

Feeding Your Baby With Cleft Lip and Palate

Feeding babies is a special experience for parents and newborns. Feeding provides infants with nourishment they need to grow. It also provides time for parents and children to bond. Sucking is a pleasurable experience for infants and it provides exercise infants need to develop the tongue and oral muscles that are important in chewing and speech development.

An infant with a cleft lip usually has few, if any, feeding problems. Feeding a healthy baby with a cleft lip and palate can be more challenging. To suck, a baby must be able to compress a nipple between the tongue and the roof of the mouth. The lips complete the seal, creating negative pressure that allows the infant to draw milk from the nipple. The severity of the cleft lip or palate (or both) affects an infant's ability to suck and obtain enough nourishment for growth and development. With a little help, however, most parents can successfully feed their child.

Your Child's Nutritional Needs

When feeding infants, it helps to understand their nutritional needs.

- A full-term, healthy newborn generally needs two or three ounces of breast milk or formula per pound of body weight per day. A newborn infant normally can lose up to 10 percent of birth weight in the first week of life. Following this initial weight loss, the baby will gain approximately three-fourths to one ounce per day, returning to birth weight by two weeks of life. Average weight gain in the first three months of life is four to seven ounces a week.
- Once feeding patterns are established, most babies can complete a bottle feeding in 20-30 minutes. Breast-feeding may initially take a little longer, as mom and baby learn which feeding position works best for them. Feedings usually are one and a half to three hours apart for a breastfed baby (8-12 feedings in 24 hours) and two and a half to four hours apart for a formula fed baby. A newborn may occasionally take a single four-hour rest period within a 24-hour period in the first three to four weeks.
- A child with a cleft palate or both a cleft lip and palate often takes longer to feed and feedings may be more frequent. If your baby is taking more than 30-40 minutes to feed or feedings are consistently less than two hours apart, your baby may be using too much energy to obtain nourishment and calories for growth.
- If your child is excessively sleepy, it can be a warning sign of poor nourishment. Poor urine and stool output and inadequate weight gain signal poor intake of calories. Logging your baby's feedings, along with urine and stool output, is a good way to tell if your infant is getting enough to eat. By the fourth or fifth day of life, a baby should urinate at least 4-5 times in 24 hours and have at least 4 or more stools per day. Infant stools should change to a yellow color by the 4th day of life. If your baby isn't meeting these guidelines, please contact your baby's health-care provider or the Gillette Craniofacial Team feeding specialist.

Try not to become discouraged when you begin feeding your infant. As your child masters feeding skills, the length of time it takes to feed usually decreases and your child will progress to more of a routine schedule. You should have your child weighed after four or five days of age, again at two weeks of age, and once a week until appropriate weight gain and effective feeding patterns are established. Once this is accomplished, you may decrease to monthly weight checks until your child is three months old. You can have your child weighed by your

baby's health-care provider in your baby's clinic or at our center.

Good nutrition is especially important in infants with cleft lip and palate. These children need to build up resistance to infection, to be strong for surgery, and to have the nutrients needed to heal after surgery. For infants with poor weight gain, breast milk can be fortified, or higher calorie formulas can be used to meet nutrition requirements. You can also contact our craniofacial team lactation consultant with questions. A clinic visit will reassure you that your child is receiving enough nourishment. It also will let you ask questions and obtain further support, if needed.

Overcoming Feeding Challenges

Prolonged feedings may be frustrating and tiring for you and your baby, particularly in the first month. This can also lead to poor weight gain. Infants with cleft palate usually can be fed more effectively with proper positioning, a combination of feeding techniques, and specialized feeding equipment.

All babies feed better when they are fairly hungry - but not too hungry or too sleepy. Let the baby cue you. Infants signal hunger with eyelid fluttering, mouth movements, rooting, sucking on fingers and by moving their arms or legs. Crying is considered a late feeding cue in a young infant, especially a premature one.

For several reasons, feeding your child may take a long time and your child may need to eat frequently.

- Infants with a cleft palate lack the normal bone and soft tissue separation between the nose and mouth. As a result, the baby may get milk into the nose. This is called nasal regurgitation. Nasal regurgitation can be upsetting, but there's no need to be alarmed if milk slowly runs out of your baby's nose or if your baby sneezes or coughs clearing milk from the nostrils. Have a soft cloth readily available to wipe the baby's nose and mouth and allow the baby to rest a few moments before resuming feeding.

Cleft palate babies feed better when positioned upright (at a 60-80 degree angle) with chin tilted up, so there is less chance of milk getting into the nose. As with all infants, rather than propping your child up, it's best to hold your baby during feedings. Frequent burping (approximately every 5-7 minutes) is important since infants with cleft lip and/ or palate tend to swallow a lot of air. You will know your baby needs to burp when the sucking rhythm slows or your child wiggles and appears uncomfortable.

- Many babies with cleft palate cannot create enough suction to successfully draw milk from a breast or ordinary bottle nipple to maintain adequate nourishment. By directing the nipple back and slightly to the more intact part of the palate, you can avoid the cleft and allow the baby to compress the nipple between the remaining palate or upper gum, and the tongue.
- Coordination of suck and swallow with breathing can be a problem for a child with a cleft palate and/ or lip, especially those infants with associated neurological disorders. When using a specialized nipple or bottle, you can gently squeeze, allowing your baby to set the pace of sucking and swallowing. You will probably need to adjust the pressure and direction of the nipple as you're learning how your baby best eats. The bottle and nipple system used early on may need to be modified as your baby grows, while allowing for good use and development of the muscles of the face and mouth.

There are several bottle and nipple systems available for infants with cleft lip and palate. They can help make up for your child's inability to create suction needed to draw milk from a bottle and they give your baby ample opportunity to suck. When you choose feeding supplies, make sure you look for the following options:

- A soft nipple that allows the milk to flow moderately - too fast a flow can overwhelm your baby, too slow a flow may cause exhaustion.
- A nipple which is designed specifically for special feeding needs. Simply enlarging the hole in the tip of the nipple is not recommended. This will result in a steady flow of milk that may cause the baby to lose control of sucking, swallowing and breathing, possibly leading to choking and fatigue. It also increases the risk of aspirating part of the nipple as it wears out.
- A squeezable, soft-sided bottle or specialized nipple that allows you to gently compress the bottle in rhythm with your baby's sucking, swallowing and breathing cycles.

Some nipples that are too short or too long may make it difficult for a baby with a cleft lip and palate to suck. Short nipples usually are not long enough to make good contact with the baby's hard palate and tongue. Nipples that are too long can gag the baby. As babies grow and increase in strength, nipple requirements may change, so be prepared to adjust the bottle and/ or nipple that you're using, as your baby's needs change.

Three bottle and nipple systems are available from the craniofacial team here at Gillette:

- The Mead-Johnson Cleft Palate Nurser has a squeezable bottle and a soft cross cut nipple, which directs the milk flow beyond the cleft. This bottle should be gently squeezed, so the baby can compress the nipple and control the flow of milk.
- The Haberman Feeder by Medela has a squeezable nipple with a slit, but the bottle is firm. Straight-line markings of different lengths are visible at the base of the nipple. The mark is "lined up" with the baby's nose. The longer the line, the faster the flow. The nipple may be squeezed gently to allow the baby to compress the nipple and control the flow of milk. The bottle also has a valve, which hinders excessive air from getting into the nipple and subsequently, into the baby's tummy.
- The Cleft Palate Nipple (aka, the "Pigeon" nipple) by Children's Medical Ventures. This system has a firm bottle and a bulbous nipple with a Y-cut that is softer on the underside. It also has a one-way flow valve. This works well for infants with good tongue extension and sucking coordination. It can also be used in conjunction with a Playtex Vent-Air bottle (nipple collar is interchangeable).



From left to right: Mini-Haberman, Haberman, Mead-Johnson, Vent-Aire with Pigeon nipple, and Pigeon bottle and nipple.

You may purchase these items from online vendors or HandiMedical Supply, www.handimedical.com, 1-800-514-9979.

Our Craniofacial Team here at Gillette would be happy to help you choose and obtain a feeding system that is right for your baby. We can also answer any questions you have after you go home.

Special Tips for Breastfeeding Moms

The American Academy of Pediatrics recommends breast milk as the best form of nutrition for all babies. Children with cleft palate are more susceptible to colds and ear infections. Breast milk, with its anti-infective properties, affords some protection for cleft infants. Breast milk also is easily digested and is associated with fewer tummy problems such as colic and constipation.

A baby with a cleft lip most likely will be able to breastfeed directly at the breast without difficulty. Often the breast tissue will fill the cleft to create a seal. You also may be able to seal the cleft with a finger while breastfeeding. Breastfeeding the infant with cleft palate is more of a challenge. Successful breastfeeding of these infants depends on the size and position of the defect of the hard palate as well as associated lesions. It also depends on the mother's nipple elasticity, size and shape.

If you decide to breastfeed your child with cleft palate, early and frequent breast stimulation is extremely important. Most babies with cleft palate are not able to get enough nourishment at the breast alone. You may need to express additional breast milk or your child may need supplemental feedings. Some mothers pump breast milk and put the milk into one of the special bottles designed for children with cleft palates. You should start double pumping both breasts with a hospital-grade, electric breast pump within 6-8 hours following delivery. Most hospitals have these pumps available for new mothers.

You should pump for 10-15 minutes duration, six to eight times in 24 hours following breastfeeding attempts. If your baby is unable to nurse, pump at least eight or more times in 24 hours, to establish and maintain your milk supply. Most breastfed babies will demand eight to 12 feedings in 24 hours. By pumping after feedings, you stimulate the prolactin (milk making hormone) receptors in the breast during this "early calibration phase" of milk production to ensure a good milk supply. If this important early phase of milk production is missed, it may be difficult to "catch up" in the future.

Beyond taking care of your baby, you need to take care of yourself. Drinking plenty of liquids, eating a well-balanced diet, and getting adequate rest will help you maintain a good milk supply and ensure you have the energy you need to care for your child. Don't be afraid or embarrassed to ask for help. Let others help you with household chores and meal preparation. Once you feel comfortable feeding your baby, teach other caregivers how to do it, so you can have an occasional break.

A visit with the lactation consultant at the hospital where you delivered your baby will get you off to a good start. The consultant can help you develop a written feeding plan before you go home and help you obtain an electric breast pump if one is needed to establish and maintain your milk supply at home. If you do require a pump at home, it is very important that it is a hospital grade electric pump. Most pumps purchased "over the counter" or at your local drugstore do not provide adequate stimulation to maintain your milk supply. The lactation consultant at the hospital can help you, or you may contact the feeding specialist on our team.

Determining the Feeding Method

Whatever feeding method you decide to use, it should fit with the feeding plan that you developed with your baby's primary care provider or feeding specialist. It must ensure that your baby will gain enough weight to sustain appropriate growth and development. It should also foster development of good feeding skills and be a method that you and your baby can enjoy.

Feeding schedules of infants with cleft lip and palate follow the American Academy of Pediatrics recommendations for all infants. Breast milk and/ or formula alone will provide adequate nutrition for infants up to 6 months of age. From 4 to 6 months of age, you can introduce cereal mixed with breast milk or formula. Strained fruits and vegetables can be added at 5-6 months. You can discuss the normal addition of various foods into your baby's diet with your primary provider. There are basically no restrictions from the normal pattern of introducing solid foods, except around the time of surgery (see below).

Be aware that just as milk may initially come through your baby's nose, the same nasal regurgitation may occur when you introduce strained or soft cooked foods. Calmly pausing and letting your baby clear the nose with a sneeze or cough, than wiping the nose and mouth with a clean, moist cloth allows your baby to resume feeding. Normal saline drops can be utilized to help clear any residual material, as needed.

Feeding Before and After Surgery

Your baby's surgeon or cleft palate team member can advise you about feeding restrictions before and after surgery. Cleft lip repair is normally done at 3 months of age. Most babies can resume breast or bottle-feeding immediately after the initial surgical recovery period in the hospital.

To maximize good speech development and facial growth, cleft palate repair is usually done at 9 to 12 months of age. Introducing your baby to a sippy cup with a soft spout (such as the "Nuby" or "Avent") at six to seven months of age is recommended. If your baby is used to using a cup with feedings, it will be easier after surgery to feed.

Your child will be on a diet of liquids and strained foods without "chunks" for approximately two weeks after surgery. Use of a bottle or sippy cup with a firm spout is not recommended. Either may disrupt your child's cleft palate repair. Also, chunkier foods may become lodged in the repaired cleft and promote infection. This is discussed with more detail in "[Preparing Your Child for Cleft Palate Repair](#)".

Make An Appointment

[651-290-8707](tel:651-290-8707)

Refer a Patient

[651-325-2200](tel:651-325-2200)

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at [651-229-3890](tel:651-229-3890).