Infant Nutrition

General

When you get home, feed your baby on demand. Most babies, after the first few weeks, fall into their own 2 to 4 hour schedule, depending upon whether they are breast or bottle fed. Remember that every cry does not indicate hunger in your baby. If it has been 2 hours or less since he began to eat, try other measures of comfort first. He may need to have a diaper change, to be burped or just to be cuddled.

Many babies get their days and nights confused, that is, he may eat every 4 hours during the day and every 2 hours at night. If your baby falls into this pattern, there are a couple measures that may help. First, if your baby sleeps longer than 4 hours at a stretch during the day, wake him so he will have his long stretch at night. Secondly, a bath in the latter part of the day may help him sleep longer at night. The addition of cereal at night has been proven not to be effective.

Burping is necessary for all babies because they all swallow air, whether they are breast or bottle fed. Usually, burping midway through and at the end of the feeding is adequate; five minutes of burping is usually enough time.

Breast Feeding

In the Beginning

Getting started might not be easy. Most mothers feel "all thumbs" for the first feedings. To make matters worse, babies are often very sleepy and will not feed well because they are recovering from their birth. Even though some books or pamphlets say that all you need to do is stroke your baby's cheek and he will nurse, in reality, it is often not that simple.

It is very important that your baby is attached to as much of the areola (the dark part around the nipple) as possible so that nipple soreness can be avoided or kept to a minimum. Signs of poor attachment are: pain in the nipple while baby is suckling, a "chewing" or "biting" sensation rather than a "pull" or "stroke," dimpling of the cheeks with suckling, or a "smacking" or "clicking" sound with the
suckling. If any of these signs occur, break the baby's suction with your finger, reposition the baby and try again.

You will receive conflicting advice from different sources about how long to let your baby nurse at each feeding because there have been different approaches tried. Letting your baby be the guide is the best approach. At these first feedings, he may nurse for only a few minutes or he may continue for 15 to 20 minutes. As long as baby is attached well, you need not limit his feeding. While recovering from his birth, he may not be eager to feed, but the nurses will encourage your baby to breast feed at least every 4 hours. By 24 to 36 hours of age, your baby will have recovered and his appetite will increase. He probably will then demand more frequent (as often as every 2 hours) and longer (30 to 45 minutes) feedings. In a few days, your "mature" milk will "come in" and the length and/or frequency may decrease.

Parents are often concerned that baby will not get enough milk in these first days. Colostrum (the "early milk") is very rich in nutrients and will supply your baby's needs. Remember that babies have been breast fed for centuries and it has worked out very well!

Bottle feeding at this point is often confusing for the infants and counterproductive to the breast feeding process. It is usually best to not introduce a bottle until an infant is at least one month old.

**After the First Days**
By the time your baby is 3 to 4 days old, he probably will be nursing 10 to 20 minutes on each breast every 2 to 4 hours. Some babies, however, prefer to nurse on only one breast for 30 to 40 minutes. Babies give "signals" when they are finished with a feeding or are ready to change breasts. "Nutritional suckling" (the "eating" suck) consists of the baby's jaw moving rhythmically and smoothly. They usually suckle for bursts of 20 to 30 sucks, rest, and then go to another "burst". Frequent swallowing will be heard. The "pacifying" suck is irregular and not as vigorous and your baby will swallow only occasionally. You can then break his suction, burp him, and try the other side after a few minutes. Different babies have different patterns. Let your baby guide his/her feeding.

**Common Problems and Questions About Breast Feeding**

**Sore Nipples:**
1. Make sure your baby is attached well.
2. Limit the nursing to 10 minutes on each breast until your nipples feel better. It has been found that nursing for a shorter amount of time more frequently is easier
on sore nipples than longer feedings less frequently. Expect to breast feed more often, probably every 2 hours.
3. Vary the position of nursing your baby. Use the cradle hold, football hold, or nurse lying down.
4. Manually express your milk so it will let-down before the baby is put to your breast. In that way, your baby may not suck quite so vigorously at the beginning of his feeding.
5. Offer the least sore nipple first.
6. To soothe the soreness, apply Lansinoh Cream to your nipples for 10 minutes and allow air to dry. Do this several times a day.
7. Express some of your breast milk and smooth onto your nipples. It has a healing effect.
8. Expose your nipples to air as much as possible - that is, leave the flaps down on your nursing bra under your clothing.

**Engorgement:** (an overfill of the breast)
Three to 5 days after birth, your breasts may become very full, firm and tender to touch. This "swelling" or "congestion" lasts about 24 to 48 hours.
1. Wear a well-fitting (not tight) nursing bra for support.
2. Breast feed baby as frequently as possible - every 2 hours, if possible.
3. If baby has trouble latching on correctly to your full and firm areola, massage your breasts and manually express some breast milk to soften the nipple. You may use a breast pump to do this.
4. Before feeding, take a warm shower or apply warm packs to help release some milk and therefore pressure.
5. After feedings, you may apply cold packs (an ice bag with a towel between your skin and the bag) for about 20 minutes.

**Is my baby getting enough breast milk?** He is if:
1. You can hear your baby swallowing frequently with the feeding.
2. He is content between feedings which are normally every 2 to 3 hours.
3. He has 6 to 8 wet diapers per day (after the 3rd day of life).

**Can I give my baby a bottle?**
It is not recommended to give your baby a bottle until the breast-feeding is well established, usually about 4 weeks. Then every couple days, you can offer your baby a small amount (an ounce for instance) of water, Similac® Advance®, or expressed breast milk from a bottle. This occasional feeding will not interfere with the nursing, but will assure you that baby can take a bottle. If your baby resists, have someone else try to feed baby - often babies will not take a bottle from their mother.
To Review
The first days at home should be primarily for you to rest and get breast feeding established.
Eat a well-balanced diet and drink plenty of fluids.
Assure that baby's attachment to your nipple is good. His suck should not be painful.
When you have questions, call either our office or the hospital lactation consultant.

Bottle Feeding
Most bottle fed newborns work up to taking 2 to 4 ounces every 3 to 4 hours during their first weeks at home. Your baby's appetite will determine how much and how often he will eat. It is important to hold and cuddle your baby while feeding to convey the feelings of warmth and love. Do not prop the bottle! There is too much danger of choking and it cheating your baby out of the important cuddling time.

Never put your baby to bed with a bottle. Not only does that decrease his being held but you run the risk of severe cavities in his baby teeth. The sugars in juice and/or formula will bathe the teeth enamel which then causes the cavities. Some babies have had to have their baby teeth pulled or "capped" because of the extensive cavities. It is best to give your baby his bottle before putting baby to bed.

There are three forms for Similac® Advance®: Ready To Feed, Concentrate and Powdered. Do not use low iron formulas. Follow the directions on the can of formula to make that form. Two types (concentrate and powdered) require that you add water, and one form (ready-to-feed) does not require any dilution. Once the ready-to-feed or concentrate formula has been opened, it needs to be refrigerated and can be kept in the refrigerator for up to 2 days.

Years ago, it was believed that formula needed to be "body temperature" to be accepted by the baby. On the contrary, many babies generally do better with cool formula. You may want to warm the formula to take the "cold" out of it. We advise you not to warm the formula in the microwave but instead warm the bottle in a bottle warmer or in a pan of hot water. There have been cases of babies being severely burned by formula heated in a microwave, especially with the cover on, since the bottle or bag felt cool, but the formula was very hot in the center. If you do use the microwave, take the cover off the bottle, warm on a low setting, put the lid back on and shake, wait a minute and "test" the formula for the temperature. Once the bottle has been prepared for a feeding, it is "good" for 2 hours at room temperature. If it has been longer than 2 hours, discard the formula and prepare a new bottle.

Sterilizing the bottle or water is totally unnecessary even though formula cans will
instruct you to sterilize. It is a good idea to sterilize bottles and nipples after taking them home from the store or out of storage, but after that, thoroughly washing them with a bottle/nipple brush in hot soapy water is all that is necessary. You can also wash them in a dishwasher.

There are many different types of bottles and nipples on the market, with not one kind significantly superior to another regardless of what the advertisements say. Most families experiment with several types and then choose whichever type the baby takes and prefers

**Cow's Milk & Solids**
The best and only nutrition for your baby is breast milk or formula for the first 4 to 6 months of his life. "Solids" (baby foods) and "cow's milk" are not appropriate for the young infant. He does not need solids for 4 to 6 months since breast milk and/or formula have all the nutrients a baby needs and since his digestive system is not mature enough to digest solid foods. Some people may tell you that your baby will get bored on just milk, or cereal will make him sleep through the night. Neither one of these notions is true.

Cow's milk lacks many of the vitamins and minerals babies need. Also, cow's milk has a high level of protein and sodium which can put a heavy demand on your infant's system. Researchers and experts in nutrition, along with the American Academy of Pediatrics, recommend that infants ideally remain on breast milk or formula until they are 12 months of age. Introduce rice cereal at 4-6 months and gradually increase the amount based on baby's appetite and preferences. Introduce single ingredient vegetable baby food at 6 months followed by fruits at 7-8 months. Each jar food should be introduced one at a time. Introducing multiple new foods at the same time will lead to confusion if your baby develops a reaction to the food (vomiting, diarrhea, rash). Table foods that are the consistency of baby food can be introduced between 9-12 months. Apple, white grape, or pear juice are best introduced around 9 months in a cup rather than a bottle.

Breast milk or formula should be viewed as the "main course" for the first twelve months. View cereals, baby food/jar food, and juices as "side-dishes".

Babies should not be given eggs, nut products, seafood, or honey during the first year of life. With eggs, nut products, and seafood, there is significant risk of developing food allergies, and honey can cause infant botulism. Nut products and shellfish may be added after age two in most children.

Your child's diet will be reviewed at each well-child visit, and recommendations for any changes will be made by your baby's doctor.
**Vitamins**

The American Academy of Pediatrics now recommends extra vitamin D supplements for all breast fed babies to prevent a rare condition known as rickets. Infants should receive at least 400 IU of Vitamin D daily. This amount is provided by one (1) mL of most of the over-the-counter liquid vitamin D preparations including: Polyvisol®, Enfamil Trvisol®, Vi-Daylin ADC®, or Gerber Infant Vitamins®. Alternatively, a more concentrated preparation is available from Carlson® that contains 400 IU of vitamin D in one (1) drop. If your baby does not tolerate the taste of the standard over-the-counter vitamins, you may want to consider this as an option. Carlson drops are available in several strengths so make sure that your baby only receives 400 IU per day. If your child is only formula fed or receives at least seventeen (17) ounces of formula per day, then he/she already gets all the required Vitamin D.

After 6 months it is also recommend that all children receive fluoride supplementation to decrease the risk of dental cavities. Almost all communities in Ohio, including Franklin and Delaware County, add fluoride to the municipal water supply. The Ohio Department of Health maintains a list of the few communities that do not fluoridate water on their website at www.odh.ohio.gov. If your home water supply does not contain fluoride or your baby is exclusively breastfed and your child does not drink any other water source with fluoride, then your infant/child will need fluoride supplementation beginning at age 6 months. Please discuss this topic with your pediatrician.