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Newborn Instructions (and Beyond)

Congratulations on the birth of your newborn!!! The information provided is offered as a brief guide to commonly asked questions about “taking care of baby.” Please refer to it while you are in the hospital or at home. Do not hesitate to ask questions or seek other sources of information from us. We are here to offer guidance in order to make the process of caring for your infant a healthy and pleasurable experience.

For many Moms and Dads, the first weeks home with a new baby can be an overwhelming experience: lack of consistent sleep, being uncertain of how best to interpret lots of newborn “signals,” the complete change in daily rhythm, the disparity of “what to do” between parents, etc. Additionally, post partum depression is a fairly common experience. Please let us know if we can help you sort through “any of the above.”

Appearance: Babies are covered with a cheesy material called vernix after birth, and may have peeling, dry, and blotchy skin. Marks from forceps are common over the cheeks or from the fetal monitor on the back of the scalp. Birthmarks are frequently present over the bridge of the nose and eyebrows, and at the nape of the neck. Bluish-black “Mongolian” spots sometimes occur at the base of the spine. The baby’s hands and feet are purple and bluish compared to the rest of the body. Infants may also have some breast engorgement from exposure to maternal hormones in the womb. Female infants may have some blood tinged, creamy vaginal discharge, as well.

Visitors/Outings: Once you get home, there will be lots of people who will want to visit: keep the number of people around the infant to a handful, excepting siblings and close relatives. The infant’s immune system need not be challenged by friend’s children or other well meaning neighbors.

You can take the infant outside for a walk or drive, assuming weather conditions are appropriate. Again, avoid crowds of people, and dress the infant as you would feel comfortable yourself. It would be prudent to follow these guidelines until the infant has received several sets of immunizations..

Physician’s Appointments: Your baby will have a series of routinely scheduled visits. We would like to see you in the office 2-3 days after you leave the hospital or birthing center to assess weight loss/gain, jaundice, urination, stooling....The infant will also be seen at 2 weeks of age (infants regain birth weight, repeat metabolic screen), 1 month, 2 months, 4 months, 6 months, 9 months, 12 months, 15 months, 18 months, 24 months, and yearly thereafter. An appropriate history and physical will be performed and appropriate immunizations will be administered.

Sleep & Sleep Position: Infants are to be placed on their back---not side or stomach. This recommendation from the American Academy of Pediatrics addresses the phenomenon of Sudden Infant Death Syndrome (SIDS), which is greatly reduced by this maneuver. The crib mattress should be firm, and the sleeping space should be free of unnecessary toys, blankets, etc. to avoid the potential of smothering. Additionally, the infant should not share a bed with a parent, again because of the threat of smothering.

Jaundice: Many infants are noticeably yellow between the 3rd and 5th day of life; there are certain instances (prematurity, blood group differences between mother and baby) that pre-dispose to this being a problem. The infant will have a screening test for bilirubin (the chemical that causes jaundice) in the hospital, and additional blood tests may be required to assess the extent of the problem and decide on further treatment.

Infection: Babies need to be observed for signs of infection. This is particularly the case if the mother has been ill around the time of delivery. Additionally, the issues of Group B Strep and/or premature rupture of membranes (water breaking) require careful monitoring. Your baby may need to be kept in the NICU for further treatment and evaluation.

Metabolic problems: Infants occasionally have problems with low blood sugar, calcium, etc., particularly for infants of diabetic mothers, infants that are large for gestational age or premature. Infants are also screened (heel prick blood test) for rare inherited metabolic diseases before they leave the hospital and again in the office at the two week visit. The blood tests for phenylketonuria, hypothyroidism, sickle cell anemia, galactosemia, congenital adrenal hyperplasia, amino acid anomalies, etc.

Respiratory Problems: Babies can develop breathing problems after birth. Prematurity, being born by C-section, being large for gestational age are factors. The baby will be transferred to the NICU for appropriate care as necessary.

Weight Loss: Babies commonly lose weight after birth, and regain birth weight by 10-14 days of life. Babies losing 10% of their birth weight require careful monitoring, including possible formula supplementation if the infant is being breast fed.

Normal Behavior: in the 1st two weeks of life the infant may:

- Reflexively cry, grasp, yawn, swallow, suck, blink, cough, gag, or sneeze.

- Grasp if palm is stroked.

- Suck any object placed in mouth.

- Startle to sudden noises or movement.

- Have jerky, mostly uncontrolled movements.

- Wave arms, kick legs, wiggle, and squirm.

- Sleep 17-20 hours a day.

- Cry and fuss 1 to 4 hours per day.

- Be alert and quiet 2 to 3 hours per day.

- Smile spontaneously.

- React to different smells.

- Begin to turn in the direction of a sound.

- Begin to recognize the human voice as different than other sounds.

- Make gurgling noises when content.

- Show preference for the human face, but cannot focus clearly.

Babies, because of an immature nervous system, also commonly do some of the following:

Trembling chin and lower lip.

Hiccups or throat clearing.

Irregular breathing: infants can go 10-20 seconds without taking a breath.

Alarm: if the breathing rate is greater than 60/minute and/or the baby turns blue.

Noise during sleep from breathing and moving.

Sneezing.

Non-projectile spitting up or burping.

Brief stiffening of the trunk to sudden noise or movement (Moro reflex).

Straining with a bowel movement.

Infants get sick in somewhat non-specific ways: the most difficult thing they do is eat and sleep. Any increased irritability, lethargy, poor feeding, temperature elevation, or a deviation from normal behavior requires a telephone call.

CARE TIPS

Bathing: Wait until the cord has fallen off (10-14 days of life) and the area is well healed. Although the infant can be bathed daily, 2-3 times a week is sufficient. Use warm water with a little mild, non-perfumed soap. Gently clean the infant's skin, being careful around the face; the genitals should also be gently cleaned, and newborn females need to have their labia gently retracted to prevent adhesions from collecting debris. Rinse your baby thoroughly. Too frequent bathing can dry out the infant's skin.

Eyes: you may use a sterile cotton ball to gently remove any mucus or crust on the eyelids and eye lashes. Please call if there is redness of the white of the eye or pus. For the first few months, babies appear to be "crossing their eyes" (strabismus), especially when looking at close objects. Your infant's eyes will be checked at each examination. Let us know if there is a family history of congenital cataracts or strabismus.

Nose: babies sneeze; if your infant is congested and uncomfortable (babies are obligate nose breathers), you can instill several drops of saltwater (1/4 tsp of table salt in a cup of water) into each nostril and then gently suck out with a bulb syringe. Wait several minutes before suctioning for best results (and comfort). This is best accomplished before eating or sleeping.

Ears: You may clean any debris from the outside of the ear; do not use Q-tips.

Umbilical cord/Navel: The umbilical stump commonly stays in place for 10-14 days. Keep the area clean and dry and keep the diaper below the cord area. It is not necessary to apply alcohol to the area. When the cord separates, the area may ooze or bleed for a day or so. You may bathe the infant when the navel is completely healed. Any oozing,

redness of the skin around the cord site, foul smell, or continued drainage should be reported to the physician.

Fingernails/Toenails: You may trim the nails with a blunt edged scissors, straight across. This may need to be done weekly.

Circumcision: The uncircumcised penis requires no particular type of care; there is no need to retract the foreskin. For the circumcised penis, if performed in the hospital, the infant may come home with a Plastibell attached: it will fall off in 7-10 days. Again, no specific care is required. Surgical circumcisions should be treated with sterile Vaseline until healed (about 3 days) and the remaining foreskin should be gently retracted down the shaft of the penis and then returned towards the tip to discourage the formation of adhesions.

Laundry: Use a hypoallergenic detergent such as Dreft or Ivory, and do not use fabric softeners.

Stools: There is a wide range of stool patterns, consistency, and colors. Infants commonly stool with each feeding, although going several days without a bowel movement is not uncommon---as long as the infant is comfortable (although straining is a normal part of defecation). If there is abdominal distention, a very hard stool, or a stool mixed with blood and/or mucus, or a pale white stool, please call the physician.

Diarrhea: defined as stools that are more fluid and frequent than usual. One or two loose stools per day rarely require intervention. More frequent stools suggest the need to worry about dehydration, marked by irritability, weight loss, lethargy, dark colored and infrequent urination. Your infant needs to consume enough fluids within a 24 hour period to counter either water loss through the stools +/- decreased intake. Call the physician for specific instructions.

Diaper Rash: often due to irritation of the skin from a damp diaper, combined with friction, and the overgrowth of yeast (that thrive in a hot, moist, dark environment). Under most circumstances, frequent diaper changes, airing out the bottom, applying a shield of a zinc oxide paste product (Triple Cream, Balmex....) will take care of the problem. An “angrier,” red, excoriated rash may require specific treatment for yeast or bacterial infection.

Facial Rashes: Newborns often have pinpoint white heads, or milia, surrounded by some redness on the face: they come and go and do not require specific treatment. Red birthmarks over the eyelids, the nasal bridge, behind the back of the neck (“Stork’s bite”) are common and usually transient findings that are not permanent.

Cradle Cap: a common condition in infants that appears as red patches with oily, yellow scales or crusts on the scalp. It usually appears in the first few weeks of life and will resolve on its own; a daily use of a mild shampoo may speed up improvement.

Crying: a way for your baby to communicate; it may be difficult to decipher the reason, and it is not necessarily true that something serious is going on; all infants have fussy periods. As you become more familiar with your newborn, it will be easier to figure out the cause for the crying (discomfort, hunger.....).

Signs of illness: infants may show somewhat non-specific signs if there is a significant problem: any increased irritability or inconsolability, lethargy or paleness, change in feeding pattern, recurrent vomiting or persistent diarrhea, temperature above 100 degrees Fahrenheit, rapid or difficulty breathing requires a telephone call and/or office visit. In addition any redness around the umbilical cord, with or without discharge, or bleeding from a circumcision site should be brought to a doctor's attention.

Fever: see Myths & Facts Sheet

Thermometer Use: The preferred method of measuring a temperature in an infant is to take a rectal reading with a digital or a mercury thermometer. The instrument should be lubricated and gently inserted into the rectum, no more than an inch, and left in place for a minimum of 3 minutes and/or the digital thermometer "beeps." The normal temperature may range over the course of the day between 98 and 100 degrees F. Ear temperatures are more accurate in older children (better fit of instrument in the external ear canal). Forehead strips are not reliable. Axillary temperatures are good for screening but not as accurate as rectal readings.

Teething: Teething begins after 3 months of age, with tooth eruption most commonly between 5-7 months of age. Increased drooling, finger or thumb sucking may be signs. Although teething may be uncomfortable, but it does not cause fever, diarrhea, vomiting, constipation, etc. Cold teething rings and occasional use of acetaminophen may alleviate the symptoms.

FEEDING

Providing your baby with the best possible nutrition is important for maintaining good health and proper growth and development. Breastfeeding is out first choice, but the approach to feeding your infant is the same whether you breast or bottle feed: the time spent feeding your child provides love and positive interaction, as well as nutrition, and enhances the natural bond between mother and child. Remaining relaxed, confident, and enthusiastic during the feeding is important.

BREASTFEEDING:

We strongly encourage breastfeeding if Mom's have the desire and adequate milk supply. Human milk has a perfectly balanced distribution of protein, fat, carbohydrates,

and minerals. Its composition is unique and changes to meet the varied needs of your infant as he or she develops. It is easily digestible, resulting in fewer problems with constipation, gas, or colic. Calcium and iron are more readily absorbed from breast milk, and it presents a smaller sodium and protein load to the kidneys. In addition a number of antibodies---part of the body's immune system---are secreted in breast milk and help your infant combat potential infections, and protect against the development of allergies.

While breastfeeding, Mom's food intake may be a routine diet, with few exceptions. (It is also easier to lose some of the post-pregnancy weight because you are "giving away" 400-600 calories, once you get going). Food tolerance for Mom and infant are individual. Food gets into breast milk 4-6 hours after ingestion. If you find that a particular food causes side effects in your infant, eliminate that food from your diet. Foods that commonly cause problems while breastfeeding include: tomatoes, onions, cabbage, broccoli, beans, chocolate, caffeinated drinks, and spicy foods. Prenatal vitamins and iron should be continued, and drinking plenty of fluids is advised. Although it is not necessary to drink milk to produce milk, calcium intake is important, along with adequate calories. Alcohol consumption and tobacco smoking should be avoided.

Women have been breastfeeding their infants for thousands of years. Breastfeeding, however, is part natural and instinctive and part learned behavior for both mother and infant. The early days may involve some initial awkwardness, frustration, anxiety about supply, discomfort, exhaustion, etc. Stress and tension can decrease milk production, for instance.

It usually takes 4-6 days to lactate fully, with good "letdown" and engorgement. In the first 2-3 days the milk supply may be scant, and the infant will lose weight (and not re-gain birth weight until 10-14 days of life, which is normal). So early on you will only be producing small amounts of pre-milk, called colostrum, which is very high in antibodies. Most breast fed infants do not require supplementation and want to be fed every 1 & 1/2 to 2 & 1/2 hours (8-10+ times within a 24 hour period). We recommend that you start slowly, 3-5 minutes per side per feeding, increasing to 10-12 minutes by day 2-3 and aiming for 15-20 minutes, emptying at least one breast per feeding. This "schedule" allows the infant to take what milk is available and allows your to toughen up a little.

The following are helpful suggestions about the mechanics of breast feeding. We can offer additional references, information about lactation consultants, breast pumps, etc.

1. Position yourself comfortably with good back and arm support. Use pillows. Try to relax.
2. Position your baby's mouth, tummy, and knees facing you so that your nipple is directly in front of the baby's mouth. Bring the baby to you.
3. You may alternate positions, but initially feeding the infant on your lap is recommended. Hold the breast in a "C" with your thumb above and your fingers below the darker skin (areola) around the nipple.

4. Get all of this pigmented area into the infant's mouth quickly, about 1 ½ inches of the areola and nipple should suffice. This latching on "well" will help the baby feed more efficiently and decrease the wear and tear on your nipples.
5. Although we have given you some time guidelines at the beginning, do not watch the clock. Watch the baby's mouth motions to know that your milk is "letting down." The following patterns will give you clues about how long to keep the baby at the breast:

At the beginning of the feeding, look for short, choppy sucks. These last from a few seconds to a few minutes and stimulate your letdown reflex.

At the middle of the feeding, look for a change to longer, more drawn out motions (about one suck per second) with short pauses. These last about 4-10 minutes and mean that letdown has occurred. Listen for swallowing. You may experience other signs of the letdown reflex, such as uterine contractions, a sleepy or relaxed feeling, and/or thirst.

At the end of the feeding, look for a return to shorter bursts of choppy sucks with longer pauses. The baby has obtained most of what is in the breast at this point; this pattern may happen more than once on each breast.

6. Remove the baby from the breast by first inserting your finger into the corner of the baby's mouth and between the gums to break the seal.
7. Breast fed babies are erratic eaters. Commonly they eat every 2-3 hours, timing from the beginning of the previous feeding.
8. If your infant has not awoken after 3 hours---timing from the beginning of the last feeding, wake him/her to feed. This modified demand schedule will ensure frequent feeding and encourage smooth acquisition of milk supply, minimizing jaundice (yellow skin color).
9. You can tell if your baby is getting enough breast milk by checking the number of wet diapers or stools. The baby should urinate and defecate at least once each within the first 24 hours. After the first day or so, the baby should wet his/her diaper 4-6 times a day. Stools will change from black and sticky-tarry to loose and yellow seedy.
10. Supplemental water and formula is usually not necessary.
11. Alternate the breast first offered.
12. Breast care: wash nipples once a day while bathing. Wear a support bra (cotton nursing bra) if it makes you more comfortable.
13. If your nipples are sore or irritated after feeding, express a few drops of breast milk and work it into the nipple and areola. Alternatively, use lanolin or Vitamin A ointment.

Call if there are any additional questions; in particular, if there are medications that you are taking (prescribed or over-the-counter) please let us know. While a small amount of alcohol (wine or beer) is acceptable, a lot isn't. Illicit drug use is obviously problematic!

Additional references: www.LACTMED.com (Toxnet): NIH generated webpage for information on the safety of maternal medication and breast feeding.

www.Breastfeeding.com

La Leche League: www.llli.org

American Academy of Pediatrics: *Caring for Your Baby and Young Child*

Pumping, Storing, Handling Breast Milk: If there are times when you are unable to nurse, it is still optimal for infants to be fed milk that has been pumped from your breasts. Formula supplementation is an adequate alternative.

Preparation & Hygiene: Always wash your hands thoroughly before you pump your breasts.

A daily shower or bath will keep your breasts clean.

After using a breast pump, wash all of the parts that come into contact with your milk (use soapy water).

Collection: Pour the milk expresses during one session into a clean plastic container. You may layer milk collected at different times during the same day in the same bottle. Chill freshly expressed milk in the refrigerator before adding to previously frozen milk. (Plastic is better than glass because some of the immune factors in breast milk stick to glass).

You may use a plastic bottle that has been washed in soapy water and rinsed or a disposable bottle bag.

Tightly cap or close the container: do not store with nipples attached.

Label each container with date and time milk expressed.

Put several bottle bags in a larger plastic bag to prevent them from sticking to the freezer shelf.

Storage: May keep in the refrigerator (34-40 degrees F) for 72 hours and 24 hours after pumping. Do not use a refrigerator door shelf.

May keep in a freezer (20-28 degrees F) for up to 3 months after pumping.

Thawing: slowly in a refrigerator for several hours, or under warm running water.

Warming: under warm running water or in a pan of warm water (Do not overheat; **do not use a microwave**).

Additionally: do not leave milk at room temperature for more than an hour. Toss any unused milk after a feeding.

Do not re-freeze thawed milk

FORMULA FEEDING

Not every mother has a desire or the ability to breast feed; each family must choose which feeding option is best for them; formula fed infants are a little bit more “schedulable,” may sleep through the night sooner, and, of course, can be fed by the dad, as well.

Milk based formulas are designed to imitate the contents of breast milk as much as possible and to provide for all of the nutritional needs of an infant through the first year of life. It is a completely sufficient form of feeding during the first 6 months of life; solid foods are added to complement formula feeding during the second 6 months.

Commercially available formulas come as “ready to feed,” liquid concentrate, or in powder form. It is important to prepare the formula exactly according to the directions on the container. Sterilizing (boiling) water to be added is not necessary.

In general an iron fortified and cow’s milk based formula is preferred. Iron has multiple functions in the body other than for oxygen carrying capacity. Rapidly growing infants deplete their iron stores by 4-6 months of age; a constant source of this mineral ensures optimal health and nutrition and growth. The amount of iron in baby formula usually is not associated with gastrointestinal distress (constipation, colic, etc).

In the hospital, the infant may be on an arbitrarily set schedule. However, most of the time a baby would prefer to be “demand” fed. There is no physiologic reason (for most infants) that a baby needs to be fed any sooner than 2 hours (timing from the beginning of the last feeding), nor any longer than 4 hours. Most bottle fed infants will feed in this 3-4 hour corridor.

Babies gobble formula rapidly. Stay ½ to 1 ounce a head of the baby. (For instance, if the baby is taking 2 ounces on average, put 2 to 2½ ounces in the next bottle). Babies have inherent hunger and thirst mechanisms and will drink to satiety. Burp frequently during the feeding, and when done place the infant in the crib on his/her back, not on the stomach or side. Additionally, you may want to elevate the head of the crib 1-2 rungs for comfort.

There are a variety of commercially available infant formulas; for most infants and mothers, a cow’s milk based formula, such as Similac or Enfamil, is the standard. In certain instances, a soy protein based formula (Isomil, Prosobee) or a lactose free formula may be recommended. Additionally there are special “elemental” formulas with significantly pre-digested protein and fats and carbohydrates that are available, as well as formulas with more concentrated calories (the average formula delivers 20 calories/ounce).

SAFETY

Your baby needs full time supervision and protection. Accidents occur more often as infants begin to roll over, crawl, and grasp. The only place a baby is safe is in his/her crib or playpen.

Infants must always be placed in a rear facing and properly installed car seat in the back seat when traveling. Although it may be difficult to see the infant, placing the car seat in the passenger side seat with or without an active airbag system is dangerous.

Don't leave an infant unattended on a changing table or bed or in the bath.

Don't leave an infant unattended with a small child or pet.

Don't clutter the crib with toys or any objects. Toys should be too large to swallow and too tough to break, and without sharp edges or points. Be wary of cords, harnesses, soft pillows as smothering threats.

Don't smoke in an infant's presence.

Pacifiers should be sturdy and made of one piece.

Check the temperature of the bath water before immersing the infant; pre-setting your hot water heater to 120 degrees or below will prevent scalding injuries.

Always call a physician if there is a question about a baby product or piece of equipment.

POISON CONTROL: 1-800-222-1222

REFERENCES

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www.healthychildren.com American Academy of Pediatrics

www.chop.edu Children's Hospital of Philadelphia

excellent section on immunizations