

Growth & Development

Birth to 3Month



PHYSICAL SKILLS

- Raises head & chest when on stomach
- Stretches & kicks on back
- Opens and shuts hands
- Brings hand to mouth
- Grasps and shakes toys

SOCIAL SKILLS

- Begins to develop social smile
- Enjoys playing with people
- More communicative
- More expressive with face & body
- Imitates some movements & expression

SENSORY SKILLS

- Follows moving objects
- Recognizes familiar objects and people at a distance
- Starts using hands and eyes in coordination
- Prefers sweet smells
- Prefers soft to coarse sensations

BREAST FEED



- Give mother's milk to every baby **immediately after birth.**
- Every mother should get **6 months leave for childbirth and breastfeeding.**
- Sunlight is a good source of vitamin D which helps in building immune system. Hence, exposure to sunlight for a good amount of time is recommended.
- On 10th of life, baby's weight must be nearly same as birth weight .If it is very less than that, the baby may not be getting enough milk. It is an emergency. Meet doctor and discuss.
- "Breastfeeding is not a choice, it's a responsibility"
- Breastfeeding is helpful in preventing various illnesses like diarrhea, malnutrition, anemia, pneumonia, dental caries.in the long term, breast fed babies have less chances of developing allergies ,obesity and have more IQ.
- Breast feeding should be started within one hour of birth. Milk in the initial 3 days is very beneficial and also works as immunization, as it is high in immunoglobulin content.
- **No prelacteal/paralacteal feeds, no water for an initial six months. No bottle/ no pacifiers.**

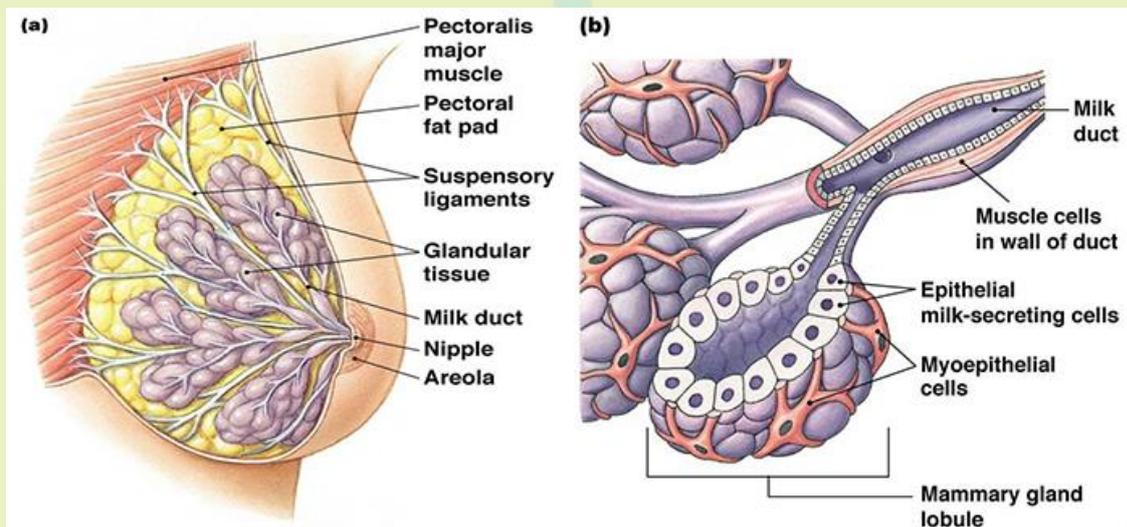
BREAST MILK CAN BE INCREASED IN MONTHERS IN THE FOLLOWING MANNER-

1. Take 4 meals apart from breakfast.
2. Eat all type of food that you like.
3. Take a total rest for 6 months.
4. Have happy mind.
5. You must remember caring is more important than worrying.

BREAST MILK- THE BEST MILK FOR THE CHILD-

- Breast milk for the babies -6 months exclusively then till 2 years with complimentary food .
- Multiple benefits of breastfeeding.
- composition of breast milk tailored for human babies; preterm milk for preemies.
- Breast milk production (prolactin reflex) and breast milk let-down (oxytocin reflex) require effective and frequent suckling.

- Breast feeding technique and skills should be taught to mother; correct positioning ensures good latching .
- Feed the baby when an it demands for the mother's milk.
- The nipples and breast problem should be prevented and managed timely.
- Low milk transfer may be real or perceived ascertain and manage.
- All mothers should know manual expression.
- Artificial feeding is disadvantageous.
- Breast milk is the first choice milk for NICU babies.



TIPS-

Room temperature: freshly expressed breast milk can be kept at room temperature for up to 6 hours. If you can't use the milk quickly or the room is especially warm, transfer the milk to an **insulated cooler:** refrigerator or freezer.

Insulated cooler: freshly expressed breast milk can be stored in an insulated cooler with ice packs for up to 1 day. use the milk or transfer the containers to the refrigerator or freezer.

Refrigerator: freshly expressed breast milk can be stored in the back of the refrigerator for upto 5 to 8 days.

Freezer: freshly expressed breast milk can be stored in a standard freezer for upto 3 to 6 months and in a chest freezer upto 6 or 12 months .place the milk in a the back of freezer, not at the door. Always store milk in a steel container only. don't use bottle for storing milk. Stored milk should be fed to the baby using a small spoon.

How long will expressed breast milk remain unspoiled?

- In room 6 hours
- In insulated cooler one day
- In refrigerator one week

Avoid feeding babies from a bottle as this could lead to serious illness.

Signs of Correct Nursing

- Your baby's mouth is open wide with lips turned out.
- His chin and nose are resting against the breast.
- He has taken as much of the areola as possible into his mouth.
- He is suckling rhythmically and deeply, in short bursts separated by pauses.
- You can hear him swallowing regularly.
- Your nipple is comfortable after the first few suckles.

A) HOW DO I KNOW THAT I AM GETTING ADEQUATE BREAST MILK

The following signs will be help mothers to confirm that things are going right. This format has been adapted from the Denver Lactation Program.

- The breasts got full and firm on the 3rd or 4th day after delivery.
- The baby latches on the breast with difficulty
- The baby sucks vigorously for the last 10 minutes per feed.
- You can hear and sucking and swallowing sounds while your baby feeds.
- The baby feeds every 2-3 hours & has around 8 feeds in 28 hours. The aby has only 1 long interval upto 5 hours at night.
- The breasts feel full before feeds and soft after the feed.
- There is no soreness of nipples and no pain while feeding.
- The baby passes several golden yellow soft stools every day.
- The baby passes urine a minimum of 6 times per day.
- The baby seems satisfied after each breast feed.

B) Family Pressures to Bottle Feed



My mother-in-law did not nurse her children and feels very uncomfortable with my nursing. She's supportive in her way but wants to feed my two-week-old a bottle. Should I give in and let her do this?

It's more important to establish and maintain your breastfeeding relationship with your infant right now than it is for your mother-in-law to feed her.

Try suggesting other ways to bond with her grandchild, such as cuddling her between nursing sessions, taking her for a stroll, bathing her, or changing her diaper.

Explain to her how important it is for you to breastfeed exclusively, point out the many advantages breastfeeding provides for your baby, and ask her to help you out by respecting your wishes in this area.

C) Possible Problems: Inverted, Flat, or Pierced Nipples



Inverted or Flat Nipples

One breast characteristic you should certainly point out to your obstetrician and pediatrician is inverted or flat nipples. Inverted nipples retract inward toward the breast instead of protruding out when the areola is gently squeezed. Flat nipples neither retract nor protrude but remain more or less flat. When not compressed, some inverted nipples appear normal. Others contain a small dimple or may have a clear indentation at all times. You can test your own nipples by gently compressing the areola about one to two inches behind the nipple. If your nipples draw inward or remain flat, tell your obstetrician and pediatrician.

Inverted nipples, and to a lesser extent flat nipples, can create a problem during breastfeeding by making it more difficult for the baby to properly latch on to the breast. In some cases, inverted nipples may actually impede the flow of milk. They are also more prone to injury of the nipple surface. Fortunately, a woman with inverted or flat nipples can still breastfeed if her nipples can protrude outward with stimulation. In addition, inverted and flat nipples sometimes become sufficiently everted, or normally protruding, on their own during

Pregnancy, so that by the time the baby is born, breastfeeding can proceed without problems. Even if the nipples don't evert on their own, this characteristic should not prevent most women from successfully breastfeeding their children.

Some methods used in the past to correct inverted nipples during pregnancy may actually reduce breastfeeding success and are no longer routinely recommended. These include using breast shells—plastic cups with a hole in the center that are pressed against the breasts, leaving the nipples exposed. (Breast shells may be helpful after childbirth, although their benefit has not been proven in studies.) Manual exercises to encourage the nipples to protrude, called nipple rolling,

have no effect. Experts now agree that it is best to wait until after childbirth to address inverted nipples—but your medical support team certainly should be informed about your situation to better guide you.

Pierced Nipples

In most cases, pierced nipples do not interfere with breastfeeding, though any rings or studs should be removed prior to a breastfeeding session to prevent choking. If your piercing became infected at the time of the piercing or later, inform your doctor. Such infection, as well as any scarring that may have occurred, can make nursing more difficult. While breastfeeding, some of your milk may leak through the pierced hole. This is usually not a problem, but if you have any questions, be sure to ask your pediatrician or a lactation specialist to check that your baby is nursing well.

D) Twins and Other Multiples



If you are the new mother of twins, triplets, or a larger number of multiples, you may worry about how you will manage to breastfeed them all. If you have twins, you can breastfeed them at the same time by holding one baby at each side in a football hold or by cradling both infants in front of you with their bodies crossing each other. You may also feed one baby using a football hold and the other in a cradle position. You can experiment and find the positions that work best for you.

You may need to express breast milk as well as breastfeed, since multiples are frequently born prematurely and require special care. A hospital-grade electric breast pump will help maximize your milk supply until your babies have fully adjusted to breastfeeding and are gaining weight appropriately. Your lactation specialist, local Mothers of Twins club, or La Leche League can offer advice on where to find a pump and provide other helpful information. Your pediatrician will continue to monitor your babies' weights to make sure each is getting an adequate amount of breast milk to ensure proper weight gain.

If you have triplets, you can breastfeed them as well. But do not be discouraged if your pediatrician recommends supplementing feedings with formula. You might find nursing two of your babies at a time and giving formula or expressed breast milk to the third works the best. At the next feeding, give the formula to a different baby. All three (or more) babies should have a chance to breastfeed. And it's especially important for you to get adequate rest, eat a good diet, and have good help with household chores and baby care to establish and maintain a milk supply for all of your babies. One estimate found that breastfeeding twins may require an additional 1,500 extra calories a day!

2) CARE OF NEW BORN

UMBILICAL CORD

the umbilical cord usually fall down between 5-10 days after birth. The cord should be kept clean &

dry. Air exposure helps with drying & separation so keep the nappy/diaper folded down below the cord area. Antiseptic powder (Neosporin) needs to be sprinkled over the cord only when it is infected, consult your paediatrician for it.

EYE

a bit of mucus collection is normal & only needs to be wiped with boiled water & cotton wool. A persistent sticky eye with redness indicates conjunctivitis for which you should consult your doctor .if your baby's eye is continuously watery he may have blocked duct it is a common condition& more than 90% of blocked duct opens up by 12mnth of age. this is treated by lachrymal massage for which you can take your doctor's help.kajal /surma should be avoided because of risk of injury/infection to eye.

NOSE

a blocked nose/stuffy nose is common & normal in young infant.it usually settles over the first few months, you don't need to clean the nose rottenly. if it irritates the baby than only you can put normal saline drops in nostril.

MOUTH

routine cleaning of mouth is not necessary .if it is thickly coated than can be cleaned with wet mersilin cloth or glycerine. A persistent white curdy coating indicates fungal infection for which you have to consult your paediatrician.

EAR

routine cleaning of ear is not required .Ear buds are not recommended as they are harmful to your baby.

NAPPY

use cotton nappy is advisable which should be washed with a simple detergent/soap. Diapers/pampers are convenient but in general use its use should be restricted for an outing or an occasional night.Babies are at higher risk of developing nappy rash with diapers & may be urinary infection in future as they tend to trap the heat &humidity .

SKIN

A baby should be bathed with a non-medicated soap/synthetic syndet. others like shampoo, creams,& powder are not recommended.

Transient skin rashes are common & may be treated with baby lotions.

The scalp often has a scaly rash resembling dandruff called cradle cap which settles down in first few months. If it is dense they can be softened by oil application .in sever cases visit your paediatrician

New born skin normally does not require any ointment/lotions. Especially avoid the applications of any greasy substances since this will almost always block the small sweet gland & lead to pimples or a heat rash,if the skin starts to become dry & cracked than apply baby lotion.

Avoid talcum powder as it cause irritation to skin pour & may cause a serious chemical pneumonia if inhaled into lungs.

BOTTOMS

After wet diapers are removed, just rinse your baby's bottom off with a wet washcloth or a diaper wipe. After removing soiled diapers, rinse the bottom under running warm water or in a basin of warm water if your baby tends to get diaper rash.

After you finish the rear area, cleanse the genital area by wiping front to back with a wet cloth. In boys, carefully clean the scrotum; in girls, the creases of the vaginal lips (labia).

FINGERNAILS & TOENAILS

Cut the toenails straight across to prevent ingrown toenails, but round off the corners of the fingernails to prevent unintentional scratches to your baby and others. Trim them weekly after a bath when the nails are softened. Use clippers or special baby scissors.

BATH

- Bathe your baby daily if you would like, especially in warm weather.
- Keep the water level below the navel or give sponge baths until a few days after the cord has fallen off. Submerging the cord could cause infection or interfere with its drying out and falling off. Getting it a little wet doesn't matter.
- Wash the face gently. Chemicals from milk or various foods build up and many cause a rash. Also, rinse off the eyelids with water. Don't be concerned about hurting the anterior fontanel (soft spot). It is well protected.
- Wash the genital area. However, when you wash the inside of the female genital area (the vulva), never use soap. Rinse the area with plain water and wipe from front to back to prevent irritation. This practice and the avoidance of any bubble baths before puberty may prevent many urinary tract infections and vaginal irritations. At the end of the bath, rinse your baby well; soap residue can be irritating.

GENITAL CARE

GIRLS:

- During the daily bath and after stool. The baby needs to be cleaned with plain water and cotton wool the labial folds need to be separated gently for cleaning. The cleaning should always be 'front to back' so that the stool is not pushed forward in the urinary area.
- Vaginal Discharge. As the maternal hormones decline in the baby's blood a clear or white discharge can flow from the vagina during the latter part of the first week of life. Occasionally the discharge will become pink or blood tinged (false menstruation). This normal discharge should not last more than 2 or 3 days. No treatment is required.

BOYS:

- Most uncircumcised infant boys have a tight foreskin that doesn't allow you to see the head of the penis. This is normal. Over the next 5 to 10 years the foreskin will naturally separate from the head of the penis without any help from us. It gradually loosens up (retracts) little at a time. Normal erections during childhood probably cause most of the change by stretching the foreskin. The penis should be washed from outside during a bath. Pulling back the skin is harmful. The foreskin of the penis is usually tight in infancy and forcibly pulling back the skin is harmful. The foreskin gradually loosens over the first few years of life in 97% of boys. Children, should be taught how to clean the penis during the bath.
- Routine circumcision of the penis is not recommended for medical reasons because the only benefit of circumcision is a slightly lower incidence of urinary infection in circumcised boys. For this reason if you choose to do it, it should be for personal, social or religious reasons and not only for medical reason.

BREASTS:

- Swollen breasts are present during the first week of life in many female and male babies. They are caused by the passage of female hormones across the mother's placenta. Breasts can remain swollen for several weeks. Never squeeze or massage to remove the "milk". This can cause infection. Be sure to call your doctor if a swollen breast develops any redness, streaking, or tenderness.

SLEEP:

- Always put a baby to sleep on the back or side.
- A baby must never be put to sleep on the first few months of life because a prone position can occasionally smother a child. Putting a baby to sleep on the stomach has been linked to "cot deaths"

BABY'S ROOM:

- Keep clean and well ventilated. A moderate fan or a mild AC (temperate 23 deg or more) are both ok.
- Keep the area dust free and avoid carpets and stuffed toys in the baby's crib
- Avoid pets in the baby's bedroom

NEWBORN BEHAVIOUR

The new-born's behaviour is a source of wonder and amazement for most parents. Every baby is unique and different and has own her own characteristics. There are wide variations in a child's behaviour and some of these differences are discussed below.

INFANT TEMPERAMENT:

One of the wonders of parenting is to discover your baby's unique temperament and personality. Each baby is different. Parents baby sleep from 18-21 hours in the initial weeks.

CRYING

- A certain amount of crying in a baby is normal. crying is the communication channel for the mother soon understands the baby's different types of cries: whether the crying is due to hunger, fussing because the child wants to be held or when the nappy is wet: Babies can usually be comforted by frequent feeding, holding, rocking, changing the nappy etc.
- Sometimes crying can be excessive and inconsolable. In such cases one needs to confirm adequacy of breast milk by checking the baby's weight gain. If the weight gain is adequate, the child may need to be checked to confirm that there is nothing physically wrong with the baby. If the child appears normal, one normally attributes the crying to gas/ colic. Medicines for 'gas' or 'wind' is best avoided. in severe cases, you may use colic Aid or Dimol drops, 5 drops, up to 3 time a day if required.

VOMITING OR REGURGITATION OF MILK

- Regurgitation is normal in babies, proper burping after feeds and keeping the baby propped up after feeds usually reduces the vomiting.
- Some babies vomit several time a day. This is because of a condition called 'reflux'. Such babies tend to bring up milk because the valve between the stomach and the Oesophagus (food pipe) is loose in these
- infants. this permits the milk to move and don the oesophagus during or even a change in position. This condition can be treated with medications are needed only if the vomiting is severe or persistent or associated, vomits which are green or yellow, or vomiting which is associated with a poor weight gain.
- Vomiting which is persistent, vomits are green or yellow, or vomiting which is associated with a poor weight gain is abnormal and needs to be checked by a doctor.

URINE:

- Babies often pass urine at the of the time of delivery and this sometimes goes unnoticed. Babies must have at least 1 wet diaper in the first 24 hours.
- On the 2nd day, the baby may pass urine as infrequently as once every 8-12 hours. by 3rd - 4th day the baby passes urine 4-6 times.
- Thereafter a baby must pass urine a minimum of 6-8 times and the urine be pale yellow or colourless

STOOLS

- In a breast fad in the first 2 day babies pass a dark green - black sticky stool. this is called meconium. Meconium is made up of thick intestinal secretions and mucus. Meconium is passed only a few times every day
- On the 3rd day, as the milk intake improves, the changes colour and it becomes yellowish green. The stools are often loose, frothy, sticky, windy and watery like in a diarrhea. The is transient and settles in a couple of days. This is called "transitional diarrhea"
- By the 4th or 5th day, the stool change in to typical breast milk stools These are typically golden yellow, soft to semisolid or even watery, often sticky and often have green strands of mucus. A baby typically passes a stool after watery, often sticty and frothy and often

have green strands of mucus. A baby typically passes a stool after each feed and this may be 6-8 times per day or more.

- Loose stools are usually normal. Most infants on breast feed pass 8-10 golden yellow semi-solid stools. They are sometimes green, frothy and sticky. The stools are usually passed soon after the baby has fed.
- The tone of an infant's rectum is a bit loose. As a result babies often leak a bit of stool with each urination cough or sneeze. This leaking of stools may take place an additional 5-6 times per day.
- A doctor must see a young infant on cow's milk or formula feeds who passes loose stools, particularly if they have a change in colour, character or consistency. This could be infection, allergy or milk intolerance.

CONSTIPATION

- Although most infants on breast feeds pass several semisolid stools, many infants get constipated particularly in the second month. It is not uncommon for an infant to pass a stool as infrequently as every 4-5 days. This does not need treatment.
- Formula or Fresh Milk fed infants often pass firm brown stools. Most pass stools less frequently than breast fed infants.

FUNNY SOUNDS, FACES AND MOVEMENTS:

- Some findings in new-borns worry parents. Most of these are harmless and disappear in 3 or 4 months. These include trembling of the chin, a quivering of the lips or a trembling or jitteriness of arms and legs.
- Rarely a baby can develop convulsions or fits. This is recognised by a rhythmic movement of the arms or legs, often associated with abnormal movements of the mouth and face and eyes. Convulsions continue despite holding the baby. In contrast, the normal jitteriness, which many new-borns have, stops the moment you hold the baby.
- Most new-borns hiccup, yawn and sneeze. Babies often breathe irregularly and seem to have a pause between the breaths. They often make throaty sounds and gurgling sounds or regurgitate milk and burp.

RECOGNISING AN ILLNESS IN AN INFANT

Most symptoms in a baby are self-limiting and settle with time. Yet, newborns are very vulnerable and illness must be recognised by parents. Inform your doctor if you have any concerns regarding your baby's health:

- **DOES NOT LOOK OK:** Fast breathing, breathlessness, looks pale or blue, refuses to feed, sleeps too much or gets irritable, remains lethargic or inactive.
- **FEVER:** more than 100 degree
- **JAUNDICE:** it is not uncommon for babies to get a tinge of jaundice on the 3rd day after birth. In most cases, it settles in a day or two. Some babies develop jaundice after they go home. If

the baby's eyes look slightly yellow it is probably normal but if they are deep yellow and particularly if the skin look yellow, you need to contact a doctor.

Use tap water without any soap or a non-drying soap such as Cetaphil. Don't forget to wash the face; otherwise, chemicals from milk or various foods build up and cause an irritated rash. Also, rinse off the eyelids with water.

