



“NEW BORN”

Instructions for use



Ugo Facchetta (1930 - 2005)

“Every child comes with the message that God is not yet discouraged of man”.

Rabindranath Tagore (1861 - 1941)

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Preface

The aim of this brief guide is to provide a sort of accessible operative instructions for all those parents who are expecting a newborn, in order to facilitate the admission of the pregnant to the maternity unit, to safeguard the newborn health and to attend stay of both mother and neonate upon delivery. We, also, intended to favor a relaxed and welcoming environment, so that to encourage early contact between mother and baby after birth and to help parents to create the right atmosphere for bonding and breastfeeding to be established.

For this purpose, we described the several phases of the post-natal adaptation, listing all the nursing cares that the newborn needs routinely, as well as the neonatal screening procedures to prevent severe metabolic or developmental disorders. In conclusion, some prophylaxis therapies, medication procedures and common hygiene measures are suggested to facilitate the ordinary management of the infant at home.



"Where there are children, there is a golden age"(Novalis 1772 – 1801)



Delivery assistance

Assistance upon delivery requires accurate measures addressed to facilitate the birth and safeguard the health of both the mother and the new born. Immediately after birth, the infant undergoes umbilical cord clamping and a general routine organ examination, being kept naked for a period not longer than a few minutes. Then, the neonate is placed in the adaptation room, close to the delivery area, that is equipped with a warming table and all the neonatal intensive care instrumentations. A visual and auditory appraisal is performed to determine whether any congenital anomalies are present, whether the infant has made successful transition from “water-breathing” to “air-breathing”, whether extent gestation, labor, delivery and analgesic or anesthetics have affected the new born and whether he or she has any signs of metabolic disease that was unsuspected.

Examiner attention is systematically concentrated on: cardio-respiratory systems (by evaluating several functional indicators, such as skin color, respiratory rate, heart rate, femoral pulses and the presence or absence of heart murmurs, these latter carried out through auscultation); muscle tone and reflexes; abdomen palpation; observation of external genitalia and rectum; evaluation of extremities, hip dislocation and back; measurements of head circumference and length; weighing; checking of fontanellas, neck and mouth; eye and neurological examination. To five objective signs so evaluated is assigned a set of total points, referred as *Apgar* score, to be registered in the clinical dossier, measured respectively at 1 and 5 minutes after birth. A score between 7 and 10 indicates an infant in perfect condition, while lower points reveal risks of asphyxia or suffering conditions.

Premature, as well as full term infants, receive mandatory treatment at birth with *vitamin K* by intramuscular route, to avoid hemorrhagic disease, and with ophthalmic antibiotics to prevent eye infections. An identification band is applied to the ankle of each baby, labeled with the identity data in accordance that worn by the mother.

The healthy newborn is put into contact with his (or her) mother as soon as possible, since this approach is the ideal way for him (or her) to adapt to life outside the womb. Mother's cuddles, as well as the physical contact, stimulate his (or her) respiration, the oxygenation of the blood, regulate body temperature and induce a general feeling of well-being in the neonate. In this relaxing environment, the baby recognizes his (or her) mother warmth, her voice and smell, while, in turn, the mother is encouraged to develop her ability to identify her baby's needs. When he (or she) is left on his (or her) mother abdomen, the neonate instinctively seek out the breast, being guided by the smell. This approach stimulates the production of oxytocin and, thus, the onset of lactation.

Only in case of birth by caesarean section or in particular situations requiring neonatal intensive care, is the newborn is put into the incubator and kept under the care of the neonatology unit nurses.





The preterm and the low birth weight infant



The “preterm or premature baby” term denotes children born before the 37th week. The expression “low birth weight infant” defines, instead, independently of the duration of the pregnancy, a newborn who weighs, at birth, less than 2500 grams. A birth weight small for gestational age and not correlated to a preterm delivery indicates, at last, a defect of intrauterine development, as happens in case of twin or multiple pregnancies, chronic fetal infections, serious maternal poor nutrition, excessive smoking or alcohol abuse. These babies belong, indeed, to the category of neonates for which the adaptation to the “new life” demands different times and modalities in comparison with those born at full-term. Considering that in the preterm baby most of the organs are immature and develop in line with postnatal evolution, particular attention has to be paid, in the course of the first days of life, to the cardio-respiratory function, that should be monitored constantly. Depending on degree of prematurity, the birth weight and the general health conditions of the neonate, it may be appropriate to transfer the preterm baby to the Neonatal Pathology Unit of our Department or to a dislocated Intensive Care Unit.

Rooming-in

The expression “Rooming-in” defines the prolonged and simultaneous permanence of the mother and her child in the same room, with the exception of the period required for medical procedures or for visits by relatives.

Such practice may begin immediately after the delivery, as soon as the maternal competence to provide adequate care to her child is ascertained.



Scientific studies have widely documented that this proximity favors the mutual contact between mother and child, reduces crying episodes, facilitates breast-feeding on demand.

Sometimes, the mother needs a prolonged rest, especially after a Caesarean section or a delivery stimulated by means of suction cap.

The awareness that her baby is put into the hands of nurses often renders the mother more anxious. Regardless, the mother should take advantage of her child frequent naps, in order to have rest, herself.

The Rooming-in method, even if apparently tiring, is generally appreciated by the majority of women, who show greater confidence with their baby and more autonomy, after their discharge from the hospital. However, the Nursery remains a service available in any case of indisposition or impossibility for the mother to room-in.

The Nursery Staff

Professional nurses are assigned to attend constantly all the newborns, to support the mothers in breast-feeding and in the routine management of their babies. The nursing staff is always available to supply information inherent to any kind of needs or practical problems, such as medication of the umbilical cord, bathing or other hygiene measures, approach to lactation supports, collection or storage of expressed breast milk, prevention of cracked nipples, avoiding breast engorgement or infections.



Neonatal screening tests

Before being discharged from the Neonatology Unit, all the infants routinely undergo several neonatal screening tests for congenital metabolic diseases, such as hypothyroidism, phenylketonuria, galactosemia, cystic fibrosis and adrenogenital syndrome, by a one-time heel prick-test. These congenital diseases, if not diagnosed early and, subsequently treated by simple means instituted shortly after birth, may lead to severe permanent injuries. The blood sample, generally referred to as a *Guthrie test*, is, rapidly, sent to the Screening Centre for Metabolic Disease situated in Milan; test results are delivered to our Pediatric Department within 10-15 days. In case of abnormal or questionable results, suspected infants are recalled for additional testing. No communication is provided to the family in the case of negative results.

Phenylketonuria

Phenylketonuria is a hereditary metabolic disorder with a prevalence of 1 / 4000-6000 live born neonates, in most of cases resulting in severe brain injuries. If diagnosed early and treated within the first weeks of life by an adequate dietary management, the infant metabolism and development will proceed regularly. In those patients affected by this disease, the metabolism of phenylalanine, an ubiquitary amino acid present in all animal or vegetal proteins, is defective and produces toxins that accumulate deleteriously in the brain, causing severe neuronal injuries.

Hypothyroidism

Congenital hypothyroidism is the most common hormone deficiency in neonates, with a prevalence of 1/3000 live-born babies. It occurs sporadically and is due to the absence of thyroid; its function may be also impaired because of an intrauterine development deficit. The classical signs of newborn hypothyroidism are difficulty in temperature control, skin mottling and dryness, reduced tone, poor feeding, jaundice, enlarged tongue and mental retardation, they are usually absent in the first 4-5 days of life. If the disease is suspected, ability to synthesize thyroid hormones has to be evaluated.

Early daily treatment with missing hormones leads to the suppression of clinical symptoms mentioned above, and normalizes metabolic processes, preventing injury to the child's psychic development.

Cystic Fibrosis

Cystic Fibrosis is a congenital anomaly affecting out of 1 / 3500 live born infant. Its principal pathological sign is poor nutrient absorption, resulting from pancreatic failure and chronic pulmonary disorders. Early detection allows to improve patient survival and permits the clinical team to advise the parents as to the genetic risks that may occur in case of further pregnancies.

Adrenogenital Syndrome (21-hydroxylase deficiency)

Adrenogenital Syndrome is an autosomal recessive disorder due to deficit of the enzyme 21-hydroxylase, characterized, in most of its clinical forms, by low plasma level of steroid hormones, adrenal insufficiency with severe or moderate salt wasting and subsequent abnormal electrolyte amounts, adrenal hyperplasia and ambiguous genitalia. This disease affects 1 / 10.000 live born neonates. Treatment involves fluid and electrolyte therapy as well as corticosteroids administration.

Other screenings

Upon birth, further clinical tests are performed to check for hip dislocation, red reflex for the diagnosis of congenital cataracts, and auditory defects. Hips are also examined by ultrasound within the third month of life.



Oral Medication



At the moment of the discharge from the Neonatology Unit, clinicians recommend to the parents the oral administration to the child of vitamin D, along with the entire first year of life, to prevent the occurrence of rickets. Children on an exclusive breast-feeding regime should also receive vitamin K, orally, for the prevention of hemorrhagic diseases, beginning this prophylaxis program from the 2nd week until the 3rd month of life. Later on, the Pediatrician of your choice will suggest to supplement the baby's feeding schedule with fluorine integrators.

The discharge from hospital

If no contraindications exist for either the mother or the baby, they are generally discharged from the Maternal and the Neonatal Unit on the 3rd day after the delivery, but never before that the neonate completes 48 hours of life, while their stay is usually prolonged for an additional two days in the case of Caesarean section. The neonatology team provides the parents with the regional booklet containing general information and guidelines about the pregnancy, the delivery and the first days of the neonatal life. Clinicians will be available to answer any parental questions and to encourage and reassure the mother in such a delicate phase of approach to the new life. In particular cases, the baby may be inserted in some follow-up programs, eventually exerted in collaboration with other specialists.



Baby at home

The attendance at home of a child is up to the family Pediatrician or to the Medical Guard (in the pre-festive, festive days and the night). On indication of the clinician or in urgent cases it is possible to reach upon the Emergency Unit of the hospital.

The environment



Considered the difficulty of babies to regulate their body temperature, it is opportune to pay particular attention to the climatic characteristics of the premises in which the newborn stays or sleeps. The domestic room temperature does not have to be markedly elevated and the baby does not have to be excessively dressed. The ideal room temperature is approximately 20-22 °C in the first days of life and, subsequently, 18-22 °C with a humidity rate equal to 55-60%, that can be kept constant through the equipment of commercial humidifiers. The bed, or the cradle, should be equipped with anti-suffocating rigid mattress and deprived of pillow; it must also be held far from heat sources. The baby does not have to be wrapped closely in blankets; it should be avoided to have him or her to sleep in prone position or on sideways, with the exception of precise medical indications. The furnishings should be easy to clean up and to wash. The baby's clothes have to be comfortable; it should be avoided to put the baby's skin into direct contact with wool, synthetic fiber materials and dangerous accessories like pins, buttons and hooks that could hurt him or her, be indeed swallowed or inhaled with consequent risk of suffocation.



SIDS

SIDS (Sudden Infant Death Syndrome) also known as "cot death" or "white death" is the prompt and unexpected death of an infant, generally occurring during the first year of life, whose causes remain still ignored.

It has been statistically reported that this syndrome is the most common reason of post-natal mortality during their first year of life, its estimated incidence being about 1 in every 1000 live-born.

National information and prevention campaigns have demonstrated that the measures described below are associated with an approximately 50% risk decrease of SIDS:

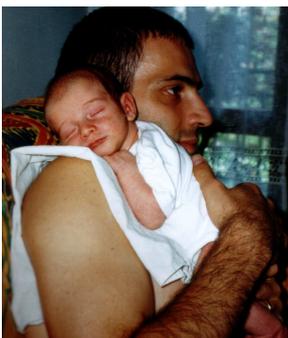
- Your child sleeps more safely if he/she lays down on his/her back
- You don't smoke and expose your infant to passive smoke
- You keep heating at less than 20°C and humidity condition within 50-60%
- You don't wrap your baby in too many blankets or heavy cloths
- You don't have him/her to sleep between parents

Going out

By the discharge from the hospital, the baby can be carried outside for a daily walk. Initially, it should take not more than a half of hour, that could be gradually prolonged to two or more hours a day. It should be avoided to expose the baby to ill people, to enclosed, crowded or high traffic density spaces. In winter, the warmer hours are recommended, in summertime those fresher are preferable. Sunlight exposure constitutes a valid tool of prevention against the rickets, but the baby should be exposed to sun with great precaution and for short periods. During the walk, starting from the 2nd-3rd month of life, the child can be transported in the baby carrier and, later on, in the apposite backpack.



Baby on board



Compared to adults, children, especially the youngest, are more frequently subject to the traumatic effects provoked by car accidents. These latter, in particular, involve at least 8000 children a year, in Italy, with unfavorable outcomes in approximately 100 cases. The occurrence of car accident trauma may be reduced of about 60% by a correct use of the baby transport devices. Being transported on the arms of an adult seated on the front seat, the baby is exposed to a serious risk.

As demonstrated by the high number of infant patients observed at the Pediatric Emergency Unit, even a short lasting unsafe travel by car may results in severe injuries for the baby. In fact, in case of unexpected car crush, the body of the adult embracing the baby may provoke itself serious lesions to the child, since it would function as unconscious air-bag.

The right site for positioning of the child is on the rear seats. Babies weighing up to 10 kg need apposite car seats, facing opposite to the driving direction, since, in case of crush, the major force of collision would be exerted against the back of the child.

It would also prevent the child's thorax and the abdomen to be subject to the belt pressure and it would avoid the prompt projection of his or her head ahead.

Therefore, positioning of the baby on the front seat is not safe and is prohibited in all those cars supplied with airbag protecting systems.

For particular low weight babies, it is advisable the use of appropriated carrying cradle to be located on the rear seat. For child older than one year, the car seats are larger and may face the driving direction, though they should be located, in any case, on the rear seats.

Traveling



Any car, train or airplane is suitable to transport your baby, even for long traveling. However, you should avoid to expose your baby to sudden temperature or altitude changes and respect his or her daily biological needs: eating, resting, cares just like at home. If you plan to leave to an exotic or abroad place, with particular climatic features, you should gain knowledge of adequate safety measures from your Pediatrician, prior to departure. If safeguarded, babies can stay either at seaside or mountains, but not over 1500-1800 meters.



Hygiene cares

Infant skin, especially in the first age of life, is somewhat thin and delicate, thus requiring particular care in order to avoid reddening, irritations, cracks or infections. All its parts need delicate cleaning cares, to be achieved not necessarily by use of sterile devices, neither antiseptic detergents; it is sufficient to use commercial products that do not alter the physiological pH and to dry the skin with soft clothes. Anyway, food or sweat deposits should be always removed from your child's skin since they could irritate it. Anyone who takes care of a baby must respect rigorous hygiene measures, washing his hands before and after handling him or her. The child has to be changed every time he or she drops off, even if it happens after meal. In such case, keeping him or her too long laid down on the changing table may induce regurgitation of the meal, therefore he or she should be changed rapidly, but without being shaken. The genital and anal areas have to be frequently deterged, since prolonged contact with excrement can easily provoke reddening and irritations. In particular, female genitals have to be washed by delicate removal of faecal residues from the vulval labia, moving from

the front part towards the anus. In male children, the retraction of the prepuce is not necessary and should be avoided not to cause traumatic lesions to phallus; Ears have to be cleaned only externally, without inserting any cotton stick into the auricular tube; long nails should be cut, not before the 2nd month of life, with appropriate scissors avoiding to cut them too short, particularly in proximity of edges.

Eye care



Eye secretion, due to deficient drain through the naso-lacrimal scholars, frequently occurs in the baby especially when he or she gets up in the morning. These secretions have to be removed by sterile water wet clothes, moving from the inner towards the outer edge of the eye. These secretions differ from ocular infections, characterized by signs such as palpebral edema, bacterial conjunctivitis, sore and pink eyes and that

require pharmacological treatment, although only a little percentage of babies (1-2%) fortunately shows them between the 2nd and the 13th day of life.

Bathing

Baby usually enjoys bathing. With passing of the months, he or she feels the contact with water like a game. Parents should dedicate part of their time in order to render a routine hygienic care a moment of pleasure. However, the baby can be completely immersed into water only when the umbilical cord has already fallen; bathing, not requested necessarily every day, should be taken preferably before the evening meal: it may favor relaxing and sleeping. The bathroom should



be warm to approximately 24-25 °C, especially in wintertime, eventually by the use of electric radiator, and the water temperature ha to be kept at about 36-37 °C. The baby should be slowly dipped into water, being supported under his or her armpit; have your baby's head to laid on your arm, while your opposite hand is washing his or her body; finally clean your baby's face with a humid towel.

The umbilical cord

The umbilical cord falls spontaneously within 7-14 days from birth; before drop, it should be kept protected from the air by means of a sterile dry gauze, held possibly upside and out from the nappy. It has to be also disinfected twice a day, with a sterile gauze wet by alcohol disinfectant and then be dried. Hear your Pediatrician if umbilical cord fall does not occur within 14 days, or if it is still humid, bleeds, has bad smell or if the surrounding skin seems reddened.



Breast-feeding

Maternal milk represents the ideal nourishment for your baby. Easy to digest, it constitutes an effective tool of defense against infections and allergies. It is also rich of many factors that improve the cerebral development. Breast-feeding provides benefits even to the mother: suction stimulates the production of the hormone oxytocin, that in turn enhances milk secretion, as well as contributes to rapid restoration of the uterus size.

On the other hand, the hormone prolactin induces itself the production of milk, activating its synthesis from maternal fat deposits, and has a relaxant effect on mother's temper. Breast-feeding, therefore, helps to lose more quickly the weight gained during the pregnancy. Lactating women generally show lower incidence of breast or uterus tumors, as well as of osteoporosis. The initial secretion that the child suckles is not real milk; for 3-4 days, in fact, the mammary glands produce a light yellow liquid, named colostrum, richer of proteins and salts but poorer of sugars and fats than the mature milk.

The colostrum is nourishing itself and lightly laxative: it favors the elimination of the meconium, that is the fecal mass accumulated during the intrauterine life. After 4 or 5 days from delivery, the breast secretion becomes mature milk. Lactation onset generally occurs after 48 hours from the delivery; women at first delivery, or undergone to Caesarean cut, start it a few days later. Milk flow is promoted especially by the earliness and the frequency of the suction. The more the baby takes, the more is produced. Before and during the lactation the mother should not intake substances that enhance the production of milk. If the child is healthy and suckles regularly, it is recommended to feed him or her on demand, without insisting when he or she feels full, since the baby regulates by him/herself.



Babies generally receive 6-7 meals a day, every 3-4 hours. Very hungry babies eat abundantly every 4 hours since birth, while the lazy ones suckle less, the interval of time between each meal resulting shortened (every 2-3 hours).

Anyway, the mother should have her child to suckle on demand, when she notices him or her making frequent movements of the head and adduction of the hands towards the mouth, that can be marks of hunger.

Mother should be patient and resolute, without losing heart when the baby seems initially reluctant or unable to suckle. It often happens that, in the first days of life,



the child sleeps for very long time and refuses to access spontaneously to the breast: the prolonged sleep of the first days is a normal and transitory phenomenon. In such circumstance, it is advisable not to wake up the baby, unless more than 3-4 hours are passed since the previous meal. In any case, when breast-feeding is started, mother should avoid having her child suckling for more than 15-20 minutes from the same nipple. It is advisable to empty one breast at once, then offer the other before the

baby feels completely satiated. If the amount of your milk seems not to satisfy your child, try to increase the number of meals, never their extent (in the 1st month of life even small amounts of milk for meal are enough). However, when a partial lack of maternal milk is suspected, contact your pediatrician to pass to bottle-feeding.

Double weighing, before and after meal, should be avoided.

Quantity of breast milk varies in the course of the day and depending on the child. Double weighing can be useful only in the first times, when breast-feeding is still not regular, or mixed with bottle-feeding, or in case of poor growth, prolonged sleep or crying. It is preferable to weigh your baby once a week.

The expected increase of weight is 25-30g a day in the 1st trimester of life, that is 150-200g a week.

It is not necessary to supplement your breast-fed child with water, herbal infusions or other sweetened liquids.



It is important during the feed that the mother is in a comfortable position, that allows her to relax, seating down, supported by a cushion, while the baby is lying across her bust and facing her breast. So the baby will be able to receive in his/her mouth not only the nipple, but the most part of the areola, so to suckle easily and compress the entire area with his/her tongue rhythmically emptying the breast and activating the milk let-down reflex.

It is also useful to change frequently the position of the baby's lips, to avoid nipple cracking or skin hurts. In conclusion, it is recommended to empty completely both the breasts, alternating at each meal that to offer first. The mother should accurately wash her hands and, in particular, her breast with warm water either before or after feeding. Soaps or common anti-bacterial detergents should be



avoided on your breast skin, since they remove the natural protecting film of that delicate body part, as well as they risk to alter the maternal typical smell that attracts your baby.

At the end of the meal, dry well your nipples, to prevent their cracking. Nipple pain frequently occurs in the first days of breast-feeding, but it usually stops spontaneously, without taking any medications.

Nipple cracking



It may cause painful small fissures on the nipple, that could preclude breast-feeding, and is due to various factors: for instance, the friction caused by wrong or prolonged fixing of the child's mouth on the nipple, strong suction from an engorged breast, frequent wash with aggressive detergents, use of too tight bra, use of synthetic breast pad. However, the only effective approach to avoid nipple cracking is to favor the correct

positioning of the baby's mouth at the breast, while no useful preventive treatment exists. It is associated to a very intense pain, and for this reason the mother should offer to her child first the healthy nipple, since the initial suction is more vigorous. Medication of nipple cracking is advised only in the case of infection by Candida (reddened squamous skin, pruritus, intense or persistent pain).

Mammary engorgement and stasis

Mammary engorgement is a breast congestion that occurs generally after the first week of lactation, due to milk accumulation, because the frequency or the duration of the feeds are reduced. Engorged breasts are prevented by correct latching on of the baby during the suction; moreover, it is important to offer to the

child more often the affected breast. Engorged breasts appear tense, painful, reddened and hot. It may be useful to apply locally warm and humid patches (such as warm wet sponges, or warm water bags wrapped with a towel) or to massage delicately the affected area to favor the release of milk.

The mastitis

Mastitis is an infection of one or both the mammary glands, caused by pathogenic bacteria (typically *Staphylococcus aureus*). There are signs of local inflammation, also present in the breast engorgement, analogous to those of the influenza, such as general sickness, fever and mammary tension, high temperature and reddening of the breast skin. In these cases, it is necessary to suspend the feeding from the affected breast, that can be, however, expressed manually, while the baby keeps on suckling from the healthy side. Although mastitis requires bed rest, medication for the pain and antibiotic treatment to neutralize the infection, it does not alter the milk composition, so it is not needed to stop breastfeeding.



The nutrition of nursing mothers



A varied and balanced nutrition is recommended to the mother who lactates, without any dietary supplementation or restriction. It is not necessary to give up the alimentary habits taken during the pregnancy; however, it is suggested to limit the intake of spicy or peppery foods, that may cause flatulence or alter the milk taste. It is important to drink a lot of fluids, approximately two liters a day. Nicotine and high-alcoholic beverages are mandatory prohibited; wine, beer and stimulating substances (such as coffee, coca-cola, tea...) are not recommended, or have to be taken with extreme moderation, since all these products restrain lactation, reduce the daily amount of milk produced and also pass easily through the maternal milk, causing insomnia, bad temper or growth inhibition to the baby. No food or drink really stimulates milk secretion, that is instead promoted by the right and frequent latching on of the child to the breast. If the mother is under drug therapy, it is not always necessary to suspend the breast-feeding, but she should contact her doctor. Drugs should be taken preferably after the breast meal. A maternal strictly vegetarian diet, which excludes milk or egg intake, may induce anemia by privation in the breastfed child; the pediatrician of your choice should be informed in order to supplement you baby's lacking nourishment.

Breast-feeding in presence of maternal disorders

Common bronchitis, influenza, exanthema, cold, diarrhoea do not generally interfere with breast-feeding. Nevertheless, fever occurrence may reduce the production of maternal milk; in this case, a clinical appraisal of the mother is needed in order to establish eventual contraindications to lactation. No scientific reports showed any correlation between breast-feeding and the progression of myopia.

In the presence of labial affection by herpes, the mother should apply on her lips the apposite antiviral cream and avoid her baby to be infected by using a mask.

Breast-feeding should be avoided when the mother is affected by:

- acute infection from hepatitis B virus (excepted if she is healthy virus-carrier: in this case, her baby undergoes the specific vaccine treatment and may be breast-fed)
- infection from HIV-1 and HIV-2 virus (AIDS)
- state of severe weakening
- alcoholism and drug abuse
- diseases that require administration of drugs contraindicated for breast-feeding
- prolactinoma (in this case, it is recommended to suspend lactation for more than three months)
- infection by Herpes simplex at the nipples (if it affects only one breast, breast-feeding is permitted from the healthy side)
- active TBC (tuberculosis)

If the baby is affected by galactosemia, a congenital metabolic disease, breast-feeding is absolutely prohibited.

Physical activity

Breast-feeding is not compromised if the mother play a regular and light fitness activity, such as light gym, bicycle, jogging, starting from a few weeks from the delivery.

Bottle-feeding



Lovely nourishing may be provided to your child even if breast-feeding is not achievable. When the maternal milk appears not enough or available, bottle feeding is absolutely necessary. Commercial formula milk, liquid - ready for the use - or powder to be diluted with no gas low-mineral water, is available, all the nutritional requirements being respected. The composition of these formulas is quite analogous to that of the human milk, although the immunological and antibacterial properties of this latter remain, still, not artificially reproducible.

Whole-fat cow milk is not absolutely suitable for the baby, even when diluted.

A breast/bottle-feeding assortment should be attempted when the mother feels her milk is not sufficient more, offering the bottle to her child, preferably at the end of each breast meal. If the breast is not constantly offered to the child, she unfortunately risks her milk to turn progressively exhausted. Administration of fortified milk formulas is suggested starting from the 4th to the 12th month of life.

When not to worry

You do not have to concern if your baby shows:

- red spots with a central yellowish-white dot localized on his/her face or spread to the entire body: it is referred as to “toxic erythema”, and disappears spontaneously within the 4th-5th day of life
 - small white dots on the tip or the base of his/her nose, that represent sebaceous micro-cysts, named “neonatal milia”
- vascular red specks on his/her eyelids, at the root of the nose and on the nape: these are angiomas that tend to vanish spontaneously
- yellowish shade of the skin and the eye sclera, appearing from the 2nd-5th day of life: it represents “the physiological icterus”, that usually fades spontaneously within a few weeks; only in rare cases due to the presence of pathological factors, this phenomenon may requires specific treatment
- frequent sneezes, not associated to a cold, due to the hypersensitivity of his/her nasal mucosa
 - repeated stimuli to defecate, especially after each meal.

During the first 24 hours of life the baby releases the fetal meconium, then the subsequent fecal mass appears semi liquid, yellow-gold colored, sometimes green-shaded or punctuated with small white lumps. After the first weeks, the rhythm of the evacuations slows down, and the newborn defecates once or twice a day, sometimes less frequently; if your child does not seem disturbed, don't concern; on the contrary, if he/she appears irritable or nervous, you should consult the pediatrician of your choice

- hiccup or milk regurgitation after meal: in a healthy child, not affected by gastrointestinal pathologies, these phenomena are usual and do not induce any consequences
- irregular movements, sometimes associated with jolts and shakes, especially during the sleep: these are symptoms of the general immaturity of the neonatal motor-nervous system
- swelling of the mammary gland, that appears like a solid cyst close to the mammary areola in the baby male, while in the female it is associated also with prominence of the external genitals too and/or a little whitish vaginal or blood secretion: this phenomenon is referred as to “genital crisis” and is due to maternal hormone trans-placental residues.



Crying



Crying is the principal approach for the baby to communicate his/her needs; it also represents the natural reaction to any agent altering his/her quietness, such as hunger, sleep, anger, pain...

At first, it may be hard to understand the child's needs when he/she weeps and this difficulty often drives the parents crazy, even if their temper is extremely patient.

However, crying is a sort of communicative means more intricate than expected.

For instance, crying due to hunger sounds rhythmic and is often coupled to contractions of the stomach, sobs and frequent inspirations: it may modify the body temperature of the mother who lactates and increase her milk secretion, by directly stimulating her autonomous nervous system. With aging of the neonate, crying for hunger becomes "smarter": it sounds attenuated and paused by longer intervals, since the baby stops in order to check that someone is coming to feed him/her. When the child feels pain, he/she generally cries in an obstinate manner, with long expirations and pauses, during which his/her breath seems to cease, causing great concern to the parents. Most of pain episodes are due to gas excess in the intestine of the child, that generates intense abdominal contractions, especially in the late afternoon or in the evening: however, you do not have to worry, since they disappear spontaneously with aging. In case of severe abdominal pain occurrence, contact the pediatrician of your choice.

Crying related to anger is, instead, characterized by multiple attacks separated by shorter intervals, compared to those due to pain; moreover, it does not sound as rhythmic as that for hunger. In conclusion, crying for calling sounds rather more moderate and differentiates from the other sort of crying because the child often stops curiously, in order to wait for someone to arrive and attend him/her. By the time, the baby learns to simulate weeping just to attract attention.