SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA

RegioneEmilia-Romagna

FACT SHEETS

Contents

Pregnancy Lifestyles

During pregnancy, women are more motivated to follow a healthy lifestyle and a varied and balanced diet, rich in fruits and vegetables in season, with great benefits for the mother and the child. Pregnancy can also offer an opportunity to fix bad nutrition habits related to work or other commitments.

1. Nutrition and behaviour

Are there foods that I should be careful with?

Suggestions for nutrition during pregnancy are not very different from those of previous periods. It is not true that you have to "eat for two", but rather a variety of good quality foods, fruits and vegetables in season.
But to be sure, in this period it is important to take some precautions. First of all extra care must be taken with hand hygiene: thoroughly washing your hands provides for a good level of prevention throughout the pregnancy.
In addition, some types of food can pose a risk to mother and foetus as they can transmit dangerous infections if contracted during pregnancy, such as listeriosis and salmonellosis.

In particular, it is a good idea to avoid:

- Soft cheese produced from raw milk and moulds, like Camembert, brie and cheeses with blue veins.
- Pâté, including those made of vegetables.
- Liver and its derivatives.
- Ready made raw or semi-raw foods.
- Raw or processed meats, raw or smoked fish, raw or undercooked eggs.
- Raw seafood, like mussels and oysters.
- Fish that can contain high concentrations of methyl mercury, like tuna (consumption should be limited to no more than two medium-sized cans or a tuna steak per week), swordfish, shark.
- Unpasteurised raw milk.

Women who test negative for toxoplasmosis (i.e., tests show that the woman never had it) must also:

- Thoroughly wash fruits and vegetables (even pre-packaged washed lettuce), peel it when possible (the residues of any pesticides are largely eliminated with a thorough washing).
- Thoroughly wash hands (before, during and after food preparation) to avoid possible infections from raw foods.
- Thoroughly cook meat and do not eat raw or aged meats (like prosciutto and cured meats, salami, etc).
- When working in the garden it is important to avoid direct contact with soil potentially contaminated by cat faeces, so gloves should be worn and hands well washed afterwards. The same instructions apply when changing the cat litter.

To limit the risk of becoming infected with Cytomegalovirus (CMV) during pregnancy, pay attention to contact with children under the age of 6 (see Pregnancy Diary):

- Do not share food, beverages, crockery, napkins, oral hygiene equipment.
- Avoid direct contact with the mouth (e.g. kissing children in or near the mouth).
- Wash hands thoroughly with soap and water after direct contact with saliva,

mucus (e.g. after blowing their nose), urine (e.g. changing nappies), etc.
- Do not put objects contaminated with saliva in your mouth (dummies, teats), tears, urine, etc.
- Frequently wash surfaces that could be contaminated (e.g. toys, high chairs) with soap and water.
- Avoid professional activities in close contact with children under 6 years of age.

It is also recommended to:
- Avoid artificial sweeteners such as aspartame, acesulfame-K, etc.
- Avoid excessive consumption of sugar, not only those contained in sweets, but also in drinks (soft drinks, tea, fruit juices, etc).

Can I drink coffee or tea during pregnancy?
Moderate amounts (no more than 3 cups a day of coffee and 6 of tea) are considered safe. Pregnant women need to limit the consumption of stimulating beverages (coffee, tea, chocolate, caffeinated beverages) because in large amounts they can have a negative influence on pregnancy.

Can I drink alcohol?
It is important to avoid alcohol and spirits because they can cause serious damage to the child's development. It has not been possible to establish whether there is a minimum quantity of alcohol that can be consumed without risk. Therefore the only way to really protect your child's health is to completely avoid alcoholic beverages during the whole period of pregnancy.

Should I take supplements?
The most important supplement is folic acid, which can substantially reduce the risk of having a child with spina bifida, a disease that results in defects of the spinal column and central nervous system. When a pregnancy is planned it is advisable to start taking folic acid at least a month before conception and throughout the 1st trimester of pregnancy. Folic acid is contained in many fruits and vegetables, but in pregnancy the need increases and it is recommended to use a supplement.
Your doctor or obstetrician can identify cases where other supplements and iron are useful.

2. Harmful Substances

Can I smoke?
NO smoking during pregnancy is the safest choice. If you can't stop, the advice is to reduce the number of cigarettes as much as possible. The local family counselling clinic (consultorio famigliare) can provide information regarding services of the national health service to help stop smoking.

What precautions should I take with regard to chemicals such as detergents, paints, pesticides, insecticides for the home, and so on?
These products should be used according to their instructions. It is advisable to use them in well-ventilated rooms and with protection (e.g., gloves). Regarding pesticides used in vegetable and flower gardens, their use should be avoided during pregnancy. If the use of these products causes some side effects, you should stop working and consult a doctor.

Can I use insecticides and repellents?
To avoid insect bites it is best to use mosquito nets and to cover yourself well with light-coloured and lightweight clothing.

And what about the use of drugs and marijuana?
Their use should be avoided.

3. Living Habits

Can I travel?
Yes. For long trips it is useful to stand up (or make stops if travelling by car) and move around to promote blood circulation and to use the restroom. In general, contact your local health authority (Ausl) for trips that require vaccinations or preventative measures.
By car: Even when pregnant it is essential to use seatbelts, which must be worn correctly: the belts should be placed above and below the belly, not across it.
By plane: During pregnancy you can travel by plane. Generally airlines do not accept pregnant women over 36 weeks and often require a medical certificate. You must also take into consideration that long journeys can increase the risk of venous thrombosis, i.e., blood circulation problems.

Can I have sex?
It has been shown that during pregnancy sexual activity is not a problem for the mother or the foetus, except in some clinical situations (threat of miscarriage or preterm labour). Your doctor or obstetrician will inform you of any risky situations.

Can I colour or perm my hair? Are there any risks?
The occasional use of normal hair dyes or hair curling treatments is not considered hazardous. These products should be used in well-ventilated rooms.

Psychological and Physical Well-being

I have lots of questions and fears, I wish I had someone to talk to about them....
Pregnancy is a special time when every woman feels the need to share emotions and questions. For this reason, the possibility offered by the childbirth courses (see the relevant information sheet) can be useful as a time not only to learn new thing s, but also to share their thoughts with other mothers and obstetricians.
In some cases, however, the distress is greater and then it becomes important to recognise that you need help, without fear of being judged because it can happen to anyone. By contacting the clinic directly, you'll be able to find support and the therapy most appropriate to your needs to overcome any difficulties. A space for support and dialogue open not only to future mothers, but also to future fathers.
Early detection of such stresses allows you to receive the support necessary to have a peaceful pregnancy and to avoid many complications that could arise if they went undetected.

But sometimes the normal questions and worries of women are not just a result of pregnancy, but there is something more. Many international studies show a worrying spread of **domestic violence against women** all over the world. These include not only episodes of physical abuse, but also psychological and verbal abuse that represents a serious risk to the health of the mother, the foetus and the newborn child. In fact, such abuse can lead to direct injuries or, in some cases, miscarriage, preterm delivery or placental abruption.
If you have any questions, or even just to get more information, **obstetricians and doctors in the clinic are trained and available to all women to address these issues.**

Can I take medicine while pregnant?
While the number of medications considered dangerous during pregnancy is limited, **you must avoid "do it yourself" solutions.** Always consult your doctor or obstetrician before taking any medication, even those sold "over the counter."
You may also want to consider non-medicinal alternatives like small and frequent solid meals in case of nausea and vomiting in the 1st trimester, or simply rest, plenty of fluids and a humidifier in case of the flu. Therapies that are generically considered "natural" (for example herbs, homoeopathic products, and so on) are not a viable alternative because at times there is insufficient data to evaluate their safe use during pregnancy.
Again, in such cases you should consult your doctor or obstetrician.

What should I do about the therapies I suspended immediately after learning that I was pregnant?

It is important to talk with your doctor and obstetrician about any therapies being done before pregnancy to get a complete picture of your health. This goes for any kind of therapy previously being followed, including medications to control anxiety, panic attacks or depression.

Can I do physical activity?

Moderate physical activity during pregnancy improves circulation and overall well-being. You should avoid activities that entail a risk of falling, abdominal trauma and considerable physical effort.

I have to go to the dentist. Are there any risks?

During pregnancy a checkup with your dentist is recommended (if you haven't had one in the last year). In general, dental care and the use of local anaesthetics by the dentist are not a problem. It is important to inform the dentist of your pregnancy and the week of your pregnancy to identify the most suitable treatments.

Vaccinations and Pregnancy

Some infectious diseases, now preventable by vaccination, if contracted during pregnancy can be dangerous for the mother and for the foetus because the infection can pass through the placenta or cause miscarriage or premature birth. However, not all available vaccines can be performed during pregnancy: those for rubella (German measles) and chickenpox should be done at least one month before conception or after birth. On the other hand, those against flu and pertussis (whooping cough) are safe.

Before pregnancy (or after)

Rubella (German measles) and chickenpox are two fairly common diseases that, if contracted during pregnancy, can endanger the baby, especially if you get sick in the 1st trimester, and, for chickenpox, in the days prior to delivery. The increased risks to the foetus include: impaired vision and hearing, heart defects, brain damage, damage to the liver or the spleen, bone abnormalities and miscarriage.

Women who are planning a pregnancy should therefore know if they have already contracted these diseases or if they have been vaccinated against them. If needed, vaccinations can be done for free before conception at the local health clinic. The vaccines available today are safe and effective, but those who are vaccinated must wait at least a month before conception.

Those women who discover only once they are already pregnant that they are susceptible to these diseases should try to protect themselves by avoiding contact with sick people, and then, after giving birth, get vaccinated. These vaccinations can be done during breastfeeding.

During pregnancy

During pregnancy not all vaccinations are possible, but some are actually recommended. These include vaccinations against the flu and pertussis (whooping cough).

The **flu** can be risky both for mother and child: infact, pregnant women have an increased risk of developing serious complications, even to the point of death, especially those who suffer from asthma, diabetes or who are obese. Possible complications for the foetus include preterm delivery, low birth weight, miscarriage and infant death.

Vaccination protects the mother, but not only her. The antibodies also pass on to the baby so it is protected in the first months after birth. The flu vaccination is safe and effective, and in Italy at the beginning of the flu season (October-December) it is offered for free by the national health service to all pregnant women.

Vaccination for **pertussis (whooping cough)** is also recommended during pregnancy. In this case the risks are not only for the mother, but also for infants in their first few weeks of life, when contracting the disease can lead to serious respiratory complications to the point of death.

When the vaccination is done during pregnancy, the antibodies are passed on to the foetus, which therefore remains protected in the first months after birth, until it gets its own vaccination (see the Childhood Vaccinations fact sheet). The ideal time is to immunise the mother between weeks 28 and 32 of the pregnancy. Vaccination during pregnancy is safe and effective, and also reduces the risk of the mother of contracting pertussis (whooping cough) and passing it on to the newborn baby.

Prenatal Diagnosis

Almost all babies are born healthy, but about 3 babies in 100 present defects at birth that for the most part are not serious or hereditary diseases. Some of these can be detected before birth through special tests (ultrasound, combined test, amniocentesis, etc), while others can be diagnosed only after birth. This means that, despite the progress of science and technology, not all diseases can be prevented or diagnosed early on.
For most malformations and diseases that can currently be diagnosed there are no available therapies to be performed before birth, and so once the woman knows the situation she can make an assessment with the gynaecologist about whether to proceed with the pregnancy.

1. Ultrasound

What is an obstetric ultrasound scan?

An ultrasound is a test that uses ultrasounds (high-frequency sound waves) to "see" the foetus before birth.
Obstetric ultrasound scans are considered to be an innocuous test. In fact, in over 30 years of use there have never been reported any harmful effects on the foetus or the mother.
However, the effects of prolonged exposure to ultrasound are not well known (such as those required for recording "keepsake videos"), so for this reason it is not recommend to perform long ultrasound scans if not medically necessary.

When is the ultrasound done?

Their are two obstetric ultrasound scans that have proven useful:
1. 1st trimester ultrasound, which is performed before the 13th week of pregnancy and is used to assess:

- That the pregnancy is proceeding smoothly
- The vitality and the number of foetuses
- The period of the pregnancy and the expected date of delivery
- The placentas in case of multiple pregnancies

2. 2nd trimester ultrasound (commonly called morphological), which is performed between the 19th and 21st week of pregnancy. It is useful for:

- Making sure that there are no anomalies or defects
- Identifying the location of the placenta
- Assessing the amniotic fluid and foetal growth

In some cases other scans may be necessary. Your doctor will decide when to propose them.

Which defects can be identified by ultrasound?

The ultrasound makes it possible to assess the growth and development of the foetus and its organs, specifically: the head and the central nervous system structures, the lips, the spine, the limbs (arms and legs), lungs, heart and great blood vessels, the abdomen and the abdominal wall, the stomach, kidneys and bladder.
Ultrasound during pregnancy is not needed for the so-called minor anomalies such as malformations of fingers, toes, small defects of the cardiac septa, and so on.

Is an ultrasound reliable for diagnosing congenital defects of the foetus?

Due to the limitations of the method, it is possible that some anomalies, even important ones, cannot be detected by ultrasound. Today it is estimated that in optimal conditions an ultrasound can diagnose about 50% of the malformations (that is, 1 of 2).
The reliability of ultrasound in recognising foetal congenital anomalies can vary according to several factors, including: the week of pregnancy at the time of the scan, the quality of the instrument used and the skill of the doctor performing the

examination, the parts of the body of the foetus being studied. In fact, defects in the central nervous system are those recognised most frequently, followed by urinary tract, respiratory, gastrointestinal, skeletal and heart.

What is the best time to identify any foetal abnormalities?

Some foetal structural abnormalities can be identified as early as the 1st trimester of pregnancy. These would usually be serious anomalies, particularly evident. Most malformations, however, are detectable in ultrasounds done during the 2nd trimester.

What are chromosomes?

Chromosomes are found in the cell nucleus. They are made up of DNA and protein and contain all the information needed for the organism's development. The number of chromosomes varies among animal species. In human cells there are 46 chromosomes, divided into 23 pairs: 22 pairs of chromosomes called autosomes, numbered from 1 to 22, and a pair of sex chromosomes that determine an individual's sex (females have two X chromosomes, while males have one X chromosome and one Y chromosome).

What are chromosomal abnormalities?

They are alterations in the number (aneuploidies) or structure of chromosomes. The most common abnormalities are in the number, in particular trisomies, in which the pair presents an extra chromosome. For example, Down syndrome is caused by the presence of an extra chromosome 21 (trisomy 21). The risk of chromosomal abnormalities increases with the age of the mother.

2. Tests to assess the risk of Down syndrome and other chromosomal abnormalities

What are they?

They are non-invasive tests (that do not pose a risk to the pregnancy) to estimate a woman's risk of having a foetus with certain chromosomal abnormalities: trisomy 21 or Down syndrome, trisomy 18 and trisomy 13.
These tests cannot tell for sure if the foetus is affected by one of these anomalies, but rather express the probability that it might be. So, if the test gives a "negative" result it means that you have a low risk of having a foetus with a chromosomal aberration, and if it gives a "positive" result (i.e., "increased risk") it does not mean that the disease is present but only that there is some suspicion. Confirmation or exclusion of the existence of the disease is only possible with more specific tests like amniocentesis or chorionic villus sampling (CVS or villocentesis).

What tests are available?

There are various tests both for the 1st and the 2nd trimester. National guidelines on normal pregnancy consider two to be suitable: the combination test that is performed in the 1st trimester and the triple test which is performed in the 2nd trimester. The triple test is only offered to women who have not done the combined test during the 1st trimester.

Combined test

This test combines the double test (which involves drawing blood from the mother) with ultrasound measurement of nuchal translucency (the thickness of foetal nuchal tissue). It is performed between the 11th and 13th weeks of pregnancy and can recognise most of the major trisomies (13, 18 and 21). False positives (i.e., tests that return incorrect positive results) are about 50 in 1000, the false negatives (i.e., tests that return incorrect negative results) are less than 1 in 1000. In addition to indicating an increased risk for chromosomal diseases, the test may also show an increased risk for certain birth defects, which will be further investigated in a second-level ultrasound.

The test must be performed by professionals accredited by national or international scientific bodies.

Triple test

Preferably carried out between the 15th and 18th weeks of pregnancy. It consists of a blood sample from the mother to determine the presence of three substances that originate from the foetus and the placenta. The test makes it possible to assess the risk of chromosomal abnormalities in a lower percentage than the combined test (about 65-70% of all cases of trisomy 13, 18 and 21) .

Other tests

A new test makes it possible to identify the main numerical abnormalities of chromosomes (trisomy 21, 13 and 18) by extracting foetal DNA from the mother's blood.
Currently this test is not available through the national health service.

Who are these tests for?

These risk assessment tests are offered free of charge to all pregnant women.

3. Tests to diagnose Down syndrome and other chromosomal abnormalities

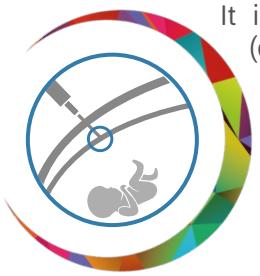
What are they?

These tests make it possible to assess the chromosomes of the foetus and then to diagnose abnormalities in their number and structure (e.g., Down syndrome) through the sampling of amniotic fluid or placental tissue.
They are invasive tests which therefore involve some risk for the pregnancy. Currently the most widely used tests are amniocentesis and chorionic villus sampling (CVS or villocentesis).

What is amniocentesis?

Amniocentesis involves taking a small amount of amniotic fluid. It is preferably done between the 15th and 18th week. Amniocentesis is an outpatient procedure, the exam is not painful and the perceived feeling is similar to that of an intramuscular injection.

What is chorionic villus sampling (CVS or villocentesis)?



It involves taking a small amount of placental tissue (chorionic villi). It is preferably done from the 11th to 13th week. The examination is performed on an outpatient basis and may result in a modest pain in the lower abdomen.

What are the risks?

These tests carry a risk of miscarriage of about 0.5 to 1% (1 in 100-200 exams). The risks for the mother, on the other hand, are extremely low.

Childbirth and Parenting Classes

Childbirth and Parenting classes (corsi di accompagnamento alla nascita) are an integral part of the care that is offered to pregnant women by the national health service, in line with the guidelines established by the World Health Organisation. The aim of the courses is to share knowledge and emotions with women regarding pregnancy, labour, childbirth, breastfeeding and baby care.

How are the classes organised?

Usually in the 2nd trimester of pregnancy, the doctor or obstetrician will offer women the opportunity to participate in a class. The classes are organised for groups of varying size with the participation of pregnant women and, at times, their respective partners.

Who is the instructor?

An obstetrician. For some issues requiring specialised knowledge, information sessions are planned involving other professionals, including a gynaecologist, paediatrician, psychologist, anaesthesiologist.

What happens during these classes?

During the meetings the future parents are free to ask questions and to share questions and fears to better deal with pregnancy, childbirth, breastfeeding, infant care and parenting. During the classes, the women and the partners also meet other people who are going through the same experience. The classes also serve to help participants to recognise in themselves the ability to find the most appropriate solutions to their situations, to solve problems, to seek and find help, support and information at the right time and in the appropriate forum, boosting self confidence.

To learn where the classes are held contact your local family counselling clinic (consultorio famigliare) or the local maternity ward.

Choosing Where to Give Birth

Often during pregnancy, your thoughts will turn to the place where you will give birth. While some have no doubts about their choice to give birth at the hospital, others prefer a more familiar environment and they want to give birth at home or at a birth centre (Casa di Maternità).
In this regard it may be useful to share your concerns and expectations with professionals (doctors and obstetricians) who are following your pregnancy and together make the best choice for your specific case.
If there are no complications during pregnancy, the woman is free to choose to give birth in hospital, at home or in a birth centre. Otherwise the professionals will suggest and share the most suitable and safe place based on the situation.

Giving birth in the hospital

In Emilia-Romagna there are 30 maternity wards in as many hospitals, about half of all births taking place in 7 maternity wards that each handle 2,000 births per year (Ospedali Riuniti in Parma, St. Maria Nuova Hospital in Reggio Emilia, Modena Hospital, St. Orsola hospital in Bologna, Maggiore hospital in Bologna, Cesena hospital and Rimini hospital).
Each maternity ward ensures the woman:

- The closest relationship between parents and the newborn, like allowing the father or another person to be present in the delivery room.
- Individual spaces for labour and delivery.
- Adequate connections between obstetric facilities and those that care for the newborn.
- Obstetric care for childbirth.
- Different methods of pain control for labour and childbirth, both pharmacological and not (see the "Support During Labour and Pain Relief" fact sheet).
- The possibility of having the newborn baby next to the mother during the hospital stay (in room).
- Assistance in starting breastfeeding.
- First paediatric visits and appointments for neonatal screening (see "Childcare" fact sheet).

Giving birth at home

In 2013 there were about 120 births at home in Emilia-Romagna (1,500 throughout Italy). Giving birth at home is an alternative for all women who have had a normal pregnancy (without problems), who are in good health and desire to experience childbirth in a family environment.

In Emilia-Romagna, in the provinces of Parma, Reggio Emilia and Modena, women who choose home birth have the opportunity to be assisted by doctors and obstetricians of the regional health service, while in the other provinces women can only be followed by paid professionals. In this latter case there is an 80% reimbursement of costs incurred.
Women who wish to give birth at home must notify the local health office (Ausl) within the eighth month of pregnancy, enclosing:

- The obstetrician's and the gynaecologist's declarations that they are willing to assist in the childbirth at home and confirm the conditions of safety for the woman and the child.
- A certificate on the state of health of the pregnant woman, issued by the primary care physician or gynaecologist who will follow the childbirth.

- A written statement from the woman who has been informed of the benefits and possible risks.

In this way, the local health office can ensure:
- The connection between the hospitals and the emergency services.
- Adequate care for the woman in the first days after childbirth.
- A paediatric visit on the first day of life and an appointment for neonatal screening.
- Reimbursement of 80% of expenses incurred.

Giving birth in birth centres

The birth centre is a support structure (not a hospital) that provides women and, more generally, couples, a suitable environment for giving birth with health care, affective support and a psycho-relational environment similar to that of home birth.

The birth centre is managed and directed by obstetricians and works closely with other social and health services associated with pregnancy and childbirth support. Assistance and the timely admission to hospital in an emergency are assured by the maternity ward of the hospital that works closely with the birth centre.

All women with normal pregnancies who have not had complications and are not deemed to be at risk can choose to give birth in a birth centre.
In the Emilia-Romagna region there is only one birth centre, “Il Nido” in Bologna.

Support During Labour and Pain Relief

The pain of childbirth is very special and different from others, because it is not a symptom of disease but rather a natural part of the normal evolution of labour.
In fact, if the mother and foetus are well, the foetus is in the right position and the mother receives adequate support during labour, the mother's body generates an array of hormones that allow it to cope with the pain, making it bearable, thereby favouring the descent of the baby through the birth canal and the start of the mother-child bond. Each woman, therefore, is "biologically" prepared to face this experience in a positive and satisfactory manner, although the perception of pain is still a subjective experience influenced by physical conditions, emotions, and social and cultural circumstances.
For this reason the support she receives throughout pregnancy and then during labour is essential for dealing with the birth.

What do you mean by support during labour?

It means being able to rely on the continued presence of a trusted person and professionals (doctors and obstetricians) that offer help, encouragement, solace and comfort to deal with and make the most of the hard work, joy, fears and pain that accompany childbirth. The choice of the trusted person (the partner, a friend, a mother, a sister, etc) should be carefully made based on one's needs and preferences.

The obstetrician is present next to the woman and follows the progress of labour, offering support to help recognise and understand what is happening to her body to boosts its capacity to deal with childbirth. In fact, emotional support during labour is also the most effective way to contain the pain, to reduce the request for epidural anaesthesia and the use of caesarean section. Moreover, it increases the mother's satisfaction with the birth.

Are there other techniques for pain relief?

Pain relief strategies during labour are divided into two types, those not based on medications and those that are.

Without medications

- Relief actions: being able to move during labour, choosing the position for childbirth.
- Environment: comfortable childbirth, suitable lighting, music if desired.
- Immersion in water: hot bath in a tub or hot shower.
- Relaxation techniques, massage, TENS.

These techniques, combined with the support of a trusted person and an obstetrician, reduce the need for medications, the need for medical assistance for childbirth and improve the woman's satisfaction with the experience and the health of the newborn.

With medications

An epidural is the most effective pharmacological technique to reduce pain during childbirth labour. To have an epidural it is required to have a visit with the anaesthetist

during the weeks before the birth, some specific tests and the expression of informed consent by the woman.
The epidural consists of a puncture made by an anaesthesiologist in the lower back (lumbar region) through which a thin tube (catheter) is inserted, and through which the anaesthetic is administered. The catheter is left for the entire duration of labour and removed only after delivery. In this way subsequent doses of anaesthetic can be administered without further need for needles.

Those who choose an epidural should know that it is very effective in reducing the pain, it is not necessary to remain lying in bed during labour and one can choose the birth position preferred.
All the same, with an epidural childbirth becomes a medicalised event, so:

- The heartbeat of the foetus is subjected to continuous monitoring.
- There is a higher probability of operative delivery (one in which forceps or vacuum extractor are required), or a C-section for foetal distress.
- The risk of a fever during and after childbirth is higher.

Caesarean Section (C-section)

The caesarean section is a surgical procedure not without risk and should be performed only if there are medical conditions that make it necessary, sometimes even in emergencies. If there are no risks or problems, natural delivery is preferable to caesarean section for the welfare of the mother and child. For this reason, before a C-section is scheduled it is important to discuss the pros and cons with your doctor and obstetrician.

Is it true that the C-section is safer than natural childbirth?

There is no evidence that a caesarean section - in the absence of specific clinical situations that make it necessary - is safer for the health of the mother and baby than natural childbirth. it should be remembered that the caesarean section is a surgical procedure, and only if there is a real medical need can it guarantee benefits that outweigh the potential risks that it inevitably entails.

What are the situations where it is appropriate to resort to a planned caesarean section?

The conditions for which a caesarean section might be planned include:

- The foetus is still in the breech position at term.
- There is a condition of placenta previa, a placenta that completely or partially covers the birth canal, obstructing the passage of the newborn.
- The baby is very large compared to the size of the pelvis of the mother, so-called cephalopelvic disproportion.

What happens if the foetus is in the breech position in the last month of pregnancy?

An attempt can be made to turn the foetus using external methods, encouraging it "to do a somersault" by means of a manual procedure performed by a doctor and monitored with ultrasound. Performed starting at 37 weeks, it can increase the likelihood that the foetus is in the proper position for natural childbirth.

If the first delivery was done by caesarean section, is natural childbirth still an option for future children?

Yes, you can have natural birth after a caesarean section. The presence of the conditions that allow you to choose labour and natural childbirth should be assessed with the professionals that will assist you during pregnancy and childbirth.

And if there are multiple births?

The assessment will be made on a case by case basis together with the doctor and the obstetrician. If the foetuses are in cephalic position (head down) at the end of pregnancy then natural childbirth is possible.

In general, a multiple pregnancy may involve greater risks, mainly related to factors such as low birth weight, reduced growth of one or more foetuses, or the fact that often the babies are born before the end of the nine months of gestation.

If the mother is HIV positive, which type of birth is recommended?

If the mother is infected with HIV further assessment will be required to determine the most appropriate delivery method to limit the risk of transmission of the infection from mother to newborn.

If the mother is infected with hepatitis B or hepatitis C?

If the mother is suffering from hepatitis B, caesarean section does not reduce the risk of transmission of HBV (the hepatitis B virus) so if there are no other risks or problems the mother can have a natural birth. In fact, contagion usually occurs after birth so the child should be given immunoglobulins and vaccine against hepatitis B within 12-24 hours after birth.
Even for women with hepatitis C a caesarean section should not be done unless there are other risks or problems with natural birth.

If the mother has genital herpes, what kind of birth is recommended?

If the mother is suffering from genital herpes (HSV) giving birth by caesarean section should be assessed medically case by case, especially if the mother was infected in the 3rd trimester of pregnancy.

Source: content is drawn in part from the public version of the Caesarean section guidelines: a proper and informed choice - SNLG (National System Guidelines).

Parents Aren't Born, They're Made!

Becoming parents is an important moment in people's lives: it is a journey that begins with pregnancy and continues throughout life. For all children the relationships with their mum, dad and the people who help look after them are of great importance. During the first months of their lives, children begin to acquire the basics needed to express themselves in relation to others, thanks to interactions with those who take care of them. So they behave in a manner that captures the attention of adults: clinging, sucking, following with their eyes, crying and smiling.

How can I start communicating with my baby?

In the first months of life it is very important to hold small children because the warm embrace of the mother, father and other people who take care of them is essential for their development, to make them feel safe and to create a bond with the environment around them.
Children gradually learn about the environment around them relying on their senses, starting with touch, by direct contact, but also through the voices and smells of people who take care of them.
Babies communicate through **touch** with their mother even before birth: caresses and body contact after birth help the development of breathing, the immune system, sociability and sense of security.
Hearing and smell are important because children feel reassured by the voice and the smell of those who take care of them. They know the voice and smell of their mother because they sensed them during prenatal development. Then they learn gradually to know the voices and the smells of other people around them.
Taste develops in children during pregnancy. In fact it is argued that changes in the taste of the amniotic fluid can be perceived by the foetus.
The baby's sense of **sight** isn't fully formed until its eighth month of life, when it can see objects in the distance. Newborn children are interested in all that is about 25 cm from their eyes, and they are especially attracted to the faces of people.
At this age it can be helpful to hold the baby stomach down on the mother's chest while in a reclined position (on the bed supported by pillows or on a semi-reclined chair): the breathing of the mother stimulates and regulates the breathing of the baby, and the distance is ideal for allowing the newborn to look into the mother's eyes.

As a mother, will I be able to properly care for my child right away?

Each pregnancy and each birth are to be considered a story of their own because each woman is different. However, it may happen that one's idealised concept of motherhood does not coincide with reality.
During pregnancy and after delivery, women can feel a certain emotional instability or sometimes a decline in mood, a strong feeling that combines enthusiasm for the new experience with sadness for the loss of previous certainties, disorientation due to the sudden change in life, anxiety associated with a sense of inadequacy.

Many women must deal with the constant demands of the newborn, the loss of order and routine, the sleepless nights, sometimes isolation and difficulties in the couple's relationship.
For new mothers, motherhood can also be a difficult experience that can be manifested in a period of psychological distress and depression.
It is important to be aware that asking for help is very useful: many of these problems can be addressed and partly prevented by contacting your obstetrician, gynaecologist or paediatrician who can help you with diagnosis and treatment to overcome such difficulties.

As a father, what can I expect after birth?

Even for the father there will be changes in daily life due to the new responsibilities, emotions and feelings. The nine months of waiting are just as useful for the man for making preparations as they are for the woman. The birth of a child brings with it changes in role (from partner to father, from son to father) and transformations in personal, couple and family balance.
Assisting the woman during pregnancy is useful to the couple, but also to the man who will have time to adapt to future changes.

After the birth...

We all have the ability to overcome the most critical moments:

- Talking to those you are closest to, sharing joys and sorrows, helps to overcome feelings of solitude and to reduce stress or feelings of inadequacy.
- Letting your partner know your expectations and disappointments can avoid misunderstandings.
- Advice is useful only if it is wanted. Grandparents, friends and relatives are a great resource, but try not to be influenced too much by them.
- Getting help with the housework and grocery shopping can be important. A clean house and prepared foods, especially in the early days, are a great help.
- Regarding visits from friends and relatives: it is possible to be overwhelmed by their desire to see the new arrival. It will be nice to let them visit, but being sure to safeguard your energy and preserving your peace of mind and that of your child.
- Breastfeeding is a great joy and especially good for children's well-being, but it can be difficult. Don't give up right away. Talk to an obstetrician at your local family counselling centre or the place your baby was born (see the "Breastfeeding" fact sheet).
- Taking time to recoup your energy is also helpful to your children. A shower, a good rest, the hairdresser or a stroll with your partner can be a good antidote to fatigue.
- The baby's crying could become very insistent, but it is the only means babies have for making themselves heard. Take care and comfort it, trying to interpret its needs. Step by step you will learn to understand each other.
- Asking for help is not a sign of weakness. Friends and family will certainly be happy to help. At the family counselling centre (consultorio famigliare) you will find professionals ready to help you.

Childcare

Welcoming the baby

The period immediately following birth is very important: the child is extremely attentive to the stimuli of the surrounding world. Undisturbed skin-to-skin contact with the mother immediately after birth, even in the event of a caesarean section, is therefore very important for the mother-child relationship, has beneficial effects on health, promotes the activation of spontaneous reflexes in the newborn and the initiation of breastfeeding (see sheet no. 12, page xxx).

1. In hospital: the first check-ups

Immediately after birth the **Apgar score** is recorded, an index of vitality and adaptation to extrauterine life that assesses the baby's breathing, heartbeat, reflexes, muscle tone and complexion. It is performed 1 minute after birth, then repeated at 5 minutes and 10 minutes. A score between 7 and 10 is considered normal, while a lower score means that the child requires attention.

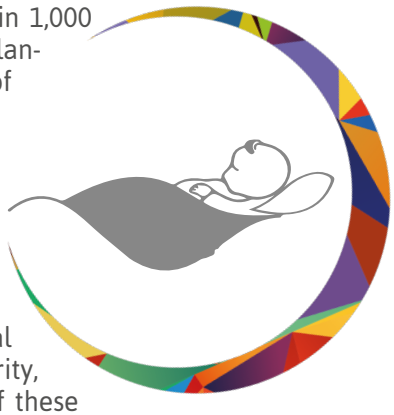
In the first hours after birth, usually after the first "bath", it is proposed to give the newborn some **eye drops to prevent conjunctivitis** and a dose of **vitamin K** to avoid the risk of neonatal haemorrhaging.
During the hospital stay more screening is proposed to identify any serious diseases that can be detected early and treated in the best possible way.

Metabolic screening**:** these are tests carried out on the child 48-72 hours after birth simply by taking a drop of blood from its heel to rule out the presence of major diseases, specifically:

- Endocrine disorders, including congenital hypothyroidism, congenital adrenal hyperplasia
- Genetic disorders like cystic fibrosis
- Metabolic disorders, including phenylketonuria, galactosaemia and many others

These diseases are rare (affecting no more than one person in 2000), congenital (i.e. already present at birth) and often hereditary (i.e. genetically transmitted from parents to children). It is important to identify them at an early stage in order to propose the best therapy so that the child can grow up and lead a normal life.

Hearing screening (otoacoustic emission)
Congenital hearing loss affects approximately 1 infant in 1,000 with the risk for the child to develop, among other things, language delay and learning. Diagnosing it before 6 months of life makes it possible to offer the appropriate treatment to avoid these risks. Hearing screening is offered in the hospital 24-48 hours after birth. It is performed with a special device that is placed near the ear of the newborn. It is fast, painless and non-invasive.



Visual screening**:** up to 6 newborns per 10,000 are born with eye disorders like congenital cataracts, congenital glaucoma, corneal ulcerations, retinopathy of prematurity, refractive defects, retinoblastoma. Early identification of these problems enables the necessary therapies to be implemented to prevent vision loss. For this assessment it is important to perform the red reflex test. This is a painless and non-invasive examination that is carried out during the hospital stay

after birth and then repeated later by your paediatrician during the baby's first year of life.

2. At home : how to keep your child safe

Safe at home

It may seem strange, but the home, the place where you feel most safe, is in reality where most accidents happen. The child's safety at home must be adapted and reconsidered continuously as it grows and learns to move, crawl, walk, etc. In most cases domestic accidents do not result in tragic fatalities, but no matter their severity they can be prevented by taking a few simple precautions.
From the very first weeks of life, children are exposed to risks: burns from hot bathwater or bottled milk if not breastfeeding, drowning because left alone in the bathtub, falls. In fact, you should never leave your child alone on a raised surface like a changing table because even newborns can move and fall.
So, some general guidelines to follow from the moment you bring your baby home are:

- Don't leave it alone on the changing table or on elevated surfaces, not even to answer the phone or the door.
- Don't leave the baby alone in the bath, even if there is only a few cm of water.
- If the baby is sleeping in a crib, the bars must have less than 6 cm of spacing between them and be more than 75 cm high.
- Put the baby to sleep on its back, stomach up, with a rigid mattress and no pillow.
- Put the baby in a crib next to the mother's bed to sleep. It is also strongly discouraged to let the child sleep in the bed with the mother if she smokes, is obese, uses drugs or has psychiatric disorders.
- Always check the bath water with a bath thermometer or at least with the "elbow test". The right temperature is 37°C.
- If bottle feeding, also pay attention to the temperature of the bottle.

Transport by car

Car safety is an important issue to consider even before birth so you'll be ready to transport your child home from the hospital. To prevent the risks associated with car accidents, it is essential that the child be transported in the car in a seat that is appropriate for its age and weight. In Italy, the transportation of children in cars is regulated by the Highway Code, in accordance with European regulations. Car seats change with the weight and height of the child and are mandatory from birth up to 36 kg (about 12 years), specifically:

- Group 0 car seat: up to 10 kg (about 12 months). To be mounted transversely on the rear seat.
- Group 0+ car seat: up to 13 kg (about 24 months). To be mounted on the rear seat opposite to the direction of travel.
- Group 1: 9 kg to 18 kg (about 9 months to 4 years). To be mounted on the rear seat facing in the direction of travel
- Group 2 car seat: 15 kg to 25 kg (about 3 to 6 years). To be mounted on the front/ rear seat in the direction of travel.
- Group 3 car seat: 22 kg to 36 kg (about 5 to 12 years). To be mounted on the front/ rear seat in the direction of travel.

More information on the Ministry of Health's website at:
http://www.salute.gov.it/imgs/C_17_opuscoliPoster_370_allegato.pdf

Breastfeeding

Breast milk is the ideal food for babies because it contains everything they need in the right quantities and proportions and adapts over time to their changing needs. It's always ready and at the right temperature, it's nutritious and it's free! Breastfeeding is the natural way to feed and cuddle your baby, and today, as in the days of our grandmothers, it remains of fundamental importance to ensure a healthy psychological and physical development. In fact, breastfeeding not only provides the baby with the best food, but also satisfies its need for contact with the mother: it is therefore also important on a relational level, through physical contact, sight and smell.

Benefits for the child and the mother

Breastfed babies enjoy many health benefits because they receive antibodies and all the other substances that only breast milk contains to protect them from disease and to assist in the development of the nervous system, immune system and vision. In fact, breastfeeding:

- Protects against diarrhoea, gastroenteritis, colic, ear infections and asthma.
- Improves the development of the palate and teeth.
- Lowers the risk of adult diabetes and skin eczema.

There are also health benefits for the mother, because breastfeeding reduces the risk of major diseases (breast and ovarian cancer before menopause) and helps her to get back in shape after childbirth. Finally, breastfeeding is practical: it allows the mother and the whole family to move freely with the newborn without having to prepare water, steriliser, bottle and powder each time.

When can I start breastfeeding the baby after birth?

As soon as possible, as soon as the mother feels up to it. Ideally, immediately after birth the newborn baby should be placed close to the mother, skin to skin, and should be helped to take the breast (see also sheet no. 10, page xxx).

How soon after birth does milk production start?

The first milk that arrives after childbirth is called "colostrum". Very little is produced, the newborn baby drinks a few drops at a time but they are sufficient because it is rich in fat and antibodies. The real milk, called "mature milk", usually arrives 3-4 days after birth. The important thing is to attach the baby to the breast whenever possible because it is the sucking action that stimulates the production of hormones (prolactin and oxytocin) that in turn stimulates the breast glands to produce milk. In other words, the more the baby sucks, the more milk will be produced. The obstetrician and childcare worker at the place where the baby was born are available to show new mothers how to support and attach the baby to the breast in the best possible way.

How long should I breastfeed my baby? Is it true that after one year breast milk is no longer nourishing?

You can breastfeed as long as you wish, there is no limit beyond which breastfeeding is no longer of value. Even after the first six months, when weaning begins and the baby begins to eat and taste solid foods, breast milk can supplement its diet and continue to be a moment of cuddling between mother and child.

I'd like to breastfeed, but I'm afraid it's too demanding.

Although breastfeeding is very rewarding for the mother and offers her a unique opportunity to remain close to her baby, it is also challenging, especially in the first weeks after birth when everything is new and foundations are being laid at home for a new life together. For this reason, it is important that the woman have the support of her family, who can help her above all by providing the moments of rest she needs, helping her for example with household chores. The mother can breastfeed as long as she wants. However, when breastfeeding becomes a tiring chore and the fatigue exceeds the pleasure of mother-child contact, it's useful to talk with your paediatrician to plan its suspension and to look for alternatives. If you have questions you can always contact the family counselling centre (consultorio famigliare), where obstetricians can offer help and advice.

FOR INFORMATION:

Numero Verde
800-033033

Weekdays from 8.30 am to 5.30 pm
Saturday from 8.30 am to 1.30 pm

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