes off the breast. She may have been removing her thumb and hand from the breast immediately after the baby attaches, causing the breast to drop out of the baby's mouth. Show her how to position her baby's body to stabilize her breast in its normal position and provide reciprocal support for the baby. Relaxing her hold on her breast gradually, after swallowing starts, will help her maintain baby and breast as a single unit.

Holding the baby's head or pushing it forward will inhibit or prevent the rooting, gape, and tongue extrusion reflexes, making seeking and latching difficult or even impossible. There-

fore, no part of a mother's hand or arm should support the *back* of the baby's head. Keeping the nipple above the baby's top lip can help him scoop in a bigger mouthful of breast below the nipple. Because actions speak louder than words, mothers might find the exercise in the Staying in Touch box useful to reinforce the importance of the instinctive feeding position and the value of keeping the nipple above the baby's top lip (**Figure 5-16**).

A Good Mouthful

An effective and fun way to help a mother understand how her baby takes the best possible mouthful of breast is to use the analogy of a very thick sandwich or hamburger (described in the box titled Have a Sandwich). This analogy models the relevance of shaping the breast parallel to the baby's lips; offering him the breast below the nipple (from his perspective); and allowing the baby's head to tilt back as he brings his chin and bottom lip forward to anchor them well away from the nipple, allowing for the biggest possible mouthful of breast. Everything is covered in one playful analogy that the mother can experience firsthand.

Participatory modeling steps: A good mouthful:

- 1. With your baby's lips and chin positioned at the starting block, focus on having the part of your breast nearest his lower lip the nipple become the mouthful. The nipple is attached; it will follow! If you present your breast, not your nipple, to the baby, your nipple will be the last part of the breast to enter his mouth, and it will unfold deep inside (Figure 5-17). Glover's DVD (2005) includes demonstrations and animated illustrations of this approach.
- 2. Keeping unbroken mouth-breast contact, wait for your baby to open his lower jaw wide.

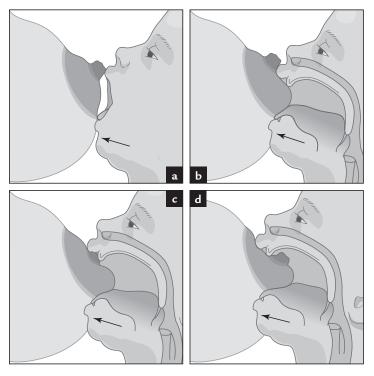


Figure 5-17 The nipple is attached; everything else will follow! Note that the baby moves to the breast, not the breast to the baby.

- 3. Wait for your baby's chin to anchor on the breast with his bottom lip, 3–4 cm from the base of your nipple. (The farther his bottom lip is from the nipple, the bigger the mouthful your baby will take.)
- 4. Then, hug your baby's body closer, using the heel of your hand and wrist only.
- 5. Watch your baby's chin and bottom lip sink into your breast.
- Watch all of the breast above the bottom lip roll down into your baby's mouth and your nipple brush or fold under the baby's top lip (Figure 5-18).

Coaching: Hitches and Hints. How big a mouthful the baby takes also depends on how wide the baby's mouth is when his lips close on the breast. Wherever the lips touch the breast, *all* the breast and nipple tissue between the lips goes into the baby's mouth. If a mother holds her baby too far from the breast or hesitates at the baby's crucial moment of readiness, the baby will have begun to close his mouth before his lips reach the breast, and he will take a smaller portion

Staying in Touch (Scooping)

Position your thumb vertically at your lips, with your thumbnail resting on your upper lip. Keeping your thumb in that position, open your mouth as wide as possible while keeping your bottom lip in constant contact with your thumb.

Your head needs to tilt back to keep your bottom lip and jaw touching your thumb. In the same way, your baby has to tilt his head back to keep his chin touching your breast while he latches on.







Courtesy of Rebecca Glover

Figure 5-18 Wide mouth: nipple at or above top lip.

of breast into the mouth. A too-small mouthful is not only likely to be painful, but it also may not stimulate the baby to begin sucking. It is worth waiting for that wide mouth. After a few successful experiences, a mother can usually anticipate and recognize the moment when her baby's searching mouth suddenly opens wide and he is ready to attach.

Shallow attachment appears to be the principal cause of painful, ineffective feeding. Anatomical variations in mother or baby cause attachment difficulties because they interfere with the infant's ability to scoop in a sufficient mouthful of breast. In these circumstances, a mother can help her baby attach more deeply by hugging him extra close at the moment of attachment.

Mothers should avoid moving the breast toward the baby's mouth. You may see a mother pushing her breast toward her cleavage and her baby in the opposite direction, with frustrating results for both. Even when a baby needs help to attach well, any movement of the breast into the mouth must occur *after* the chin and bottom lip anchor firmly on the breast. Much of the finesse of mother-led latching comes from our right brains, but here are a few thoughts that may help:

• Catch the lower lip if needed: Occasionally, it may be helpful not only to shape the sandwich and tilt the nipple, but also to catch the lower lip and jaw of the open mouth with the breast. The idea is *not* to put the breast into the baby's mouth, but to catch the lower lip and jaw of the baby's open mouth with that portion of breast below the nipple, holding the baby's mouth open fractionally longer and wider as he is brought onto the breast.

Help the baby take a good mouthful of breast: A mother can help her baby to latch
deeply by catching a good amount of breast below the nipple and then using her finger or thumb (positioned as previously described) to press the breast into her baby's
mouth as she hugs his shoulders closer, bringing his chin, bottom lip, and mouth

onto the breast. Remember the sandwich analogy. In this variation, the mother not only lands the lower jaw on the sandwich, but she also uses the finger nearest the baby's upper jaw to stuff some extra bread into his mouth. The aim is to fill the baby's mouth with breast to maximize oral sensory input, which is the "least invasive means of applying appropriate orofacial stimuli" for infants with suck problems (Bovey, Noble, & Noble, 1999, p. 26).

- Exaggerate breast shaping: This may be useful for a baby who does not respond normally to the previously described assistance, increasing sensory input by firming and shaping the breast. Instead of using just one finger or thumb to shape the breast, the mother uses one hand to narrow the sandwich, tilting the nipple as previously described and also using her hand to shape the entire breast between her fingers and thumb. One digit presses near the base of the nipple where the baby's upper lip will land, while the rest of her fingers scoop under the breast to create a sandwich shape that runs parallel to the baby's lips. To ensure that ample breast below the nipple is available to the baby, the lower fingers must be far from the nipple—usually well off the areola and perhaps even kept as far away as the breastbone. The mother's fingers may be very close to the upper lip, but *not* to the lower lip. The mother may find this works best if she shapes her left breast with her left hand, or her right breast with her right hand. Her hand can come from either below the breast, as in **Figure 5-19**, or above the breast.
- Shape the breast rather than supporting it: For most mother-baby pairs, the mother need only shape the breast where it rests naturally, relaxing and removing the shaping hand after the baby begins active sucking. Lifting the breast from its normal position usually means she must continue to hold it throughout the feed; releasing it will cause it to drop out of the baby's mouth. Some babies do require that the breast be held throughout the feed in order for them to maintain an adequate mouthful, and a long-breasted woman with downward-pointing nipples may need to lift her breast for effective positioning.

Other Holds and Approaches

The new and only rule for helping mothers is that there are no unbreakable rules. Some mothers find it easiest to nurse cross-legged with the baby's bottom dropped into the "hole" in their lap; others prefer approaches such as standing or lying, with the baby wrapped around their side or kneeling at their side, or simply putting their nipple straight into the baby's mouth. Several common variations are described below.

Side-Lying. A baby who is struggling to breast-feed when his mother is upright may be more willing to attach when she lies on her side on a



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Figure 5-19 Exaggerated breast shaping, hand below the breast.

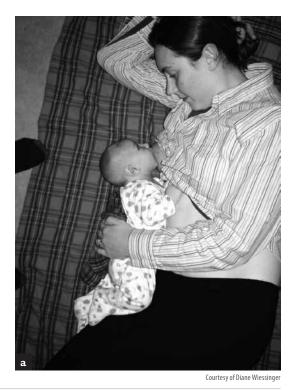


Figure 5-20a Mother-sped attachment, side-lying.

firm, flat surface. In one side-lying approach (Figure 5-20a), the mother makes herself comfortable and balanced on her side. She lifts her lower breast, which may have been tucked beneath her somewhat, and sets it back down on the bed so that her nipple is at the baby's cheek height above the mattress. She rolls the baby onto his side, facing her, with his lower shoulder below her breast, probably with her nipple near his eye. In this position, if the baby rocks his head back, his mouth will usually cover her nipple nicely. As it does so, she may press the middle of his back in slightly more to help him finish the latch. The baby's body will usually arch slightly backward, and he will be looking up at his mother's face. By pressing the baby's shoulders toward her, the mother may cause his face to burrow into the breast instead of encouraging the instinctive feeding position. Tilting the nipple and shaping the breast may be helpful, but the breast sandwich, if it is used, should run floor to ceiling in order to run parallel to the baby's lips.

Unless the baby latches fairly quickly, the mother may find that he has wriggled up past her nipple. Since a baby cannot move down the bed independently, she can pull him back down for another try. She may need to do this several times; even newborns creep remarkably well.

It is simple for a baby to achieve a slightly extended head when the mother lies down, and it can help a baby cope with a fast flow or receding chin.

The gap that may exist between mother and baby in some side-lying positions can be problematic for some pairs. It may help if the mother can bring the baby's legs and lower torso toward her. The gap can also be an asset for the infant who has been traumatized at the breast and who prefers some freedom from touch at first.

Some form of side-lying is, of course, what most comfortable breastfeeding pairs will adopt for nighttime nursing, and it is well worth learning (**Figures 5-20b and 20c**).

Long-Breasted Mothers and Mothers with Downward-Pointing Nipples. Some breasts are so long that there is little room for the baby beneath them. The nipples may point down, which means that stabilizing the baby's chest against the mother's body puts the baby in the wrong place.

When a mother's breast is long or large, the baby's stability can come not from her torso but from the breast itself. Remember, babies can feel secure in any position, provided they have firm pressure on their chest and belly and they are positionally stable. A long- or large-breasted mother





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Figures 5-20b and 5-20c Demonstration of other common side-lying positions.

can hold her baby slightly higher than her breast's resting position, so that a gentle portion of the breast's weight rests on the baby's chest. In the cradle hold, with her baby held sunny-side up below her breast, rather than against her torso, the mother's forearm helps to stabilize her breast from the side; the breast and baby become a unit; and the breast is less likely to slip from the baby's mouth.

A variation of this cradle hold can help the baby with torticollis or other neck or shoulder problems. If the baby's painful side is held against the mother with his arm across his middle, his body more supine than usual, and the breast lying partially on the baby's chest, then the mother's breast, baby's arm, and baby's body can support each other.

If the mother's breast is especially long or if she cannot see her nipple, she can use the palm of one hand on the thoracic skin above her breast, or on the breast itself, to lift and hold the entire breast and angle the nipple slightly more forward (**Figure 5-21**). Some mothers may prefer to lift the breast by holding it in the palms of their hands (left breast, left hand)

or by using a scissor hold with nipple and adequate lower-jaw breast tissue protruding between the index and middle fingers (left breast, right hand). Some very long-breasted mothers may spread their legs and drop the baby's bottom into the space created.

Larger Women. A larger mother may need help finding a position in which her baby can approach her breast with a straight and open body, with his mouth lifted and head tilted back into the instinctive position. Laid-back positions are often effective, perhaps with the baby angled more completely across the mother's body. This can help prevent the baby's nose from becoming buried



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Figure 5-21 Mother slides thoracic skin to roll the nipple upward.





Courtesy of Shaughn Leach

Figure 5-22 A larger mother stabilizes baby against breast, breast against arm.

Figure 5-23 Sacral sitting with a larger breast. Note lumbar support and how arm and baby stabilize the breast where it falls.

in breast tissue. A very large woman may sometimes find it easier to sit fairly upright and hold her baby nearly horizontally on the shelf below her breasts, as described earlier in this chapter. The cross-cradle hold may not be helpful; it can be difficult for this mother to reach an arm across her body. One mother did well cradling her supine baby's head in her hand, extending that arm straight in front of her, and lightly resting her breast on the baby's body. Experimentation can result in surprising and effective approaches (**Figures 5-22 and 5-23**).

Specialized Approaches to Mother-Led Breastfeeding

Prematurity and neurological or physical difficulties are well-covered elsewhere in this book; however, it is worthwhile to provide a reminder here that the same fundamentals are important, whether the baby sees to them himself or his mother sees to them for him. When the mother is providing extensive assistance, she will likely be helped by sacral sitting. It is no accident that kangaroo care for premature infants involves the mother being neither vertical nor supine.

The details will vary with the baby's needs, but keeping in mind the steps from Table 5-1 will help the mother and her assistant make appropriate choices. Of course, sucking always requires a baby to have some sucking ability. However, the mother can perform the prefeeding steps for even a very low-muscle-tone baby (this is one time when holding a baby's head—respectfully and in appropriate alignment—may be helpful). Specialized approaches for these unique situations are what the rest of this book is about.

However a baby feeds, spending all or much of each day in Biological Nurturing positions and babywearing (**Figure 5-24**) is one of the fastest, most pleasurable routes toward competent, pleasurable breastfeeding.

Choosing an Approach

There is no immutable order to the approaches along the helping continuum. Not every approach makes sense for every mother and baby, and aspects of one approach can certainly be combined with another approach. Some vigorous babies are nonetheless helped by exaggerated breast shaping. A baby who has had numerous bad experiences at the breast might do best moving straight to lying down to give him a completely new experience from the start. If you know that



Courtesy of Rebecca Glover

Figure 5-24 Babywearing-where babies belong.

the baby has developed an aversion to the breast, you might want to encourage at least a few days of near-continuous holding, using an alternate feeding method, before going further. If you know that others have tried without success to help a mother and baby, you might move more quickly to an artificial aid—perhaps one described in the next section.

Sometimes an office visit is simply ill-timed. The overly hungry baby may first need at least part of his meal by some familiar means before he can begin to learn. If the baby isn't hungry at first, you and the mother will have some time for discussion and modeling. If he is in a deep sleep, you can use the session to describe and demonstrate techniques she can use at home (see the section on self-efficacy above), offer encouragement, and share your confidence in the baby's and her innate abilities. (Remember that lighter sleep states can be an optimal time for bringing a baby to breast in Biological Nurturing positions.) Above all, stay in touch with the mother and help her find additional sources of encouragement.

One mother simply wasn't willing to hear about Biological Nurturing with her twins during the first two visits; she needed to give up the old-style rules in her own time. Another mother reported that there came a day when "My baby just looked different to me," and breastfeeding proceeded uneventfully from that point. We can provide insights and

Road to Health (Self-Efficacy)

Taking over most of the breastfeeding work for the baby who needs it is very much like your mother propping you up in bed when you were sick, placing a bed tray across your legs, and even spoon feeding soup to you and blotting the dribbles from your chin. Sucking in the soup and swallowing it were up to you. Your mother took care of everything that made sucking and swallowing possible-encouraging you to eat, arranging your position, and bringing the food to your mouth in a form you could manage. The extra help you are giving your baby right now is almost always-like your mother's help-temporary. It is just part of helping your baby eat appropriately and get healthy.

enthusiasm, and we can even provide tools like those in the next section, but it is the mother and baby who ultimately make breastfeeding happen.

When Technique Is Not Enough

Jumping through a fiery hoop is an unnatural act for a tiger, but it can learn to do so through a combination of patience, mutual trust, technique—and sometimes, tools. Breastfeeding is an entirely natural act for a baby. When patience, trust, and technique are insufficient to help a normal baby feed at a normal nipple and breast, some tools may be helpful. (For a more complete discussion of these and other tools, see Genna, 2009.)

Dripped Enticement

Dribbling a bit of expressed colostrum or milk on the nipple with an eyedropper or syringe can sometimes encourage a baby to begin licking, tasting, and showing interest. Tucking a dropper, syringe, or periodontal syringe into the corner of the baby's mouth after an unenthusiastic latch and adding a few drops of milk as the baby sucks may cause the baby to swallow, draw in a bit more breast, and perhaps begin sucking. If the baby is truly hungry, however, he may need

to take in significant calories before he is able to breastfeed effectively.

Reverse Pressure Softening





Figure 5-25 Reverse pressure softening.

Initial engorgement can make it difficult for a baby

to attach. One of the best tools in this situation is the mother's own fingers. All five fingertips of one hand can be pressed around the base of her nipple for approximately 1 minute, or about as long as it takes the mother to hum a lullaby. The pressure moves fluids deeper into the breast, softening and indenting the area that the baby needs for attachment, just as a fingertip pressed into any pitting edema creates a soft, temporary dent. The mother can also press with the sides of two or more fingers, perhaps laying an index finger at the nipple base, where the baby's upper lip will be, and two fingers from the opposite hand where the baby's lower jaw will land, with the fingers running parallel to where the baby's lips will be (Cotterman, 2004) (Figure 5-25).

Suction Devices

Suction devices exemplify the adage that necessity is the mother of invention. For a quick, inexpensive

aid for babies who are unable to attach to inverted nipples, try a syringe whose diameter is slightly larger than the mother's nipple diameter. Remove the piston and cut off the needle end. Slide the piston into the cut end, creating a small suction device with a smooth open end. The mother places the smooth end over her nipple and draws back the piston until her nipple everts, but not so far that it causes discomfort (**Figure 5-26**). If the syringe fills with milk and loses suction, she pulls the piston out farther. After about a minute, she releases the suction by depressing the piston and offers her breast to the baby before the nipple inverts. Most babies who require this temporary aid learn quickly to at-



Courtesy of Diane Wiessinger

Figure 5-26 Suction device for inverted nipple.

tach to their mothers' less-than-prominent nipples without preliminaries (Kesaree, Banapurmath, Banapurmath, & Shamanur, 1993). Commercial suction devices are available, including Supple Cups, that can help evert nipples prenatally or can be used between feedings.

Bottle Feeding as a Prelude to Offering the Breast

A baby may be more receptive to breastfeeding if he has taken at least part of a meal first. If the mother likes, the bottle can be tucked under her arm when she is seated, so that her baby can be held against her as if for breastfeeding, with the bottle teat close to her nipple.

Bait and Switch

In bait and switch, the mother holds the baby as if for breastfeeding, but in such a way that she can also offer a bottle. Sitting upright and holding the bottle under her arm is one such position. Sitting upright and holding the baby along her side, with the baby looking up at her, is another. She offers several swallows from the bottle, then quickly removes the bottle and offers her breast. The baby will probably refuse. She immediately offers several more swallows from the bottle, then offers the breast again. After several such back-and-forth offerings, the baby may have gained enough energy and interest to attach to the breast and begin feeding. The shorter the time between removing the bottle and offering the breast, the more likely the baby is to shift his suckling behavior to the breast (**Figure 5-27**). In the end, even if he does not attach to the breast, the baby will have been fed. For a full discussion of paced bottle-feeding techniques, see Chapter 12.

Nipple Shields

The human nipple is soft and tends to retreat from a baby if he mouths it before latching. In contrast, a nipple shield stays very assertively in place, allowing the baby to feel it, play with it, grasp it correctly or incorrectly, and even push it away with his tongue. Its unchanging shape can make it a very helpful bridging tool for a baby who is suspicious of the breast, who is accustomed to a bottle teat, or who has decided that there is no reason to try. Premature infants



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Figure 5-27 Bait and switch.

may actually increase their milk intake with the help of a shield; it keeps the mother's nipple from sliding away from a weaker baby with thinner buccal fat pads during the pauses between suckling bursts (Meier et al., 2000).

Modern silicone nipple shields have a stiff nipple section and a very soft rim. They come in several nipple diameters and nipple lengths. While the nipple shield chosen needs to accommodate the mother's nipple comfortably, it must also match the infant's palate length. Wilson-Clay and Hoover (2008) suggest selecting the shield "with the shortest available teat and smallest base diameter" (p. 58) given the mother's anatomy. When a baby latches deeply onto a well-fitted shield, the thin and flexible rim usually allows him to milk the breast with near-normal efficiency. This level of efficiency was not possible with the old latex shields.

To attach the shield, the mother can grasp the shield's rim between her thumb and fingers, with the nipple section facing away from her. She stretches the base of the teat open as if she is trying to turn the teat inside out, and brings the lower edge of the nipple section onto the breast, beginning well below her own nipple and stretching the shield over the nipple, centering the shield's nipple over her own. This brings a good portion of her breast and nipple into the shield, with slightly more tissue below her nipple, helping to ensure that her baby will take

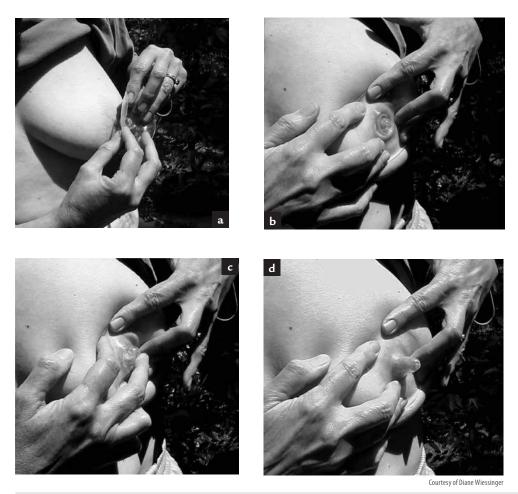


Figure 5-28 Applying a nipple shield.

more breast into the mouth with the shield. Because the base of the nipple section has been stretched onto the breast, it grips the breast and is less readily dislodged. The mother brings the baby onto the breast and shield, with his head tilted back and mouth open wide. As the baby's bottom lip and chin sink into the rim of the shield, well below the nipple, his top lip will glide over the upper surface of the shield's nipple section, facilitating a deep and asymmetrical latch. A baby who is able to attach well can take a truly effective mouthful of breast and suckle almost as if the nipple shield does not exist (**Figure 5-28**).

Some nipple shields have a portion of the rim cut away to remove any barrier between the baby's nose and the mother's skin. They can be difficult to apply to the breast using the method previously described. An alternate approach is for the mother to hold the shield on opposite sides at the outside edge using the thumb and index finger of each hand, with the nipple section facing away from her. With her middle fingers, she gently applies pressure to the tip of the

shield's nipple portion until it begins to collapse, pushing until the nipple section is just a little longer than her own nipple. She places the partially inverted shield over her nipple, the rim curling away from her breast. Using the first two fingers from each hand, she slides the backs of her fingernails down the slope of the shield's nipple. When her fingertips touch the bottom of the moat around it and the pads of her fingers touch the outer edge of the moat, she stops sliding her fingernails and uses the pads of her fingers to stretch the moat out onto the areola. Her nipple tip is drawn into the shield as the moat disappears (Pohl, personal communication, July 2006).

The rim of a shield may curl over the baby's nose while he feeds; however, the nipple section stays in the baby's mouth, and the rim will not interfere with his breathing. If the baby repeatedly dislodges the shield, a piece of tape along the upper edge can help to hold it in place. Moistening the underside may also help.

At times, a baby's inability to breastfeed effectively with a shield simply reflects his inability to breastfeed effectively without it; these mother-baby pairs will need additional support in the form of milk expression and an alternate feeding method. However, nipple shields have helped many babies learn to latch and to associate the breast with food, and they often give the mother of a nonlatching baby a way to enjoy her baby at breast while they learn to breastfeed.

Until a baby using a shield has demonstrated a normal feeding pattern and normal pattern of weight gain, his growth should be followed closely because babies can use a nipple shield ineffectively, spending long periods of time at breast without significant intake.

Most babies relinquish the shield without difficulty after they gain some competence and confidence; occasionally, a baby continues to rely on a nipple shield for months or, rarely, for the duration of the breastfeeding relationship. Breastfeeding with a shield is still breastfeeding.

Pillows

Pillows probably cause more breastfeeding problems than they solve. Pillows are usually not helpful if they raise the baby above the natural level of the mother's nipple, create a crevice into which the baby can roll, cause his body to lie across the other breast instead of below it, or prevent the close application of his body to his mother's. Pillows encourage a horizontally positioned baby, rather than one in the angled-down position of earlier generations. In addition, mothers can become pillow dependent, unable to nurse with the spontaneity and adaptability that easy breastfeeding requires. Although an ordinary pillow can support a mother's arm or back, a specialized breastfeeding pillow is rarely useful. Biological Nurturing positions are usually much more useful than pillow-supported positions. However, a firm, flat pillow can allow some distance for a baby who resists close contact. It can serve as a baitand-switch platform, perhaps even with a nipple shield in place so the baby can approach the breast with only the lightest maternal touch, allowing him to explore the shield at will. Pillows for nursing twins together were considered all but essential until our rediscovery of laid-back positions; the mother of twins who leans back comfortably may find that she can simply cradle a baby in a near-longitudinal lie on each side, resting a baby's cheek on each breast. A one-sided wriggle can move one baby's cheek against her breast, bringing the nipple

toward his mouth as he turns to grasp it; a wriggle on her other side repeats the process for the second twin.

Supplemental Feeding Devices

Normally used to supplement a baby who can attach to the breast, a supplemental feeding device can occasionally help a baby who is having difficulty attaching to a very flat-nippled breast by providing a focal point for his efforts. Held or taped so the tubing runs along the underside of the breast (on top of the baby's tongue when suckling) and extends slightly beyond the nipple tip, a supplemental feeding device's added stimulus can make a nearly featureless breast less confusing.

Conclusion

When any fluid act is broken into discrete components—when a right-brained, body-sense activity like dancing, tennis, walking, bicycling, or breastfeeding is taught or performed in left-brained steps—fluidity disappears and instinct bows to instruction. But many of the lessons we have learned from our decades of disruptive, left-brained breastfeeding analysis can help certain mothers and babies. If we can facilitate smooth, instinctive, right-brained breastfeeding with little more than a nudge or suggestion, most of the time we can drop into the background of an interaction in which we do not rightly belong. When aids are used with a normal mother and baby, be sure that they will help to move the mother and infant toward a normal relationship, ideally with breastfeeding as the cornerstone.

Learning to breastfeed can take time. Simply encouraging the mother to enjoy ample, preferably gravity-as-friend time, with her baby and to follow her baby's lead are often the most important suggestions of all. With time, with repeated positive experiences, with a mother and (if necessary) a helper who respect and work with the baby's innate abilities, the great majority of normal babies will eventually begin to feed normally.

Helping a mother and baby breastfeed requires more than an understanding of positioning, tools, and techniques. It requires an understanding of one's own limitations and of the mother's and baby's limits today and in the future. It requires access to other helping resources, including mother-support groups. And, it requires full confidence in the basic breastfeeding process. This is, after all, how all mammal babies eat.

It is easy to exhaust a mother and baby with attempts and experiments, so that breastfeeding fails before it begins. Be ready to find more experienced help *before* the mother's emotional well runs dry. The goal is not to have the baby breastfeed today, nor to be the one who makes it work, but to help ensure that mother and baby will be a happy breastfeeding pair in the future. Is there someone else who might help the mother more efficiently? If so, refer the mother, go with her, and add to your skills by observing.

The future may hold better and simpler bridging tools that help a baby make the transition from bottle to shield, or shield to breast. But interventions can harm as easily as they can heal, and far too many mothers today find themselves pumping for months simply because they were not encouraged to attend local mother-support groups or were not told about the simplicity of lying back with their babies. Start with the basics; they will take you far.

In addition to improving your tool kit and confidence with the ideas in this book, be sure to take a little time to support the mother-to-mother groups and birth activists in your area. We will truly be doing our job when we're able to help the majority of mothers and babies avoid breastfeeding problems, rather than helping to solve them.

References

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychology Review*, 84(2), 191–215
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (Vol. 4). New York, NY: Academic Press.
- Blyth, R., Creedy, D., Dennis, C.-L., Moyle, W., Pratt, J., & De Vries, S. (2002). Effect of maternal confidence on breastfeeding duration: An application of breastfeeding self-efficacy theory. *Birth*, *29*, 278–284.
- Bovey A. R., Noble R., & Noble, M. (1999). Orofacial exercises for babies with breastfeeding problems. Breastfeeding Review, 7(1), 23–28.
- Buxton, K. E., Gielen, A. C., Faden, R. R., Brown, C. H., Paige, D. M., & Chwalow, A. J. (1991). Women intending to breastfeed: Predictors of early infant feeding experiences. *American Journal of Preventive Medicine*, 7(2), 101–106.
- Colson, S. (2008). Biological Nurturing: Laid-back breastfeeding [DVD]. Available from http://www.biologicalnurturing.com
- Colson, S. (2010). An introduction to Biological Nurturing. Amarillo, TX: Hale.
- Colson, S. D., Meek, J. H., & Hawdon, J. M. (2008). Optimal positions for the release of primitive neonatal reflexes stimulating breastfeeding. *Early Human Development*, 84(7), 441–449.
- Cotterman, K. J. (2004). Reverse pressure softening: A simple tool to prepare areolae for easier latching during engorgement. *Journal of Human Lactation*, 20(2), 227–223.
- Creedy, D., Dennis, C.-L., Blyth, R., Moyle, W., Pratt, J., & De Vries, S. (2003). Psychometric characteristics of the Breastfeeding Self-Efficacy Scale: Data from an Australian sample. *Research in Nursing and Health*, 26, 143–152.
- Dennis, C. L. (1999). Theoretical underpinnings of breastfeeding confidence: A self-efficacy framework. Journal of Human Lactation, 15, 195–201.
- Dennis, C. L. (2006). Identifying predictors of breastfeeding self-efficacy in the immediate postpartum period. Research in Nursing & Health, 29, 256–268.
- Dennis, C. L. (2010). *Mothering transitions research*. Retrieved from http://www.cindyleedennis.ca/research/1-breastfeeding/specific-publications
- Dunn, S., Davies, B., McCleary, L., Edwards, N., & Gaboury, I. (2006). The relationship between vulnerability factors and breastfeeding outcome. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 35(1), 87–96.
- Doidge, N. (2010). The brain that changes itself. New York, NY: Penguin.
- Genna, C. W. (2009). Selecting and using breastfeeding tools. Amarillo, TX: Hale.
- Glover, R. (2004). Lessons from innate feeding abilities transform breastfeeding outcomes. *ILCA Conference Syllabus*, Scottsdale, AZ. 87–94.
- Glover, R. (2005). Follow me mum: The key to successful breastfeeding [DVD]. Available from http://rebeccaglover.com.au/video.html
- Kashiwagi, H., & Shirataki, S. (1995). Development in mother-infant en face interaction of high-risk newborn infants: A longitudinal follow-up from 0 to 7 months. *Early Human Development*, 43(3), 245–270.
- Kesaree, N., Banapurmath, C. R., Banapurmath, S., & Shamanur, K. (1993). Treatment of inverted nipples using a disposable syringe. *Journal of Human Lactation*, 9(1), 27–29.
- Kingston, D., Dennis, C. L., & Sword, W. (2007). Exploring breastfeeding self-efficacy. *Journal of Perinatal & Neonatal Nursing*, 21(3), 207–215.

- Meier, P. P., Brown, L. P., Hust, N. M., Spatz, D. L., Engstrom, J. L., Borucki, L. C., & Krouse, A. M. (2000). Nipple shields for preterm infants: Effects on milk transfer and duration of breastfeeding. *Journal of Human Lactation*, 16(2), 106–114.
- Morris, E. S., & Klein, M. D. (1987). Pre-feeding skills. San Antonio, TX: Therapy Skills Builders.
- Noel-Weiss, J., Bassett, V., & Cragg, B. (2006). Developing a prenatal breastfeeding workshop to support maternal breastfeeding self-efficacy. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 35*(3), 349–357.
- Noel-Weiss, J., Ruppe, A., Craig, B., Bassett, V., & Woodend, K. A. (2006). Randomized controlled trial to determine effects of prenatal breastfeeding workshop on maternal breastfeeding self-efficacy and breastfeeding duration. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 35*(5), 616–624.
- O'Campo, P., Faden, R. R., Gielen, A. C., & Wang, M. C. (1992). Prenatal factors associated with breastfeeding duration: Recommendations for prenatal interventions. *Birth*, 19(4), 195–201.
- Pajares, F. (2002). Overview of social cognitive theory and of self-efficacy. Retrieved from http://www.emory.edu/EDUCATION/mfp/eff.html
- Papinczak, T. A., & Turner, C. T. (2000). An analysis of personal and social factors influencing initiation and duration of breastfeeding in a large Queensland maternity hospital. *Breastfeeding Review*, 8, 25–33.
- Smillie, C. M. (Writer). (2007). Baby-led breastfeeding: The mother-baby dance [DVD]. Available from http://www.geddesproduction.com
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performances: A meta-analysis. *Psychological Bulletin*, 124, 240–261.
- Teicher, M. H., Andersen, S. L., Polcari, A., Anderson, C. M., & Navalta, C. P. (2002). Developmental neurobiology of childhood stress and trauma. *Psychiatric Clinics of North America*, 25, 397–426.
- Wilson-Clay, B., & Hoover, K. (2008). *The breastfeeding atlas* (4th ed.). Manchaca, TX: Lactnews Press.
- Wolf, L. S., & Glass, R. P. (1992). Feeding and swallowing disorders in infancy: Assessment and management. San Antonio, TX: Therapy Skills Builders.
- Woolridge, M. W. (1986). The "anatomy" of infant sucking and aetiology of sore nipples. *Midwifery*, 2, 164-176.
- World Health Organization & UNICEF. (1989). Protecting, promoting, and supporting breastfeeding: The special role of maternity services. A joint WHO/UNICEF statement. Geneva, Switzerland: Author.

