

Pregnancy, giving birth and the new family.

This book belongs to:
My baby is due:

Published by:

SCA Hygiene Products A/S, Denmark
This English translation is based on
the 37th Danish edition of the book.
Final editing date
October 1, 2007
Copying permitted if attributed to source

Photography: Lennart Nilsson
(Photographs from "Et barn bliver til", Gyldendal)
Christina Voigt
Piotr & Co.
Jo Selsing
Susanne Mertz
Jonna Fuglsang Keldsen

Printed on Scandia 2000 paper - a totally chlorine-free medium approved for the Nordic Swan
Environmental Label - by Scanprint A/S, a Swan-certified printing house, license no. 541 006.

SCA Hygiene Products A/S
Gydevang 33
3450 Allerød, Denmark
Telephone: +45 48 16 81 16
Fax: +45 48 16 81 17
www.sca.dk

ISBN no. 978-87-85080-17-2

General disclaimer Whilst all efforts have been made to ensure the accuracy of the information
in this book, SCA Hygiene Products A/S and the contributors to the book cannot be held responsible
for the accuracy of the information contained within these pages or for any actions taken on the basis
of information provided herein. The information provided by SCA Hygiene Products A/S should not be used
for diagnosing or treating a health problem or a disease and it is not a substitute for professional
medical care. If you or your baby have health problems or you suspect there is a problem with your
pregnancy, you should consult your own primary health care physician (general practitioner)
for further information and advice.

General editor:
Ulla Rode
Information manager, RN

Professional consultants:
Ulla Due
Physiotherapist
Hvidovre Hospital

Per Albertsen, MB
Consultant, Senior Lecturer
Dept. of Pediatrics
Hillerød Hospital

Lene Jessen
RN, Maternity Ward
Sydvestjysk Hospital, Esbjerg

Carsten Lenstrup, Dr. Sci.
Managing Consultant
Gynecology and Obstetrics
Gentofte Hospital

Anne Mette Rasmussen
Clinical Midwife Tutor
Gentofte Hospital

Birgitte Døj
Health Visitor, RN
Gladsaxe

Elsebet Schultz
Social Worker

Svend Aage Madsen, Ph. D.
Head of Department of Psychology, Play Therapy & Social Counselling
Copenhagen University Hospital, Rigshospitalet
Copenhagen

PREGNANCY

Being pregnant

Becoming a dad

Antenatal care

Your first antenatal check-up at the doctor's
Your first visit to the midwife

Pregnancy scans and screening tests / fetal diagnostics

Quickening

Pregnancy calendar

Understanding your pregnancy week by week

Expecting a baby

Twins / triplets

Diseases and pregnancy complications

Your lifestyle during pregnancy

Work, exercise, travel, etc.

How to eat while you are pregnant

Your relationship as partners and parents-to-be

Antenatal and parenting classes

Fitness in the run up to childbirth

CHILDBIRTH

The onset of labor

Preterm delivery

Quick births

Overdue

Labor induction

Admission and childbirth

Positions for birth

Labor and delivery

Pain relief

During labor

Dad

Early contact and bonding

The first medical check-up of the newborn infant

When delivery doesn't go completely to plan

Delivery by caesarean section

BEING A FAMILY

Being a family

Breastfeeding and nutrition

Common breastfeeding problems

Formula feeding

Vitamins, iron and the baby's first solid foods

The newborn infant

Becoming yourself again

Getting back in shape after delivery

Back home

Dad

Siblings

Single mother

Visitors

How to care for your baby

Bathing your little baby

Crying

Your health visitor

Preventive health check-ups for children

The baby's development

Mum - dad - baby

Having sex

Mothers' / fathers' groups

Grandparents

Siblings and jealousy

You are about to become parents – congratulations!

Your lives are about to change. It will be a momentous and challenging journey.

A new little human being will join the human race - and you will take on parenthood. This book has been written to describe what happens during pregnancy - as well as the personal development involved in becoming a parent. You may choose to use this book as a work of reference. In it you will find brief explanations of some of the changes that will take place during this time.

You will also find blank columns where you can jot down your own thoughts, feelings and experiences - making this book your first record of your little one and of becoming parents. Following - and sharing the experience - of how your little one is developing, how the mum-to-be is experiencing pregnancy and how you are both developing and moving into parenthood can be a positive contribution to making pregnancy, childbirth and your baby's neonatal phase a good experience. And in the long term it can reinforce your partnership and create a strong basis for your family life.

If you have questions for which you do not find the answers in this book, we recommend that you speak to your doctor, your midwife, the health visitor or other expecting mothers. This book is updated every year to ensure that the information in it is correct and completely up to date. If you feel that something has been missed out or you have looked for information in this book in vain, I would be very pleased if you would write me a note.

In the book I address the pregnant mum, the dad-to-be, or both of you as a couple - depending on the context.

You will find further information by visiting
www.libero.dk

General disclaimer

Whilst all efforts have been made to ensure the accuracy of the information in this book, SCA Hygiene Products A/S and the contributors to the book cannot be held responsible for the accuracy of the information contained within these pages or for any actions taken on the basis of information provided herein. The information provided by SCA Hygiene Products A/S should not be used for diagnosing or treating a health problem or a disease and it is *not* a substitute for professional medical care. If you or your baby have health problems or you suspect there is a problem with your pregnancy, you should consult your own primary health care physician (general practitioner) for further information and advice.

Being pregnant

Being pregnant is both a biological and a psychological process. It also involves such momentous and incredible changes that you can be certain you'll benefit greatly from guidance from the professionals who work with pregnant mothers, mothers in labor and with their partners and families. Most of you will probably also make good use of the Internet for information.

The first sign of pregnancy is that you miss your period, you may feel bloated, perhaps nauseous, and your breasts may feel tender. Maybe your intuition tells you that you are pregnant. You can confirm whether or not you are by doing a urine pregnancy test. You can either buy a test kit from your local chemist's or via the Internet and do a home test yourself on a freshly voided urine sample. Or you can hand in a urine test at your health clinic or the chemist's.

The test result will be positive when the fertilized egg has reached the uterus (womb) and implanted in the uterine wall. Gradually a placenta forms. Pregnancy hormones are secreted into the bloodstream and via the kidneys into your urine.

The test kit contains antibodies which - when added to your urine sample - will react with these hormones and confirm whether or not you are pregnant.

The pregnancy test kit will show a positive result even a few days after you have missed your period.

If the test comes out negative, and you still suspect that you are pregnant, or if your periods have been very irregular, it is a good idea to repeat the test one week later. Because pregnancy tests these days are sometimes carried out at a very early stage it does occasionally happen that the result may be a false positive (i.e. the result comes out positive in spite of the fact that you are not pregnant) or as a false negative (the result is negative in spite of the fact that you are pregnant). Pregnancy can also be confirmed by having a gynecological examination. If you have not had a baby before, the doctor will not normally be able to confirm pregnancy until towards the end of the second month of pregnancy or the beginning of the third month. If you have had more than one pregnancy, the doctor will be able to tell somewhat earlier. One of the symptoms the doctor looks for when performing a gynecological examination is changes to the mucous membrane of the vagina and the cervix (the color is different).

When you are sure that you are pregnant, contact your doctor in order to set up further appointments with him or her, as well as with the midwife and your chosen birth venue.

According to the Danish National Board of Health's (Sundhedsstyrelsen's) recommendations for prenatal care you are entitled to:

- Five free medical check-ups with your own doctor
- Four to seven check-ups by your midwife
- Two ultrasound scans.

See the National Board of Health's (Sundhedsstyrelsen's) recommendations for antenatal check-ups in the table below:

<<<SKEMA INDSÆTTES>>>

Antenatal care

The purpose of these check-ups is to ensure that everything is alright, to alleviate any worries you may have, to make sure that you remain healthy during your pregnancy and that your baby will be born healthy and viable.

It is a good idea to jot down all the questions you want to ask before going for a check-up - it's annoying suddenly remembering what you wanted to say after the consultation is over.

There are regional differences in the timing of your various check-ups. In some but not all regions you will be offered group consultation and participation in childbirth and parenting classes.

In some regions the midwife will offer to have the health visitor (sundhedsplejersken) visit you at home before the baby is due. You may also decide to phone the health-visitor service (sundhedsplejen) in your municipality to ask about this possibility.

Becoming a dad

It is of course the woman who becomes pregnant but you, the man, are about to become a father. Some men find it hard to understand that it is really happening now. Others feel jubilant from the start and maybe quite proud as well. Most men have many contradictory thoughts and feelings simultaneously.

The entire physical development takes place in your female partner, of course, but you, the man, have every possibility to be part of the process right from the start of the pregnancy. The more events you, the prospective father, take part in - consultations, shopping for the new baby and everything else related to pregnancy and delivery - the more insight you will get, and the more

important your role will become. And in the long run that means that you as a father will have a more equal position as a parent.

It can be difficult to know and understand a woman's reactions and needs. And the male partner and his needs can easily be overlooked. For this reason it is important that you as the prospective father get involved and that you know and express your own thoughts - both negative and positive. This is first and foremost because in the long run you will both benefit greatly from supporting each other and sharing the experience of becoming parents. You will find an article over the page written especially for you: *Fathers, delivery and paternity leave*.

Did you know?

- that the average age of first-time mothers has risen from 24 to 29 years of age over the last 30 years - and that from 2006, for the first time, this rise has been constant. The average age of first-time mothers has never been higher
- that the overall average age of all mothers-to-be is 30.7 years
- that the corresponding average age of their male partners is 31.5 years
- that every year in Denmark approx. 1,700 children are born to mothers over 40 years of age
- that approx. 7,000 children are born to mothers under 25 years of age
- that by having regular sexual intercourse, 80% of women become pregnant within the first year
- that the viable sperm count in Danish men has halved in the course of the last 30-40 years
- that the use of artificial insemination is increasing. Approx. one child in every 25 is now conceived by artificial insemination
- the average weight of a child at birth was 3,525 g in 2006. Twins weighed an average 2,484 g and triplets 1,728 g.
- that just under one in every 60 deliveries in Denmark is a delivery of twins, this means that approx. 1,500 twins are born annually
- that currently 22.3% = approx. 14,000 deliveries are by caesarean section, 12% of these are performed at the mother's request. The percentage of deliveries by caesarean is not increasing
- that just over 65,000 children were born in Denmark in 2006, boys outnumbering girls by a few thousand. The number of children born in 2006 was only 200 higher than in 2005
- that on average men take 3.9 weeks of paternity leave - men are only half as likely to take paternity leave as women are to take maternity leave
- that women on average take 42.3 weeks of maternity leave
- that Danish women find it more difficult to conceive than Swedish or Italian women
- that an increasing number of women in Denmark choose not to have children - on average we give birth to 1.8 children.

Fathers, delivery and paternity leave

By Svend Aage Madsen, edited by Ulla Rode

A new dad!

Fathers and delivery

Danish fathers choose to be present at approx. 95% of deliveries. This is a new trend seen in many countries. In Sweden, too, fathers are present at approx. 95% of deliveries, while the frequency in the UK and Australia varies between 60 and 80%.

Seen in an historical perspective this is something completely new - by and large there are no other countries where fathers get as involved in their partner's pregnancy or choose to be present at the birth of their child.

And these fathers don't just get involved at the time of the actual birth. Approx. 50% of prospective fathers accompany their partners to medical check-ups, around 90% on visits to the

midwife, around 70% participate in antenatal classes and approx. 97% are present at ultrasound scans. And the fathers tell us that they are pleased they went.

It is, however, interesting that the latest Danish survey shows that the majority of fathers do not feel they were invited by the doctor or midwife to take part in consultations. Many also report that they were not spoken to directly during these visits.

Why do fathers choose to be present at the birth of their children? New surveys show that 98% of fathers say they chose to be present because they wanted to be; and afterwards 95% say they were glad they did - only 1% say they would have preferred not to have been present.

When asked why they want to be present, all prospective fathers say that they are there to support their partners. And 85% add that they also want to be there to welcome their child.

Once the baby has been born, 70% of fathers feel that their involvement with the baby is the most important aspect. In other words, prospective fathers initially become interested and get involved in the delivery in order to support their partners, and then find that they bond with the newborn. While at the maternity clinic, many new fathers ask for advice on how to obtain better contact with the infant. Most fathers also want to remain with their partner and their newborn at the maternity unit, and this is becoming possible at an increasing number of birth venues.

Fathers as pioneers

Fathers who are present at the birth of their children are still "pioneers" and contribute to the creation of new traditions as they voice their needs and requirements in the childbirth environment.

Men who become fathers today still do not have many positive role models. It is likely that they are the first generation whose birth was attended by their own fathers - who were among the first in the world to be present at the birth of their children. But their fathers were still "traditional fathers" who did not take paternity leave, who were never alone with the infant, did not walk the baby carriage (pram) alone in the street and did not take their young children out anywhere on their own. Many men do all these things today even if the responsibilities of child-rearing are still somewhat unevenly balanced. But never before have so many fathers been spending time with infants, babies and toddlers. And never before have so many men chosen to take their share of the available maternity / paternity leave.

What does being a good father involve?

Men, when asked - both before and after the birth of their child - what they think being a good father involves, reply as follows:

- Being actively engaged
- Taking the time needed
- Being observant and mentally present
- Being loving
- Being together
- Being interested and caring.

In order to become a good father and for strong bonds between father and child to develop, men must:

- Make a conscious decision to take on the role of a parent
- Be present at all check-ups and consultations - and ask their own questions
- Attend antenatal classes - to increase the sense that they as partners are about to bring a child into the world
- Spend as much time as possible with mother and child right from the very beginning
- Work out and insist on having their own role as a father in their little family
- If necessary ask the advice of health-care professionals how to hold / change / obtain contact with the newborn
- Be present during the maternity stay at the birth venue
- Take as much paternity leave as possible
- Spend time alone with their little one and insist that they can do things their way - their way is OK.

Involvement during delivery and the first days / weeks of the infant's life is a good basis for the bonding of father and child - and for lifelong contact between the two. It is all-important that you are physically close to the infant. This will increase your desire to spend time with your little one as well as your confidence and capabilities as a father.

Fathers and infants

All surveys show that fathers are perfectly capable of taking on the main responsibility for a baby straight after birth. There is no discernable difference later on to show whether a child's mother or father took main responsibility for the child. And cross-generational surveys show that fathers'

capability of creating a happy and secure emotional basis for their children is just as great as that of mothers.

These surveys also show that fathers immediately adapt to the newborn infant even if - before the birth - they had mainly been thinking about later stages of the child's life, beyond babyhood. And fathers can identify with infants just as well as mothers can.

However: Taking the time to be involved is all-important. Depending on the time you as a father spend with your little one, you can bond with him / her in the same way and just as profoundly as your female partner. Current research shows that fathers and mothers act and react in much the same way when they are alone with the infant. There are, of course, some differences but none that prevent the fulfillment of the child's fundamental needs.

Agreements and seeming differences between fathers and mothers

In spite of the fact that men and women do not show much behavioral difference when they spend time with their infants, fathers and mothers often have very different ways of speaking about their infants and the time they spend with them. When women speak about the child they are expecting, they often refer to it as an infant and describe having close contact with it whereas men are more likely to speak about spending time and playing with the older child.

This is also the case once the child has been born: The mother often speaks about closeness, the tender relationship between her and the child. Men, on the other hand, often speak about experiencing togetherness with the child through physical, wild and exciting play and games. This depicts mum and dad as being very different in their roles as parents and can create conflicts but in reality there is no evidence that they are very different in the way they actually associate with the infant.

This makes it very important for parents to discuss their relationship and their views on equality as parents. You would be wise - before the baby's arrival - to think about your future together and consider and discuss what it will be like: How will you share responsibilities? Think about which one of you will get up at night to change the baby, who will pick up the child from the crèche, who will put the child to bed and so on. Do you want to share these responsibilities equally or will it mainly be up to one of you? Who will spend the most time with the child - will it be mainly one of you during the first years of the child's life, bearing in mind that this leads to developing stronger lifelong bonds - or are you looking for equality? And not least: How will you balance your work and being a parent? What will your priorities be for the next 18 years?

Becoming a father with everything this entails is an important factor in a man's psychological development. Fatherhood can develop traits in a man which directly counteract the aggressive / violent tendencies that some men have. Feeling responsible, bonding closely and identifying with the child develop characteristics in the male psyche to complement the traditional masculine image.

Fatherhood is fundamental to a man's development - not least his psychological development. And being separated from your children is devastating. The psychological processes involved in becoming a father will transform you. Most fathers find it an enriching experience.

All this, and more, seems to point to the fact that the concept of fatherhood has been and is undergoing development - and that perhaps it makes sense to speak of a "new concept of fatherhood". We now know that the more time you spend with your child the more time you are likely to want to spend with it. This opens up an historic possibility: The possibility of creating the right conditions for building strong ties between father and child from very early on.

Fathers and the baby blues

Both men and women find the birth of a child and becoming parents psychologically challenging - and they find it redefines their identity. Every new parent experiences a multitude of very strong feelings. Sometimes these feelings are so strong that the new parent needs help - a postnatal depression has developed.

We now know that men as well as women can experience postnatal depression. Around 7% of all fathers in Denmark experience postnatal depression within six weeks of the birth of their child. With approx 65,000 births annually, this means that a good 4,000 fathers experience the baby blues every year.

The cause of postnatal depression can often be troubled childhood memories - for example, conflicts with one's own mother, conflicts which the new parent has not resolved or come to terms with. In postnatal depression these childhood conflicts may get mixed up with current conflicts in the relationship with one's own mother and perhaps also with one's partner. Many of the conditions, thoughts, feelings, reactions and symptoms experienced in connection with an "ordinary" depression also occur in postnatal depression. Except for the fact that the way the new parent feels is connected to having become a parent.

Men may display symptoms of postnatal depression which are different from women. Women traditionally experience feelings of, for example, hopelessness, guilt, reduced self-worth and helplessness. In addition to that, men may display reactions such as: a low stress threshold, substance abuse (particularly alcohol), anger, restlessness, withdrawing from contact, exaggerated interest in their work and refusing to accept help. These reactions may escape attention and may be difficult to associate with the need for help. Many men might be perceived as being a problem rather than a person who has a problem and needs help.

When experiencing these reactions a new father may also often feel overwhelmed by a feeling of being hemmed in. Add to this an overwhelming feeling of responsibility, worry that something may be wrong with the baby, worry about the child's reactions and needs or anxiety about being separated from the child. Many men may also worry that they might lose self-control with the baby, that the baby will get out of control, that the baby will have a damaging effect on the father or the father's life - or the father may be thinking it would be easier not to have to deal with the child.

You must seek help if you are a new father and feel like this. Speaking to a psychologist can help - both in terms of how you feel within yourself and in terms of your relationship to the baby and to becoming a father.

Antenatal care

Your first antenatal check-up at the doctor's

Most couples attend the first appointment at the doctor's together - you are both welcome. Your doctor will inform you of the antenatal care on offer and of the possible birth venues. You can discuss your experiences as prospective parents and your joy and worries as well as your sexual relationship. Your general practitioner (doctor) will ask whether you have any special difficulties, and whether, for example, you need an examination / clarification concerning any hereditary diseases in your family.

Date of my first antenatal check-up:

.....

Cross-agency case notes

Your general practitioner will calculate the date your baby is due on the basis of the day your last period started.

As part of this check-up you will be asked for the date of your last period, about your menstrual cycle, whether you have been pregnant before and about any diseases. You will be weighed, have your pulse taken and your blood pressure measured, and a sample of your urine will be checked for bacteria because pregnant women are prone to bladder inflammation. Before you leave, appointments will be set up for further antenatal health checks.

Your general practitioner will start your cross-agency case notes. You will get your copy of them handed to you in an envelope. You must bring these notes with you on all visits to your doctor and your midwife so that you yourselves have a complete record of your case notes. Your cross-agency case notes also allow the health-care professionals looking after you to read up on your previous check-ups.

When is your baby due?

Your due date is the day your baby is expected to be born. Your general practitioner will do an initial calculation of the date; later a date will be calculated on the basis of your scan, later still a date will be set by the midwife and perhaps finally by your obstetrician. You should agree a date with staff at the birth venue. The exact date is only important if your baby becomes overdue or is premature.

Many birth venues go by the due date estimated on the basis of your ultrasound scanning.

Pregnancy is calculated as 40 weeks from the first date of your last period. It is calculated this way because most women know the date of their last period whereas not many women know exactly when the baby was conceived.

In practice, this means that you were not pregnant during the first two weeks because you did not, of course, become pregnant on the day your period began.

The exact date depends on your menstrual cycle and whether it is exactly 28 days or not. If your cycle is slightly longer, your due date will be calculated taking this into consideration.

First-time mothers tend to be overdue by one week.

Choice of birth venue

There are currently 29 birth venues in Denmark. Danish health legislation (Sundhedsloven) provides a free choice of hospital; this also applies to pregnant mothers. This means that you are free to choose between hospitals in your own region as well as hospitals in other regions of the country.

If you have any specific requirements, mention it now, while the general practitioner is working on your case notes. Perhaps the birth venue of your choice follows routines of which you are not aware. A venue may differ as regards the length of time you may stay at the venue after you have given birth, or the antenatal and parenting classes on offer may be different. Be aware that a hospital may refuse to admit somebody from another region if insufficient places are available. It may be a good idea to search the Internet to see what facilities are available at the hospital of your choice. For example, visit www.sst.dk

Many parents-to-be do not realize that they have a say regarding where delivery will take place, and many more do not even realize what their options are. This is a brief list of possibilities:

- A specialized maternity unit
- A maternity unit
- A surgical maternity unit
- Home birth
- A private maternity clinic.

If you opt for giving birth at a hospital, you will possibly be able to do so as an outpatient and leave the hospital approx. six hours after delivery.

Your midwife and your health visitor will visit you at home in the course of the first week after delivery if you have given birth at home or as an outpatient.

Specialized maternity unit

A specialized maternity unit can cater for any and all deliveries irrespective of how your pregnancy and actual delivery develop. Here, obstetricians and midwives work side by side. All types of analgesia (pain relief) are available, so is caesarean section if needed. Usually a specialized maternity unit is a busy place with more than one delivery going on at the same time. The midwife will attend you most of the time, or perhaps a team of midwives will attend you in turn. Some parents-to-be feel safe to concentrate on the delivery knowing that help will be at hand, others are quite happy in the knowledge that they can be transferred to a specialized unit if necessary. Large hospitals have these specialized maternity units, and increasing numbers of pregnant mothers choose to give birth at these.

Maternity unit

You can choose an ordinary maternity unit as your birth venue. Here you will have exactly the same facilities as you would have at home. In practice, delivering your baby at a maternity unit is a "home birth" at a hospital.

This service is midwife-led. A midwife will be with you all through the delivery, and you will get the help you need when you need it.

How long you can stay after the delivery varies from region to region. The types of pain relief available also vary. Be sure to ask before you decide.

Surgical birth venue

This is a small maternity unit in a hospital with a duty surgeon on standby. Depending on the particular venue and the staff, you can stay here even if delivery takes a little longer than normal. Speak to the midwife to find out what types of pain relief are available.

Home birth

Between one and two per cent of pregnant mothers choose to deliver their baby in the peace and quiet of their own home. The midwife will come to you; you won't have to leave home to go to the birth venue.

A number of midwives work in private practice. They carry out antenatal check-ups, attend home births and carry out midwife visits. You can read more about home birth schemes in the various regions of Denmark by doing a search (in Danish) for a home-birth system ("hjemmefødselsordning") via www.google.dk - (you might want to ask a Danish-speaker to help you).

Some midwives in private practice have entered into an agreement with the Danish Association of Midwives (Jordemoderforeningen). They are appointed on a group-contract basis and do not charge for their service. Be sure to ask what the possibilities are in your area.

You will remain in the peaceful surroundings of your own home, and the midwife will be able to concentrate on your needs. No surveys have brought to light any evidence that delivering your baby at home is not perfectly safe, assuming that a home birth has been planned all along.

The drawback is that if the delivery does not progress normally, you will have to be transferred to a maternity unit. It is important to prepare for this eventuality so that you do not become too disappointed if you do not manage to deliver your baby at home, after all. The midwife will visit you again two days after delivery.

Private maternity clinic

These days you also have the possibility of choosing a private, midwife-lead maternity clinic whose midwives attend you all through pregnancy and birth. You can find out what the possibilities are by contacting the clinic in question, for example, www.klinikkenmaia.dk - you will be charged for the services of a private maternity clinic.

Patient Hotel

Some venues offer accommodation facilities at a patient hotel where the new family can move into a room on its own and spend the night. A patient hotel looks like any other hotel with a reception, and many patients spend a few days here after having minor surgery. Your midwife will be able to tell you what is on offer at your birth venue.

Examinations on your first visit to your doctor

Gynecological examination

The doctor will palpate the pregnant mother's uterus to ascertain whether its size is consistent with the length of time she has been pregnant, and to ensure that everything feels normal.

Hemoglobin percentage

Hemoglobin is the pigment that colors your blood red. Hemoglobin protein is inside your red blood cells, its function being to transport oxygen from your lungs to the tissues all over your body that need oxygen. It is normal for your hemoglobin percentage to drop a little during pregnancy. This drop is due to increased fluids in the body diluting your blood. It is recommended that pregnant women take an iron supplement of 50-70 mg Hemofer from 20 weeks of gestation onwards. Choose the least expensive one you can find (also see *How to eat while you are pregnant*).

Blood group

There are many systems for determination of one's blood group. The best known are the ABO blood group system and the Rhesus blood group system. A blood test will be taken to determine your Rhesus status. If you are Rhesus-negative, your blood sample will be checked for Rhesus antibodies. At 35 weeks your blood will again be checked for Rhesus antibodies. If Rhesus antibodies are found in your blood, you will need more frequent check-ups as these antibodies may affect your little one's health.

Your baby's blood group will be determined after delivery, if you yourself are Rhesus-negative. If you are Rhesus-negative and the baby is Rhesus-positive, you will - within 72 hours - be given an anti-D injection to prevent Rhesus problems in connection with any later pregnancies. Adherence to this procedure has practically eradicated Rhesus disease in Denmark.

Blood pressure

A person's normal, stable blood pressure should be approx. 120/80 (a hundred and twenty over eighty). If your blood pressure is elevated, this may indicate the early stages of pre-eclampsia. If your blood pressure is low, this is not a problem but you may experience dizziness, particularly if you get up quickly from a seated position.

Urine samples

Sometimes your urine may look a bit cloudy. This may be due to an increase in vaginal discharge, and is normal during pregnancy. Sugar in your urine may be a sign of developing diabetes but it is more likely that your kidneys are simply more easily triggered into secreting sugar during pregnancy. This is nothing to worry about. What may have caused it in your case, can be ascertained by carrying out a glucose tolerance test, if needed.

Protein in your urine may be a sign of a bladder inflammation, which is easily treated. In the second half of the pregnancy protein in your urine may also indicate the early stages of pre-eclampsia.

Bacteria in your urine indicate a bladder inflammation and must be treated.

Weight

Gaining 10-15 kg in the course of your pregnancy is normal. You should, however, gain only 8-10 kg if you are overweight, and approx. 14-15 kg if you are underweight.

This weight gain breaks down as follows:

- The baby (approx. 3 ½ kg)
- Increase in size and weight of uterus (approx. 1 kg)
- Placenta (approx. 1/2 kg)
- Development of breasts (approx. 1 kg)
- Amniotic fluid (approx. 1 kg)
- Retention of fluid in your body (approx. 1 ½ kg)
- Increased blood volume (approx. 1 ½ kg)
- Fat deposits (approx. ½-1 kg) laid down as extra energy for breastfeeding.

Read more in the folder: "Når du er gravid. Råd om mad og motion" (see the list of recommended leaflets at the back of this book).

If you gain more weight than this, it may be due to the fact that you have a big appetite but it may also be because your body is retaining fluid. Light edema, fluid retention, is common during the last trimester (see *Exercises for improving your circulation*). Serious retention of fluid may be another sign of the early stages of pre-eclampsia.

A leaflet for Dad

There is a leaflet written especially for fathers, "Til dig, der skal være far". You could ask the midwife for it or download it from www.libero.dk - this website is another good place to read up on the subject of becoming a father.

The leaflet offers a brief summary of the many thoughts and feelings that men may have in connection with their partner's pregnancy and confinement and their own preparations for the new baby. The main focus of the leaflet is the relationship between father and newborn infant.

Your first visit to the midwife

You will receive a reminder of your first appointment with the midwife at around 12 to 16 weeks. The venue of the visit may be a midwifery centre. Staff here will attempt to plan so that you - to the extent possible - see the same midwife for all check-ups. Some birth venues have set up a special "Know-your-midwife system" ("kendt jordemoder ordning"). The system involves assigning a group of midwives to each group of pregnant mothers with a view to achieving continuity and building confidence with familiar faces.

Date of my first appointment with the midwife:

.....

Knowing your midwife and knowing that she knows you creates confidence. It can, however, be difficult to plan for the delivery to happen exactly when your chosen midwife is on duty. At many birth venues this problem is addressed by assigning a small group of midwives to attend you - in the hope that one of them will be on duty when you deliver the baby. Fortunately, this is often the case.

At this visit the conversation with your midwife will focus on how it feels to be pregnant and on how you both feel about becoming parents.

The midwife will make sure that you are well-informed and will speak about your resources and the way you live while you, the mother-to-be, are pregnant. She will also discuss with you what you can do to ensure that the baby you are expecting is healthy and developing as well as possible, and she will answer any questions you have.

At this visit the pregnant mother will be weighed and have her blood pressure taken, and a urine sample will be checked. After 28 weeks the baby's weight will be estimated and the fetal presentation (the way the baby is lying) noted.

The midwife will also discuss with you your options as regards attending antenatal classes / parenting classes.

Some midwives have telephone hours during which you can phone if you have a question you would like answered.

And if the prospective father would like to speak to the midwife for a few minutes, all you have to do is ask.

Group consultation

In some areas the midwife arranges group consultations with six to eight pregnant couples, each consultation lasting 60 or 90 minutes. This will give you a networking opportunity which will also benefit you after the baby has arrived. You can, of course, also speak to the midwife at these group consultations.

Visiting the birth venue

Your doctor (general practitioner) will refer you to your birth venue. Most birth venues offer to show you around the premises before the event. Each birth venue arranges its own timing for showing parents-to-be around.

Many hospitals have their own website. See, for example, www.sundhed.dk (you might want to ask a Danish-speaker to help you).

Pregnancy scans and screening tests / fetal diagnostics

Ultrasound scanning makes it possible - by using high-frequency (ultrasonic) sound waves - to produce an image of the uterus, the baby, the placenta, the umbilical cord and the amniotic fluid. This scan is performed either via the vagina or from the outside of the abdomen and is carried out by a midwife, a doctor or a nurse.

There is no risk involved in ultrasound scanning - this type of medical examination has been carried out for almost 50 years, and no surveys have brought to light any evidence that ultrasound scanning as used for antenatal examinations is in any way harmful.

Ultrasound scanning can be performed at several "levels" - levels 1, 2 and 3:

Level 1 scanning

This is an examination to ascertain that the baby's heart is beating, to measure the size of the baby and double-check that your due date has been correctly predicted (i.e. that the size of the baby is consistent with its calculated gestational age). The health professional performing the scan will check whether you might be expecting more than one baby and locate the placenta. This scan, which can be performed at 10 to 16 weeks, shows the amniotic fluid.

Level 2 scanning / a total scan of the baby

This is a comprehensive scan to examine the baby from head to toe in order to exclude the possibility of most - and the most serious - abnormalities. This is a total, thorough scan of the baby and is available everywhere in Denmark. The health professional performing the scan of course also double-checks whether you are expecting twins or more, examines the placenta and checks the volume of amniotic fluid. This examination is best performed at about 18 to 20 weeks.

Level 3 scanning

This examination is performed only in special cases and by specially trained professionals. It is performed to examine minute details of, for example, the baby's heart and brain. This scan is carried out only when particular diseases are suspected.

Nuchal fold test

The nuchal fold test is a scan which measures the thickness of the nuchal fold, i.e. the thickness of a pad of skin and subcutaneous tissue at the nape of the baby's neck. When you know the gestational age and the thickness of the nuchal fold, you can assess the risk of the child having Down's syndrome (this is a chromosomal defect which causes "Mongolism" - Down's syndrome is the cause of 85% of all serious chromosomal disorders). This test should preferably be performed at 11 to 13 weeks.

The nuchal scan can be supplemented with a blood test - a double test - which is best carried out at eight to 13 weeks.

The test result is assessed on the basis of your age in order to ascertain the risk that your baby might suffer from Down's syndrome. You must be aware that this test result is an estimation of risk, not a conclusive answer.

This method of combining a blood test and a scan eliminates up to half of the placenta and amniotic-fluid tests which used to be performed until some years ago. Blood tests and scans involve no risk to the baby whereas placenta and amniotic-fluid tests involve a small risk (<1%) of spontaneous miscarriage. A blood test and nuchal scan are routinely available to all pregnant mothers.

Date of nuchal scan:

.....

Myth

The amniotic-fluid test shows for certain whether you are expecting a boy or a girl.

True or false?

Yes, this is true.

Later scans

If, later in the pregnancy, there is a suspicion that the baby is not growing and developing normally, the baby's weight and general condition can be monitored by performing another ultrasound scan which takes account of the volume of amniotic fluid, the baby's movements, the blood flow through the umbilical cord and the baby's blood vessels, etc. It is also possible to carry out an amniotic-fluid test and a blood test taken from the umbilical cord.

3D-4D ultrasound scanning

This is a relatively new type of ultrasound scanning which produces a three / four-dimensional image of the baby inside the uterus. This type of scanning, which comes in various forms, is available at private clinics. These scans cost between DKK 400-1,800, and you will be charged for

this service. You will find further information about this type of scanning, for example, at www.scanningsjordemoderen.dk - you might want to ask a Danish-speaker to help you.

Myth

The Shettles method

Boys' Y sperm move at a faster rate than girls' X sperm.

If you have intercourse close to the time of ovulation, the baby will be a boy.

X sperm on the other hand are more viable, so if your baby is conceived two to four days before ovulation, the baby will be a girl.

True or false?

There is no scientific research to confirm this theory. One survey was carried out in 1995 but did not support the theory. If you believe this theory may be true, it is important that you know when ovulation is due.

It is, however, always slightly more likely that you are expecting a boy, as 51.2% of all newborns are boys and 48.8% girls.

Chromosomal screening

This test is open to women who are at increased risk of bearing a child with chromosomal abnormalities or certain hereditary diseases. The test can take the form of a placenta biopsy - a small sample of cells is taken from the placenta at around nine to 13 weeks - or an amniotic-fluid test is performed. The amniotic-fluid test is performed at 14 to 18 weeks. The tissue sample or the cells in the amniotic fluid are then cultivated, and when they divide, chromosomes are produced and examined. You will need to spend the remainder of the day resting after undergoing a placenta or amniotic-fluid test. The result of the **placenta test** will be ready in about a week; the result of the **amniotic-fluid test** will come back in three to four weeks. A provisional test - a so-called FISH test - will give a fairly certain but still not conclusive result after two to three days.

Visit www.sst.dk for further information; you might want to ask a Danish-speaker to help you.

CTG reading

A cardiotocograph (CTG) is a monitor that records the fetal heart rate and your uterine contractions. Performing a CTG gives health professionals an immediate impression of how the baby is doing.

A CTG reading is performed if you feel movement is becoming less frequent or in case of suspected placenta insufficiency with the risk of retardation of the baby's growth; CTG monitoring is also used at some birth venues during the initial stages of delivery. CTG is measured from a heart-rate transducer, and a uterine-contraction transducer which is strapped in place on the maternal abdomen over the uterus. The baby's heart rate is normally monitored via ultrasound.

During CTG monitoring the monitor will sometimes stop tracing the baby's heart rate; this happens because the baby has moved.

A CTG reading takes approx. 30 minutes.

Myth

Placenta biopsy

The test gives you 100% certainty of the baby's sex.

True or false?

Almost true - but it does occasionally happen that an error is made and the specimen consists of maternal tissue.

Maternal blood tests for AFP

AFP (alpha-fetoprotein) is a protein produced by the baby measurable both in the mother's blood and in the amniotic fluid. Why the baby produces this protein is not known but AFP levels that are either too high or too low are seen in connection with abnormalities in the baby, particularly central-nervous-system and chromosomal disorders. If unusual levels of the protein are found, the mother is offered a fetal chromosome test and / or an ultrasound scan to corroborate or eliminate suspected fetal abnormalities.

The "Double test"

The "Double test" is a blood test that measures the concentration of two hormones, P-Beta-HCG and P-PAPP-A in the mother's blood. This test is done at about eight to 13 weeks.

Myth

If you cannot see a male organ by 20 weeks, you can be fairly sure that you are expecting a girl.

True or false?

The baby's male organ may not show on scans, so you cannot be sure.

The "Triple test"

The "Triple test" is a blood test for measuring the concentration of three different hormones in the mother's blood, AFP, Oestriol and Human-Chorionic-Gonadotrophin = HCG. This is a test to assess the risk of the baby having Down's syndrome. If test results are not normal, the mother will be offered a fetal chromosome test. This test is done at about 14 to 20 weeks.

Available tests

The tests currently available differ slightly from region to region in Denmark. Ask your midwife and doctor what is available at your birth venue. For more information visit www.sst.dk - you might want to ask a Danish-speaker to help you.

Myth

If you already have more than one son, it is likely that you will have another boy.

True or false?

Yes, this is true but it is not known how great the likelihood actually is.

Other technology

Modern technology (enzyme activity assays and molecular biological technologies) makes it possible to diagnose some hereditary metabolic disorders and demonstrate the presence of certain pathogenic genes. Tests are carried out partly on the parents, partly on specimens from the baby (amniotic-fluid test / placenta biopsy). Speak to your doctor if there are any hereditary diseases in your family (see under *Your first antenatal check-up at your doctor's*).

Projects

Most birth venues have various ongoing projects which run over several years. You may want to discuss taking part with your doctor or midwife.

Boy or girl?

An egg cell and a sperm cell each have a set of chromosomes (23 each). The fertilized egg therefore has 46 chromosomes. These chromosomes carry our individual, hereditary genes. All egg cells have one X chromosome. Approximately half of all sperm cells carry X chromosomes; the remaining half carry Y chromosomes. When a sperm cell carrying a Y chromosome fertilizes an egg cell, the resulting XY combination in the set of chromosomes that determines the child's sex makes the child a boy. If a sperm cell carrying an X chromosome fertilizes an egg cell, the resulting XX combination makes the child a girl. In other words, the child's sex is determined at the moment of conception.

In the first ten weeks of gestation, male and female babies develop in the same way, forming the same primordial anlage for sexual glands and organs. But after ten weeks the sex chromosomes will determine the baby's further development (See the *Pregnancy Calendar*).

If you choose to have a chromosome test performed, it will tell you whether you are expecting a boy or a girl. This test is carried out on the basis of cells from the amniotic fluid or the placenta.

Calculating your due date

Your due date can be calculated in a number of ways:

- The date your baby is due can be calculated on the basis of the first day of your last period using a cardboard "due date calculator":
First day of last period
+ 7 (10) days
- 3 months
(These days ten days are usually added rather than seven)
- An ultrasound scan.

Names

When discussing whether you are expecting a girl or a boy, you and your parents and friends are perhaps also putting forward ideas for what you might like to call your child. Make a note of these suggestions, perhaps adding who first suggested each name - this might make interesting reading later!

Ideas for names:

Quickening

Every baby has a different pattern of movement

The baby's movements (quickening) initially feel a little like bubbles in your tummy. But the "bubbles" become more pronounced as the baby gains weight. Towards the end of the gestation period you will perhaps feel that the baby's movement is more deliberate and more of an effort for the baby. This is due to the fact that the baby now has very little room to maneuver. Fetal movement is initially quite irregular. In the early stages, hours and / or days may pass between instances where you can feel the baby move.

Women who have given birth before become aware that the baby is moving at about 16 to 18 weeks. First-time mothers, who perhaps do not at first know what fetal movement feels like, usually become aware of it at about 18 to 20 weeks.

If you do not feel the baby move until a little later this may be due to the fact that the placenta is located at the front of your uterus or that you have gained a lot of weight. If you become worried because you very rarely feel movement, contact the midwife at your birth venue.

Make a note of when you feel the baby moving

A small number of birth venues - from 32 weeks - use records of fetal movement as one way of monitoring the baby.

If the pattern of the baby's movements changes, it may be because the baby is asleep or that - as it is becoming larger - it has no room to move in the uterus. You could wake the baby up by giving it a gentle push with your hand, or you could lie down and relax and send it loving thoughts. Or perhaps you could wake the baby up by quickly drinking a glass of cold water. You should speak to your doctor or midwife if there is a marked change in fetal movement.

Date of the first time you felt the baby move:

.....

Pregnancy calendar

Understanding your pregnancy week by week

For practical reasons the first day of your last period is calculated as the first day of gestation. But in actual fact conception could not take place until the time of ovulation two weeks later.

So during the first two weeks you are not really pregnant. This means that your baby is actually two weeks younger than its "gestational age". Most women remember when they had their last period but not all women feel ovulation taking place. Hence the above calculation method.

In this pregnancy calendar you can see what is happening week by week and read up on the approximate size and weight of the baby until it is due. Size and weight may, however, vary from woman to woman. During the first half of the pregnancy most babies grow at the same rate, after that it may vary. Babies weighing 3,000 g and babies weighing 4,000 g at birth are both within normal range.

In this book we quote sizes and weights as published by the Danish National Board of Health (Sundhedsthyrelsen).

Ultrasound scanning makes it possible to ascertain the size of the embryo at a very early stage. Until 14 weeks your baby's length is measured in units of mm from crown to rump (Crown-Rump-Length = CRL). Thereafter the baby's length is measured in units of cm from head to toe. It is also possible to measure the width of the baby's head in units of mm. And if the length of its thigh bone (femur), is also measured, a fairly accurate impression of the size and gestational age of the baby is achieved.

You might want to enter the actual dates relating to your pregnancy in the date fields below.

2-3 weeks Date:

Most women release a mature egg from one of their ovaries once a month. At this time, vaginal discharge changes consistency making it more penetrable to sperm cells. In the time it takes an egg to mature, a man can produce billions of sperm cells. Each ejaculation can contain up to 500 million sperm cells. Conditions will only be right for one in every 10 of these to reach the egg (ovum). Sperm cells maintain their ability to fertilize the egg for approx. 48 hours.

It takes a sperm cell from 30 minutes to 48 hours to reach the egg. The sperm cell which gets there first will penetrate the egg, thereby fertilizing it. The sperm cell loses its "tail" (flagellum) and soon grows to the same size as the nucleus of the egg. The sperm and the nucleus unite and new life begins - a human being has been created.

The egg matures in one of the woman's ovaries and lies ready in one of her fallopian tubes waiting to be fertilized. It may lie in this nutritive environment for a couple of days. If it is not fertilized, it will continue down into the uterus and be discharged in connection with the woman's next period.

Many women say that they had a feeling that conception had taken place – something felt bodily different – a slight sensation across the breasts. Perhaps you remember feeling something like that?

3 weeks **Date:**

Now a sperm cell has penetrated the egg. The fertilized egg stays in the outer part of the fallopian tube for a couple of days dividing over and over again to become 4 cells, 8 cells, etc. On the fourth day of gestation the fertilized egg looks a bit like a mulberry. It is transported through the fallopian tube to the much roomier uterus. The fertilized egg becomes embedded in the nourishing mucous membrane of the uterus, and the placenta forms at the location of the egg. This is usually in the upper part of the uterus.

At the very moment when the sperm cell first penetrated the egg cell it was determined whether you are expecting a boy or a girl. It is the sperm cell that determines the sex of the baby. The cells of the fertilized egg continue to divide. Approximately one week has passed from ovulation to this point. The fertilized egg now consists of approx. 100 cells; it is 0.2 mm in diameter, the size of a pinhead. The first primitive indications (anlage) of developing brain and nerve cells are formed. Some cells will build the baby itself. Other cells will form the placenta which will be intimately attached to the nutritive mucous membrane of the uterus. The hormone progesterone is secreted in quickly rising concentrations in order to ensure viable gestation and that the mucous membrane of the womb develops to help the egg remain embedded.

Chemical signals are sent to your pituitary gland and ovaries that you are pregnant and that the ovulation cycle can stop for now. That means that your periods will stop as well.

Your morning temperature will have risen to approx. 37° C; this is also due to the progesterone being secreted.

4 weeks **Date:**

You may feel a little more tired than usual, and you may have a slight headache.

The egg now measures 0.5 mm and would be visible to the naked eye. It is embedded in the mucous membrane lining the uterus. Some women experience slight bleeding when the egg becomes embedded – this is nothing to worry about. The placenta forms around the egg and secretes the hormones needed for gestation, and for the embryo to develop. The embryo receives oxygen and is nourished through the placenta which also carries waste products away from it by cleansing its blood.

Be aware that not only oxygen and nutrition but also nicotine, alcohol and medication pass from you into the embryo's bloodstream. The embryo also receives valuable antibodies from you. These antibodies will protect the newborn baby from certain diseases during its first months of life. The placenta is covered in membranes which – in the course of gestation – will form the balloon-like amniotic-fluid cavity in which the embryo lies suspended. This "balloon" also provided a cushion against physical injury and ensures that the embryo is kept moist to avoid desiccation. During the first ten weeks of gestation, the fetal membranes produce the amniotic fluid. After that the baby contributes to the fluid by swallowing it and then urinating in it over and over again.

Mother and baby may have incompatible blood groups which – if blood flows directly from mother to baby – can be fatal for the baby. A thin membrane forms a filter between maternal and fetal blood to ensure that the two types of blood do not mix.

The anlagen of the gastrointestinal tract, the lungs and the nervous system have been formed, and some cells are forming the anlagen of skin, muscles and blood vessels.

By day 20 the baby's heart will be beating for the first time.

5 weeks **Date:**

24 days old and 4 mm from crown to rump.

You will probably begin to sense that you are pregnant. Your breasts may be tender and you may feel nauseous and need to urinate more often. If this is the case, the reason is an increased afflux of blood to the area around your uterus. This may result in increased pressure on your bladder which makes you feel you need to urinate. It is completely normal to feel tired and more hungry than usual.

A pregnancy test carried out now is likely to be positive.

The side of the placenta facing the baby is covered by two fetal membranes, the amnion and the chorion.

The anlagen of what will become the baby's upper and lower limbs have begun to "bud" from the body. Its spine is beginning to form, and its heart anlage is divided into two halves. The baby is still sexless. Initially every embryo starts out as female. If the XY combination is present, the Y-chromosome will now release high volumes of testosterone which will make the baby develop into a male. If this does not happen, the baby will be a girl.

6 weeks **Date:**

5 mm from crown to rump. Weight approx. 1 g.

Perhaps you are already secretly cherishing your pregnancy. Perhaps you feel at one with the baby and feel strongly protective of it. Perhaps your morning coffee seems to taste different, and you feel a little under the weather first thing in the morning? Maybe the joy you feel is overshadowed by the fact that your breasts feel very tender, by tiredness and nausea. And perhaps you are a little constipated? It may take longer for your meals to pass through your digestive system, and this will also make your stomach a bit windy. You can read more about this subject and what to do about it later on in this book. You may want to check the index.

Your external os (the opening of the cervical canal into the vagina) will have turned a blue color. You can now discern eyes, mouth and nose. Development is tremendously intensive just now and sensitivity to any negative influence correspondingly great. There are anlagen for lungs and liver, and you can see the ocular anlage.

7 weeks **Date:**

The baby measures 10 mm from crown to rump.

You may feel dizzy from time to time and very tired - listen to your body and rest when you need to. The feeling of nausea may be overwhelming. The little bumps on your nipples may show clearly now. Still nobody will be able to see that you are pregnant but most women feel the changes happening in their body.

Your little baby is growing approx. 1 mm per day just now, doubling its length in a week. By the end of this week it will be the size of a pea. Its little heart is beating and pumping blood out to all its tissues. Its bones initially consist of cartilage but now ossification starts, continuing until the child is in his / her twenties. You can see a body with a head with little concaves and convexes which will become the baby's face. The eyes with their lenses have been formed but there are as yet no eyelids. You can just make out where the ears will develop. The baby's skin is almost transparent. There is no subcutis yet but the connective tissue which will form the basis of the skin is developing. The baby's hands are "paddle" shaped, and you can just make out where the fingers will develop. There is already hectic activity in the cells which will form the brain. The various parts of the primitive brain are each taking on their special function, and new connections are formed between nerve cells all the time.

It is possible to measure the baby's length by ultrasound scan and to register its heartbeats. It is now also possible to see whether you are expecting twins or more.

8 weeks **Date:**

Approx. 15 mm. Weight approx. 2 g.

Perhaps you are experiencing an increase in vaginal discharge; this is normal. Your uterus is growing, and you may feel twinges of pain in the lower part of your abdomen. This is because the ligaments from which your uterus is suspended are stretching. A little spot bleeding is not uncommon either. If you are worried and are experiencing increasing pain in connection with the bleeding, you should contact your doctor.

Perhaps you are developing bizarre tastes already at this point? Many women discover that now suddenly they cannot stand certain foods they used to like.

The baby you are expecting now looks like a tiny, miniature human. Its head is disproportionately big in comparison to the upper body and much larger than the lower body. Its body is straightening, and you can make out the beginning of upper and lower arms, thighs, lower legs and feet.

The baby now has anlagen for the primary inner organs. You can see the brain stem, the baby's heart is beating regularly. The baby is moving all the time and sleeps only for short periods.

Already at this point nerve impulses are sent from the baby's brain to the muscles in its arms and legs about how to move, and the brain receives nerve impulses back from the periphery of its body. This is of great importance to the development of muscles and joints.

9 weeks **Date:**

The baby is 25 mm long from crown to rump.

Your blood volume is increasing. Your gums may bleed a little and you may get nosebleeds. This is due to increased afflux of blood in all your mucous membranes.

You may still be experiencing mood swings. This is very natural; there are so many feelings and thoughts that you will need to deal with during your pregnancy. Perhaps you are also tired and feeling indisposed but hang in there because most women find that this has passed by the time they get to 12 weeks. Also, feeling less interested in having sex is not unusual during pregnancy. But having sex does not harm the baby.

The baby's skin is now less transparent although it is still very thin. You can see the holes that will develop into nostrils. The baby's nervous system is developing and maturing, particularly the brain cells at the location where its brain is developing - 100,000 new nerve cells every minute. The baby's inner sexual organs are formed, and its head is almost half as big as its body.

Placenta growth is keeping pace with the baby. It is all important to the development and growth of the baby that the placenta functions well as transporter of nutrition and oxygen. The umbilical cord has three blood vessels, two veins and one artery. The placenta regulates hormone levels to ensure there is a constant level of progesterone. This keeps the muscles of the uterine wall relaxed and

inactive. Towards the end of gestation when it is time for the baby to be born, progesterone production decreases with the effect that the uterus can contract, creating labor pains.

10 weeks **Date:**

The baby measures 35 mm from crown to rump. Its weight is approx. 15 g.

The baby's weight has doubled since seven weeks. Its heart has been beating for a month, and 56 days have passed since conception.

All the baby's organs are there but they are still very immature. The baby secretes small amounts of urine which become part of the amniotic fluid. The thin membrane which covers the anal orifice disappears. The inner ear has formed but the baby cannot as yet hear anything. The buds of its deciduous teeth and its taste buds are formed. The baby's eyes are moving from the sides of its head to their final location. Its eyes see light but cannot yet blink. Fingers and toes show slight indications of joints and nails.

If you are expecting twins, this will show up on a scan.

You are likely to need to get up at night to urinate; you are also likely to have a lot of wind in your stomach. Your breasts feel heavier than normal.

11 weeks **Date:**

The baby measures 45 mm from crown to rump.

Its heart rate is fast - approx. 110-160 beats per minute. This is necessary for its growth and development and for the transportation of nutrients and waste products. Its liver is large and takes up most of its abdominal cavity. There is no room for the intestines yet; the loops of the intestines still lie in the umbilical cord.

The baby's testicles or ovaries have been formed. It can open its mouth, and its tongue is fully developed. Its head is the same size as the rest of its body.

If you have been experiencing nausea, this has perhaps diminished somewhat by now. Many pregnant women are more sensitive than usual and will experience mood swings. This is due to the fact that changing hormone levels, being tired and thinking a lot about the future are all draining you of energy. Think about possible lifestyle changes. Your blood volume has increased and will continue to do so until you have given birth.

12 weeks **Date:**

The baby weighs approx. 25 g. It measures 55 mm from crown to rump.

The baby moves around in your uterus but you will not yet be able to feel this.

It now has eyelids and the tooth buds of its permanent teeth are forming. Its little tail - a reminder of the fact that we have a lot in common with other vertebrates - is shrinking and becomes its coccyx.

At this point the volume of amniotic fluid is approx. 60 ml.

Can you still fit into your clothes? At this point some women - when lying on their back - can feel something firm just above their pubic bone. This is your uterus.

If you want a placenta biopsy performed, now, around 11 to 12 weeks, is the time to do so. This test will also tell you whether you are expecting a boy or a girl - if you want to know.

13 weeks **Date:**

The baby measures 70 mm from crown to rump.

The baby growing in your uterus is now a fully developed, albeit tiny human being. All its bones still consist of cartilage but are ossifying. Its eyelids are still shut. In spite of the fact that the baby cannot perspire inside the uterus, its sweat glands are fully developed. Towards the end of the week you can see the lines on the tips of the baby's fingers which will later turn into its unique fingerprints.

Already at this point, little boys will be producing male sex hormones; and girls already have millions of primitive egg anlagen in their immature ovaries.

An ultrasound scan will show how the baby's hands often seek its mouth and how it is stretching its arms and legs.

You are now entering the second trimester of gestation. Many women experience this as a quieter time than the first trimester. Most things have fallen into place and many prospective parents are relieved to know that the greatest risk of miscarriage is now past. If you have the option, it would be a good idea already at this stage to take a rest in the middle of the day every day.

14 weeks **Date:**

The baby measures approx. 85 mm and about as much around the tummy.

It is becoming stronger and its movements more conscious. It can hold its head up briefly and bend it backwards. Its hands can grasp and its feet kick briefly. The baby's legs are now longer than its arms and it may have a little hair on its head. It moves its arms and legs but you will not yet be able to feel it.

You may be less tired now. Perhaps you are one of the women who had a strong urge to eat specific foods early on - or perhaps this is only happening now? You might hanker after liquorice, hot dogs or foods you have never liked before. Some pregnant women already have a dark line from their navel to their pubes - the so-called "linea alba". This disappears after you have given birth.

15 weeks **Date:**

If the baby has a tendency towards dark hair, it will start to produce dark pigment. Its skin will be covered with fine, colorless lanugo hairs. It is thought that the purpose of these is to retain the vernix caseosa, the protective, greasy substance on the baby's thin skin. The lanugo hairs do not disappear until towards the end of gestation. The baby's eyebrows have appeared. Its skin is still transparent, and you can see its thin blood vessels through it. The baby will move its chest now and then as if it is breathing. It is practicing breathing. Anlagen are in place for the cerebellum and the spinal cord. Calcium is being stored for the purpose of ossifying the cartilage in the baby's bones. The baby is constantly giving off tiny quantities of the greasy substance on its skin into the amniotic fluid.

Your heart has increased its capacity and is beating a little faster. Some women experience this as palpitations but it is nothing to worry about. Perhaps you no longer want to urinate as frequently because your uterus is now primarily growing upwards and not pressing as much on your bladder.

16 weeks **Date:**

The baby is now 16 cm long from head to toe. Its weight is approx. 90-120 g. Its head is approx. 30 mm wide.

Fetal movement is sudden, and the baby has both active and quiet periods.

It has hair, eyebrows and clearly visible nails. It drinks from the amniotic fluid and urinates into it but this does not create a problem because its urine is completely clean. Sometimes the baby will get the hiccups from drinking the amniotic fluid - you will be able to feel this later on in gestation. You can also see if the baby frowns.

You will be feeling twinges along the sides of your abdomen; this is still due to the stretching of the ligaments attached to your uterus. Some pregnant women, particularly those with dark skin, may develop blotchy facial pigmentation patches.

If you have given birth before, you will perhaps be able to feel the first signs of life already at this point?

17 weeks **Date:**

The baby is 18 cm long from head to toe; its weight is 125 g.

The baby now weighs more than the placenta, and it moves about a lot in the amniotic fluid, sometimes so much that a knot will form on the umbilical cord. This is not a problem, however, because the umbilical cord is so elastic. The baby may react to sounds; and it yawns. You can see the sex of the baby. Its body is thin, and its arms and legs delicate. Most of its skeleton is soft and flexible. It has hardly any subcutaneous fat. Its eyelids cover its eyes and will not open until about 26 weeks. The baby is aware of its surroundings and reacts to what is happening. You will perhaps feel it start at sudden loud noises.

The baby's brain is protected by loosely fitting bony plates. They will later fuse but the two openings, called fontanelles, will not close completely until the child is two years old.

You will be perspiring more and may feel your nose is stuffed up. This disappears after you have given birth. The reason for this is the increased volume of blood. This may make it a little more difficult than usual for you to get rid of a cold. If you need to use nose drops, use a saline solution.

18 weeks **Date:**

The baby's weight is approx. 150 g.

Its sebaceous glands were created earlier; they are the ones producing the vernix caseosa, the greasy substance protecting the baby's skin.

If this is your first child, you may feel it moving by now, or you may not be aware of its movements for another few weeks. Women who have been pregnant before are often aware of the baby's movements a few weeks earlier than first-time mothers. It depends where the baby lies, and how much time you take to focus on what is happening. Movements may feel like little bubbles or starts. Once you do become properly aware of movements, you will realize that these are a more vigorous version of what you felt earlier. On some days you will feel many little starts, on other days just a few. For many women it is now a much more harmonious time, and many will notice that their skin, hair and eyes seem to have a special shine to them.

19 weeks **Date:**

The baby's length is approx. 18 cm and its weight 260 g.

The tooth buds of the baby's permanent teeth are now in place. It is thought that the baby can discern between various tastes. Its hearing develops at between 15 and 20 weeks, and even if life in the womb is quiet, it is not soundless. The baby hears the flow of your blood, it hears your heartbeat, it hears when your intestines gurgle and when you sneeze, cough, burp or laugh. The baby will be conscious of your voice at an early stage. Its tooth buds are clearly visible, and nails are visible on its fingers and toes.

Perhaps you have become wider over the hips, and it takes less for you to get out of breath or perspire when you exercise. This is due to changes in your metabolism; your thyroid gland has become more active. The ligaments attached to your uterus are having to stretch further as your

uterus grows. You will feel this quite distinctly, and you may feel pain in your groin and at your sides. It is nothing to worry about. You may want to sit down and put your feet up.

20 weeks **Date:**

The baby is now 25 cm long, the width of its head is approx. 43 mm and it weighs approx. 400 g. Its brain is under intense development. The baby needs hundreds of millions of nerve cells for its muscular activity. The development of its nerve paths means that it can move consciously and coordinate movements such as sucking its thumb and drinking the amniotic fluid. Both these activities are congenital reflexes which are important to its survival once it has been born. Your little one is practicing suckling. The volume of amniotic fluid is now approx. half a liter. It is thought that the baby drinks half the amniotic fluid every 24 hours and renews it by urinating into it. The baby's heartbeat can be heard through a wooden stethoscope. Its heart rate is approx. 130 beats a minutes. It is developing the various layers of its skin, and its skin is becoming thicker.

You, the mother, are halfway there. The top of your uterus has now reached your navel. Your navel may turn "inside out".

If you feel tired, it is because you have doubled your volume of blood, and the baby's need of iron is increasing. In other words, you need iron.

21 weeks **Date:**

The baby weighs approx. 450 g. It is almost half its birth length but weighs only 10% of what it will weigh at birth. The baby's first bowel movement is collecting in its intestines. It seems to enjoy moving. You can feel it move every day, and day by day its movements are increasing. Your little one now has eyelashes.

Perhaps you are experiencing heartburn or reflux symptoms because your uterus is pressing against your stomach and inner organs?

Your mammary glands have been developing over the last few weeks, and you will see the blood vessels increasingly clearly on your breasts. Some pregnant women will begin to secrete a little colostrum from their breasts around now. This is the first type of milk your infant will get when it is put to the breast. This does not affect your milk flow or your ability to breastfeed when you have given birth. Gestation hormones will also increase the size of your nipples and make them darker.

22 weeks **Date:**

The baby's heart rate is approximately twice that of your heart. It is likely to be most active while you are resting. The reason is that it is easily lulled into sleep when you are moving about - but perhaps you will recognize its circadian rhythm once it is born. The baby will use its hands to feel its face and body. Its neck vertebrae are clearly visible, and it now has proper ears which can hear - although its ears are still very soft. Its skin is still very thin and is slightly reddish due to the clearly visible blood vessels.

Your uterus now extends to up over your navel, and the baby's movements can be felt from the outside of your abdomen. There may be a slight swelling in your gums. Your heart rate is still 15 beats higher than it would be if you were not pregnant.

23 weeks **Date:**

The baby's thigh bone measures approx. 4 cm, the width of its head is between 50 and 60 mm, and it weighs approx. 540 g.

The baby's lungs will not be completely mature until shortly before birth but already it is carrying out little breathing exercises - these are visible during an ultrasound scan. A little amniotic fluid may "go down the wrong way" - this will be cleared from the baby's lungs once it has been born. Pigment is forming in the baby's skin.

Some pregnant women feel the first Braxton Hicks contractions around this time. This does not mean that you should avoid exercising but listen to your body and take more frequent breaks.

Experiencing Braxton Hicks contractions in connection with having sex is nothing to worry about - the baby is well protected inside the uterus.

24 weeks **Date:**

The baby is approx. 30 cm long and weighs approx. 650 g.

Its frequent and rapid movements will perhaps give you an idea of its temperament and budding personality. The baby may happen to grasp the umbilical cord but the cord is so elastic that it is crush-resistant - and your little one needs to move about to develop its body. Its inner ear has formed. This means that it now knows up from down as this is where our sensory organs for balance are located.

You will be able to locate parts of your little one's body by touch. The baby will react to various sensory impressions. Its favorite sound will be the sound of your voice. Every human voice is entirely unique with its own pitch and tone. The sound of your voice plays an important part in the initial bonding between you and your little one. Perhaps when the infant is born it will recognize the songs you sing now while it is in the womb. The unborn child will also hear other voices in your surroundings and get to know the entire family. The differences in the various voices stimulate the creation of cells in the part of its cerebral cortex where the auditory

centre is being formed. If you speak a foreign language with a different cadence, your child will react to it - but at birth it will prefer its mother tongue.

If you stroke the child by moving your hand on the surface of your abdomen, it may respond by becoming calm, if it was moving. If it is sleeping, it may respond by moving or by giving your hand a little kick. Or it may be sleeping so soundly that it does not react; after all, the baby spends most of its time in the womb asleep.

If your baby was born now, it would be able to survive.

25 weeks Date:

Weight 800 g, length 24 cm.

The baby's bones are becoming more rigid. Its hands are fully operational, and its fingers have nails. Ossification of its bones is continuing.

The substance which will cause its lungs to unfold at birth is being generated. The baby would still need a little help to breathe if it was born now. If you were to place a loudspeaker on your abdomen, the sounds would make the baby's heart beat faster, and perhaps make its legs twitch. If you want an idea of what your child is hearing, you could place a conch to your ear and listen to your blood flow, or feel your partner's rhythmic heartbeat when you lean against his chest. Sounds obviously sound different to the baby through the amniotic fluid.

You may be becoming more prone to cramps in your lower legs. Perhaps you feel the urge to urinate all the time. Be aware that this could be caused by bladder inflammation.

26 weeks Date:

The baby's length is approx. 32 cm and its weight 850 g.

Its skin is becoming less transparent. Its eyes can discern between light and darkness, they open and shut and look to either side - your baby is exercising its eye muscles. It is known how a baby reacts to light at 26 weeks in connection with keyhole examinations for certain, rare diseases. The baby actually holds its hands in front of its eyes when hit by the light. The baby now sleeps for longer, uninterrupted periods, sometimes even compatible with your own sleep pattern. If you are having a day when you feel down, are too busy or perhaps under stress, your baby will feel it, too, and react to the stress hormones you release. Or, if you get a fright, the adrenalin you release will affect your baby through the placenta. Conversely, if you feel happy, the endorphins you release will also affect your baby. The baby's brain is developing very fast just now. The convolutions of the cerebral cortex are beginning to form.

The umbilical cord which transports blood to the baby and waste products away from the baby has become very long and elastic - it may even be wrapped around the baby without restricting its movements. As mentioned earlier, the baby may have grasped hold of it. This is a good way for it to develop its sense of touch.

27 weeks Date:

The baby's feet measure approx. 4 cm, its thigh bones approx. 5 cm, and its head is approx. 70 mm wide.

The baby's skin is wrinkled and dark red. It is still very thin because - as yet - it has no subcutaneous fat. The baby blinks regularly. Its cheeks are getting rounder; its face is protected by a good coating of vernix caseosa. It's got what it needs for life outside the womb.

At this point, many women feel that carrying the baby is getting more cumbersome. They experience backache from time to time because of the extra weight, both the weight of the baby and the weight they themselves have gained. Straighten up, tuck your chin into your chest and do the exercises described elsewhere in this document to minimize your aches and pains. Perhaps you could talk your partner into giving you a massage?

28 weeks Date:

The baby weighs approx. 1,000 g and is 35 cm long. Its average weight gain for the rest of the gestation period will be approx. 200 g/week.

The baby is growing, making it harder for your body to cope. The contact between you and your baby is becoming increasingly intensive and feels very close. If you exert pressure against your abdomen, the baby may kick in response. Sometimes you may notice that the baby reacts to loud sounds by kicking, even if the amniotic fluid does diminish the sound.

Surveys show that the baby can dream, and it is thought that it has the ability to remember.

During the last three months of gestation the baby's tongue has developed so many nerve endings that it can begin to use the sense of touch in its tongue - and the baby explores the size and shape of its fingers.

Its lungs are maturing with each day that passes, and its chest movements during "breathing" exercises are becoming more regular. From seven months the baby's growth becomes dependent on being able to secrete insulin. Insulin permits the entry of sugar from the blood into the fat cells, and once sugar is inside the cells, insulin stimulates metabolism into protein and fat. In this way insulin contributes to the building up of a little body fat.

If it has not already been happening earlier, perhaps a little colostrum is now being secreted from your breasts.

29 weeks **Date:**

The baby weighs approx. 1,300 g and is 37 cm long.

It urinates and drinks amniotic fluid every day.

At this point the baby's weight and size can be assessed. Its head is still large in comparison to the rest of its body, and its wrinkled skin still has little subcutaneous fat. The baby is pressing against your inner organs - it is moving around and stretching. It still has sufficient space to be able to lie in many different positions.

Your uterus is now pressing down on your large blood vessels. This may mean that blood vessels have become more visible on your legs. Some pregnant women get varicose veins. Many also retain fluid because the uterus is pressing against the large blood vessels. The best thing you can do is sit down and prop your feet up on a chair.

30 weeks **Date:**

The baby is 38 cm long, and weighs 1,500 g.

Its brain is developing and growing, increasingly forming the characteristic convolutions that began to form earlier. The baby's lungs are now almost mature, and it is practicing moving its chest as if breathing in and out. You will perhaps be able to hear its heartbeat by listening through an empty household-towel tube held against your abdomen.

You may experience Braxton Hicks contractions, and you may also still be very sensitive and be easily moved to tears - this is not unusual. The placenta is still working hard to ensure that your baby grows big and strong. So listen to your body and have a rest now and then, especially if your body feels sore.

31 weeks **Date:**

The baby weighs just over 1,600 g and measures 39 cm.

It sleeps most of the time and is still able to move freely in the uterus. The baby is not likely to have placed itself head down yet, although some babies do so at this stage.

You may by now feel burdened by the size and weight of the "bump", and you will increasingly be getting out of breath when walking up stairs. You can make things a little easier for yourself if you distribute the weight of, for example, shopping bags between both hands.

32 weeks **Date:**

The baby is approx. 40 cm in length and weighs approx. 1,700 g. The placenta weighs approx. 380 g. The baby's subcutaneous fat is increasing; your little one has now reached half its birth weight.

It needs to gain around another two kg in the course of the last eight weeks. If your baby is a boy, its testicles are now ready to descend into the scrotum. The baby's brain is active both when sleeping and awake. From this week onwards, newborns will be able to remember a special piece of music which they have heard repeatedly. If it is soothing music and the baby feels you relax when you hear it, it is thought that it, too, will learn to relax.

If the arch in your back is becoming more pronounced, this will be because you are feeling the baby's weight.

And if you urinate involuntarily, it may be because the baby is becoming stronger and is kicking your bladder; your hormones, too, may play a part here.

At this point some women have the option of starting their maternity leave.

33 weeks **Date:**

The baby weighs approx. 2 kg and is 43 cm long.

You can perhaps sometimes grasp a small foot or your baby's buttocks through your abdomen if you have not gained too much weight. Your baby's subcutaneous fat is increasing, and its muscles are still developing. Its capability to regulate its body temperature is maturing; it can now perspire - which premature babies cannot do. Some babies will have placed themselves head down. Its heart rate is approx 120-160 per minute. The baby may hiccup from time to time, perhaps because it is swallowing amniotic fluid.

Your uterus is now so big that it is crowding your other organs, and you may not be able to eat a whole meal in one go. Some pregnant women get stretch marks.

34 weeks **Date:**

The baby weighs approx. 2,200 g and is approx 42 cm long. Its feet measure 60 mm.

Its skin is now lightly pigmented. Its suckling reflex is in evidence; many unborn babies suck their fingers. The pupils of the baby's eyes open and contract. Some people think that the baby's eyes can now focus. It can discern between night and day. The volume of amniotic fluid is now approx. 1 liter.

Many pregnant women have developed a dark line, the linea alba, from their navel to their pubes. In most cases, this line will fade and disappear completely after the birth.

35 weeks **Date:**

Weight approx. 2,500 g, length 44 cm, thigh bones measure approx. 66 mm, feet measure approx. 65 mm.

The baby is adding 25-30 g to its weight every day.

It can still move about freely. Its skin is covered by a thick coating of vernix caseosa, the greasy substance that protects the skin in the amniotic fluid. If the baby has altered its pattern of movement, it may be because it is now head down. But you will feel it move every day. Many women report that the baby is at its most lively in the evenings. Some expectant mothers are experiencing backache now. Ligaments and muscles are under strain and may have weakened. Perhaps you long to get the birth over with, to see your baby for the first time - and soon be able to get your "old" body back.

36 weeks **Date:**

The baby is 45 cm long. Its head is approx 90 mm wide. The baby is almost at full term. It increases its weight by 200-250 g a week. The muscles it will need for suckling have become stronger, and its facial features more rounded. The baby has moved further down into your pelvis, the bump has moved a bit lower, and you may find it easier to breathe. If the baby is lying buttocks down (breech presentation), health professionals will attempt to turn it around. At this point - four weeks before full term - all women in Denmark can choose to take maternity leave. Most women will attend their last antenatal check-up at the doctor's at this time. It is quite normal if by now you are getting a little restless, that your sleep at night is interrupted, that you need to get up several times a night to urinate, and that you are experiencing heartburn and have to sleep with your head elevated. Perhaps you are thinking about the huge responsibility that will be yours once you have given birth.

37 weeks **Date:**

The baby weighs approx. 2,800 g, and the volume of amniotic fluid around it is just over 1 liter. Your baby is considered to be at full term, and its intestines contain its first stool, meconium. Its coordination is now so advanced that it can grasp things with its fingers. It is storing energy for the effort of being born. Your uterus now extends all the way up to your sternum (breastbone). Your maternity leave has begun. It would be a good idea to spend your maternity leave resting. Perhaps your health visitor will call on you if this is a service offered by your local authority. Your midwife will be able to tell you whether the baby's head is in place for the birth. If your baby were to be born now, it would not be considered premature.

38 weeks **Date:**

The baby's weight will by now in many cases be over 3 kg. It moves a little less now, and it may gain up to 30 g per day. The amniotic fluid is renewed every three hours. It is produced from the baby's urine and secretion of lung fluid. The baby's skin is now pigmented. Perhaps you feel the baby's head against your pelvic brim. The baby will determine when it is time for it to be born. Research shows that gestational length is programmed into your genes. Your baby has inherited these genes from you and from its father; gestational length will be determined according to what is normal for you and for it. The diameter of the placenta is now 20-25 cm. Expectant mothers who smoke will often have calcium deposits and areas of dead tissue in the placenta. This prevents the placenta from working completely as it should. The effect may slow the growth of the unborn baby and make it harder for it to play its part in the labor process than if its mother did not smoke. In Denmark 5% of expectant mothers smoke during this week of gestation.

39 weeks **Date:**

Average weight approx. 3,200 g, length approx. 50 cm, width of head approx. 90 mm. The baby sleeps much of the time because growing and developing is very energy-consuming. Also it no longer has much room to maneuver, so it moves less. You may feel heavy and find it difficult to find proper rest at night. Rest in the course of the day - perhaps the reason you are not sleeping well is that you need to get used to waking up at night in order to breastfeed? Are you breathing more easily now? This may be due to the fact that the baby's head has now dropped into your pelvis, if this did not already happen a few weeks ago. Your cervix is softening - this means that your body is getting ready for labor.

40 weeks **Date:**

The baby weighs approx. 3,500-4,000 g; its length is 50-53 cm. The birth of your baby is approaching. The baby takes up your entire abdomen. Its head is pressing against your softening cervix. By the time of the birth, the umbilical cord is often as long as the baby itself. Some women are bothered by diarrhea towards the end of gestation. This is presumably due to the increase in the hormone, prostaglandin, which stimulates bowel movements. This is quite natural. If you are experiencing vigorous Braxton Hicks contractions, these will help to shorten the cervix. But in spite of this you may still have to wait a few more weeks before you become a mother. Your body is ready to give birth.

Once labor starts you will be burning up approx. 500 calories an hour. Some people say that giving birth is comparable to running a marathon, and perhaps it may help you to approach it that way.

Rest, eat something that gives you energy, such as carbohydrates. Prepare well and remember that your body was created to be able to give birth if you let it. You have something really momentous to look forward to.
Good luck.

Source: "Et barn bliver til", Lennart Nilsson and Lars Hamberger, 2006, et all.

Expecting a baby

General pregnancy-related changes

For most expectant mothers pregnancy is a time with many physical and psychological changes. Joy, anticipation, bubbling energy and enthusiasm and then suddenly a fit of weeping and the feeling that everything is insurmountable - none of this is unusual during pregnancy. And you will also be aware of psychological changes as well as the physical changes that are taking place in your body.

Everybody reacts to your bump

Having well-meaning relations, friends and colleagues pat your bump is a common experience for many pregnant women. Perhaps you feel that they are taking a bit of a liberty. Some women enjoy it, others do not. If you don't feel comfortable with people touching your bump, say so!

Psychological changes

Many parents-to-be start thinking of their own childhood and what their parents were like when they were growing up. You may suddenly remember both happy and less happy times and this may change the way you view your own parents for a while. If you get a chance to discuss the past with your parents, it may be a good idea to do so. This can lead to increased mutual understanding and support in your coming role as parents (and in their case, as grandparents). You may feel the need to be a little more introverted for a while. Many pregnant mothers experience mood swings and feel vulnerable - this is not uncommon. Some pregnant women also seem to become a little absent-minded. But perhaps this is simply because they are thinking about the little one in their womb. Positive and negative thoughts are all part of the picture and not unusual when expecting a baby. Most pregnant mothers can report dreaming romantic dreams which are then suddenly replaced by fear and nightmares, thoughts of what the child might look like and whether it might be severely physically disabled or suffer from some other ailment. At times like that, remember that both positive expectations and worries are expressions of care and concern, attachment to and love of the baby.

The run-up to the birth of a baby is long, and you have time to prepare for it. You may be asking yourselves whether you have chosen the right time to become parents and whether you can live up to what it takes to be good parents and shoulder the huge responsibility this involves. And it is not uncommon to worry about how having a baby will influence your partnership.

It always helps voicing your thoughts. A few parents-to-be may need professional help from a psychologist or others who are trained to act as counselors. Contact your doctor, midwife or health visitor to find out where you can get help. The sooner you get help, the better you will feel during your pregnancy, and the better your health-care professionals will be able to help you. Some birth venues have specially trained midwives who attend particularly vulnerable mothers-to-be or mothers who are receiving psychoactive drugs.

Physical changes that may affect your mood

Hormone levels fluctuate in connection with your periods. These fluctuations increase during pregnancy. And if you are bothered by tiredness, your breasts feel tender and you are experiencing nausea, it is only natural that mood swings should increase. It may also be difficult to see what is so wonderful about expecting a baby when you can't yet see a bump or feel the baby kick. But then on other days you may feel totally delirious with happiness because you are pregnant, and you won't be able to concentrate on anything but the tiny baby in your womb.

Towards the end of gestation many expectant mothers feel that they seem to be getting a little clumsy. They seem to drop things - perhaps because their fingers are swollen or because the big bump is now getting in the way.

Feeling indisposed and nauseous

During the first three months of pregnancy it is common for pregnant women to feel indisposed and nauseous at various times of day or night. Some expectant mothers actually throw up. This is due to increased levels of the female sex hormones, progesterone and estrogen. You may feel tempted to eat something sweet when you feel nausea sweeping over you. But you will be better off if you eat small, frequent meals rich in carbohydrate (see *How to eat while you are pregnant*).

Headaches, getting a stitch in your side and feeling faint may also be among the every-day symptoms which you experience early on in your pregnancy. But mostly this stops long before you notice the baby move inside you for the first time, at about 18-20 weeks. Sometimes just accepting the fact that you have got the symptoms makes them feel less severe.

Myth

You feel more nauseous when expecting a girl than when you expect a boy.

True or false?

Slightly over half of pregnant women experience nausea; there is no connection to the baby's sex.

Tiredness

You need more sleep than usual because you will often be extremely tired. This is due to the fact that being pregnant takes a lot of energy; you may find it very hard to keep your eyes open in the evenings, in particular.

Part of your tiredness may be caused by lack of iron, so you may want to start taking iron supplements even before you are advised to do so.

Your breasts

Tender, swollen and enlarged breasts are one of the earliest signs of pregnancy. Later your breasts also become heavier. The color around the nipples alters a little, in many instances it gets darker. Your breasts will feel tender, particularly the nipples. Your breasts may even feel sore when a spray of water hits them in the shower, and perhaps they are also tender to the touch. Most expectant mothers find that this tenderness disappears in the course of their pregnancy. A good, supporting bra that is not too tight can help. You could, for example, visit www.libero-shoppen.dk - here you will find a good bra which gives you proper support and which you can later use as a nursing bra. The size of your breasts has no bearing on your ability to breastfeed. Because you will produce exactly the amount of milk that is right for your baby's needs. Your breasts will not change because of breastfeeding. They change and stretch already during pregnancy due to the change in hormone levels.

Myth

In spite of the fact that many women wish to breastfeed, there are many myths that may make them uncertain about it. Here are some of the fallacies:

- My mother couldn't breastfeed, so I probably can't either
- Mother's milk is not enough
- My mother only breastfed me for four weeks, so I probably won't be able to breastfeed any longer than that
- You get closer, better contact with the baby when you breastfeed

True or false?

These myths are not based on reality.

Blood pressure

Your blood pressure may drop a little when you get up quickly or stand still for too long. You feel faint and dizzy, and you may actually pass out. This is not dangerous. Try relaxing more, and when you get up, do so slowly.

If you begin to feel faint, bend over with your head down. And if you can find somewhere to lie down, do so for a few moments.

Menstrual-type cramps

During the first months of pregnancy many women experience menstrual-type cramps, a bit like a stitch in your side. This is due to the fact that your uterus is growing and feels heavy, that it contracts and that the ligaments around it are stretching. If the pain increases, or if you are bleeding, you should immediately contact your birth venue or your doctor.

Calf cramps

It is quite common for pregnant women to experience cramps in their lower legs. Cramps are caused by violent contractions of your muscles, in this case calf muscles. It is not known why we get cramps but it does help to do the *Exercises for improving your circulation* and to stretch your calf muscles several times daily.

Myth

Dark nipples are a sign you are expecting a boy.

True or false?

No, this is not true.

Backache

As your bump grows, your posture will be changing. Your back muscles are having to work harder to keep you upright, and you can perhaps sense that you are sticking your chin out. As the day goes on you will be getting tired, and your neck and your lower back will be sore. The best thing you can do to prevent these problems is to remind yourself to stand up straight and to tuck your chin into your chest. Doing exercises to strengthen your back and taking some long rests will also help.

Lumbar pain / pelvic-girdle pain

More than half of all pregnant woman experience lower-back or pelvic-girdle pain. Some are in so much pain that they feel it is affecting their quality of life.

These pains can be located quite differently from woman to woman, and many experience pain in more than one location. They experience mostly lumbar pain, posterior pelvic pain and pubic bone pain. Some pregnant women feel pain in one side only, or only on the front of their body by their pubic bone. Others are in pain front and back. Many pregnant women also experience muscle tension in their buttocks, abdomen and pelvic-floor muscles.

What should I do if I am in pain?

Fortunately, there is a lot you can do yourself to prevent or minimize lumbar and pelvic pain as long as you are sensible and take the fact that you are pregnant into consideration.

If you haven't exercised much before, you can start doing so now, and perhaps follow an exercise plan especially for pregnant women.

Strengthen your body by doing exercises every day, and make sure you stretch often. Your muscles may get sore in the beginning, adjust the amount of training you do according to your level of fitness.

You should also take some breaks in the course of the day, and change your position often.

Straighten up whether you are standing, walking or sitting - if you are working sitting down or standing up, it is important that you often change your position.

Physical training and lumbar and pelvic-floor pain

Exercising has been proved to alleviate back pain and pelvic-girdle pain. We recommend that you start with the exercises found in this book.

Aqua training is beneficial to all pregnant women, particularly mothers-to-be experiencing lumbar or pelvic-girdle pains.

You will find inspiration for good aqua exercises by visiting:

www.hvidovrehospital.dk/hhfoedeafdelingen.nsf.

Pain relief

Many pregnant women feel that lumbar or pelvic-girdle pain increases towards the end of the day - at which point they also feel they are retaining fluid. You can alleviate fluid retention by doing exercises for improving your circulation. And using a cold pack is a good idea if you are in pain. Wrap the cold pack in a cloth and place it where you are most sore for 15-20 minutes (you can buy reusable gel therapy packs from your local Matas or the chemist).

Some pregnant women like wrapping a scarf around their pelvis or wearing an elastic belt. It is not known to what extent this actually supports you, and not all women like wearing them, so see what you think.

Lumbar and pelvic-girdle pain does not affect your baby or childbirth.

Water retention (edema)

Women differ as regards how much water they retain during pregnancy. Subjective experiences of retaining water may also be quite different from woman to woman.

Some pregnant women feel that they "swell up", particularly during the last phase of pregnancy. Their hands, feet and face swell. You can alleviate this by taking a rest on your back or your side with your feet propped up. If it is possible, you should do this from time to time in the course of the day. An herb tea called "Universel urteté" also helps.

If you have a particular problem with swelling legs, wearing support stockings - or swimming - can help. Or try out the exercises elsewhere in this book to improve your circulations.

You can buy support stockings from the chemist's. You can also buy a type of support stockings which are slightly less expensive, the so-called "air-hostess stockings" (stewardesse-strømper).

Varicose veins

Varicose veins, or enlarged blood vessels, start because blood circulation in your legs becomes poorer during pregnancy, both because the uterus presses against the blood vessels in your pelvis, and also because your veins become more dilated than they would normally be. Blood collects in your legs and this results in swelling. You can counteract this by elevating the foot of your bed by pushing a block of wood under each leg at the bottom of your bed. In the course of the day you can perform exercises to improve your circulation and perhaps wear support stockings. See *Water retention* above.

The exercise program elsewhere in this book contains some good exercises for improving your circulation. Varicose veins may also form on your labia and in your vagina. Mostly, these will disappear of their own accord after your baby is born but if this is not the case, consult your doctor.

Hemorrhoids

Hemorrhoids are the same as varicose veins only they are located in your anus. They can cause itching, discomfort and pain. If you are bothered by hemorrhoids they can be treated with ointment which you buy over the counter at the chemist's or with suppositories for which you can get a prescription. (Neither of these will harm the baby.) You can prevent hemorrhoids if you keep your digestion in order by eating lots of fresh vegetables and brown, multigrain bread, drinking lots of water and doing pelvic-floor exercises and exercises for your blood circulation.

Your gums

Your gums and mucous membranes can become swollen and bleed more than normal. This is the effect of increased hormone levels. Dentists recommend that you use dental floss and toothpicks, and that you consult your dentist a little more often while you are pregnant.

Frequent urination

In the beginning of their pregnancy many women feel they need to urinate all the time. This is presumably due to increased blood volume in the uterus and around your bladder. Towards the end of pregnancy you are also likely to feel you need to urinate a lot because the baby is pressing against your bladder. If you feel a stinging sensation when you urinate, get your doctor or midwife to check whether you have a bladder inflammation. You have an increased risk of getting bladder inflammation while you are pregnant because the muscles around your urinary passageway are weakened.

Involuntary urination / incontinence

It will make a difference to you if you do pelvic-floor exercises all through your pregnancy. In this way you can prevent any problems involving involuntary urination (incontinence) both while you are pregnant and after you have given birth. You can use the short program you will find here in this book, or you can get a poster with exercises through the Libero club.

Constipation

Most pregnant women get constipation. This is due to hormonal influence on your intestines; and the tendency may be aggravated if you are taking iron supplements. You could switch to another brand of iron supplements. Drink 1 1/2-2 liters of water a day and not too much milk (but remember to eat brown, multigrain breads and lots of vegetables). Try taking psyllium husk (in Denmark you can buy it under the brand name "HUSK"), figs or prunes, or take a mild laxative which will not affect the baby through the placenta - ask your doctor or at the chemist's. Most important of all, remember to exercise at least 30 minutes every day.

Heartburn

Heartburn is a common complaint in the second half of pregnancy when the baby takes up more room, pressing upwards. You can alleviate heartburn in various ways, for example, by eating biscuits and milk and avoiding spicy or rich food. Some women use antacids in the form of effervescent powder or chewable tablets to neutralize stomach acidity. Lemon juice can make heartburn worse, try orange or grapefruit instead. Others feel they benefit from chewing almonds. It is also a good idea to prop yourself up with an extra pillow under your head and shoulders when you are lying down.

Itchy skin

It is common for pregnant mothers to experience itching during the last months of pregnancy - particularly under the soles of their feet, in the palms of their hands and on the skin of their abdomen - although no rash is visible. This type of itching during pregnancy arises as an effect of changes in the liver - a few pregnant mothers may get jaundice. Both the itch and any jaundice will disappear after the birth. Speak to your doctor or midwife if you feel you can't stand it.

Your skin

If you have previously had a tendency to get greasy skin just before your periods, the same may be the case now. But more likely, your skin will dry out faster when you are pregnant. Dry and itchy skin can be alleviated somewhat by using moisturizers. Some women feel it helps to drink lots of water.

Pigmentation

The skin of some pregnant women shows more pigmentation than normal, forming brown, blotchy patches. This is due to increased hormone levels. If you sun yourself, you increase the risk of this form of pigmentation. Some of the patchiness may remain on your skin after you have given birth, although patches often become less prominent.

Stretch marks

Stretch marks are due to hormone-associated stretching of the subcutaneous stratum of the skin, a tendency which is often hereditary. Creams and moisturizers unfortunately do not prevent stretch marks but moisturizing your abdomen can increase your well-being and give your baby a little massage.

Increased volume of blood

The volume of your blood will have increased by 1.5 liters from approx. 4 liters to 5.5 or 6 liters by 33 weeks. Your pulse will increase from 70 to 80 or 85 beats per minute because of the increased blood volume - this will also be one of the reasons why it now takes less for you to get out of breath.

Hormones

If you perspire more and lose a little more hair than you would normally, this is due to prolactin, the hormone that stimulates lactation.

Vaginal discharge

Almost all pregnant woman experience increased vaginal discharge. Towards the end of gestation the discharge may be so thin and runny that some women think it is the amniotic fluid seeping out. If the discharge smells, stings or makes you itchy, it may be a sign that you have a touch of thrush. Consult your midwife or doctor about getting treatment.

Braxton Hicks contractions

The uterus is a muscular sac which contracts from time to time without us noticing. It continues doing so during pregnancy, and the larger it gets, the more we feel its contractions. It is "in training" for delivery. All pregnant women have Braxton Hicks contractions. Braxton Hicks contractions are irregular uterine contractions. They do not hurt but can be uncomfortable. Some pregnant women experience these contractions from 14 weeks, other women don't notice them until during the last few weeks of pregnancy. Both situations are normal.

The uterus hardens for a moment, then relaxes and becomes soft again. The number of these contractions women experience - and how they experience them - varies. Contractions may happen because you are moving vigorously, bump into something, are constipated, have bladder inflammation or because you feel under stress. Contractions can also be triggered by an orgasm.

If you start getting worried that you can't distinguish between Braxton Hicks contractions and early signs of preterm labor, have your midwife or doctor examine you.

Myth

A pointy bump is a sign that you are expecting a boy. A big, round bump and a wide bum mean that you are expecting a girl.

True or false?

That's what they said in the old days. In actual fact all pregnant women carry their weight differently - there will be differences from pregnancy to pregnancy and from woman to woman.

Fear and worries

If you are worried about childbirth, speak to your doctor or midwife, and ask for your wishes and worries to be recorded in your case notes. This will save you or your partner from having to explain things to staff when you arrive at the birth venue (see *Psychological changes*, and *Planning the birth*).

Twins / triplets

The number of births of twins and triplets has almost doubled since 1990. One out of 55 pregnancies is a twin pregnancy. The older the mother-to-be, the greater the chance of having twins. This is due to the fact that women in their thirties release several mature eggs at each ovulation as the quality of the individual egg diminishes. And an increasing number of women over 30 undergo fertility treatment either in the form of hormone treatment or IVF.

Two thirds of all sets of twins are non-identical, i.e. from separate eggs. The babies have each their placenta, and their degree of similarity to each other will be the same as between other siblings. One third of twins are identical. They often share the same placenta, are always of the same sex and inherit the same genes. They are more at risk than non-identical twins because they share one placenta. One twin may be more demanding in terms of nutrition than the other, who will then be very small.

Many women get a feeling that they are expecting twins if their bump becomes obvious very early on. Discomfort such as heartburn, constipation and tiredness will often be more pronounced because it is harder for your body to adjust to two babies than to one. The skin on your abdomen may itch more because it is being stretched more. An analgesic ointment can alleviate it somewhat. You may experience Braxton Hicks contractions at an earlier stage - consult your midwife.

First-time mothers may often initially be worried. But already at the next consultation most will start to relax; they are getting used to the thought and are beginning to work out how to cope in practical terms.

If you are expecting twins, you will get special treatment, including a double appointment slot with the midwife. You will be offered more examinations and a certificate saying that you have the right to be off work from 28 weeks to give you the chance to rest so your babies will be able to grow. Twins and "only children" grow at the same rate until 28 weeks. After that, twins grow more slowly because of the restricted space, and because the expectant mother does not have as much nutrition to pass on to each of them. There is also a greater risk of preterm delivery. Twin births are often induced two weeks early. But one quarter of twin births happen spontaneously before 36 weeks. Twins weigh an average of half a kilo less than other babies at birth. Over half of all twin births are vaginal births. The second twin is born about ten to thirty minutes after the first twin.

It is not unusual for the mother to gain 20-30 kg while being pregnant with twins. But when you breastfeed twins you will be burning 1,800 calories or so every 24 hours - this is more than you would need for one baby.

Several informative and thorough leaflets on having twins have been published. Ask your midwife. You can also contact twin and triplet associations.

Visit:

www.libero.dk, www.tvillinger.com or www.tvillingeforeningen-freja.dk

Libero award triplet sponsorships. A sponsorship will give you three-months worth of diapers (nappies), etc. Contact Libero at tel: +45 48 16 81 16.

Hospital admission during pregnancy

Sometimes it may be necessary for a pregnant mother expecting twins or triplets to be admitted to hospital for a little rest during her pregnancy.

Hospital admission can be psychologically difficult. It may be difficult to relax while you are thinking of the rest of the family at home, particularly if there are older children who miss their mum, and whom you miss.

Sometimes it is possible to offer you help at home depending on your situation. Speak to your health care professionals about your worries.

Diseases and pregnancy complications

In general, illnesses in the form of bacteria and viruses do not harm the baby - with the exception of German measles (rubella) and toxoplasmosis. To the extent possible, try to stop colds from developing by looking after yourself. We advise against all immunizations during pregnancy, except against tetanus.

German measles

German measles - rubella - is a virus infection. If you catch it during the first half of your pregnancy and have not been immunized against it or have previously been infected with it, it can harm your baby. This virus can cause you to miscarry or cause deformities of the baby's brain, ears, eyes or heart. You can have a blood test performed to show whether you have antibodies against German measles. If you do, this will be because you have previously been infected or because you have been immunized against it, and you will not be infected again. It is important that girls who did not contract German measles when they were young should be immunized against this disease before planning a pregnancy. Nowadays, all girls over 17 years of age who were not given MMR (in Danish "MFR") immunization as children are entitled to free immunization.

Toxoplasmosis

Toxoplasmosis is a rare disease induced by a parasite. If it is not treated, it can harm the baby's eyes and / or brain. Take the following precautions while you are pregnant:

- If you have a cat, have somebody else empty its litter box
- Avoid unpasteurized milk
- Eat only meat that is well-done or which has been boiled. Do not taste minced meat or forcemeat to check seasoning
- Do not skin and handle hares or other animals
- Wash your hands after preparing raw meat
- Rinse vegetables and fruit; wash your hands after any direct contact with soil.

Chlamydia

Chlamydia is a tiny bacterium, often found in the cervix and the bladder. If you are infected with chlamydia, you are quite likely not to have any symptoms but if the infection is not treated, it may eventually make you infertile. The infection may be transferred to your baby during childbirth and give it eye or respiratory infections. Chlamydia is treatable with antibiotics.

Herpes

Herpes is a cold sore which can break out around your mouth and / or genitals. The herpes virus can be transmitted to your baby. This paragraph focuses on genital herpes. Herpes is a serious disease in a newborn baby.

If the pregnant mother experiences her first outbreak of herpes in the birth canal around the time of childbirth, doctors will recommend that she gives birth by caesarean section. If the mother-to-be has had previous outbreaks of herpes, her unborn child will be protected by her antibodies. If the mother suffers a renewed outbreak of herpes around the time of the delivery, the risk of infecting the baby is low, and a vaginal birth will normally be possible - depending on how bad the outbreak is and the extent of the mother's discomfort in that connection.

Group B streptococci

Group B streptococcus is a very common bacterium which - in rare cases - can cause problems during pregnancy (bladder inflammation in the mother, preterm delivery and serious illness in the newborn

baby). Pregnant women are not normally tested for group B streptococci. But if you have previously been infected by this bacterium, your urine will be examined, and a swab for cultivation taken from your cervix. Group B streptococci are easily treatable with penicillin.

Vaginal thrush

Some pregnant women develop thrush. This is because the vagina is more susceptible to yeast infection due to changed hormone levels. The symptoms are a yoghurt-like discharge, a burning feeling and itching, and the area around the vagina is sore to the touch.

It is a good idea not to eat too much sugar, if you suffer from thrush as yeast thrives on sugar. You could also leave your briefs off at night or use loose underwear. This is an easy way to avoid thrush. Thrush is not dangerous and is treatable with suppositories. Talk to your doctor - vaginal thrush can infect your baby during delivery.

Fifth disease (human parvovirus)

Around two thirds of all Danes have had fifth disease as children which means they have antibodies against it. Often this illness is relatively mild involving a slightly raised temperature and a viral rash on the cheeks which disappears in the course of a week or two.

If a pregnant mother has not had the infection before and becomes infected while pregnant, there may be a risk to the baby. You may want to discuss this with your doctor.

HIV / AIDS

HIV is the virus that develops into AIDS. HIV-positive women are advised not to become pregnant. If you carry a pregnancy to full term, the Danish National Board of Health (Sundhedsstyrelsen) advises you not to breastfeed because the HIV virus can be transferred to your baby through your milk. If you are uncertain whether you might be HIV-positive, you can have a blood test performed. A blood test is not conclusive until three months after you have been infected.

The baby is not growing at the expected rate

Not all babies grow at the expected rate. One sign may be that your bump seems too small, or the baby is assessed to be too small. Or perhaps you are not feeling the baby move very often, hormone production in your uterus is too low (this is ascertained via a blood test), or the CTG is not completely normal. In these situations you need to be admitted to hospital for a closer check-up. Treatment consists - first and foremost - of rest and taking the strain off you. The main thing is that the baby grows in your womb for as long as possible, and that it is born before it suffers any harm because of the delay in growth. If necessary, delivery is induced.

If you are a smoker, you will give your baby its best chance of growing by giving up smoking.

Risk of premature birth

A birth would only be considered premature (or preterm), if it were to take place more than 21 days before the due date. In very rare cases a woman may give birth without having undergone any labor pains. Normally, (the risk of) preterm delivery will be preceded by increasing Braxton Hicks contractions, which may become painful, or there will have been some bleeding. If you experience this, you must contact your midwife or doctor. You must also contact your midwife or doctor if you think your waters have broken.

Spotting or bleeding during pregnancy

Even if you are having a perfectly normal pregnancy, you may find that you are spotting or bleeding a little.

Bleeding in early pregnancy may be a sign that you may miscarry - of "imminent miscarriage" or "threat of miscarriage". Bleeding may also be due to other factors:

- You may have a small ulcer on your cervix
- A polyp on your mucous membrane
- You are perhaps overdoing a physical activity, for example, lifting something heavy - although this reason is rare.

Later on you may bleed because:

- The placenta is located in front of your cervix
- A slight - or extensive - placental separation.

Bleeding can happen spontaneously without the pregnant mother having done anything at all to cause it, or it may occur in connection with physical activity or having sex.

This can obviously give you a fright and make you worried that you are about to have a miscarriage, and you may also develop a bad conscience vis-à-vis the baby. The mucous membranes on the cervix bleed easily if touched. This quite often means nothing but if it happens again, you should always contact your doctor or midwife.

Miscarriage

In the context of this book a miscarriage usually means losing a much wanted and longed-for baby. It can be hard for those around you to understand your pain, and many may not understand just how long it can take to come to terms with the loss.

But most expectant parents, particularly those who have attended fertility clinics, have already spent a long time thinking about their future child, and have been looking forward tremendously to becoming parents. The female partner may have felt the baby move and may feel totally devastated. Maybe she is also blaming herself for some action or omission.

That's why it is a good idea to speak to hospital staff about the miscarriage. Depending on the length of gestation, you will also be thinking of whether you want to see the baby. Many do not want to see it but generally the couples who did see the baby to say goodbye were later glad they did.

Perhaps you are wondering when you could start a new baby? Some begin trying for a new baby immediately, others may feel the need to wait a little while. It is important that you give your partner the time he or she needs and that you take good care of each other. This will help you to find the way forward.

Pre-eclampsia

Pre-eclampsia can be mild or severe. The expectant mother may experience:

- Protein in her urine
- High blood pressure
- Edema
- Considerable weight gain over a short period
- Headaches
- Blurred eyesight.

Treatment consists of rest and having the strain taken off you so that the blood flow to the placenta can increase giving the baby more oxygen and nutrition.

In severe cases of pre-eclampsia the baby does not grow at the rate it should, and it has a negative effect on the mother's body. In many cases the pregnant mother is admitted to hospital where she and her baby can be monitored every day. It may be necessary to interrupt the pregnancy, either by inducing the birth or by performing a caesarean.

The causes of preeclampsia are not known. Once the child has been born, the mother's blood pressure and urine return to normal, and the edema disappears. Your blood pressure will continue to be monitored for a while to ensure that it stays stable.

Nausea and severe vomiting

It is perfectly normal - although unpleasant - to experience nausea and vomiting during the first trimester. Some pregnant women vomit so frequently that they lose weight and / or their sodium-water balance is affected. The cause is not known. In most cases the symptoms disappear after a few weeks. Possible treatments are:

- Seasickness tablets
- Vitamin B
- Ginger tablets
- Reflexology
- Acupuncture.

In the most severe cases hospital admission may be necessary.

Being overweight

Approx. 25% of pregnant women were overweight with a BMI over 27 before pregnancy (BMI = Body Mass Index = weight/height x height). Being overweight increases your risk of:

- Gestational diabetes
- High blood pressure
- Thrombosis
- Pre-eclampsia.

It is recommended that monitoring frequency is increased in the last trimester in order to assess the baby's size. Overweight mothers face more problems in connection with delivery than mothers within the normal weight range. First and foremost because of secondary inertia.

Overweight mothers often give birth to larger babies than mothers of normal weight do.

Caesarean births and ventouse deliveries tend to be connected with more complications than normal deliveries. Newborn babies with overweight mothers are more likely to need respiratory help during their first few days of life than babies born to mothers who had a BMI within the normal range of 20-25.

Changing your eating and exercising habits can be a hard thing to do. But becoming pregnant can give you the incentive you need to make changes. The Danish National Board of Health advises not to go on an actual slimming diet. If your BMI is over 27, the weight you are going to gain in the course of your pregnancy should be based on healthy, lean foods (replacing unhealthy foods) and lots of exercise. The weight you gain during your pregnancy will greatly affect your weight later in life, so that is another reason why it is important for you to think about your lifestyle while you are pregnant (see *Pregnancy and exercise*).

In most regions of Denmark women with a BMI over 27 are offered advice about their eating habits, and it is recommended that they be given a healthy eating plan.

Gestational diabetes

In the course of your pregnancy your metabolism changes and becomes more like the metabolism of a person suffering from diabetes. The pregnant mother may actually develop gestational diabetes, a type of diabetes which is in evidence only during pregnancy, and which normally disappears after the birth of the baby. Eating a diet low in sugar and taking daily exercise is normally sufficient treatment.

Approx. 1.5-2% of all pregnant women develop gestational diabetes.

Some pregnant women are at particular risk of developing gestational diabetes:

- If diabetes runs in your family
- If you are over 37 years old
- If you have previously given birth to a large baby (> 4,500 g)
- If you have previously suffered from gestational diabetes
- If previously, you have had a stillborn baby
- If you are overweight - Body-Mass-Index (BMI) > 27 kg/m²

When a pregnant mother develops gestational diabetes due to having a high BMI, there is a tendency for her baby to be larger than normal. There will also be an increased risk of birth complications. Your midwife can recommend a good, healthy eating and exercise plan to minimize the risk.

In order to identify pregnant women who are particularly at risk of developing gestational diabetes it is - in Europe as a whole - recommended that all pregnant women with a BMI higher than 27 should undergo a glucose tolerance test. The pregnant woman is asked to drink a glucose solution (sugared water), after which her glucose (blood sugar) levels are measured.

Asthma and allergies

If you suffer from asthma, it is important that you continue to take your medication as normal but do speak to your doctor early on to see whether you should perhaps switch to another make.

If you are allergic to certain foods, you should avoid them exactly as you would have before you fell pregnant.

Depression and medication

Surveys show that approx. 5% of the Danish population suffers from depression.

Based on this, a number of pregnant women will be undergoing treatment with antidepressants. In spite of the fact that medication will cross the placenta during pregnancy, and that there will be traces of it in your milk, it is not recommended that you stop taking your medication. Medication is important for your wellbeing, and the side effects of stopping treatment are more serious for both you and your baby than any side effects there may or may not be of continuing to take antidepressants during pregnancy and breastfeeding.

There are two types of antidepressants:

- 1) Tricyclic antidepressants (TCAs)
- 2) SSRI antidepressants ("happy pills")

There is no evidence of an increased risk of abnormalities in connection with taking TCAs. The "happy pill" most thoroughly investigated is Fluoxetine, and the incidence of abnormalities does not seem to be increased in connection with this substance (although there is possibly a slightly increased risk of miscarriage).

So much is known these days about treatment with antidepressants while breastfeeding that the Danish National Board of Health does not advise against breastfeeding while undergoing treatment with antidepressants.

Antidepressant treatment should always be undertaken under the supervision of a doctor. A quiet, undisturbed talk with your own doctor, midwife or a psychiatrist or psychologist to whom you may have been referred can be a step towards finding a solution; and intermittent follow-up meetings for the duration of your pregnancy can be set up in order for you to be able to discuss your problems.

After childbirth it is important to discuss your experience of pregnancy and of giving birth with other people. If you don't, even minor problems may seem insurmountable and could contribute to an increased risk of postnatal depression (www.libero.dk/Pages/General/ArticleList.aspx?id=7728).

Your lifestyle during pregnancy

Your lifestyle affects your baby. If you have habits which you have sometimes thought about changing, now is perhaps the time to do so - even if it may at first be difficult.

Job / working environment

Under normal circumstances you will be able to continue carrying out your day-to-day work. If this is hard for you, try speaking to your employer about how to make it easier.

If it is possible for you to take a rest in the middle of the day, do so. Being constantly overworked, psychologically and / or physically, lifting many heavy objects, working standing up for long periods, stress and contagious diseases all increase the risk of preterm delivery. If

there are problems, you should therefore discuss them with your midwife or doctor and perhaps a social worker.

There is no evidence that working in front of a computer screen is dangerous for pregnant women. Any work can be stressful, and that in itself may increase the risk of problems in relation to pregnancy.

You can also ask your trade union what the situation is or visit www.gravidmedjob.dk (you might want to ask a Danish-speaker to help you).

Coffee, tea, caffeinated soft drinks and chocolate

The Danish National Board of Health recommends that you have not more than three cups of coffee a day, and that you limit your intake of tea, caffeinated soft drinks (coke) and chocolate. Coffee, tea, coke and chocolate contain caffeine. Surveys show that excess caffeine can affect your baby's growth.

Caffeinated soft drinks and coffee can have a negative affect on your bones, so for your sake and your baby's sake, it makes sense to limit your intake.

Chemicals in cosmetics and baby products

The Danish Environmental Protection Agency (Miljøstyrelsen) has published a useful leaflet. It gives pregnant and breastfeeding women nine useful tips about chemicals in cosmetics, baby products and toys:

- Use as few cosmetics, moisturizers and creams as possible while you are pregnant or breastfeeding
- Always choose fragrance-free products and do not use scent (perfume) while you are pregnant or breastfeeding
- Whenever possible, buy ecolabel products - look for the Nordic Swan label (Svanemærket) and the EU Flower label.
- Do not dye your hair while you are pregnant or breastfeeding
- Avoid products in aerosols (spray cans), and do not do any painting while you are pregnant or breastfeeding
- Wash everything before using it for your baby - even clothes and textile and plastic toys
- Do not apply moisturizers, soaps, etc., to your baby's skin on a daily basis
- Always buy fragrance-free products for your baby - including toys
- Buy (and use) only toys produced explicitly for babies. Toys for children over the age of three may contain phthalates.

Test yourself at www.babykemi.dk (which has been translated into several languages), or get the book "Tænk - guide til sikre og sunde småbørn".

Pregnancy and exercise

Keep in trim both before and during your pregnancy - and you and your baby will both benefit. So keep exercising at a level that suits you. It is alright for you to get out of breath when you exercise to the point where you can still - just - keep up your end of a conversation. You can use weights and fitness machines but preferably while sitting down. You must avoid leg-muscle weight training towards the end of pregnancy because this increases the pressure on your abdomen.

If you do not normally exercise, it would be a good idea to get started on some light exercise now. If you are in doubt about how much exercise you can do, you may want to ask your own doctor or midwife. Generally, you can do anything you are capable of doing.

If, however, you normally go in for the martial arts or ball games or you ride a horse, you must remember that you will not be able to protect your baby from a sudden knock or fall and you should therefore avoid these sports while you are pregnant. Jump on your bicycle, use the stairs rather than taking the lift, go for frequent swims if you like swimming, and listen to your body. If you feel any discomfort, try taking it easy.

Being in good shape has many advantages. Here are some of the most important reasons that you should exercise for at least 30 minutes a day all through pregnancy:

- To increase your wellbeing, raise your spirits and give you that little extra energy
- To minimize lumbar and pelvic-girdle pain
- To give the baby in your womb the best possible conditions for growing strong and healthy
- To prevent becoming overweight and getting gestational diabetes
- To minimize your risk of getting pre-eclampsia
- Because pregnant women who are in good shape give birth more easily and faster, and they experience fewer birth complications than women who never exercise.

Travelling

If you are not experiencing any difficulties during your pregnancy, there is nothing to stop you from going travelling. Contact the airline in question to find out whether they have any special rules you should follow. Speak to your doctor or midwife. If you are keeping well, you should be able to travel until 36 weeks (if you get a doctor's note - until 38 weeks).

Depending on where you are going, having certain inoculations may be recommended. There seems to be no evidence that being immunized during pregnancy increases the risk of harming the baby or miscarrying. If you are travelling far or to areas with a greater than average risk of catching infectious diseases, you can contact SSI (Statens Serum Institut) by visiting www.ssi.dk or phone, tel: 32 68 32 68. They are specialists.

Remember to take your cross-agency case notes with you on your trip

Eating disorders

If you have previously struggled with eating disorders in the form of bulimia or anorexia, it would not be unusual if you were to experience an increase or recurrence of the disorder during pregnancy and subsequent breastfeeding. If you experience a recurrence, you need help. It is very important that you speak to your midwife, doctor or health visitor about it.

Smoking

One in every four pregnant women in Denmark smoke. Everybody knows that smoking damages your health. Carbon monoxide and nicotine from the cigarettes you smoke show up in your blood and in the baby's blood. You must stop smoking; smoking is harmful to your baby. When you smoke, your blood carries less oxygen. This means that your baby gets less oxygen. Pregnant mothers who smoke often have premature babies. Their babies are often too small - on average, they weight 200 g less than babies born to non-smoking mothers.

Their babies' body parts and organs are smaller than those of babies with non-smoking mothers. It is not just during pregnancy you should not smoke. Babies should not be subjected to smoking after they are born.

Children of parents who smoke are more likely to suffer from allergies (see the leaflet "Sådan forebygger du allergi hos dit barn" from the Danish National Board of Health (Sundhedsstyrelsen). They are also more prone to infections of the middle ear and other respiratory tract diseases (pharyngitis, laryngitis, bronchitis, pneumonia). Also, a link is suspected between smoking and cot death.

You can read more about this in the leaflet, "Rygning, graviditet og fødsel" from the Danish National Board of Health, www.sst.dk or you can contact the Quit line service (Stop-linien) (at tel.: +45 80 31 31 31) and ask for a free leaflet to help you stop smoking.

An increasing number of Quit Smoking classes are available at various locations - ask your midwife.

Wine and spirits

Alcohol is poison to your baby. Your baby will have the same blood alcohol level as you do when you drink wine or spirits.

The Danish National Board of Health recommends that you avoid alcohol completely during pregnancy

It is not known how much alcohol a pregnant mother can drink before her baby is harmed. Babies born with alcohol damage often have abnormalities, develop more slowly physically, have a lower IQ and are very small and sensitive.

Medication

As a rule of thumb you should not take any medication while pregnant. Medication crosses the placenta and can therefore affect the baby. Your baby is very sensitive, particularly during the first three to four months of gestation when all its vital organs are being formed.

It is alright to take a single over-the-counter painkiller if one day you have a headache. But if you need painkillers or other medication over a longer period, you should ask your doctor to advise you about what you can take. Do not start self-medicating (but do read the information on antidepressants in this book).

How to eat while you are pregnant

"Eating for two" during pregnancy is an old wives' tale. How much you should eat depends mainly on how much exercise you get. Eating approx. 10% more than before you fell pregnant is enough.

This corresponds to an extra piece of bread with liver paste or three bananas. Half of your extra intake goes towards your weight gain. The other half is burned up as the extra energy your body needs.

What is a healthy diet?

Eating low-fat is eating healthily. But it is important that "low-fat" does not become "no-fat". Your baby needs various types of fats - for example, to develop its brain. Eating healthily means eating a varied diet, including - over the week - various kinds of meat, fish, vegetables, bread and dairy products.

Nutrients will always go to your baby before they go to you. So the situation would have to be extreme before your baby will lack nutrition.

The eight new tips for eating well

make sense - also when you are pregnant

- Eat more fruit and vegetables - six a day
- Eat fish (including fish sandwich fillings) - several times a week
- Eat potatoes, rice or pasta and brown, multigrain bread - every day
- Cut down on sugar - particularly from soft drinks, sweets and cakes
- Cut down on fat - particularly from dairy products and meat
- Eat a varied diet - and stay within your normal weight range
- Drink water when you are thirsty
- Be physically active - for at least 30 minutes every day.

The ratio of energy from fat, protein and carbohydrates during pregnancy should be the same as normal.

Fish

Eating fish is very healthy because fish contain a number of necessary vitamins and minerals - not to mention Omega-3 fatty acids. Omega-3 fatty acids are very important for the development of the brain. It is important that you eat both oil-rich (fatty) fish and white fish as part of a main meal (200-300 g) once or twice a week.

Do not eat more than 100 g a week of the following fish:

tuna, halibut, swordfish, herring shark, pike, perch, pike-perch, oilfish (escolar) and skate (thornback ray).

These fish may contain mercury, etc. The mercury content is the same whether the fish is fresh or comes from a tin. It is alright for you to eat raw fish or shellfish while you are pregnant. It is important, though, that the fish has been frozen for 24 hours before it is used. The restaurant or anybody else who serves sushi must do this. Remember to do it if you make sushi yourself and always handle fish hygienically.

Baltic salmon contains dioxins. For this reason the Danish Veterinary and Food Administration (Fødevarestyrelsen) recommends that women of childbearing age, and pregnant and breastfeeding women eat a maximum of 125 g (one portion) of Baltic salmon a month.

If you do not eat fish, it would be a good idea to take fish oil supplements. But you should be aware that supplements do not contain the vitamins and minerals that fish do.

Raw / rare meat

The National Board of Health advises against eating raw or rare meat because of the risk of toxoplasmosis. Boil or fry all meat until it is well done and obviously do not eat raw steak mince "tatar".

Cheese

It is alright to eat cheese while you are pregnant. Perhaps you have heard that you should stay away from soft cheeses because of the risk of listeria. You can avoid any risk by buying cheeses made from pasteurized milk - read the label.

Vegetarian food

If you are a vegetarian, it is particularly important that you pay attention to what you eat. Make sure you get enough protein. You can get protein from milk, cheese, eggs, soy milk, tofu, cereals, nuts and pulses. Your baby needs various kinds of protein, so make sure you eat products from all these food groups. As you do not eat meat, good sources of dietary iron are wholemeal cereal products, pulses, green vegetables and dried fruit. If you do not eat dairy products, it would be a good idea to take calcium supplements.

Fast food

Most of what we tend to call fast food is deficient in a number of respects:

- The level of trans fatty acids (trans fats) is too high
- Too little dietary fiber
- Too much sugar
- Too few vitamins, minerals and dietary trace elements.

If you end up with a pizza or burgers on the dinner table anyway, you can improve your meal by adding a few peeled carrots, munching florets of cauliflower or broccoli or by having a fruit smoothie afterwards.

Multivitamin tablets

We recommend that you take a multivitamin tablet every day. If you choose one of the brands especially for pregnant women, you will get the recommended doses of folic acid / folic acid and vitamin D in your tablet. Ask at your chemist's, in your local health food shop or at Matas.

Folic acid / folic acid

You need the type of vitamin B called folic acid / folic acid during your first trimester. This makes it less likely that your baby will be born with spina bifida. Taking folic acid / folic acid also makes it less likely that you will have a low birth-weight baby. You get folic acid / folic acid particularly from green vegetables (for example spinach, broccoli and curly kale). The Danish National Board of Health recommends that you take a daily supplement of 400 micrograms in tablet form from the moment you start planning for a baby until the end of the third month of your pregnancy. Or you might want to continue taking it; it certainly won't do you any harm. Only 40% of all pregnant women get the recommended daily intake of folic acid.

Vitamin A

Too much vitamin A can harm your baby. The Board of Health therefore advises pregnant women against taking cod liver oil or eating liver or liver pâté because of their vitamin A content. Eating liver paste (leverpostej) from time to time is healthy as it contains many other useful things, such as iron, folic acid / folic acid and protein.

Do not worry about the vitamin A content in vegetables, for example, carrots; they contain vitamin A in the form of beta-carotene - and you cannot eat too much of that.

Vitamin D

You need vitamin D, one reason being that it is a prerequisite for your body's absorption of calcium. Lack of calcium during pregnancy may mean that your baby's bones will not develop as they should - lack of calcium may lead to abnormalities. You get vitamin D from, for example, fish but your body also produces vitamin D when your skin is subjected to ordinary daylight. You are therefore more likely to need vitamin D supplements during the winter than during the summer. The darker your skin, the less vitamin D it produces. It is therefore recommended that women with olive or darker skins should take vitamin D supplements all through their pregnancy. Women who wear a headscarf get less daylight on their skin. The Danish National Board of Health recommends that they should take a vitamin D supplement. If you are overweight, you will also need more vitamin D. See the leaflet "Får du D-vitamin nok?" from the Board of Health.

Iron

The Board of Health recommends that you take an iron supplement (50-70 mg of hemofer) every day from 20 weeks onwards. Hemofer is a slow-release tablet which you take once a day, and the iron is released little by little. Iron is important as it carries oxygen around your body. When you lack iron, you tend to feel tired and generally out of sorts. It will also take less to leave you out of breath. You get iron from almost all foods but particularly from meat and green vegetables. Iron supplements may make you constipated. If you react adversely to iron supplements, it is important that your diet includes foods containing plenty of iron. Be aware that coffee, tea and milk block iron absorption. So do not take your iron tablet with coffee, tea or milk. Speak to your doctor if you are worried about not getting enough iron.

Iron, calcium and vitamin C

Your body is better at absorbing iron from a supplement if you take it with vitamin C, for example, a glass of orange juice. The opposite is the case if you take your iron supplements with milk (which, of course, contains calcium). For these reasons it is a good idea to take your iron supplements between meals with a glass of fruit juice. Your body is always better at absorbing iron from food rather than from an iron supplement. So do your best to get iron every day through what you eat. Visit www.altomkost.dk to read more (you might want to ask a Danish-speaker to help you).

Calcium, bone-building and your diet

Your skeleton and that of your baby contain calcium. That is why you need calcium all through your pregnancy.

We recommend dairy products as the easiest available source of calcium. If you do not like dairy products or you suspect you have an intolerance to them, there are other ways to cover your calcium needs.

Some people feel under pressure to consume dairy products and actually develop a bad conscience if they can't get themselves (or their children) to consume the recommended intake. There is no need to have a bad conscience. We humans have always managed to get plenty of calcium from other good sources - vegetables, pulses, nuts, seeds and water. And it is worth noting that osteoporosis is on the increase in Denmark in spite of the fact that our average calcium consumption is very high (on average, we get more than the recommended daily intake of calcium, particularly through cheese and milk). So consuming more milk and cheese seems not to be the only solution. And there are alternatives available if you would rather do without dairy products.

You can replace cows' milk with soy milk or rice milk with added calcium. The calcium content in non-dairy milk has been adjusted to match exactly that of cows' milk.

You can also choose to take a calcium supplement. The recommended daily calcium intake for pregnant women is 900 mg. The Danish Veterinary and Food Administration recommends that you take a 500 mg supplement of calcium all through pregnancy - you will get the rest of what you need via your general diet.

But it is just as important to retain the calcium that you consume. You retain calcium in your body through weight-bearing exercise (walking, running, participating in ball games, dancing, etc.), by limiting your intake of drinks containing caffeine and by making sure that you get plenty of relaxation and rest all through your pregnancy.

Bone building takes more than just calcium, and the future strength of your baby's bones depends on many factors. You can contribute to giving your baby strong bones by making sure you get plenty of:

- Folic acid
- Calcium
- Vitamin D.

This will contribute to giving your child stronger bones - at birth and for a long time thereafter.

Spicy foods

The baby in your womb will be getting the same nourishment as you do. If you eat spicy food, your baby will be eating spicy food. You can eat all the garlic and chili you want while you are pregnant. There is no evidence that your little one is affected. So if you like garlic and chili, enjoy!

Nausea

If you are feeling nauseous, you might want to try these tips:

- Add some ginger to your food or take ginger tablets
- Eat many small carbohydrate-rich meals a day (fruit, bread)
- Avoid rich food
- Avoid eating anything very sweet
- Drink raspberry juice
- Apples and tea can increase your stomach acid; avoid them for a while to see if that helps
- If you tend to feel nauseous in the morning, put out a biscuit or some other carb-rich food item the night before, eat it before getting up and make a slow start to your day.

Different things work for different people, so see how you get on. Always make sure you drink a lot of water.

Allergies

Currently one in every four Danish children is affected by some kind of allergy. For many years research has focused on what happens after babies are born and on hereditary factors in the attempt to explain why so many children suffer from allergies. There are not at present any official recommendations from the Board of Health or the Danish Asthma and Allergy Association but research has actually shown that you can take precautions during pregnancy to make it less likely that your child will suffer from allergies.

Visit www.videncenterforallergi.dk to read more.

Restless legs and cramps

It is quite common for pregnant women to get restless legs or suffer from leg cramps. Here are a few tips in addition to the exercises recommended in this book. Magnesium has many functions in the human body, and it helps against getting cramps. Magnesium is a harmless mineral and can also help against constipation, headaches and general tiredness. Good sources of magnesium are green vegetables, seeds, nuts, pulses and wholemeal products. You may want to take this subject up with your doctor or midwife.

Excess weight increase

If your weight increases more than expected during pregnancy, you would be wise to take a closer look at your eating and exercising habits.

By composing your meals using the food plate model, you will be able to keep your blood sugar levels stable all day. Healthy vegetable fats and oils stabilize your blood sugar, and that is of great importance to you and your baby.

Heavily fluctuating blood sugar levels make you crave something sweet, make you more tired and more likely to gain weight.

That is why it is important to choose wholemeal products - wholemeal bread, wholemeal pasta and brown rice - and to compose even your snacks according to the food plate model.

Cutting back on animal fats from meat, milk and cheese is fine - but if your weight is increasing too quickly, you should be watching your intake of carbohydrates, not fats and oils.

Cut sugar out of your diet, and cut down on carbohydrate-rich foods such as bread, pasta and potatoes. Eat more vegetables instead to feel full. Do not cut down on high-energy foods like nuts, almonds, avocados and olives. On the contrary, these foods will help you to feel full so that you can avoid being tempted by sweets, coffee and cakes.

If, in addition to becoming overweight, your body is retaining fluid, you may be able to alleviate this by rethinking your diet and taking out individual items which in your case contribute to this problem.

Looking for an energy boost

It is normal to be tired while you are pregnant and breastfeeding. Many women therefore look for a quick energy boost in the form of cakes and sweets. But the energy you get from sugary sweets and cakes is so short-lived that you will end up even more tired at the end of the day. Stick to the easy, healthy solutions - grab an extra carrot, a handful of almonds or a piece of rye-bread with something healthy on it - and ask the people around you to help you get nutritious meals and snacks.

Myths and facts

There are many old wives' tales about what pregnant women should and should not eat. Here are a few:

Your baby eats first

It has previously been assumed that nutrients would go to the baby in the womb rather than the mother, and that any lack in the mother's diet would therefore not affect the baby so much. It is now acknowledged that the exchange between mother and baby is complex and that the baby's welfare in the womb forms the basis of the child's health all through later life. This means that during your pregnancy you have every possibility of giving your child a good start in life - with effects far beyond early childhood.

Twin pregnancy and folic acid / folinic acid

The likelihood of getting twins is no greater no matter how much extra folic acid / folinic acid you have been taking just before falling pregnant.

Some people say that you increase the baby's intelligence by taking folic acid in the last trimester. This, however, has not been proven.

CARBOHYDRATES

Wholemeal pasta · wholemeal bread · porridge · brown rice · whole millet · buckwheat · potatoes · maize (corn) · dried fruit

VEGETABLES

Broccoli · cabbage · onions · leeks · garlic · lettuce · rocket · endive (chicory) · spinach · squash (courgette, zucchini) · radishes · bell peppers · tomatoes · green beans · carrots · beetroot · berries · fruit

PROTEIN

Meat · poultry · fish · eggs · pulses / legumes (beans, lentils) · cottage cheese · lean yoghurt · milk · soy milk · emmentaler cheese

FATS AND OILS

Sunflower seeds · sesame seeds · linseed (flax) · walnuts · hazelnuts · cashews · almonds · pine kernels · avocados · olives · cold-pressed oils · sesame butter · peanut butter

Your relationship as partners and parents-to-be

Expectations and reactions

Your decision to have a baby heralds a new era in your relationship. Over and beyond being partners you are now also parents-to-be. This is a big change.

You will both be thinking many new thoughts and experiencing new feelings: What will I be like as a parent - what will my partner be like? What will it be like to live with a child? How will it influence our relationship? How will it influence my life generally?

Many expectant parents spend a lot of time imagining what the child will be like and how life with it will pan out. And the two partners do not necessarily form the same picture. Quite often the female partner will be thinking primarily of the newborn baby, while the male partner is more likely to be thinking about the older child, a child with whom he can play games, etc. But this does not affect what you are going to be like as a parent once the baby has arrived. Thinking about the child - no matter at what age - and about what you are both going to be like as parents is important. It prepares you for parenthood.

The time may come when one or the other of you experiences ups and downs, reactions which the other one may not understand. And the thoughts, feelings and mood swings experienced by the two partners will not necessarily occur at the same time. Sometimes one of you may be absorbed by something which the other one is not thinking about at that particular time. The fact that the woman experiences the physical aspects of the pregnancy - while the man does not - may explain many differences in their reactions and feelings.

Pregnancy is a time which may enrich your relationship, giving it a new and much deeper perspective. It can also be a time to test your relationship and your mutual understanding and the care you show each other. It is particularly important to accept that your partner may react with doubts and fears that you do not necessarily understand.

Communicate with each other

It is important to be open to the other partner's reactions, even if this is not how you feel yourself. The female partner may well feel a great need for tenderness and care - with particular focus on her body and her looks. You may both have worries about your jobs, your various interests and friends, etc. You may both at various times be worrying about the actual delivery, and whether the baby is alright. Taking the other partner's reactions seriously and showing you care for the other person - meeting your partner where he or she is - is not only important for your relationship as parents-to-be but is also good practice for becoming a family.

It is important that you speak about what is going on - sometimes to other people as well. It is not unusual in a partnership for the woman to feel that you do not have proper conversations with each other sufficiently often. This does not always mean that the male partner does not wish to discuss things. But it is important to find ways of speaking to each other with which you both feel comfortable - not least about sensitive issues. You both need to feel safe, free to speak your mind - and to feel that your partner understands you. It is important that the way you talk about things should be shaped according to the needs of both of you - not just one party - and that you both acknowledge that it is alright to have different feelings.

For this reason it may be a good idea sometimes to discuss things with a third party, to read books or leaflets, search the Internet, etc., to get another angle on things. There are many books written for expectant parents - the most important aspect here is really the conversations that arise on the back of them. We have published a small leaflet particularly for fathers-to-be: "Til dig, der skal være far". You can request it by phoning tel.: +45 48 16 81 16.

Having sex

Expressing your needs is the first step on the way to a good relationship. Tell your partner why you feel aroused - or why not - just now. This takes time to learn - you get better at it with practice.

Your sexual needs may change in the course of your pregnancy. In the beginning many women experience nausea and tiredness, and their breasts feel very tender. Perhaps at this time physical closeness, tenderness and loving care is more important to you than intercourse. This is perfectly natural. Or perhaps you are among the women whose libido is stronger than usual at this time. This, too, is perfectly natural. Your husband / partner is perhaps - or perhaps not - exercising some restraint at this time. Speak about how you both feel.

Some women feel more attractive because of their swelling breasts, the fact that their pregnancy is beginning to show, and the thought of the new life in their womb. This is also attractive to many men.

Other women feel sexually unattractive. These factors may vary a lot in the course of your pregnancy. And obviously, your libido will be affected by the extent to which you are experiencing nausea, tiredness, etc. Most pregnant women find that their sexual needs increase in the second trimester.

In the course of the third trimester many women feel impaired by their swelling abdomen, and it can be difficult to find a comfortable position for intercourse.

You need not worry about harming the baby, if your pregnancy is developing normally. The baby lies well protected in the womb surrounded by amniotic fluid. But the bump can be very much in the way as it grows bigger. You may begin to feel faint if you lie on your back because the placenta presses against the large veins that carry blood back to the heart. It is a good idea to try other positions when you are pregnant.

If you experience pain or bleeding after intercourse and orgasm, you should contact your doctor. If you have been pregnant before and the birth was premature, you should avoid having sex around the gestational time when you gave birth before. Speak to your doctor or midwife about this.

Antenatal and parenting classes

It is a very good idea to take part in antenatal and parenting classes. In many regions hospitals offer antenatal classes for groups of mothers / parents-to-be. Here the midwife will encourage you to speak about your thoughts about the actual delivery, and how you feel about having family. She will tell you about what happens during labor. You will be shown videos featuring childbirth. You will also be informed about the various kinds of pain relief available to you during labor, and about breastfeeding. Some hospitals also offer antenatal classes with a physiotherapist or relaxation therapist. But due to cost-cutting, many hospitals no longer run these classes and refer you to evening classes for adults. You will be charged for these classes. Finding out early on in your pregnancy which classes are available at or associated with your birth venue is a good idea, alternatively which adult evening classes are available. Discuss your needs and find the classes that will suit you best.

If you choose practical antenatal classes, these will usually include physical exercise to keep your body in good condition. Most classes will give you the opportunity to try out breathing and relaxation exercises which you will need during labor, as well as labor positions and positions for resting during labor. At many training venues you will be given the opportunity to attend antenatal classes as a couple - either for the entire course or for some of the classes. In this way your partner also gets a chance to learn about labor and childbirth in general and, in particular, what he can do to help you during labor.

An important aspect of antenatal preparation is to make sure that your body is in good condition for the delivery. If you can no longer keep up with those who are not pregnant or if you have not taken much exercise before, you might want to join an exercise class for pregnant women. Begin exercising as early in pregnancy as possible. You will benefit and so will your baby. That way you can minimize many pregnancy difficulties - back and pelvic-girdle pain, incontinence, cramps, etc. - by exercising regularly. Women who are in good shape manage childbirth more easily - and more quickly - than women who have not been exercising.

Attending antenatal classes or group consultations also gives you a chance to meet other parents-to-be and to exchange experiences and thoughts on the subjects of pregnancy, childbirth and becoming parents.

There is so much to learn. The Internet, many publications and new DVDs can give you an abundance of information which can be overwhelming. So avail yourselves of consultations and classes to get an impression of the many different ways in which families choose to live and find out what you think will suit you and your baby. Some of the expectant parents you meet may already have other children. They or the midwife can report that a new mother can easily spend an entire day breastfeeding the infant, changing the infant and sleeping - without ever finding time for her own shower. This can be difficult to imagine when you are used to being able to plan and execute your work in the course of a normal working day.

Sometimes the health visitor from your area may attend a group consultation. Ask what is available in your area.

Yoga for pregnant women

Yoga for pregnant women is a good way to prepare for childbirth because it offers a calm and controlled way of strengthening your entire body. For women who have never thought about relaxation and breathing exercises before this is a good way to get to know your body before going into labor. Yoga, however, is not aerobic; you also need to do some fitness training. Walking or running are good choices - and when you feel you are getting too heavy for this, cycling is good exercise where your bump will not get in the way.

Water births

Going into labor in a birth pool is becoming increasingly common. One of the advantages of a birth pool is that the pregnant mother can move her body so much more freely without putting any strain on her back or pelvis. Ask the midwife whether this can be arranged in your area. Or you could rent a DVD for inspiration if this is not on offer in your area (see the list of recommended DVDs at the back of this book or visit www.gravidivand.dk - you might want to ask a Danish-speaker to help you).

Packing the things you will need

It is a good idea to have the things you will need at the birth venue ready packed.

You'll need to take your own soap, toothpaste, dressing gown, slippers, other toiletries and, of course, your cell phone (mobile).

Perhaps taking some clothes for wearing when you leave hospital is a good idea - something comfortable. You could, for example, take a practical breastfeeding (nursing) shirt or other top which unbuttons easily. Always remember to take your cross-agency case notes with you for the

birth. Ask the midwife which documents you will need in addition to your birth certificates and wedding certificate if you have one, or visit:

www.personregistrering.dk (you might want to ask a Danish-speaker to help you).

You will also need to pack a bag with the things that your little one will need. Diapers (nappies, size Newborn), vest, pants, perhaps a babygrow, bodysuit or sleepsuit and jacket, a cap, socks and a blanket (light or heavy depending on the time of year) are all useful things to take. And perhaps something to eat for the baby's father, some music, an mp3 player and reading material might come in useful.

Equipment

Read this section for inspiration - and to be prepared and perhaps avoid making too many purchases which you later regret. If you own a freezer, you may want to spend a little time before the birth preparing and freezing some meals to have ready.

You could also visit some of the many Internet websites for parents who want to buy and sell good, second-hand equipment for children.

Most expectant parents buy too much, especially clothes. You must remember that the baby grows out of them very quickly. The baby does not care about clothes; your choice will be influenced by your needs and wishes for the baby.

Most babies start as size 56. This size is likely to fit for one or two weeks. After that the baby will fit size 60 - or size 62, which will last the baby a little longer. If you use a tumble drier, be aware that clothes shrink - particularly clothes made from cotton, i.e. most clothes for infants.

Buy clothes that are soft and avoid metal buttons and difficult fastenings at the nape of the baby's neck. Wash all clothes before you use them. Read more in "Tænk - guide til sikre og sunde småbørn". www.taenk.dk

Child car seats

It is unlawful to carry a child under three in your car without a safety harness.

A child car seat is the safest way to transport your new baby back from hospital.

The baby must be harnessed securely in a rearwards facing car seat to protect him / her from neck and back injuries in case of an accident. The rearwards facing car seat must not rest against an airbag (unless the airbag has been deactivated).

The Board of Health recommends that you only use the child car seat during transport and - for the first couple of months - only for a maximum of 30-45 minutes daily. If you must go on a longer trip, the baby can manage being in the car seat for a couple of hours at a time.

If you have a car, always check that your car safety equipment has been approved.

Visit www.sikkertrafik.dk to read more.

Five tips about baby clothes

- Wash all clothes before you use them. The levels of noxious substances are reduced even after the first wash.
- If the clothes are packed in a polythene bag or other wrapping, open the bag outside the house so that any formaldehyde vapor is "diluted" before you or your baby breathe it.
- To the extent possible, you should avoid buying baby clothes with rubbery lettering if you have the slightest suspicion that it contains phthalates. Usually pvc lettering containing phthalates feels soft and "rubbery".
- Make sure that your baby does not get a chance to grab or suck this type of lettering while he / she is being bathed and changed.
- Products with the Flower ecolabel do not have pvc prints i.e. phthalates. The Flower ecolabel also means there is a 30 ppm maximum limit for free formaldehyde in products which are likely to come into direct contact with your skin.

Suggested shopping list

- 6 bodysuits
- 4 rompers
- 2 sets of pajamas (pyjamas)
- 2-3 sweatshirts / jackets, long - in order to keep the baby's back warm
- 2 long-sleeved T-shirts
- 6 pairs of socks - make sure they are not too tight
- 4 shawls to wrap around the baby
- 1 cap
- 1 pack of diapers (nappies); start with size Newborn, or size Mini if your baby's birth weight was over 3,700 g
- 10 cloth diapers as burp cloths (wind cloths) and for resting the baby's head on
- 2 sheets and quilt covers
- 1 baby quilt
- 1 cotton bath sheet
- baby carry bed (carrycot)
- baby carriage (pram)

- baby changing table
- changing mat
- bath tub perhaps on a stand so that you and you partner do not hurt your backs
- disposable wipes
- small washbasin to stand by the baby's changing table
- baby oil
- talc or ointment for the baby's diaper area
- baby thermometer
- safety cotton buds
- old family cot, if available
- playpen
- high chair, baby carrier or sling, diaper bag (changing bag), nursing cushion and baby alarm (all great ideas for gifts)
- baby car seat, if you have a car.

Spring or summer babies:

- 2 short-sleeved T-shirts
- loose pants in light material
- sun hat
- 1 light cap.

Fall (autumn) or winter babies:

- fleece suit, snowsuit or sleeping bag (bunting)
- woolly hat
- mitts and warm socks, possibly quilted
- lamb fleece (no longer recommended if there is any risk of an allergic reaction)
- woolen body stocking from September to May.

Fitness in the run up to childbirth

The exercises in this section are suitable for all pregnant women, including those with lumbar or pelvic-girdle pain. These exercises will help you feel better while you are pregnant.

When you are pregnant, you will often feel tired and generally sore all over. It is very easy to collapse onto the sofa when you get home from work or - if you have other children - you may push yourself to start doing practical chores.

But if you stop and concentrate on how you feel for a moment, you will realize that your body needs exercise and movement in a more unrestricted way than you have been able to move all day. If your legs feel heavy, do some exercises to improve your circulation and do some stretches for the back of your legs. If your back feels stiff, you can swing your arms and arch and bend your back, and if you feel weak, you can exercise your pelvic-floor muscles, your stomach muscles or the muscles on the sides of your pelvis.

And then lie down and rest, even if it is just for a short while before you have to get up again.

Do the exercises you are capable of doing. If you feel uncomfortable lying on your back, don't do the floor exercises which involve lying on your back.

Visit www.Hvidovrehospital.dk/hhfoedeafdelingen.nsf to see more exercises.

Exercises for improving your circulation

These exercises will relieve swelling and soreness in your abdomen and legs, calf cramps, hemorrhoids and constipation. These exercises work well followed by your pelvic-floor exercises - after childbirth as well.

- 1 Lie on your back with your knees bent and the soles of your feet against the floor. You may want to place a cushion under your buttocks. Take three to five deep, calm breaths.
- 2) Lift your buttocks, then lower them back towards the floor - five to 10 times. You could perhaps try shaking your pelvis while your buttocks are in the lifted position.
- 3) Lift your right leg towards the ceiling and bend and stretch it at the knee - 10-15 times.
- 4) Keep your leg stretched towards the ceiling and bend and stretch your foot at the ankle 10-15 times. Lower your leg, give it a bit of a shake and place the sole of your foot back against the floor. Repeat with your left leg.

Pelvic-floor exercises

This exercise strengthens your pelvic-floor muscles and increases your awareness of your pelvic floor making it easier to start exercising your muscles after childbirth.

Lie on your back or on your side with your legs bent.

Relax your stomach, buttocks and thighs. It is a good idea to place your hands on your stomach, then on your buttocks and thighs to make sure you are relaxing your muscles here.

Tighten your pelvic muscles as if you are trying to prevent air from escaping (wind).

The feeling is that of contracting your anus, of squeezing it shut. This is how you close off all three orifices.

Keep this tension for five to 10 seconds, sometimes for up to 30 seconds. Rest for five to 10 seconds between each repeat. Repeat the exercise 10-20 times, preferably several times a day. It is also possible to carry out this exercise in a sitting or standing position.

Stomach muscle exercises

This exercise helps you to achieve a better posture, which will take the strain off your back and pelvis. It strengthens your obliques, the deep stomach muscles which you will be using during labor to expel the baby.

Lie down on your back with your knees bent and the soles of your feet against the floor. Place your right hand behind your head with your right elbow touching the floor. Keep your chin tucked into your chest, so that you do not end up with a sore neck. Keep your lower back against the floor without actually pressing your back into the floor, and REMEMBER to tighten your pelvic muscles BEFORE lifting your head and your other arm. Now lift your head and your left arm and stretch your left arm towards your right knee. Slowly lower your head and your arm and repeat. You can alternate from side to side, or you could carry out five to 10 oblique stomach crunches to one side, then switch to the other side.

Exercises for the outside of your buttocks

Strengthens the muscles on the sides of your pelvis.

Lie on your left side. You may want to place a cushion to support your bump. Place your left hand under your head so that you are supporting the weight of your head in your hand. Lift your right leg a little towards the ceiling, making sure that both your leg and your foot point straight forward or a little downwards. Feel the tension down the side of your buttocks. Lower your leg again. Do this exercise 10-20 times with your right leg. Roll onto your right and repeat the exercise with your left leg.

Mobility exercise for your back and pelvis

This exercise helps prevent a stiff back and the back pain that goes with it. Takes the strain off your abdomen. This exercise is also suitable for pregnant women who cannot lie on their backs to do exercises. If you place your hands and knees close together, your lower back will benefit most. If you place your hands and knees far apart, your upper back will benefit most. You can also rest on your elbows if your wrists get sore when you rest on your hands.

Rest on your hands (or elbows) and knees and alternatively arch and hollow your back. Imagine the movement starting and ending at your tailbone (coccyx). Watch your neck, do not look up as you bend your back, and tuck your chin into your chest as you arch your back. Repeat 10-20 times.

Standing exercise for your back, pelvis and shoulders

Loosens the muscles between your shoulder blades and improves mobility in your back to make it less stiff.

Stand with your legs slightly apart. Swing your arms back and forth and make a point of turning your head towards the arm currently behind you as you do so. Keep your knees soft and slightly bent while you swing your arms, and relax your shoulders. You will benefit from swinging your arms like this for a couple of minutes in the course of the day every time your back feels tired. If you get dizzy easily, only turn your head slightly while doing the exercise.

Standing hamstring stretches

Stretches the muscles on the back of your thighs, which will improve your posture. Tight hamstrings can often be the reason why many people do not keep themselves erect while standing and sitting. Your muscles should always be warm before you do this stretch.

Stand with your feet together and your toes pointing forward. Move your right heel forward and lift your toes up towards the ceiling. Lean forward over your right leg keeping your back straight until you feel the stretch on the back of your right thigh. You will have to bend your left leg in order to do this. Maintain this position for at least 30 seconds. You must keep your entire body still during the stretch. Repeat with your left leg. We recommend that you do this exercise many times a day.

Standing calf stretches

Makes your calves more supple so that you can comfortably do a knee bend when, for example, you need to pick up something from the floor. Flexing your knees, for example, when you lift things will protect your back and pelvis. Counteracts calf cramps and sore calves.

Stand facing a wall. Place your hands against the wall with your arms extended. Move your right leg one step forward keeping your left leg straight with the heel on the floor behind you, so that you feel the stretch in your left calf. Lean forward with most of your weight on your left leg. Maintain the stretch for at least 30 seconds keeping your body still during the stretch. Slowly change legs and stretch your right calf. Repeat many times every day. Doing it just before you go to bed at night is particularly beneficial.

Resting on your side

If you want to rest while lying on your side, or if you - like most pregnant women towards the end of pregnancy - can sleep only on your side, you may want to place a folded rug or duvet between your knees and ankles. If you use only a cushion between your knees, you might put too much strain on the outside of your pelvis, which can result in a pain down the outside of your leg.

The onset of labor

Giving birth to a baby is an overwhelming and momentous experience. It is also hard work. Both partners may start showing feelings and reactions that you were not aware of. No two deliveries are the same. And it is important that you observe your own reactions to know what is right for you. You need to be able to be yourself. There is no need to worry that you will not be able to remember everything you learned at your antenatal classes. Everything that happens will be done in consultation with you, and health care staff will do everything they can to accommodate your wishes.

The first indications of impending birth:

1. Increasing Braxton Hicks contractions (over weeks or months)
2. The baby descends into your pelvis. In the case of first-time mothers, the baby's head stays in position from approx. four weeks before the due date - somewhat later if you have given birth before. Your midwife will check this.
3. In most women, the external os has a mucous plug as protection against bacteria. This secretion may be aqueous or a viscous, whitish or yellowish plug, which will slide out in the course of the last week before delivery. It may also contain a little blood. This is nothing to worry about and is just an indication that labor is approaching.
4. Bloody show (a few days before delivery) - is nothing to worry about. This bleeding stems from the external os and is caused when small blood vessels burst as the cervix shortens.
5. Regular uterine contractions increasing in intensity and duration, and progressively increasing in frequency.
6. Rupturing of the bag of waters. In 10% of pregnant women labor starts this way.

Irrespective of whether you are planning to have your baby at the hospital or at home, it is a good idea to contact your midwife.

Have her telephone number ready when your time is getting close:

1. When your contractions are regular and increasing in intensity
2. When your waters burst
3. When you experience heavy bleeding (fresh blood, more than would cover your palm twice over).

You can then arrange with your midwife when you should arrive at the birth venue or when she should come to you.

If you are having your first baby, normal childbirth may take 24 hours from the time of the first contraction or from when your waters burst until your baby is born.

If you have given birth before, labor will usually progress a little faster.

Rupturing of the waters but no contractions

Most Danish birth venues will wait between 24 and 36 hours after your waters have ruptured before inducing labor. It depends to a great extent on how the baby is doing and on the color of the amniotic fluid. You need to feel the baby move as normal, and the amniotic fluid needs to be clear, possibly with a little mucus and blood. If the waters are green, it will be because the baby has had a bowel movement. And the reason for that will be that the baby will at some point have been under stress. In this situation a CTG reading will be run to assess how the baby is now. If everything is alright, you will be asked to wait for spontaneous contractions to occur within the next 24 hours.

Labor can be induced by inserting a suppository into your vagina or setting up a drip with medication that stimulates contractions. Some venues offer acupuncture - this, too, is a possibility.

If your waters have ruptured and you have no contractions, you can remain at home. You will be asked to come to the birth venue a couple of times every 24 hours, so staff can listen to your baby's heartbeat. 24 hours after your waters have ruptured, you will be put on a course of penicillin to prevent any infection.

Procedures differ from region to region, so ask what the procedure is where you are.

Breathing

Generally breathing deeply relaxes you.

If you would like to practice breathing in the most advantageous way during labor, the following description may help you. Most pregnant mothers find their own breathing rhythm during labor.

Relax your breathing, breathe naturally. Your natural breathing rhythm will be different from anybody else's, and you will know when you have found your own rhythm. Practice staying in each breathing rhythm for the length of a contraction, approx. 60 seconds. This can make it easier for you to maintain a good breathing pattern during labor, and breathing this way can alleviate pain.

Breathing from your stomach

From the beginning of the dilatation (dilation) phase and for as long as it feels comfortable, breathing deeply is very beneficial for you. Place one hand on your stomach and feel your breath rise all the way from your stomach.

You can practice this when you are lying on your side, standing up or sitting.

Breathe in through your nose and breathe out through your mouth, this will prevent your throat from getting parched. Notice how much better you become at relaxing your body as you practice breathing this way.

Panting

As you pass from the dilatation (dilation) phase to the pushing stage you may feel a strong urge to push in spite of the fact that your external os is not yet sufficiently open. Your midwife will help you to put off pushing just yet.

You may have heard many funny stories about panting. It is at this stage that you need to do it. When you are panting, you breathe very shallowly, and only the top part of your chest will be moving.

When you feel the urge to push, you must pant, breathe out forcefully and immediately start panting again.

You may need to use the panting technique again towards the end of the pushing phase. Once again, the midwife will try to control the power forcing the baby out by asking you only to push gently or to pant. Cooperation between you and the midwife is very important for she will help you prevent your vagina and perineum from rupturing too severely.

You can perhaps practice together at home a couple of times before the event.

Relaxation exercises

There are various kinds of relaxation exercises. Your midwife, physiotherapist or relaxation therapist will be able to help you.

The purpose of relaxation exercises is for you to learn to control the muscles of your body and in this way be able to relax your body completely. First you must become conscious of how different your muscles feel when in a tense or a relaxed state. You learn this by first tensing a group of muscles while you notice how that feels, and then you let go and relax the muscles as much as you can.

Experiment to see if you can relax one group of muscles at a time. Work through your muscles in this way, in your feet, your legs, your hands, your arms, shoulders and face. Once your entire body is relaxed, continue relaxing and feel how your body seems to be getting heavier.

Breathing and relaxing exercises can - in combination with a conscious awareness of uterine labor activities - contribute to help you and your baby through labor.

Preterm delivery

Sometimes uterine contractions start too early. If the baby is born more than three weeks before the calculated due date, he / she is considered a "premature" baby.

The fact that a baby is born slightly before the due date, does not mean he is under any great risk. Depending on how early he is born, it may, of course, be slightly more difficult for the baby to adjust to his new state. In connection with delivery before 34 weeks, the baby is given a substance to mature his lungs and prepare him for taking his first breath.

If your contractions start too early, or your sac of waters ruptures, you should immediately contact the midwife or your birth venue, where staff will consider admitting you to the birth venue.

Quick births

Births in some families traditionally happen very fast. It may be a good idea to ask what it was like when your mother gave birth. There can often be similarities between mother and daughter. It is very rare for a first-time mother not to manage to get to the birth venue in time. But if everything went very quickly the first time, it could well happen a lot faster the second time. If you are in any doubt, you can always phone the duty midwife at your birth venue.

Myth

You can bring labor on through

- Sex
- Massaging your nipples
- Reflexology
- Sweeping the membranes

True or false?

There is no evidence that it works.

Overdue

A normal-term birth varies widely. 38-39-40-41-42 weeks - these are all normal.

The closer you get to the day, the greater your impatience. It is natural to be disappointed if your baby is not born around the time of your due date. A not insignificant stress factor in this connection is often having well-meaning friends and relations phone up every day to ask whether anything is happening. Some pregnant women may get to the point of not wanting to answer the phone. Remember that everyone else is excited, curious and impatient just as you are. If your due date is exceeded by more than two weeks, the birth venue will increase the frequency of your check-ups. And a date will be set for when labor will be induced.

Visit <http://www.libero.dk/Pages/General/Article.aspx?id=23420> to read more.

Labor induction

If it is decided to induce labor, the induction method will depend on your birth venue and how mature your cervix is at the time of induction.

These are the three most common methods:

1. Inserting a suppository into the vagina (with the hormone, prostaglandin, which softens the cervix and induces contractions). This can be repeated after four to six hours, if nothing has happened.

2. Hormone drip (oxytocin)

3. Amniotomy

The fetal membranes are ruptured surgically, so that the amniotic fluid can escape - it corresponds to the spontaneous rupturing of the membranes. This is often followed about an hour later by setting up a drip with medication to stimulate contractions, if contractions have not started spontaneously.

Inducing labor can be a lengthy process. Many mothers-to-be who have been induced do not give birth in the course of the first day, so you must be patient.

In many cases you do not have to remain at the birth venue all day. You can go for a walk or you may want to go out and have lunch before labor really starts. This could be a pleasant break for you.

Contraction stimulation

Women who have been in labor for a while often experience at some point that contractions become less effective.

The uterus is taking a break, and intervals between contractions get longer and the contractions shorter.

This is a natural part of the labor process. Your body simply wants a rest. Particularly first-time mothers may need something to stimulate contractions.

The treatment of secondary inertia varies depending on your birth venue.

If you need help to get your contractions going again, a drip can be administered via a vein on the back of your hand. Syntocinon, which is an artificial copy of oxytocin, the body's natural contraction-inducing hormone, is added to a bag of saline solution.

The drip rate is increased little by little until your contractions become effective again.

Many birth venues now offer acupuncture to stimulate contractions.

Admission and childbirth

When you arrive at the maternity department, your midwife will be there to greet you. Each birth venue has its own routines.

Your midwife will ask you when your contractions started, whether your water has broken, and whether you have experienced any bleeding, etc. Your pulse, temperature and blood pressure will be checked.

The midwife will check to feel how much your external os has dilated. She will check how the baby is doing by noting its lie, listening to its heartbeat, and making a note of the intensity and frequency of the contractions. The midwife will assess how far labor has progressed.

If everything is alright, you can eat and drink more or less anything you like. It would be good if you eat something that gives you lots of energy.

Sugar is fuel for your contractions. Feeling hungry makes for weak contractions.

Wish list

If you have thoughts about something you would like in connection with the birth, or if you have a wish list, you should discuss these matters with the midwife, if you haven't done this already in connection with your visits to her.

- Would you perhaps like to be moving during contractions?
- Or would you like a bath or shower?
- Receive a particular type of pain relief?
- Have the baby placed on your abdomen immediately after birth?
- Do you want the baby's dad to cut the umbilical cord?
- Have the baby stay in your arms until he / she has suckled for the first time?

Planning the birth

Many birth venues have begun to make so-called birth plans available for parents-to-be. A birth plan may be a good idea because it can be difficult to get an overview of how labor and delivery are likely to progress. After discussing your wishes in connection with labor and delivery with a doctor, a plan is prepared accordingly. This information will be added to your case notes. When you go into labor, the midwife will work on the basis of your doctor's notes. A birth plan could contain a note that you want labor and delivery to be as natural as possible without the use of pain relief. Or it may contain a note that you want pain relief in the form of an epidural if needed.

Ask your friends about the things you might like, look up information in books, visit the Internet, visit www.sst.dk, and ask at your antenatal classes or ask your midwife.

It is good to have certain expectations but it is also important that you are willing to forfeit these aims should it become necessary.

If after childbirth you feel that your wishes were not met, speak to your midwife and get her explanation as to why it was not possible.

The midwife will be with you to support and guide you through most of your labor. You will always have access to a bell and can always ring for the midwife if you (or you and your partner) are alone and need assistance. Ring for her, if you would like her to be there. The midwife will always be with you during the last phase of the birth, the pushing phase.

Positions for birth

Contractions

During the first stage of labor, the dilatation (dilation) stage, contractions can be very painful. Your contractions can take you by surprise, psychologically bringing home to you that you are now on the brink of this long-awaited event. Sensitivity to pain can vary considerably from woman to woman.

The birth canal is curved. That is why it may be of help to switch between various positions: walking, standing, hanging by a bar or around your partner's neck so that gravity helps to move the baby's weight as close as possible to the external os.

You may feel most comfortable sitting up or lying on your side on a bean bag or an easy chair. It may help to place your hands on your thighs, bend forward slightly and rock back and forth.

Hot baths or showers may also help you. Some women feel that pieces of toweling immersed in hot water with most of the water wrung out of them can alleviate the pain. Others feel they benefit from relaxation exercises. Some women are most comfortable just following the rhythm of their own breathing. It will help you to discuss these things with your midwife and get her help or that of your partner to do what suits you best.

During the pushing phase, choose between the various positions that suit you best. Whether you choose to give birth in a standing position, lying down, crouching, resting on your hands and knees or sitting up, is up to you. Speak to your midwife about your expectations and wishes - but do not feel disappointed if all your wishes are not quite met. Circumstances and your own psychological outlook and energy may be different from what you thought.

Labor and delivery

Often in first-time mothers the baby's head will already have descended into the pelvis - ready for delivery - four weeks before the due date.

As part of the last few check-ups before the due date, the midwife will keep checking the position of the baby's head. In women who have given birth before, the baby's head rarely stays in position. This usually does not affect the actual birth.

Dilatation

The dilatation phase is the most demanding part of labor. It usually takes many hours, and most mothers-to-be are still at home in their usual surroundings at this stage. Emotions are often

running very high. You will be feeling both excited and anxious at the thought of becoming parents. You will be wildly happy and nervous and perhaps a little worried about how it is all going to go. If this is your first baby, you and your partner are getting ready for a momentous experience - one about which you have heard so much. Now it is finally happening to you. If you have given birth before, you are likely to discover that every birth is different. Labor and delivery are normally somewhat quicker when you have given birth before.

It is important to rest whenever you can during the dilatation phase to keep your strength up for the next stage. When you can no longer rest, you must try to find one or more comfortable labor / resting positions. Most mothers-to-be prefer to be moving, while others just want to lie completely still in peace and quiet. Some pregnant women like taking a hot bath or shower because they find the effect of hot water soothing. The uterus is a large muscle - each contraction of this muscle contributes to diminish the cervix and dilate the external os. You will need to dilate to 10 cm. Dilatation starts at the back of the vagina, so you yourself cannot see it. The midwife will be monitoring the baby's heartbeat all through labor.

As you dilate, the baby's head presses against your pelvic floor. In the beginning, the breaks between contractions are of longer duration than the contractions themselves. But after a while, contractions and breaks will be of the same duration.

Towards the end of labor your contractions will last just over one minute followed by a two minute break

At this point you will need to breathe deeply, quietly and calmly - like when you practice yoga. It is normally during the dilatation phase that the fetal membranes rupture and "the water breaks". It can be difficult, particularly for first-time-mothers, to know when it is time to go to the birth venue or phone for the midwife. As long as you are alright and are working your way steadily and calmly forward - you should stay at home. When you get to a point when it becomes difficult to remember your breathing, and you have run out of good ideas on how to move forward - phone the midwife and arrange a time for coming to the venue.

When you have dilated to 10 cm and the baby's head has dropped onto your pelvic floor, there may be a short transitional phase before the second-stage contractions start. These contractions are different, and you may need a little time to get used to them. You may want to have a light enema.

Childbirth can be divided into three phases:

- 1.The dilatation (dilation) phase
 - The latent phase
 - The active phase
 - The transitional phase
- 2.The expulsion (pushing) stage
- 3.The placental stage

A total of approx. 15-16 hours (from the point when your contractions occur regularly every five minutes or less).

The urge to push and the pushing stage

During the dilatation stage the contractions have been working, and you have been following the contractions with your breathing. Now, during the expulsion stage you need to be active in a very different way. You must give in to the feeling / urge which second-stage contractions give you - it feels like you have to go to the toilet RIGHT NOW. You feel like this because the baby's weight is on your pelvic floor and is pressing against your anus.

Many mothers are pleased to become a little more actively involved and to participate in a different way. Once the expulsion stage has started, you do not have long to wait before you become parents. This thought can be totally overwhelming.

It is important during the pushing phase, too, that you find a good labor position - sitting, lying down, standing or on a birth chair. The possibilities are many but it is a question of finding the right solution for you. Even if it can be tiring, it will often be easier for the baby to find its way through your pelvis if you are standing upright. See how you get on, and get the midwife to help you.

When you have pushed, the midwife will listen for the baby's heartbeat. The pushing stage requires close cooperation between you and your midwife, and the atmosphere in the room tends to get very intense and intimate.

The father-to-be may find it difficult to see his partner so concentrated on labor activities that she notices nothing and no one else. The best help you, as a dad / birth attendant, can give is to express all the support and encouragement you can muster.

Ruptures and sutures

Rupturing of the tissues around the vagina and of the perineum occur in connection with some deliveries. Your midwife or obstetrician will record any lacerations in your case notes and also record whether you have received any sutures / stitches. It may be difficult to make sense of the wording in your case notes.

How and where do lacerations occur?

Tears and lacerations may occur during delivery when the perineum is very distended. Only on rare occasions is it necessary to make an incision (perform an episiotomy) in order for delivery to take place. But if it becomes necessary, the midwife will make a 3-4 cm incision to one side. Local anesthesia may be administered before the incision is made.

Tiny tears may occur around the labia or in the vagina. Perineal lacerations may occur in the area between the vagina and down towards the rectal sphincter.

Many women giving birth to their first baby receive stitches after delivery - somewhat fewer receive stitches after delivering their second or third baby.

Perineal ruptures and tears are graded into the following four categories or degrees and will be reported as such in your case notes:

First-degree vaginal tear: Superficial tear in the skin or the vagina.

Second-degree tear: The superficial muscles around the vagina have ruptured.

Episiotomy: Involves the same muscles as a second-degree tear.

Third degree: Partial or total rupture of the rectal sphincter.

Fourth degree: The tissue lining the rectum has also been torn.

Suture

You can ask your midwife to show you on the basis of the illustration where you have received stitches. You may also want to ask her how you should care for yourself once you are back home in terms of care and hygiene to ensure healing.

The type of stitches used are always dissolvable and will disappear within a month or two. If the stitches cause you discomfort, you can have them removed by your general practitioner a couple of weeks after giving birth.

Healing and pain relief after delivery

You may experience heaviness and feel sore in your vaginal and perineal area for some weeks after giving birth.

Your body is working hard to heal the wound, and swelling and itching in and around the wound are side effects of the healing process.

Tears to the labia and perineum take about a week to heal. If an episiotomy has been performed, healing will take around two to three weeks. Ruptures that involve the sphincter take approx. one month to heal.

You can use an ice pack in the form of a sanitary pad, for example, to alleviate pain and to minimize swelling. Just pour approx. 20 milliliters of water onto a sanitary pad (sanitary towel) and pop it into the freezer. You can apply ice pads several times a day - wrap, for example, a thin tea towel around the pad to prevent the ice from "burning" your skin.

You may also want to consult your doctor or midwife about taking painkillers.

If you are still experiencing pain in the sutured area after a week, you should contact your midwife or your general practitioner and have him / her check the stitches.

If you suffered rupturing of the rectal sphincter (a third or fourth-degree tear), you must follow the hospital's rehabilitation recommendations.

Do you want to know more?

You can read more about vaginal ruptures by visiting www.gynzone.dk

This website has been set up by experienced midwives and obstetricians at Skejby University Hospital.

Once the baby's head has appeared, the midwife will help you to edge the rest of the baby's body out, lifting the baby carefully. Perhaps you are strong enough to help her do this.

Once the baby has been born, it takes its first breath, and the midwife will assess whether light suction needs to be applied to its nose and pharynx to remove mucous and amniotic fluid.

Lying against mummy's tummy

Most mothers enjoy having the baby placed on their abdomen, and many infants would, if given sufficient time, find their own way to her breast.

When the infant lies against your abdomen, it can feel your warmth and listen to your heartbeat from the outside and no longer through amniotic fluid. The closeness between your infant and you as you hold it in your arms is something very precious. Make sure you keep your baby warm.

Dad, the midwife or whoever you have agreed upon, cuts the umbilical cord after it has been clamped with an elastic band. Perhaps the midwife will ask whether you would like her to wait a while before she weighs, dries and dresses the baby, or perhaps you can ask her to wait. An identity tag is attached either to the baby's arm or leg.

The placental stage

The uterus contracts again - this time in order for the placenta to loosen. It feels like giving birth to a large, warm substance; you must push lightly to expel it. Once the afterbirth has been expelled, the midwife will examine it to make sure that none of it has been left in the uterus. The umbilical cord is attached to the placenta and is approx. 50-80 cm long. After the afterbirth has been expelled, the routine at many birth venues is to inject Syntocinon into your thigh. This helps your uterus to contract and to generate the afterpains which will help to reduce bleeding after childbirth. If there are any tears in the mucous membranes of the vagina or in the skin around your vagina, the midwife will stitch them up. She will first apply a local anesthetic to the spot to numb you. You will heal in two to three weeks. The stitches are dissolvable and will disappear of their own accord but it may take a few weeks before you no longer feel them. After delivery you can stay in the ward for a couple of hours to enjoy each other's company - and the midwife can keep an eye on you and monitor for postpartum hemorrhage, and monitor the size of your uterus, your blood pressure and the baby. You can then be referred back to the maternity department, stay at the clinic or go home. You can read up on the baby's first hours further on in this book.

Stem cell storage

It is now possible to collect cord-blood stem cells immediately after delivery. This causes no discomfort to the baby. This service is handled by private companies. If you are interested, you must subscribe to the service before delivery takes place. You can subscribe via the Internet. Not everybody agrees exactly what the possibilities are and for which diseases stem cells can be useful but read about it before you decide. Maternity unit staff are not involved in the collection of cord blood.

Pain relief

Birth pains can be alleviated

It is the experience of most women that giving birth hurts, and we would rather not be in pain. These days there is a lot of technology available to help you. But your knowledge about pain and its alleviation and your active participation are important factors in you having a positive experience of childbirth. Many women can't see the positive aspects and the purpose of birth pains. But in contrast to pain generally, there is a purpose to these pains: To give birth to the most wonderful little baby. We all have different pain thresholds, and some pregnant mothers end up needing less pain relief than they had planned for, others more.

Nobody expects you to manage without any form of pain relief

Speak to your midwife or doctor about pain relief, and what will be available at your birth venue. One of the best ways to alleviate the pain of the initial contractions is to move about. Walk around the house, listen to music, play cards, place a hot-water bottle on the small of your back, lay out the last few baby clothes, pack your bag, or go for a walk outside - there are many possibilities. You may also want to take a few personal items with you, things that give you a feeling of security. This could, for example, be your favorite shirt or top which you might want to wear rather than clothes issued by the hospital. Or it might be your own pillow or a CD which makes you relax (only remember your own CD player; the hospital might not have one).

Birth pains are different from other types of pain - you get breaks between the contractions

Birth pains are associated with something very positive, and they will stop after a certain length of time. If you are frightened and feel insecure, you will tense up, and this will increase the pain. You must therefore let your body do its work and not fight what is happening. Think about the fact that your body was built to give birth. When you are upright and moving, you will get the maximum effect of the pain-relieving endorphins that your body releases.

Breathing

When you practice deep, calm breathing, your entire body will relax. Breathe in very calmly through your nose and breathe out through your mouth. The more you concentrate on controlling your breathing, the more control you will have over the labor process. If you feel you need to make

noise, do so. It may feel liberating to link sounds to your breathing. Some women find a rhythm that helps them through the contractions. Some may slowly count to ten - when they have reached ten they know that they are over the worst part, the pain is decreasing and they are heading for a break. You could perhaps ask your partner to help you stick to the rhythm when you are working with the contractions. You could perhaps practice your breathing when you settle for the night - breathing is a good relaxant.

Antenatal classes

Antenatal classes are a path to natural pain relief. The more you know about what is happening to your body during pregnancy, labor and delivery, the better your possibilities to play an active part.

The pain relief of hot water

Hot water (36-37° degrees C) relieves pain because heat travels along neural pathways faster than pain does. Hot water also stimulates contractions. Almost all birth venues offer showers and baths. A bath works best if you are dilated to four or five cm - not before this stage because it can make your contractions ease off. The hot water relaxes you because it increases the secretion of endorphins. And it makes contractions seem shorter. Nobody will be completely pain free but hot water will make it easier for you to get through the contractions. If you are in a bath tub or birth pool, it will be easier for you to move around in order to find the most comfortable position. Hot water from a handheld showerhead is ideal for massaging your abdomen and lower back during contractions.

Water birth

Some maternity units offer water births. This gives the baby a gentle transition from its life in the womb. If delivery is normal, there is no danger to the baby, as it does not breathe while it is under water.

Lumbar massage

Lumbar massage can relax you and alleviate pain because it increases the release of oxytocin, the hormone that stimulates contractions. The baby's dad or the midwife can massage you. Some women find it comforting; others find it distracting when they want to concentrate on the contractions.

Painkillers in tablet form

You can also take painkillers in tablet form, for example, paracetamol / panodil.

Morphine / pethidine

Morphine (diamorphine) / pethidine can be administered to exhausted mothers-to-be who have not had any sleep in the previous 24 hours due to minor contractions but who are not yet actively in labor. It is prescribed only if delivery is deemed to be more than four hours away because morphine / pethidine will affect the baby through the placenta and make it listless. If the baby is affected when it is born and seems weak and listless, a medication can be administered which will immediately reverse the effect of the substance.

Spinal analgesia

Ten percent of all women giving birth get an epidural or spinal anesthesia. An anesthesiologist induces a thin catheter into the spine between the membranes (maters) which cover your spinal cord. This blocks the nerves to your abdomen and legs.

This form of analgesia can be used both for caesarean sections and vaginal births.

Its effect is to make you pain free from your chest to your thighs.

You will not be able to feel your contractions. It also means, though, that you will not be able to feel whether you need to go to the toilet. For this reason, it is a common procedure to empty your bladder with a catheter.

There are two kinds of epidurals or spinal anesthesia:

- One which allows you to move about, and
- One where you must stay in bed because you will not have control over your legs.

Birth venues differ as to which method they use.

If you cannot be up and about during labor, it may affect the labor process. It may become necessary to set up a drip to intensify contractions, as you cannot contribute by moving about.

And the incidence of ventouse deliveries increases with an epidural block.

The effects of an epidural wear off after a couple of hours. You must have somebody by your side to support you the first time you get out of bed after having an epidural.

Nitrous oxide and pure oxygen

Nitrous oxide works as a method of pain control, relaxing you and making you feel a little intoxicated. Many women find they benefit from nitrous oxide. It works fast and is out of your system again after just a few minutes. When you use a nitrous oxide mask it is important that you breathe calmly to get the best effect. Nitrous oxide does not prevent you from feeling pain but it

can make you more indifferent to it. Some people experience headaches and nausea as side effects. Some women benefit from pure oxygen. Your midwife will be able to help you, ask her.

Pudendal block

This form of anesthesia is rarely used. It is administered as local anesthesia in the vagina and anesthetizes its nerves thereby reducing the pain as the baby is expelled. It may prolong the pushing phase because your urge to push may be reduced.

Full anesthesia

Full anesthesia - putting you fully to sleep - can be applied during caesarean sections. It is only rarely used.

Acupuncture

Most birth venues offer acupuncture. Acupuncture can be used to stimulate contractions, to alleviate pain during labor, to encourage placental detachment if the placenta is "stuck", and to alleviate afterpains.

Some birth venues also use acupuncture to treat nausea and fluid retention in pregnant women. You can always enquire at your birth venue whether they offer acupuncture.

Acupuncture will be administered by a midwife while you are standing up, sitting or lying down. You will feel a slight prick as the needle goes through your skin. Its effect will follow after just a few minutes. Acupuncture will not affect your baby.

Sterile water injection

Sterile water injection is a method for pain relief in labor where a little water is injected subcutaneously - usually in the lower back. The actual injection involves a brief shooting pain like the sting of a bee. Sterile water injections alleviate lumbar pains well and are effective immediately for up to 90 minutes. The injections can be repeated as needed during labor and have no side effects.

During labor

95 per cent of fathers attend the births of their children, and they are good birth attendants. It is a good idea to discuss what you expect from each other during the labor process - before you go into labor.

Dad

The male partner can be of help in many ways. He is an important contributor and can be a good support. It's a good thing for the mother-to-be to be able to cling to him - and she can squeeze his hand or his arm when her contractions are painful. It can be a comfort to receive encouragement from him, to relax with him, have him fetch coffee and perhaps a damp cloth. He can be of help in finding good resting positions or by administering lumbar massage. Some men report that their partner or wife reacts differently from what they expected when they go into labor.

It is important that the man displays a trusting and accepting attitude because this gives the mother-to-be peace to concentrate on the labor process. Towards the end of childbirth the mother often concentrates so completely on her own involvement in the labor process that she is unable to pay any attention to her partner. This does not mean that the man's help is not necessary - just that the labor process demands the mother's full attention.

Irrespective of who is there to help you, their physical and psychological presence is very important. Having somebody there for you during labor means fewer interventions, less need of pain relief and a shorter labor process.

It is, however, not unusual for the mother to feel that she lost normal control and did not manage to maintain normal decency during the most painful part of labor. She may have said something or been abusive and generally gone beyond her own bounds of propriety. Some women feel empowered by this, others feel somewhat ashamed.

The midwife has seen all these reactions before, so irrespective of whether there is a problem or not, it is a good idea to discuss these things with her.

Siblings attending the birth

Perhaps you have older children who want to attend the birth?

Bring another adult who can take care of the older child and who can keep an eye on how he / she reacts. Being present during childbirth is an intense experience, and seeing and hearing that Mummy is in pain can be very hard. You must also make sure that the older child gets a chance to discuss his / her experience afterwards, perhaps several times. Even if your older child is a teenager, the need to speak about the experience can be just as great. Many teenagers can be quite

embarrassed initially when told that Mum is pregnant (pregnancy proves that the adults have sexual relations!).

Monitoring the baby during labor

The midwife listens for the baby's heartbeat many times during labor.

She uses a wooden stethoscope and places her hand on the mother's abdomen to monitor the labor process. She can also use a doppler, a small ultrasound device which you perhaps recognize from your check-up visits to her.

Most birth venues have facilities for monitoring the baby's heartbeat and the labor process via a CTG monitor. The CTG monitor registers the baby's heartbeat in two ways. Either via an ultrasound device on a belt placed on the mother's abdomen or through an electrode attached to the baby's head. The labor process is registered via a pressure transducer placed on the abdomen. This combination gives good insight into how the baby is doing.

STAN-ST analysis

In recent years a monitor has been developed which uses advanced computer technology to analyze the baby's electrocardiogram. This is called a STAN monitor. If the baby gets insufficient oxygen during childbirth, its electrocardiogram will change as its resources are depleted, and the screen on the STAN monitor is constantly updated to show to what extent the baby is affected. The monitor will also indicate if delivery is urgent. The STAN monitor supplies the midwife / obstetrician with additional information based on CTG monitoring.

The baby's pH reading

If during labor the suspicion arises that the baby is at risk from oxygen deficiency (its cardiac sound is affected, for example, or the amniotic fluid is green), checks can be made by measuring the baby's pH level.

The level of pH is an expression of the acidity or alkalinity of the baby's blood. Oxygen deficiency will alter the baby's metabolism and result in the production of more lactic acid. Lactic acid will result in a drop in pH value. The level of acidity is measured in the baby's blood. A thin capillary tube is used to take a blood test from the baby's scalp. The sample is tested immediately, and the result is ready in 60 seconds. Several blood tests can be taken from the baby at 15-20 minute intervals to ascertain whether the baby's condition is stable or whether it is at increasing risk of oxygen deficiency. The results will help the midwife / obstetrician decide whether delivery can continue normally, or whether urgent delivery must be recommended.

How does the baby experience delivery?

Vaginal delivery is natural. The baby's adrenal glands are stimulated to help it get through the labor process, and its chest is compressed so that the fluid in its lungs is forced out.

The baby and the labor process are monitored for the risks described below.

We still know very little about how the baby experiences labor. The knowledge that we do have indicates that most babies manage the process fully aware and interested in discovering their new world. But we also know that the baby is subjected to considerable strain during the labor process and the delivery itself. First and foremost in "mechanical", physical terms because it must adjust to the birth canal. This is evident from the baby's head after it has been born - the back of the head, which normally presents first, is swollen.

As the bones in the baby's skull have not yet merged, this does not endanger the baby. It is, however, important that pressure does not increase too suddenly. The labor process therefore needs to take its time - both for the sake of the mother-to-be and for the sake of the baby.

The blood flow to the placenta decreases during the labor process which means that for a short while the baby is getting less oxygen and nutrition. The baby was built to withstand this strain but if labor is prolonged for many hours, the baby's resources may be depleted, and its heart rhythm may change.

High birth weight

There is a slight increase in the number of births of babies weighing more than 4,500 g.

Neonatal transition

The newborn baby must start to breathe and its circulation change in the minutes after he / she is born. Before he is born the baby gets his oxygen and nutrition via the umbilical cord. His lungs are filled with "lung liquid", which is secreted in the lungs and makes up part of the amniotic fluid.

While the baby is still in the womb, his blood circulation bypasses the lungs. During the time before delivery the baby adjusts to the changes that are about to happen at birth. His lungs mature, and sugar (glycogen) is stored in his liver.

During delivery the lung liquid is forced out of the baby's lungs and runs out his nose and mouth. His first few breaths will instead fill his lungs with air. If a little amniotic fluid is still hampering the infant's breathing, it may be necessary to apply suction to his nose and pharynx.

His circulation also changes. The blood flow to the placenta is cut off, and blood flows through his lungs enabling the oxygenation of his blood.

The baby's first breaths are usually quite vigorous, and he / she may spontaneously cry quite energetically. Most infants calm down quite quickly.

In the hours thereafter the newborn infant tends to be active and awake as a result of the transition and the enormous strain of being born. A few hours will pass before the infant's lungs are past the transitional stage, and a few weeks will pass before the transition to normal infant circulation has been completed.

The baby's breathing will often be irregular during his first few weeks of life.

Almost all infants have bluish hands and feet initially after being born. A few weeks may pass before this bluish color disappears.

The Apgar score

The infant's condition during the first few minutes after being born is graded by the midwife via Apgar scoring. Points are given - zero, one or two points - for his / her breathing, muscle tone, color, reflexes (whether he is grimacing) and heart function / pulse. The maximum number of points is 10. This scoring is carried out 60 seconds and again five minutes after delivery. Eight to 10 points means that the infant has withstood delivery well and had sufficient strength to manage the contractions. Seven points or less means that the infant has been affected by labor and may need a little initial help. You can ask the midwife what your baby's Apgar score was.

Umbilical pH reading

A pH reading can be taken from the umbilical cord immediately after delivery. Like the previously mentioned pH reading, this will show the level of oxygenation of the blood. This test will indicate whether the infant has been short of oxygen during delivery, and if so, for how long.

Reporting the birth of your child

How you should go about reporting the birth of your child varies a little from region to region in Denmark but usually you have to report the birth within two days to the parish clerk in the parish where you live. You must enclose a copy of your birth certificate / certificate of baptism / naming certificate and that of your husband if you are married, plus your wedding certificate. It is a good idea to have these documents ready before the birth. You can also register your baby over the Internet. Consult your midwife.

Paternity registration

If you are not married, you can register paternity from the start of the pregnancy or in connection with the birth of your child. The easiest way to register is to sign a joint declaration of care and responsibility for the child (omsorgs- og ansvarserklæring) when he / she has been born and include this when you report the birth.

You can request the relevant form from the midwife, or you can register your baby and the father can acknowledge paternity over the Internet by visiting www.personregistrering.dk (perhaps you can get a Danish-speaker to help you).

Early contact and bonding

The newborn baby's senses are all functional from birth. The infant loves to look at his / her parents' faces. His vision is clearest at a distance of 20-30 cm during the first couple of weeks of his life. You can communicate with the infant in many different ways. He uses his senses to discover the world around him - and to become attached to one or more individuals.

Very soon he will recognize the persons with whom he belongs. First via his sense of smell, then by the sound of their voices and presently by their looks - particularly their faces.

Many newborn infants initially lie with their eyes wide open. When you look into the baby's eyes, you may be met with an intense look and experience deep contact. The baby is able to give his parents a strong feeling of human contact, of meeting a new little human being.

Feel the togetherness of lying skin to skin with your baby

A newborn baby is capable of human contact and needs contact with a nurturing adult. Babies are not all the same, and not all babies are ready immediately for close human contact. But the need to bond is common to all babies - their lives and their entire future development depend on it.

Surveys show that the breathing of a newborn who has early contact with a nurturing adult matures faster, its body temperature is better, it learns to breastfeed more easily, and its blood sugar may be more stable.

Some infants do not have this early chance to bond. This may be due to illness or because mummy or daddy is not there.

Fortunately babies have the ability to keep looking for the bonding they need, so even if some days, a week or two weeks have passed, you can still start all over skin to skin.

The infant moves through six different states of consciousness:

- Deep sleep - he sleeps so deeply that you almost cannot wake him
- Light sleep - the slightest sound will wake him
- Drowsiness - the baby is awake but occupied within himself and not interacting with his surroundings
- Quiet alertness - it is possible to be in contact with the baby and interact with him
- Fussiness - will start crying unless you work out what he needs now: comfort, food, a change of diaper, to be burped, sleep, etc.
- Crying. There are different kinds of crying depending on what is upsetting the baby.

The newborn baby moves back and forth between these states. If you are aware where the baby is on this continuum, he will interact with you and will feel you are interacting with him.

You can interact with the newborn in all sorts of ways - by touching him / her physically, by eye contact, with sounds (talk, singing), etc. Interaction can take place during breastfeeding, when you are changing his diaper, tucking him up in bed, and in many other situations. Your little baby is up for it all and can cope with most situations.

The first medical check-up of the newborn infant

The umbilical cord is clamped with an elastic band, then cut.

Infants have varying amounts of vernix caseosa, the greasy substance which protects its skin. In most babies the substance is absorbed by the skin in the course of a few days. You will see it particularly in all his skin folds, his armpits, neck folds and - in girls - between the labia. Some babies are born with a caput succedaneum. This is a molding of the baby's head which is caused by the head having been pressed against the external os for some time. The caput disappears in the course of a couple of days.

We now know that to get a good start to breastfeeding you and your little one need a peaceful environment until he or she has managed to breastfeed for the first time. You therefore have the option of asking the midwife not to examine your baby until he has breastfed. If the midwife assesses that your baby needs to be examined sooner, she will explain why.

The midwife's (or the obstetrician's) examination of your baby will include an examination of the baby's mouth and palate to make sure it is not cleft, and that the baby can suckle. He or she will also examine the baby's body, eyes, ears, and count his fingers and toes.

Your baby will also be examined for congenital hip dysplasia. This is caused by the baby's pelvis being too small which means the thighbone can easily be dislocated. This is checked by rotating the baby's thighbone 90 degrees outwards at the hip joint. This will result in a "click" if the baby has a problem with congenital hip dysplasia. Treatment is the application of a splint to position the hip. How long the splint should be worn is assessed in each individual case - a specialist will follow the baby's progress.

The baby's reflexes are checked. A newborn displays various reflexes which disappear / alter as the infant matures.

Its anus will be checked. In boys, a check is made to see whether their testicles have dropped into the scrotum, and whether the urethra opens at the tip of the penis. Some maternity units offer this medical examination before you go home. At other birth venues you are expected to contact your own doctor to have the examination carried out within the first week after delivery. Your baby will be measured and weighed, and he is given a vitamin K injection. This is to prevent bleeding. Vitamin K is required for blood coagulation. It is produced in our intestines but the infant is not yet able to do this.

The baby's eyes

If the baby's eyes are inflamed, they are treated with saline solution.

You can also lightly massage the corner of his eyes (his tear ducts) with your (clean) little finger. This will release any pus from an obstructed tear duct.

When the baby is 12 months old, his eyes will usually have acquired their permanent color.

When delivery doesn't go completely to plan

Sometimes something will occur which means that delivery will not happen exactly as you would like. Sometimes a little technical help is needed.

Presentation

Most babies are born in a head-first position where the back of the head comes first, so-called cephalic presentation. But sometimes the forward flexion of the baby's head expected by the start of delivery hasn't occurred. In a few cases its head may extend backwards. This means that its

bregma, forehead or face comes out first. This is called a brow presentation and often means that delivery is protracted.

In three per cent of all births, the baby's buttocks or feet come first. This is called a breech presentation.

If the baby is lying in the breech position as the due date approaches, many birth venues will try to manipulate the baby from the outside of the mother's abdomen to get it into a vertex position. If this cannot be done, delivery may still be vaginal - in this case a breech birth - assuming everything goes smoothly. If there are any problems, delivery will be by caesarean section. Consult your doctor and midwife about this.

Lack of oxygen during delivery

If the baby's cardiac sound is normal during labor, it means that the baby is doing well. It is normal for its heart rate to slow down during contractions.

But if its heart rate remains slow, this is often an indication that not enough blood and therefore not enough oxygen is getting to the baby.

This may be due to an obstruction or compression of the umbilical cord.

It can also be due to insufficient blood flow to the placenta connected with frequent and intense, or protracted contractions, or an already existing placenta insufficiency that has become worse due to the strain of the contractions.

Only very protracted and severe oxygen deficiency puts the baby at risk.

How long the baby has been short of oxygen can be measured by testing blood from the umbilical cord. The pH value of the blood is measured, and this shows how long the baby has been subjected to oxygen deficiency.

Green amniotic fluid

The amniotic fluid may be green, which is a sign that the baby has passed a bowel movement in it. If this is the case, the baby will be CTG monitored during labor. The amniotic fluid is green because oxygen has been in short supply for a period - long or short - and the baby has had to exert itself. Perhaps the baby is also somewhat weak once it has been born and needs help with its breathing for a couple of days in order for its lungs to fill up properly with air.

Delivery by ventouse and forceps

Ventouse is the more common of the two. A ventouse can be a soft cup made from plastic or a hard cup made from metal. Forceps are very rarely used and only if the baby needs to be delivered very quickly.

The ventouse is inserted and placed on the baby's head. The midwife will then pull using the ventouse - in order to help deliver the baby - to coincide with your contractions and while you push.

The ventouse will leave a black mark and swelling, and perhaps blisters and small abrasions or sores on the baby's skull. This is not serious and will heal in the course of a few days. Some infants may suffer from headaches after having been delivered by ventouse, and a little pain relief will be administered.

Delivery by caesarean section

As previously mentioned pregnancy and / or delivery does not always go as planned, and it may be necessary to proceed to a caesarean section. Deliveries by caesarean section have doubled in the last 10 years. 20-25% of all deliveries are by caesarean section.

A caesarean section may be a planned or an emergency procedure.

You may plan to have a caesarean for various different reasons:

- The baby may be in a breech position
- Your pelvis may be too narrow
- You have previously given birth by caesarean (60% of the women who have previously had caesareans have caesareans again), or
- You have a strong wish to deliver your baby by caesarean section.

When it is suddenly decided that your baby must be delivered by emergency caesarean section, you will no doubt have many questions as to why a normal, vaginal birth was not possible. The atmosphere in the birthing room will have been hectic, and there will not have been much time to explain. One reason could be that the baby's head had not dropped properly into your pelvis, or your baby had become stressed and needed to be delivered as quickly as possible.

When an acute caesarean takes place under full anesthesia, it will rarely be possible for your partner to be present in the operating theatre. As the father / accompanying relative or friend it can be difficult if you feel you are being "pushed aside". The health care professionals will be focusing completely on mother and child, and they may not have the resources or the time to keep you properly informed here and now. This may cause you to become anxious and worry about how everything will go. Remember that you are experiencing the entire process seen from the outside, and you may see or experience some things from a different perspective. It can feel all wrong to be separated in this situation. And the feeling of powerlessness can be difficult to handle.

Some women feel they were done out of the experience of the birth, and others draw a sigh of relief that the whole thing is now over.

Irrespective of how you feel about it afterwards, it is always a good idea to discuss with your midwife and obstetrician why this decision had to be made. You can discuss the entire process step by step, and you will also receive a copy of your case notes. It may be a good idea to ask the obstetrician whether it is likely that you will need to deliver your next baby by caesarean, too. This will give you a good basis to prepare for the birth of your next child.

It is also a good idea to discuss events at the birth venue between yourselves later on when you are back home. How do you both feel? You and your partner may feel quite differently about it, and it is important that you give each other the space to express how you each feel.

In most cases a caesarean - even if it is an emergency caesarean - is performed under local anesthesia, either in the form of an epidural or a spinal block. This form of anesthesia is applied to your back and anaesthetizes you from your chest to your thighs. This means that you remain completely conscious during the operation. You can read more about this type of anesthesia elsewhere in this book.

Having a caesarean section

A caesarean section is an operation and is therefore performed in a surgical theatre. Your stomach needs to be empty, and a catheter / tube will be inserted into your bladder. A drip will be set up, and you may be shaved along your bikini line. You will be given support stockings to wear to avoid blood clots forming in your legs. You will need to keep these stockings on for 24 hours after the operation. The incision is made at the actual bikini line. The scar will be approx. 15 cm long (see photograph).

You will be anesthetized by the anesthesiologist, and as soon as the anesthesia becomes effective, the surgeons will start to operate. From this point your baby will be delivered in a matter of minutes. The midwife applies suction to your baby's nose and mouth, and a doctor will examine him / her.

At most birth venues a pediatrician will be part of the team of doctors, if your baby requires a little extra attention. As soon as the pediatrician has examined the baby, he will be brought to you if you are awake.

In the meantime the surgeons will stitch you up, and about an hour after the start of the operation, you will be ready for the next step.

If you were under full anesthesia, it will be some time before you are fully conscious again, and you may later feel that you were done out of the first few hours with your newborn baby. Remember that your baby has been with his father during that time, and has enjoyed the best start to life with his dad until such time as you were ready to greet him. You can easily have your baby with you even if you are not completely awake. This will give the baby the chance to smell your skin and perhaps suckle a little at your breast. Your partner or hospital staff can help you.

People vary in how long it takes them to come to after full anesthesia but for some it takes most of the first day.

If you were under local anesthesia, you will be fully conscious all the time.

The first days after your caesarean

We now know that it is important for newly operated patients to get out of bed and move about as soon as possible. That is why most patients are up and about on the day they had their operation. Your catheter will be taken out in the course of the day, and you must make a point of going to the toilet. The first couple of times you go, a member of the hospital staff will accompany you to see how you manage. If you have been under full anesthesia, your throat may be dry and hurt when you cough or clear your throat. A physiotherapist can perhaps give you some guidance, or you can ask hospital staff to help you.

The incision area will be sore in the days after your caesarean, so get something to relieve the discomfort from the staff. It will be easier for you to start moving if you get something to ease the pain. Once you are moving about, that in itself will help alleviate pain. But do not move about more vigorously than is suitable for somebody who has just had an operation, of course.

You need to start doing some gentle exercises for your circulation to alleviate the swelling in your abdomen. These exercises will also help to get your bowels moving again.

You can be discharged from hospital after three to four days, or when you feel you are ready.

When you get home you must continue to take it easy. You need to look after yourself, and one aspect of this is that you mustn't lift anything that is heavier than your baby.

Don't start any get-fit-after-delivery routines or sit-ups until four to six weeks after the birth but instead - once your scar is no longer sore - you could try the abdominal exercises in this book. And use the after-birth-fitness guidance to start getting back into shape.

Looking after your wound

When you shower, you should rinse the wound. It may itch while it heals. It is important that you keep the wound clean and dry. Once the scab has fallen off, use a moisturizer after your shower and massage the wound gently with circular movements. You should not do this until three weeks after the operation - but at this point it will help the incision to heal. The stitches will be absorbed into your skin.

Avoid exposing the scar to direct sunlight for the first six months. After that you can slowly begin to accustom your skin to sunlight again. If the scar turns red, slather on protective SPF 20 sunscreen (in Danish: faktor 20) or cover the scar up with an adhesive plaster. Experiment and see what works for you.

It is a good idea not to do any get-fit-after-delivery exercises until approx. four to six weeks after the birth.

If your exercises make your scar hurt, it may be an indication that you are overdoing it and need to wait. In spite of the fact that you did not go through a vaginal delivery, your pelvic floor has been under strain, so remember also to start doing the pelvic-floor exercises.

At some venues special classes are set up for women who have had caesareans.

Babies born by caesarean section

Babies born by caesarean section are not subjected to the same physical effects during the birth process as babies born vaginally. One example of this is that lung liquid is not forced out to the same extent. For this reason many newborns born by caesarean section initially need help to breathe. This may be done in the birthing room but sometimes a short stay in an incubator at the maternity unit or at the hospital's neonatal department may be necessary.

Adherent placenta

Approx. 15 minutes after the baby has been born, it is time for delivery of the placenta. You will feel a couple of contractions, and the midwife will ask you to push. The placenta does not always detach spontaneously, and if this is the case the midwife and the obstetrician will intervene to speed up the process. First they will check whether the baby shows interest in suckling, as this tends to bring on the necessary contractions. Other methods of bringing on delivery of the placenta are to inject contraction-inducing medication, acupuncture or to inject a saline solution mixed with contraction-inducing medication into the umbilical cord. If none of this works, the placenta can be manually removed under local anesthesia. Spinal anesthesia will be applied - which makes it possible for you to stay in contact with your little one - or you may be put under full anesthesia in order for the obstetrician to manually remove the placenta.

Low birth-weight infants

Approx. 4,000 Danish babies are born prematurely.

Five or six per cent of babies are born before 37 weeks or weight less than 2,500 g at birth.

Approx. 1% of newborns weigh under 1,500 g. These infants are often more than 8 weeks premature. The organs of these infants are not mature and ready to take on their various functions, and for this reason the infants need special support and monitoring, often for several weeks. This may take the form of respiratory support, tube feeding, being placed in an incubator to keep warm or medication against infection.

Neonatal departments make every effort to ensure that mums and dads can spend as much time as possible with their children and personally contribute to their care whenever possible.

If you cannot stay at the hospital with your baby, your local authority may be willing to cover your taxi expenses. It is a good idea to take some photographs of your baby, so you can look at the photographs and send your baby loving thoughts when you cannot be with him / her.

A good way of spending time with your little premature baby is to hold him close to your bare chest or for his dad to hold him close to his chest skin to skin. Hospital staff can help you with this. Carrying your infant skin to skin this way is called the **kangaroo method**.

It is very difficult being the parents of a low-birth-weight infant. Perhaps your little one does not look like the baby you had imagined, and you may feel that he is very small and helpless.

Fortunately, over 90% of babies with a birth weight above 1,000 g will survive. With the support and treatment available today most will develop quite normally.

Even if you give birth prematurely, you will produce mother's milk. What's more, nature will have adjusted your milk to be especially suitable for your premature baby. It is possible to breastfeed your baby, and initially you will also be encouraged and helped to express breast milk either by hand or with a breast pump. Consult hospital staff.

(At the back of this book you will find the titles of a few informative leaflets about premature children.)

Being a family

Many birth venues allow you to stay for a couple of days. At other venues you have to leave six to eight hours after the delivery. An increasing number of venues allow fathers to stay, as well. Each day at the birth venue follows its own routine.

Mum

As a mother you are simultaneously strong, dazed and very vulnerable. Your abdomen and your breasts hurt, and you are likely to experience mood swings of a kind you haven't felt before. This is normal. It is alright for you to react to this overwhelming, new situation. Keeping your baby close is the best way to bond. It is also best for initiating breastfeeding - the closer your baby is to you, the sooner your milk will initially let down. Listen to yourself and trust your ability to handle your baby's needs. What you do is right for you, and you will be doing everything in the best way possible. And take advantage of the fact that you are surrounded by staff you can ask questions. Ask them for advice, guidance and help if you are in doubt about anything concerning yourself or your baby.

Mum and Dad

You can have your baby with you all the time, and most mums and dads prefer this. Being there together the three of you gives you a unique opportunity to bond before it is time to go home where you have to manage to do everything yourselves. As there are other infants and parents in the ward, and routines are perhaps different from what you are used to, there may be a lot going on all the time. These couple of days are something very different, and you will remember them for the rest of your lives.

If you discover that you have arrived home too early, you can always phone the birth venue and ask about anything you want to know.

Dad

Dad is capable of doing everything, except breastfeed. He can lie with the baby against his chest, he can participate, and he can be of assistance.

Perhaps he is the one who should give the baby its first bath or change its diapers so that he has some chores which are his. It is important to be in close contact with the newborn right from the start, see the article by Svend Aage Madsen at the beginning of this document. In many cases the baby's tired mother will enjoy being allowed to rest while dad takes care of the baby. Dad can also pick up the baby and stand or walk about with him when he cries.

Visiting hours

Some birth venues have set visiting hours. Too many visitors can make it difficult to get peace to establish the routines you often need. You could agree on limits beforehand as to the frequency and duration of visits by friends and relations. Or you could ask staff to help you get the peace you need if your visitors or other patient's visitors overstay!

Some maternity departments recommend that afternoons are for siblings and Dad only, asking other relatives and friends to visit in the evenings.

Once you are back home, a telephone answering machine on which you record your telephone and visiting hours can be a good help.

Breastfeeding and nutrition

Mother's milk is best

Mother's milk is the best nutrition for an infant. The Danish National Board of Health recommends that the baby gets breastfed exclusively for the first six months, and still gets some breast milk until he / she reaches 12 months.

Mother's milk contains exactly the nutrients, in the quantities and the proportions which your baby needs. The fatty acids and proteins - which are vital for the formation of cells - are of a composition which makes it easy for the baby to digest. And mother's milk alters as the baby matures.

Mother's milk also naturally protects the baby against childhood and infectious diseases during his first months of life, and allergies are either prevented or delayed. Surveys show that the long-term effect of mother's milk is to prevent a number of chronic diseases and conditions. Breastfeeding also has advantages to the mother, as it helps her lose the extra weight she may have gained during pregnancy - and breastfeeding helps prevent some diseases such as breast cancer. Mother's milk is free, it is right where you need it - and at the right temperature, too.

Preparing for breastfeeding

Your body will spontaneously prepare physically for breastfeeding. But it may be a good idea to discuss breastfeeding traditions in your respective families and your expectations of what life will be like with an infant as early as during pregnancy.

The most important factors are that you feel confident in your ability to produce the quantity of milk your baby needs and that you want to breastfeed

The baby's father and his belief in your ability to breastfeed your baby is the best support you can get.

If you have previously had difficulty breastfeeding, try to work out why you did not find it easy. If you do, you may well be able to prevent the same situation from arising again.

Read up on breastfeeding and speak to your midwife, staff at the maternity department and your health visitor about what it takes for you to succeed at breastfeeding. You could perhaps contact one of the breastfeeding consultants at www.fogf.dk (Forældre og Fødsel which means Parents and Birth; you might want to ask a Danish-speaker to help you) and discuss your previous breastfeeding experience so that you will be in a stronger position to tackle it next time.

It may also be a good idea for you and your husband / partner early on during pregnancy to discuss how you are going to tackle visits from family and friends once the baby has been born. If you will be staying at a maternity department after the delivery, you could inform friends and relations of your visiting hours already at this point. You will need time to get to know your baby and to initiate breastfeeding.

Nutrition while you are breastfeeding

Eat more or less the same diet as when you were pregnant. You should be aware that you will be burning more energy while you are breastfeeding, and for this reason we recommend that you eat a little more of the foods you would normally have. Eat healthily and eat a varied diet and follow the eight tips for eating well. Visit www.altomkost.dk or ask your health visitor for information. Drink as much as you like (water and milk - two liters), restrict your intake of coffee and tea and avoid alcohol.

If you suspect that some foods upset your baby's tummy, avoid them for a couple of weeks to see whether that helps. Then try eating the type of food you suspected again, and you will know whether you were right in your suspicion.

Getting off to a good start

Physiologically all women can produce mother's milk. But breastfeeding is something you and your little one must learn by doing.

Believe that you will succeed.

Give yourself the time it takes; you need a peaceful environment to concentrate on breastfeeding

Ask the hospital staff for help and guidance.

It is best if the baby can be handed to you immediately after he / she has been born and can lie quietly in your arms skin to skin until he spontaneously roots and latches on (finds your nipple). Many babies work their way to the nipple in the course of their first hours of life. Other infants need a little sleep first. Ignore the rest of the world and switch off your mobile phone. These first hours in each other's company will never be repeated and are important for a good, undisturbed start to your baby's life.

The more often your baby gets to suckle properly, the sooner your milk production will get going. The baby has sufficient nutrition to manage the first couple of days. He lives on liquid he had with him from when he was in the womb.

Keep your baby close to you and let him suck your nipple as often as he wants. Rest when your baby sleeps. Trust that you know what is best for you and your baby.

How to get your baby to suckle

Your baby will show you when he wants to be breastfed. He will make sucking movements with his mouth, put his fingers into his mouth, or open his mouth wide and move his head searching for your nipple.

Rooting and suckling are natural reflexes and these are best exploited by placing the baby close to your breast, with the nipple touching his / her cheek. The baby will root, open his mouth wide and latch on taking the whole of your nipple and part of the brown areola around it into his open mouth. Place the baby so that your nipple points to the baby's nose holding the baby's stomach against your stomach. Support the baby's body and pull him close to your abdomen, so that his nose is free. His head needs to be bent slightly backwards, a position where you can easily imagine the baby "drinking" from your breast. You can use your free hand to support your breast. Do not use a "scissor hold" to support your breast - this prevents the baby from getting a proper hold of the nipple.

Breastfeeding positions

Lie or sit down so that you can relax and hold the baby close to you - irrespective of how long breastfeeding takes.

Experiment with different positions. Make sure that your back and arms are well supported so that you don't tense your shoulders. Sit in a comfortable chair with a backrest and armrests, perhaps with a good footstool. If you prefer to breastfeed lying down, you may need cushions in various sizes. If you have a tendency towards obstructed ducts, it would be a good idea to switch between different nursing positions. The baby takes more milk from the side of the breast where his chin is.

Colostrum

Your breasts will contain colostrum, which is ready as soon as your baby is born. Even if your baby is premature. Colostrum will cover your newborn's needs as long as he has access to the breast. It is very rich in antibodies which will protect your baby against infection. It will also help to get the baby's bowels moving. The composition of colostrum does not change in the course of the baby's feed. You can therefore offer him both breasts every time you breastfeed. Change sides when the baby spontaneously lets go of the nipple.

Onset of lactation

Onset of your actual lactation will be between 24 and 72 hours after delivery. The more your baby has had a chance to suck your nipples, the sooner your milk will "come in". Now the baby's bowels will need to digest milk, and that may cause a little uneasiness in its stomach. Keep the baby close to you. If you get very tired, let the baby's Dad take over or ask hospital staff to help you.

Many women's breasts become engorged during this transitional period. It helps letting the baby suckle often. If it is difficult for the baby to latch on, you can express a little milk by hand to make your breast less hard. It is also a good idea to take a hot shower or apply heat to your breasts. Or experiment by changing your breastfeeding position.

Some women experience a slight increase in body temperature in connection with engorgement. Let your baby suckle frequently. Take some Paracetamol / Panodil perhaps. Consult staff about it.

The let-down reflex

When the baby suckles at your breast, a message is sent to your brain to release two hormones. One hormone (prolactin) stimulates lactation. The more the baby suckles, the more prolactin will be released, and the more milk you will produce. One hour after you have breastfed your baby, 40% of the milk will have been reproduced. Approx. two hours later 75% has been reproduced. In other words, you produce the most milk while your baby is suckling and immediately after you have breastfed your baby.

This means that there will always be milk for your baby, and the more you breastfeed, the more milk you will produce.

The other hormone (oxytocin) lets down the milk from your lactiferous glands through your lactiferous ducts and to your nipples. This is called the let-down reflex. You need an active let-down reflex and your baby needs a good suckling technique for it to get milk from your breasts. The let-down reflex works after the baby has suckled for a couple of minutes.

Let down can be delayed if you feel anxious or nervous. That is why it is important for you to feel confident in yourself and confident that you can breastfeed.

The reflex will feel a bit like pins and needles in your breasts, and milk may drip or even spurt from your nipples. Some women are only vaguely aware of let down. Others feel it as soon as their baby starts crying.

Afterpains

In the days after delivery the hormone oxytocin causes the uterus to contract. These contractions are called afterpains; they reduce the size of the uterus and reduce bleeding after the birth.

Afterpains are particularly intense in women who have given birth more than once. It may be necessary to take a mild painkiller.

Frequency of breastfeeding

You and your baby will work out how often and for how long it should suckle, once you get to know each other. Let your baby decide for how long he wants to feed by giving him time to finish feeding from one breast before you offer him the second breast. Breaks are an intrinsic part of your baby's feeding pattern.

It is important to be aware that poor suckling technique involving improper latch on can lead to unnecessarily lengthy feeds - with the baby regularly spending more than 30 minutes at each breast. Many newborns will happily breastfeed up to 10-12 times in every 24 hours. The frequency of their interest in being fed will spontaneously reduce in the course of the first month.

Intervals between feeds will vary depending on the time of day or night. Usually there will be breaks between the breastfeeds in the course of the morning and in the early hours of the afternoon. Many infants want to be breastfed almost constantly in the late afternoon and during the evening.

Breast milk is easily digestible. There is therefore a tendency for breast-fed babies to feed more frequently than bottle-fed babies.

In the summer

If during the hot summer your baby needs more liquid, he will show signs of wanting to be breastfed to get the liquid he needs that way.

Night feeding and sleeping in the same bed

Breastfeeding your baby at night is a natural part of breastfeeding, and it helps to keep your milk production going.

People have different views as to where the baby should sleep at night. You will know what suits you best. In families where both parents and the infant are healthy there is no risk of lying on the baby and crushing him. The important thing is that you all get to sleep as well as possible. But if the adult is ill, under the influence of medication or alcohol or very overweight, or if the baby is immobilized, for example, by a brace, sleeping in the same bed is not recommended. There is also a slightly increased risk of cot death connected with having the baby sleep in your bed if you are smokers.

Also you are advised against having the baby sleep with you in a waterbed, on a sofa or a sofa bed or futon. When you have the baby sleeping with you, he needs to lie on his back. He needs to lie on a firm surface, and you must ensure that he has a safe area to sleep where there is no risk of him having his face inadvertently covered with anything, such as your duvet, a pillow, blanket or anything else, and where there is no risk that he might fall or get stuck or jammed.

You also need to make sure that the baby is not too hot. He therefore needs to sleep with his own little duvet.

Signs that your baby is doing well

- he / she feeds at least six times in every 24 hours
- He is alert and interested in suckling
- He makes clear swallowing sounds
- He seems content but not apathetic
- He is gaining weight
- He produces wet diapers (nappies) with light-colored urine six to eight times in every 24 hours (from day five or six onwards)
- He produces yellow, grainy or "seedy" stools (from day four)
- He has a normal skin color, not grayish or pale.

Urination and bowel movements

The infant normally first urinates within 24 hours of delivery, and then twice to six times in every 24 hours in the course of the following days.

You can see whether your baby gets enough to eat, if after this point he or she produces at least six to eight wet diapers every 24 hours, one of which needs to be wet through / very heavy.

The baby's urine will be clear and odorless if he gets enough to eat.

Its first bowel movement, meconium, will come within the first 24 hours after birth. It is black and sticky.

After two to three days the baby's stools will become green-black or green-brown, and the consistency more watery. From day four his stools become yellow and grainy, with a slightly acid smell. It is normal for a baby's stools to be watery, and this has nothing to do with what Mum has been eating.

If a baby was born at term but is still passing meconium on days four or five, he is probably getting too little milk.

The baby will often have a bowel movement in connection with being fed. During his first month he can have between one and four bowel movements in any 24 hours, although some infants have fewer bowel movements.

When the baby reaches the age of two to three months, he will have fewer bowel movements, and stools will have a different smell.

If babies are fed baby formula rather than breast milk, their stools will be light brown with an "adult" feces smell, and babies should preferably pass a stool every day.

Appetite

As babies grow their appetite increases, and you need to make more milk. If you find that your baby is fussy, you should let him suckle longer and more often to increase the quantity of milk. Babies normally need to feed six times in every 24 hours by the end of their first week of life, or they can become apathetic and not stimulate your milk production sufficiently. You must wake

your baby more often and offer to feed him, including at night, to reduce intervals between feeds. Eight to 12 breastfeeds in every 24 hours is perfectly normal.

If babies feeds more frequently, with less than one to two hours' interval between each feed, it may indicate that they are not getting the rich "hind milk" which is released as the feed progresses - or it may indicate that the baby is not suckling effectively.

If your infant is feeding less than six times in every 24 hours or more frequently than every one or two hours, it would be a good idea to consult your health visitor, a lactation consultant or your doctor.

Weight

Newborn babies normally lose weight during their first week. This is due to loss of water. The baby will be back at his birth weight by his tenth day of life.

After the first couple of weeks he will on average gain about 200 g a week.

During the first two to three months a breastfed baby grows rapidly, gaining more weight than a formula-fed baby. The growth rate of the breastfed baby then decreases a little. The growth graph of a breastfed baby is different from that of a formula-fed baby.

Foremilk and hindmilk

The composition and available quantity of milk changes in the course of the feed. Foremilk is more watery and quenches the baby's thirst. As the baby continues to suckle, he or she will be getting less milk but it will be "hindmilk" which will be creamier and more nutritious and will make the baby feel full.

It doesn't matter if the baby only wants to suckle at one breast at any one feed. It is also perfectly normal for the baby to suckle at both breasts at every feed. What matters is that he gets the rich hindmilk. The hindmilk is a creamier color than the watery, bluish foremilk which is released at the beginning of the feed.

Engorged or soft breasts

It has no bearing on your milk production whether your breasts are engorged or soft. Many women think that soft breasts mean they won't be able to produce enough milk. This is not necessarily the case.

Being burped and spitting up

During the first couple of days after birth the infant does not normally swallow much air as he suckles. As your milk production gets going, and the baby gets more milk in a shorter space of time, he may need to be burped. Some infants need to be burped a couple of times in the course of a feed. Place him back at the same breast, until he refuses to latch on to this breast. Some infants also spit up when they are burped. What they are bringing up is usually a little milk. This is of no importance as long as the baby is otherwise doing well.

Expressing milk by hand

It is not normally necessary to express milk. But you may need to do so if, for example:

- Your breast is so engorged that your baby cannot latch on to your nipple
- If your nipples are sore
- If you want to stimulate your milk production
- If you are separated from your baby.

Always wash your hands before expressing milk. Put out a clean dish to collect your milk. Work your milk down to the nipple by gently massaging your breast in the direction of your nipples with circular movements or with the palm of your hand.

Place your thumb above the nipple and your index and third fingers under the nipple by the edge of the brown areola.

Carefully press your entire hand into your chest wall while compressing your fingers together and then let go. Continue compressing and letting go rhythmically to express the milk. You are actually simulating your baby's suckling rhythm.

Don't be impatient if you do not manage to express milk immediately. It may be several minutes before the milk starts flowing.

Expressing milk using a breast pump

You will find several types of breast pump on the market, both electric and manual. You can rent one from Falck, from a medical supply shop and some baby supply shops. You also get smaller models which you can buy from Matas, the chemist, baby supply shops or directly from the companies that produce breast pumps.

Choose the type or model you feel you need.

Always wash your hands before expressing milk.

Before applying the breast pump work your milk down to the nipple by gently massaging your breast in the direction of your nipples with circular movements or with the palm of your hand.

Storing expressed breast milk

Breast milk must be expressed into clean containers which must immediately be cooled under cold running water and stored in the refrigerator or freezer.

Expressed breast milk will keep:

- For three days in the fridge at max. 5 degrees C
- For two to six months in the freezer by -18 degrees C.

Breast milk - once defrosted - must not be refrozen.
Any remaining, heated milk must always be discarded.

Pacifiers (dummies)

Infants need to suck. Many parents give their baby a pacifier (dummy). You are advised, however, not to give your baby a pacifier until breastfeeding is well established. Your baby first needs to be able to latch on without any problems at each feed, you need to feel confident in the breastfeeding process and have plenty of milk available for your baby. It varies how long it takes to get to this point.

You should be aware that an infant can find satisfaction in sucking on a pacifier and that this can increase intervals between feeds. If the baby is offered a pacifier - or formula supplementation - it may mean that he will not want to be fed often enough to stimulate milk production sufficiently. Always boil pacifiers before use, and use only pacifiers with the DVN label (Dansk Varefakta Nævn) to be certain that the baby's pacifiers meet safety requirements.

Breastfeeding twins

Having twins should not prevent you from breastfeeding. If you are motivated and get support and help from the people around you, it need not be any more labor-intensive than bottle-feeding them. Some mothers of twins feed both babies simultaneously. It increases milk production if both breasts are emptied at the same time.

Consult a breastfeeding consultant or another mother of twins who has had a positive experience of breastfeeding. Your health visitor can also help you. And check the lists of recommended books, leaflets and DVDs, etc., at the back of this book.

Smoking

Breastfeeding mothers are advised not to smoke, and it is also advised never to let anybody smoke in the baby's surroundings.

Nicotine is secreted in the breast milk. The quantity of breast milk decreases because smoking reduces the quantity of the hormone which stimulates lactation. Mothers who smoke breastfeed their children on average for a shorter period than non-smoking mothers.

Never smoke when you are in the same room as the baby. Set up a "smoking policy" and ask all visitors to respect it. Suggest to your visitors that you / they go outside the house to smoke. If you must smoke, it is best to do it immediately you have breastfed, in order for there to be as little nicotine as possible in your milk by the time the baby is ready for his next feed.

Nicotine gum or nicotine adhesive plasters are not recommended for nursing mothers, although they are somewhat better for the baby than having the mother smoke.

You can get a referral to a "Stop smoking" clinic from your own doctor, your midwife, your dentist or your birth venue or hospital.

Surveys show:

- That smoking during pregnancy can result in miscarriage, premature birth, low birth weight and the baby having smaller organs
- That the risk of cot death is increased by a factor of two to four depending on how much the mother-to-be smokes during pregnancy. There is an increased risk of cot death if the baby is exposed to smoke after birth, and if the mother has smoked during pregnancy
- That a baby subjected to passive smoking has an increased risk of developing allergy-related diseases, respiratory diseases, infections of the middle ear and of suffering from colic.

Medication

If you regularly need medication, consult your doctor to ask whether you should continue with your present medication or switch to another make while you are breastfeeding.

When breastfeeding is not possible

Breastfeeding is not always possible. This may be due to the baby's special circumstances; for example, its suckling reflex may not be properly developed due to the baby being premature. There may also be difficulties as a result of a breast operation or because you have very inverted nipples. In this case it may be best not to breastfeed - and just be proud of your tremendous achievement so far.

A few women don't want to breastfeed. You mustn't feel pressed into breastfeeding. Whether you breastfeed or not is your own personal choice. Many women see breastfeeding as an integral part of

their image of being "a good mother". But there is no evidence to show that it is breastfeeding in itself which results in bonding between mother and baby. Getting his bottle can be a cozy "parent-and-baby time" for the baby which makes him feel secure, loved and close to Mum or Dad. There can also be advantages to having a bottle-fed baby:

- The possibility for Mum and Dad to be more equal providers of food
- The possibility of keeping a close eye on how much the baby eats.

When you need to stop breastfeeding

If you need to stop breastfeeding within a very short time span, you should wear a very tight bra. Milk production can also be stopped via medication. Express a little milk if parts of your breasts get very hard, so that you avoid getting mastitis. Your milk production will gradually decrease.

Weaning

Most babies thrive and grow well on breast milk until they are six months old. At that point you can slowly start the transition from breast milk to solid foods which will fill the baby more than milk.

Your baby will be breastfed less as he starts to be fed solid foods, and the quantity of breast milk available will reduce correspondingly. It is recommended that you continue breastfeeding your baby along with giving him other foods up to the age of 12 months or as long as you both like doing it.

You might want to consult with your health visitor about this.

Common breastfeeding problems

Reinitiation

If the baby has difficulty latching on to the breast, or if breastfeeding has simply not worked out so far, you can start again. You do this by recreating the first bonding from your first few hours together after delivery. This is a way of helping the baby re-find his or her natural instincts - and to get Mum to relax and again believe that breastfeeding is possible for her and her baby. You can "reinitiate" at any time.

As a dad you may also need to have your baby close to you. Perhaps something got in the way of your first contact with your baby, or perhaps your baby has been ill. Many people feel holding their little infant close to them is very emotional.

Reinitiation

- First strip to the waist. You can wear a shirt which can be tucked around the baby when he / she is lying on you and / or a duvet to cover both of you
- Undress the baby. He should only be wearing his diaper
- Place the baby between your breasts
- In many cases the baby will fall asleep. When he wakes up, offer him your breast. It is sometimes easier for the baby to latch on if he is not too hungry
- Enjoy the closeness between you - and be patient
- Accept help from others and let them look after you.

Low milk supply

It is a common experience that there are times of day or whole days when you feel you do not have sufficient milk.

Many babies also seem to want to suckle frequently in the evening which is the time when many mothers feel they have less milk. This is not unusual as milk production varies over any 24 hours. There are times when the baby's appetite increases. This normally happens at the age of five or six weeks and again at approx. three months. At those times he will need to suckle frequently. This increases your milk production and makes it adjust to the baby's needs. You will also experience these sudden increases in appetite if you attempt to control breastfeeding times.

Having too little milk can also be due to the baby not suckling often or long enough, it may be because the baby does not latch on well enough, or because you are anxious causing the milk not to let down easily.

Assess how your baby is doing generally. If you are worried that he is not doing as well as he should, contact your health visitor or your doctor.

It is common for your milk to have a slightly different taste at the time when you would normally ovulate or menstruate. It may be that your baby refuses the breast, until he gets used to the taste.

Too little milk

- Put your infant frequently to both breasts, possibly every two hours. Make sure that your baby has finished at one breast before you offer him the other breast
- Breastfeed at night as well
- Make sure that your baby is using the right suckling technique every time - this is the best stimulation of your milk production
- Sit or lie in a relaxed manner when you breastfeed. That way you get the maximum let down
- Rest as much as possible
- You could perhaps express some milk (by hand or pump) after your baby has finished feeding
- Do not give your baby a pacifier (dummy)
- Accept the fact that you need to spend a few days doing little but breastfeeding and resting.

Too much milk

Some women produce more milk than the baby needs. Your milk production will, however, gradually adjust to your baby's needs. If your baby does not empty your breast, your milk production will gradually decrease.

Your breast should feel soft with no obstructed milk ducts when you have breastfed. It cannot, however, be emptied completely of milk.

If you have more milk than your baby needs, you can sell it to a human milk bank (Mælkecentralen) at Skejby Sygehus or Hvidovre Hospital. There they will use your milk for very premature infants. Contact them to ask them what to do.

You will be tested for HIV antibodies and hepatitis B and C before the hospital can accept your milk.

Too much milk

- Let your baby suckle when he is hungry
- Have the baby finish at the first breast before you consider offering him the other breast
- Watch for signs that your baby feels full, and respect these signs
- Do not let your baby suckle too much if he is not really hungry - the more he suckles, the more your milk production will be stimulated
- Express your milk (by hand or by pump) if there is more than your baby can manage and you are starting to get obstructed ducts because your breasts are so full of milk. But be aware that the more milk you express, the more you will produce.

Obstructed milk ducts or mastitis

You can help prevent obstructed milk ducts by switching between various breastfeeding positions to allow your baby to suckle from all parts of your breasts. Make sure the baby latches on properly. Check your breasts after each feed to see whether they feel soft and without any very sore areas due to obstructed milk ducts.

Avoid wearing tight bras or constricting your milk ducts with your fingers.

Make sure your breasts don't get cold. Use nursing pads of wool or silk - they keep your breasts warm.

A plugged milk duct feels like a tender, sore lump in the breast. Your breast will feel hot, sore and red with a hard lump in the area where the obstruction started. You may be running a temperature and you feel run down or have flu-like symptoms. You will need patience to unplug plugged milk ducts.

If you cannot unplug them, and your temperature has not dropped in the course of 12 hours, this may indicate that you have mastitis (inflammation of the breast). In this case contact your doctor. You should continue breastfeeding in spite of taking antibiotics.

Obstructed milk ducts or mastitis

- Take a hot shower or bath or apply heat to the area of the breast with the plugged duct before breastfeeding. This helps unplug the plugged milk ducts
- Put the infant to your breast so that his / her tongue is placed by the part of the breast with the plugged duct. If the blocked duct is on the underside of the breast, you can place the baby on the baby changing table with his head turned towards you and stand over him while he is suckling. The baby is most likely to empty the part of the breast where he is using his tongue to express the milk
- Massage gently over the top of the plugged ducts in the direction of your nipple with your fingers held flat as you breastfeed
- Handle your breasts gently to avoid damaging the breast tissue
- Go to bed, keep warm and get some rest. Have somebody look after you
- Continue breastfeeding frequently, approx. every second hour, even if it hurts when your baby suckles
- Express milk with your hand or a breast pump when your baby has finished feeding, until the breast feels soft
- Speak to your doctor if you cannot work the milk towards your nipple, or if you are not better within 12 hours.

Sore nipples / cracked nipples

In the first few days after delivery your nipples may feel tender when your infant is put to the breast. If the baby is not put to your breast correctly, your nipples may continue to feel sore because suction on the nipple will be too intense. This will damage the nipple resulting in sores and cracks.

Once the baby latches on properly, the pain will usually go away after a few days, when any sores and cracks will have healed.

Sore nipples / cracked nipples

- Make sure the baby latches on to your breast properly
- Offer the baby your breast if he shows signs of hunger. An engorged breast is difficult to latch on to, and a hungry baby can suck very intensely
- Express a little milk by hand before you put the baby to your breast. This will make it easier for him to latch on, and your milk will let down
- It is important to relax and breathe deeply before putting the baby to your breast. This will ease the pain
- You could put the baby to the least sore of your breasts and move him across to the sore side when the milk lets down
- Be very careful how you remove the baby from your breast. Insert a finger by the corner of the baby's mouth and gently make him let go
- Do not dry your nipples to clean off the milk and the baby's saliva. Make sure your nipples are exposed to the air so they can heal. You can perhaps place a little plastic tea strainer over your nipples inside your bra.
- Avoid moist nursing pads. Keep your breasts dry and warm with woolen pads with lanolin
- If breastfeeding hurts too much, express your milk for a day or two (by hand or pump) and feed the milk to your baby from a cup or with a spoon.

Nipple thrush

Painful breastfeeding can be caused by thrush, a fungal infection caused by the Candida organism, affecting your nipples. Thrush can occur even after a period of problem-free breastfeeding. You are more likely to get thrush after you have been treated with antibiotics. Some women attempt to treat thrush with seashells; it doesn't work and may actually make it worse.

Thrush can cause a burning, stinging, itchy pain. Or you may feel shooting pains in your breasts like a knife has been stuck into them. You may feel the pain during, between and after feedings. It takes a long time for small sores or cracks to heal. Your nipples may be red, shiny or flaky. White thrush can also form in your baby's mouth, and may spread through his or her intestines to the diaper area. And you may get vaginal thrush and redness around your anus.

Speak to your doctor about getting medical treatment. It is important that both you and the baby are treated.

You can deal with mild attacks of thrush yourself by using carbonated mineral water on your breasts before and after each feed. Make sure your environment is peaceful, and that your breasts get light and air. Change your nursing pads every time you breastfeed. Make sure you use bed clothes, towels and cotton bras which can be washed at 60 degrees C. A bra of man-made material may increase thrush because it tends to keep you more humid / warm. Don't eat too many sweet, sugary foods. These can increase fungal growth.

If the baby has patches of thrush in its mouth, these can be removed with a damp gauze napkin (wrung in carbonated mineral water) wrapped around your finger. If you use a bottle and teats, these must be boiled for 10 minutes every day. Once the fungal infection is gone, you must buy new teats and bottles.

Tight lingual frenulum

Sometimes the baby's lingual frenulum is too short. This means that the baby cannot express the milk. He will want the breast all the time to get some milk, and you can end up with cracked nipples because he cannot latch on to the nipple properly.

The baby's tongue will be heart shaped and very short when he puts out his tongue.

A small incision in the lingual frenulum will solve this problem. The baby will hardly feel it. Consult staff at the maternity department, your health visitor or your doctor.

Flat or inverted nipples

You will be able to breastfeed even if your nipples are flat or inverted.

The shape of your nipples is less important than the elasticity of the surrounding tissue. This is what determines whether your baby can latch on to the breast. Your breasts and nipples will develop in the course of pregnancy so you can't know beforehand whether there will be any problems. Accept the help and support you can get from your midwife and maternity unit staff.

If the baby cannot latch on at all, a nipple shield may be the solution. This is a shield of thin, transparent silicone with an artificial nipple.

Using a nipple shield can result in reduced milk production because there is no direct stimulation of the breast. This means that it may be necessary to breastfeed more often or to stimulate milk production by expressing extra milk.

Flat or inverted nipples

- Make sure you are in a peaceful environment when you put your baby to the breast
- You could perhaps hold your baby skin to skin
- Massage or shape your nipple and the brown areola
- Taper your nipple so that the baby can latch on
- Express a few drops of milk with your hand for your baby to lick up so that he knows he will be fed
- Draw out your nipple with a breast pump if you cannot do it with your fingers
- Experiment with various breastfeeding positions
- If the baby cannot latch on, express your milk and feed it to him from a cup
- Sometimes it is easier for the baby to latch on once the milk has let down
- If there is no way you can get your baby to latch on, use a nipple shield.

Breast operations

If you have had a breast operation of any kind, you should speak to your midwife about it in the course of your pregnancy. It is not always possible to say beforehand whether you will be able to breastfeed as this will depend on the type of surgery you have had. It is always worth trying. You may need a little extra determination and good support. Accept the support of hospital staff, your health visitor or the association, Parents and Birth (Forældre og Fødsel).

Even if before you have not been able to breastfeed your first child as you would have wished, you can succeed and breastfeed this baby.

Breast reduction

If your nipple still has a thick stalk of milk ducts with nerves and blood supply, it is very likely that breastfeeding will be successful.

In many cases you will be able to breastfeed at the start of your baby's life - later you can perhaps supplement breast milk with a formula.

Breast enlargement

Implants will be taking up much of the space which should be taken up with lactiferous glands. This means that it may be necessary to breastfeed more often, as there won't be room in your breasts for much milk at a time.

But compared to having had a breast reduction your chances of being able to breastfeed are better.

Piercing

Both the piercing procedure itself and the subsequent scarring may mean that your milk ducts have been damaged. This means that the milk can't get out, and that you risk getting mastitis.

Formula feeding

Some mothers prefer bottle feeding / formula feeding. It may be the right solution if you cannot seem to get breastfeeding to work for you and your baby, or you don't like doing it.

Formula milk is produced from cows' milk, the nutritional contents of which have been modified so that it corresponds to breast milk. The protein content has been improved and its general composition altered. Formula milk comes as a powder. You mix it with boiled, cooled water.

You can also get ready-mixed, ready-to-feed products in cartons. These are more expensive.

When preparing formula milk, follow the instructions on the tin / carton.

In case of allergy tendencies it is best to use special formula milk until the age of four months (see the section on allergy).

The Board of Health recommends that you prepare just one meal at a time to avoid bacteria developing. This applies to preterm babies during the time when they are fed only on formula milk and to full-term babies during their first two months of life.

If you are going out somewhere, you need to bring a clean, sterilized bottle with boiled water, and only add the powdered formula when it is time for the baby's meal.

Never use a thermos to store warm formula milk. When milk is kept warm for any length of time, bacteria multiply dramatically putting your baby at risk.

Use only level measures and the exact volume of water. If you use too little powder in proportion to the volume of water, your baby will get too little energy and too few nutrients. If you use too much formula in proportion to the volume of water, it will put a strain on the baby's kidneys, and he / she will not be getting enough fluid.

Every baby is different, in size and temperament. This will be reflected in his behavioral and eating patterns. Experiment with bottle feeding times until you find the daily pattern most suitable to both you and your baby.

Offer the baby a bottle when he shows signs of hunger. Accept the fact that he doesn't always eat the same volume, and do not press him to empty his bottle. Formula milk is more difficult to digest than breast milk. For this reason your baby may feel full for longer than if he had been fed breast milk.

Bottle feeding position

Hold your baby close to you when you are bottle-feeding him, so that you have eye contact. Your baby needs contact and to feel safe and loved while he is eating.

Do not let your baby lie alone while he is feeding

Vitamins, iron and the baby's first solid foods

All babies need a vitamin D supplement during their first 12 months. Vitamin D is absorbed from food and through the skin when the skin is exposed to daylight - during the summer months daylight is a very important factor. Vitamin D combined with calcium strengthens your baby's bones. Vitamin D deficiency can cause rickets which leads to bone deformity.

How much vitamin D to give your baby depends on the brand. We recommend giving your baby a vitamin D supplement of 400 I.E. every day from two weeks to at least 12 months when he will be able to swallow a vitamin pill. Children with dark skin or children whose bodies are usually covered up in the summer should be given a vitamin D supplement throughout childhood - and should presumably keep taking a vitamin D supplement all their lives.

Place a few drops of expressed milk on a teaspoon, then add the drops of vitamin D supplement. That way you avoid having the supplement stick to the spoon.

The easiest way to remember to give your baby the drops is to do it at a specific time every day.

Preterm babies need more vitamins than full-term babies. Consult your health visitor.

Iron

A baby is born with a reserve supply of iron in his tissues but this will have been used up by the age of four to six months. Iron deficiency can result in anemia and a reduced immune system, and the baby will not be doing well. It is important for your baby to get enough iron.

If he does not get iron-fortified formula or gruel, you should give him an iron supplement until the age of 12 months.

From six to 12 months, we recommend an 8 mg iron supplement or 400 ml of fortified formula or gruel per day.

Consult your health visitor or doctor if you are in doubt.

Introducing solid foods

From the age of six months you should slowly start to introduce and supplement with solid foods. From about this time you will often realize that the baby no longer feels full on breast milk / formula milk alone.

Your health visitor can give you good guidance on infants' diets and will give you a leaflet with advice and recipes.

Initially just give your baby a little taste on a spoon of the new foods. It is important that he slowly gets accustomed to spoon food and the taste of the new foods.

You can choose to cook his food yourself or buy ready-made baby food. Irrespective of what you choose to do, it is a good idea to see that your baby's first spoon foods are fairly runny.

Continue breastfeeding or bottle-feeding your baby.

The official eight new tips for eating well also apply to your child from the age of 24 months:

- Eat more fruit and vegetables every day - but not in the same quantities as an adult
- Eat fish - either twice a week as your main, hot meal or once a week as your main meal and as sandwich fillings nearly every day
- Eat potatoes, rice or pasta and brown, multigrain bread every day. Boiled potatoes are better than fried potatoes and better than rice or pasta. At least half of this group of foodstuffs should be rye bread (rugbrød) and porridge oats
- Cut down on sugar - particularly from soft drinks, sweets and cakes. Babies just don't need it.
- Cut down on fat - particularly from dairy products and meat, i.e. saturated fat. Use a vegetable spread and buy meat with a maximum fat content of 10%. Cut off visible fat. Add an extra teaspoon of butter or olive oil to the baby's food until he / she is 12 months old
- Eat a varied diet - and keep your child within the normal weight range
- Have your child quench his / her thirst with water - healthy habits start young. So-called "light" drinks and sugary drinks harm your child's teeth
- Be physically active - at least 30 minutes a day for adults and 60 minutes for children.

By the age of

- Five months the baby can move his tongue to the back of his mouth and use his lips to eat from a spoon
- Six months the baby can use his jaws to chew. As portions get bigger, and the foods your baby can eat become of a firmer consistency, solid foods will make up whole meals which can gradually replace meals from the breast or bottle.
When you start giving your baby porridge, you can choose corn (maize), rice or buckwheat flour which do not contain gluten. When you start feeding your baby vegetables, you can mix carrots, corn (maize), broccoli, peas and zucchini (courgettes, squash) into his mashed potatoes. Fruit, such as ripe apples and pears, peaches and bananas work well as early spoon food.
- Seven months most babies can sit up and be fed
- Eight months, the baby can chew his food well. He can chew a little dry food mixing it with saliva, and is little by little able to eat small pieces of rye bread (rugbrød) and soft, boiled vegetables. Perhaps your baby is now using a pincer grip to hold, for example, a small piece of rye bread between his thumb and index finger. He will also now be able to drink from a cup. If the baby reaches out for your food, it is a good idea to let him have a little taste.
- Nine to 12 months you can usually share what the rest of the family is having with your baby who will now be able to chew and take a bite out of a piece of bread himself. He will need practice to get the spoon to his mouth but it is a good idea to let him have his own spoon. In the months to come your baby will learn to eat with a spoon and to pick up food with a fork - almost without spilling. Allow your baby to feed himself using his spoon and his fingers - that is how he will learn.

Visit www.altomkost.dk or www.mejeri.dk/barnemad to read more on this subject or read the book, "Mad til spædbørn og småbørn", published by the Danish National Board of Health.

The newborn infant

The newborn infant will spend his or her time between periods of quiet wakefulness, active wakefulness, crying, drowsiness, quiet sleep or in the active dream phase of sleep.

Sleep

Infants can have very different sleep patterns. Some sleep a lot, others not so much, too little, you may feel. Newborns sleep an average of 16 hours out of every 24. They do not know the difference between night and day.

While the infant is sleeping he / she goes through various phases of sleep. That is why he sometimes sleeps very quietly, and at other times seems restless in his sleep.

About half the newborn infant's time asleep is spent in the active, light dream phase of sleep called REM sleep (Rapid Eye Movement). The infant breathes irregularly, moves, grimaces, moves his arms and legs and may whimper and cry in his sleep. The baby wakes up briefly many times during this phase although you may not realize it.

You may easily disturb your little one if you think he is awake. If you are not sure, you should perhaps hold back until you are.

If the baby is in the deep-sleep phase, he is completely relaxed, and it takes a lot to wake him. Newborns need a lot of sleep and will often show signs of tiredness after being awake for as little as one to two hours, and it is important to help them fall asleep again. Stroke him very gently over the eyes, for example - this could be a good way to start good sleep habits.

The newborn baby often needs to fall asleep while being held by one of his parents and listening to the parent's comforting heartbeat.

When the baby is a few months old and you want him to sleep, make sure you don't stimulate him just before this time but be aware that he needs to wind down. He will not be able to sleep if you have just finished a "tickling session".

Be aware when your baby shows signs of tiredness - sometimes babies cry because they are hungry, sometimes because they are tired, sometimes both. It is a good idea to establish fixed, pre-sleep rituals for putting your baby down to sleep.

Meals involve certain fixed routines which mean that the baby will know what to expect, and, similarly, it is a good idea to follow more or less the same routine every time you put your baby down to sleep. Many babies like having a security blanket, for example, a cloth diaper next to their face. It may also be a good idea to give the baby a cuddly toy or a fold-out book in his crib but too many toys will prevent him from sleeping.

It is easier for the baby to fall asleep if there are not too many stimuli. The room should be in semidarkness, and preferably, there should not be too much noise. When you put your baby down to sleep, don't have too much eye contact with him. You could perhaps whisper something like: "Shush now, beddie byes", and rock him / her gently.

Many babies protest when they are put down to sleep, and it usually takes a little while before they "let go". It normally takes them between nine and 15 minutes to fall asleep. Comfort your baby if he cries. This builds up confidence and peace of mind.

Remember, for a baby to be put down to sleep when he is tired is no punishment!

How many hours do children sleep?

| | |
|--------------|-------------|
| Newborns | 14-20 hours |
| 6-12 months | 14-17 hours |
| 12-24 months | 14 hours |
| 2-6 years | 11-14 hours |
| 6-9 years | 9-11 hours |
| Adults | 6-9 hours |

- *albeit with considerable, individual variations*

Babies have the ability to calm themselves down. Perhaps by a tuneless "hum" or by making some other noise. This makes it easier for them to fall asleep.

If the baby is in his baby carriage (pram) a cloth diaper hung in front of the folding top can be a good idea. This way there will be fewer sensory distractions, and it will be easier for your little one to fall asleep.

During the first few months the baby will often fall asleep in connection with being fed. Later he will not fall asleep quite so easily. You may therefore need to encourage his sleeping pattern. Try to accustom the baby to being put down to sleep in the course of the morning and again in the afternoon, after he has eaten and "played" - sleeping should not always necessarily be associated

with meals. When the baby is three to four months old he / she begins to be able to discern between night and day.

In the long term it is a good idea to have your main emphasis on **letting** your baby fall asleep rather than **making** him fall asleep. When the baby is over six months old, for example, you should gradually stop walking him to sleep in his baby carriage when it is time for his midday nap. Tuck your little one in with his teddy, say "night night" and let him fall asleep.

- Babies should sleep on their backs until they can turn over by their own efforts. Do not let your baby get too hot while he sleeps. A room temperature of 16-20° C is recommended in the bedroom.
- During the daytime most babies sleep particularly well in a baby carriage outside. The better the baby sleeps in the daytime, the better he will also sleep at night. So there is no reason to limit his sleep in the course of the day in the hope that he will give you peace to sleep at night.
- Show your baby that day and night are not the same by cutting down on "service" at night. Make sure that meals are as short as possible - only change his diaper if he has had a bowel movement - and don't speak to him.
- If your baby's sleeping pattern is still very irregular after the first few months, consult your health visitor or your doctor.

Varying your baby's sleeping positions

Many babies always turn their head to the same side as they lie sleeping on their back. To avoid the baby's head becoming misshapen, the National Board of Health has made the following recommendations:

- When the baby is asleep make sure he doesn't always have his head turned to the same side
- When it's time to change the baby, to burp him or carry him close to you, make sure he doesn't always have his head turned to the same side
- If the baby has a tendency to look towards one side only, try to get him to turn his head to the other side by speaking to him or showing him toys from that side
- Lay your baby on his sides and tummy when he is awake and roll up a cloth diaper in the shape of a sausage to support his back and head when he is lying on his side
- Be aware that babies turn their heads towards the light and that you will need to turn his crib / playpen.

Allergies

Allergies (infantile eczema, asthma, hay fever, milk allergy) are very common in babies - and are becoming even more common. There is a certain hereditary factor in these illnesses. Children whose parents or siblings have an allergy-related illness are at particular risk of developing an allergy themselves, although not necessarily the same type of allergy.

You can reduce the risk by ensuring:

- That babies are fed only on breast milk during their first six months or get a special formula
- That babies are not subjected to passive smoking
- That babies are not subjected to furred animals during their first 12 months
- That babies live in a healthy indoor climate. To achieve this you must ensure:
 - That rooms are aired two or three times every day, for 10 minutes each time
 - That you air your bed and let it cool by leaving your duvets to one side when you get up
 - That upholstered furniture and thick carpets are avoided in the bedroom
 - That bedclothes are washed twice monthly at 60 degrees C
 - That you wash your pillow, duvet and top mattress four to six times annually
 - That general, thorough cleaning is carried out.

If babies who are at particular risk of developing allergy cannot be breastfed, it is recommended that special formulas, such as Nutramigen or Profylac are used.

Infant jaundice

Many infants get slight jaundice on their third or fourth day of life.

They become a little apathetic and often need to be roused to be put to the breast. In most infants jaundice disappears spontaneously as they get fed more. Ordinary sunlight in the room contributes to curing slight jaundice symptoms. Place the crib in the lightest part of the room - by a window - but avoid drafts and direct sunlight.

In some infants jaundice is so pronounced that bright light therapy is necessary.

Jaundice is due to bilirubin, the yellow breakdown product of hemoglobin, the red component of red blood cells. Bilirubin is excreted via the liver but because the infant's liver is not quite mature during its first few days of life, bilirubin will build up in his body and this shows in his skin.

Bright light therapy increases bilirubin metabolism. Very high levels of bilirubin can be dangerous to the infant, which is why bright light therapy is sometimes recommended. Treatment usually takes 48 hours. In some neonatal departments your baby will receive phototherapy lying in a cabinet wearing sunglasses to protect his eyes from the bluish therapeutic light.

Breathing

During the baby's first few weeks his / her breathing can be somewhat irregular, alternating between short periods of rapid breathing followed by short periods of slower breathing.

The belly button

Keep the baby's belly button clean and dry. Wash it with soapy water if it has become dirty in connection with a bowel movement. The umbilical cord stump has no nerve strands, and it doesn't hurt the baby to have it cleaned. The stump normally drops off after eight to 12 days, and it is quite normal for it to bleed and smell a little. Once the stump has fallen off, you can clean the baby's belly button with a cotton bud.

The baby's skin

The look of infants' skin can vary a lot. Many infants initially have bluish hands and feet. The reason is usually that the infant's blood contains relatively large numbers of red blood cells (their blood is quite thick). The bluishness is not because he / she is feeling cold.

It is also quite common for infants to have many sebaceous glands in their skin, tiny and very close together, particularly on their noses. Larger sebaceous glands are usually found on their body, first and foremost on their backs. The skin around these glands can be quite red, and it may look as if the baby has a rash. The sebaceous glands in the baby's skin react this way due to the changes taking place at birth. It is normal and doesn't mean that the baby's skin is infected or that he has zits (pimples).

Infants' breast glands can be swollen (this goes for boys as well as girls) and even produce milk (witch's milk). This is due to hormonal influences from the baby's mother. Baby girls may bleed a little from the vagina. This, too, is normal and only proves that the infant's tissues can react to hormone stimulation.

The scrotum of baby boys may be red and swollen. This will resolve itself in the course of the first week.

Medical examination

If you have given birth at a maternity clinic or as an out-patient, your new baby will usually be examined by your own doctor one week after the birth. You must phone up to arrange an appointment.

Blood tests

Blood tests in the form of a heel stick are available to all infants on their fifth day of life. This is in order to examine the baby for congenital metabolic disorders and toxoplasmosis. You can breastfeed the baby while the heel stick is performed. This may make it hurt less, and make it easier for you to comfort him.

PKU (phenylketonuria) is one of the analyses. It tests for a metabolic disorder which - if left untreated - can lead to mental retardation. When this disorder is discovered at a very early stage, it can be treated by diet, and the baby will develop normally. This disorder affects one out of 12,000 newborns.

Congenital, lowered metabolism will impede the baby's physical and psychological development. This is the second disorder tested for. Treatment consists of administration of a metabolism-stimulating hormone which the baby cannot himself produce.

Toxoplasmosis can be transferred from mother to baby during pregnancy. If the disease is not discovered and treated, the baby's sight can be affected and his brain damaged. This infection can be treated and negative affects be prevented. Toxoplasmosis affects one out of 3,000 newborns.

The sample is sent to SSI (Statens Seruminstitut). If your baby is affected, you will be contacted directly by letter.

Testing the newborn's hearing

One or two out of every 1,000 babies are born with reduced hearing.

To give babies the best possibility of developing normally, it is important that instances of reduced hearing are discovered as early as possible, preferably before the baby is six months old. For this reason all babies now have their hearing tested when they are between 3 days and 14 days of age. This screening does not take long and does not hurt the baby. You can be present all through the screening and get the result while you are there.

It is best to carry out the test while the baby is sleeping. It is therefore recommended that you keep the baby awake before the screening and make sure that he / she has been changed and fed shortly before the screening.

A small earphone sends clicking sounds into the baby's ear. When the sounds are received in the inner ear, the cochlea, an echo is generated which is then registered by the earphone. The echo means that the ear is functioning well and that the baby can hear. In other cases the baby has

sensors attached to his head, and an earphone is held by his ear. This makes it possible to monitor the way the baby's brain reacts to sound.

Some children suffer from reduced hearing after infections in the middle ear or colds due to fluid accumulation in the middle ear. If you become worried about whether your baby can hear, you should consult your health visitor or your doctor.

Preventing cot death

There has been a distinctive fall in the number of cot deaths. It is not known exactly why but adherence to the recommendations below have meant that the number has fallen from 120 babies a year to 25.

Prevention of cot deaths

- Put the baby down to sleep on his / her back
- Do not smoke during pregnancy and do not subject your baby to smoke after he has been born. The risk of cot death is two to three times higher if the baby is subjected to secondary smoking
- Make sure the baby is not too hot when he is sleeping. He needs to sleep in a cool room and not wear too many clothes. Undress him if he is running a temperature.

There may be special reasons for putting your baby down to sleep on his tummy. Consult your pediatrician or your health visitor. It is all right to have your infant lie on his tummy while he is awake. If he falls asleep, turn him over on his back.

Becoming yourself again

Becoming yourself again

It takes time to get over having given birth, and it will be at least a few months before your body begins looking like itself again. Be patient and don't put too much strain on your body.

Bleeding

After giving birth you bleed from the part of the uterus where the placenta was located. Bleeding may be heavy to start with before becoming more like normal menstruation after a few days. After about a week it turns into what is called lochia serosa, which is a brownish discharge which may smell a little. After that it turns lighter and more slimy (lochia alba). Lochia discharge may last for up to a month after giving birth. Speak to the staff at your maternity unit or your health visitor if you are in doubt about excessive, heavy bleeding or lochia discharge. Stick to having showers, and do not use a bath tub or a swimming pool until the bleeding / discharge has stopped. If you are in any doubt, contact your doctor.

Stitches

Most women experience some perineal rupture during delivery which is sutured after the baby has been delivered. It takes two to three weeks until it heals, and there may be soreness and swelling during the first couple of weeks. Do as many pelvic floor exercises as pain will allow, use a handheld showerhead to rinse the area with lukewarm water or apply an ice bag wrapped in a clean cloth to the area. Lie down while you breastfeed, and rest many times in the course of the day. Remember to keep your stitches clean, change your sanitary pad (sanitary towel) often and use a handheld showerhead to rinse yourself after you have been to the toilet.

Bowel movements

Many new mothers are worried about going to the toilet and having bowel movements. Rupturing again is very rare but it does hurt if you are constipated. Avoid getting constipated by eating healthily, including the regular intake of foods containing plenty of dietary fiber, and drink a couple of liters of fluid (in addition to tea and coffee) a day. Support your perineum with a doubled-up pad and relax and take your time when you visit the toilet. Consult your doctor if you have any problems with hemorrhoids or constipation.

Discharge from hospital

If you have given birth as an outpatient, you will be back home a couple of hours after the delivery. Most new mothers stay in hospital for two to four days. Make a point of speaking to your obstetrician, midwife, nurse or physiotherapist about any doubts you may have or anything you want to know more about before going home.

Having sex again

You can start having sex again when your pelvic floor has healed and the lochia discharge has stopped. The most important factor is that you both want to. If you are experiencing vaginal

dryness after the birth, you can use a lubricant (in Danish: glidecreme) or slightly anesthetizing gel. Use a condom to begin with to minimize the risk of you getting an infection – also, of course, to prevent you from immediately becoming pregnant again. Breastfeeding does not prevent you from becoming pregnant. Consult your doctor or your health visitor about contraception at your eight-week postpartum check-up. See *Eight-week postpartum check-up* below. You can also request the leaflet on contraception listed under recommended leaflets at the back of this book.

Hormones and breastfeeding

You release two hormones in connection with breastfeeding:

1. The hormone, oxytocin, which delivers your breast milk into your milk ducts. You release the same hormone when you are sexually aroused. You may therefore experience that milk spurts from your breasts when you have sex. Some couples feel it is frustrating to be reminded of breastfeeding during sex, others feel it is all right.

Oxytocin has a relaxing effect and gives you a feeling of wellbeing. So take the chance of settling in well- either sitting or lying down – and enjoy the fact that for the moment all you can do is breastfeed.

2. The hormone, prolactin, which is needed for the production of breast milk.

Long ago people said that you could not become pregnant while you were breastfeeding but this is not true.

Prolactin restricts your own estrogen production and contributes to the delay of your menstruation but breastfeeding does not work as contraception.

Your eight-week postpartum check-up

Eight weeks after delivery you are due for a postpartum check-up at your own doctor's. Your doctor will check that your uterus has returned to its original size and will also check how well you can "squeeze" your pelvic floor muscles.

You can also discuss contraception.

Finding a good breastfeeding position

You are likely to spend many hours out of every 24 breastfeeding your baby during the first few months. It is therefore important that you find a comfortable position, whether seated or lying down, every time to do so. Neck and shoulder pain, sore wrists and an aching back are typical problems in young mothers. And you must remember that your baby is getting heavier all the time.

Finding a good breastfeeding position

You need to bring your baby to you rather than you having to bend your neck and "collapse" your back to put your baby to the breast. Use a nursing pillow or a thick quilt to support your arms. Relax your shoulders, arms and wrists. Make sure your back is propped up properly against the backrest and keep your feet on the floor or propped up on a footrest.

Getting back in shape after delivery

This section tells you how – in a manageable way – you can get back into shape after giving birth. It is not necessary to have previous experience of exercising or for your weight to be textbook correct for you to benefit from this. You will be able to manage to do these exercises even if you are up several times a night and find it challenging to organize breastfeeding, etc. Read through this section now and read it again every time you need encouragement to move correctly or to get more exercise.

Irrespective of what shape you are now in, at least three months will pass before you can run or jump. But walking the baby carriage (pram) every day is good and efficient fitness training. Go for short walks pushing the baby carriage to begin with. If your pelvis and stomach muscles feel "heavy" or very sore, it is a sign that you are overdoing it, so take it easy to begin with! If you walk at a good pace for between 30 and 60 minutes every day, you will get fit.

Use this text and the illustrations to see how to protect your body and exercise it while looking after your baby. The exercises from the *Fitness in the run up to childbirth* section will also be suitable during your postpartum period, so we recommend that you also continue doing them. Do the exercises when your body feels heavy and tired, as well. This will ensure that you use your body in as many ways as possible.

Read the previous page, or read the section about caesarean sections before you start the exercises.

Your pelvic floor muscles

If you started doing pelvic contractions (Kegels) during pregnancy – which is a good idea – you already know about pelvic floor exercises. You will presumably also have heard of these exercises while you were at the maternity unit, and perhaps you are thinking that you might just put off doing them until tomorrow. But NOW is the time to be doing pelvic floor exercises.

Your pelvic floor has been under strain - from the changes in your body and from the baby - all through pregnancy, and labor and delivery means that your pelvic floor muscles, connective tissue and nerves have been stretched and distended.

You need your pelvic floor muscles to be able quickly to shut off your urethra, vagina and anus, so that you don't involuntarily pee or break wind. Also it is the job of these muscles to support your bladder, uterus and intestines to help ensure that you do not experience a prolapse of your internal organs later in life. Preferably you should contract (squeeze) your pelvic muscles every time you put any strain on your pelvic floor, for example, when you lift your baby, cough, jump or get up from a sitting position. In other words, you need to do many contractions every day. And to carry out this task, your pelvic muscles need to be rehabilitated. Preferably, you should be exercising them every day, doing sets of many medium-tight contractions. You should aim for ten to twenty contractions - holding each contraction for up to 10 seconds - every time you exercise. It is important to take a break of at least 10 seconds between contractions in order for your muscles not to become too tired. To begin with you are likely to tire easily and will perhaps only be able to hold a contraction for a few seconds at a time, so do not be too ambitious. Your pelvic floor muscles should preferably be in good shape by the time your baby is three months old. You might want to buy the CD with pelvic floor exercises available from www.liberoshoppen.dk. The most important part of your exercise regime is to make it a habit to contract your pelvic muscles:

- When you get up or sit down
- Lift something
- Cough, sneeze or jump
- Clean the house, for example, vacuum clean or wash the floor.

Your stomach muscles

You may be dreaming of having a flat tummy again. Perhaps you are also thinking that you need to get going on a lot of sit-ups. But you should not be doing sit-ups until you have become really good at your pelvic floor exercises. And if you had a caesarean section, this will first need to heal. Fortunately, there are other possibilities for exercising your stomach muscles at this point if you want to get started. Elsewhere in this book you will find an easy and effective exercise for the stomach muscles which you can do right away, even if you have had a caesarean section.

Use your body every day

The following illustrations show you how to move your body in the most beneficial way. Initially it may be difficult and you are bound to forget yourself if you are busy but persevere - keep giving it your best. Your new habits will stand you in good stead.

Get on your hands and knees keeping your back straight. Imagine you've got something precious made of glass standing on your back and that you must prevent it from crashing to the floor. Without moving your back, pull in your lower abdomen to a count of ten. Your back still mustn't move when you let go.

Practice contracting your pelvic muscles while pulling you tummy in. Repeat the exercise 10 times with a break of 10 seconds between each contraction. If your wrists get sore, you can rest on your elbows but you still have to keep your back completely still.

You need to bring your baby to you rather than you having to bend your neck and "collapse" your back to put your baby to the breast. Use a nursing pillow or a thick quilt to support your arms. Relax your shoulders, arms and wrists. Make sure your back is propped up properly against the backrest and keep your feet on the floor or propped up on a footrest.

Sit well forward in the chair before you get up. Lean forward with a straight back. Watch your posture. Squeeze your pelvic muscles and pull in your tummy just before getting out of a chair - and before sitting down.

Keep watching your posture. You can end up with a stoop if you constantly let your posture sag. You are likely to be carrying your baby on your arm for many hours every day, so straighten up and tuck your chin into your chest every time you notice that you are slouching. Practice standing in front of a mirror and stand erect to see what you look like when you are standing properly.

You will have a much better starting position for lifting your baby into or out of his / her baby carriage if you first put down the canopy. Remember to keep your back straight and stand close to the baby carriage.

There is quite a distance to the floor when you need to pick up a carry cot or an infant car seat. You need to bend your knees to avoid putting your back under strain. Stand with your back straight, contract your pelvic muscles and pull in your stomach. Go as low as you can by bending your knees, and keep holding the contracted muscles tight as you straighten up. If this sounds too complicated to begin with, just think about contracting your pelvic floor muscles and pulling in your stomach. The more you practice, the easier it gets!

In theory, you should always carry a carry cot or an infant car seat at chest level with both hands but in practice you may need one hand to carry a shopping bag or keep hold of an older child. Think about your posture and switch to the other arm once in a while to avoid twisting your back

Stretching

Sit in a chair with your back straight. Bend your head whilst lowering your left ear towards your left shoulder, placing your left hand by your right ear and feel the stretch down the side of your neck. Repeat to the other side. Move your head to various positions - forwards and to the sides - letting it rest there for a little while. Move your head slowly and calmly. Remember that rolling your shoulders and swinging your arms in large circles can help sore neck and shoulder muscles. Remember also to make sure that you maintain good working and breastfeeding positions.

Stretch your body every day – stretch it in every direction you can think of. Keep your chin tucked into your chest to avoid neck pain as you stretch sideways.

Most mothers are familiar with sore breast muscles. Stretch your breast muscles, and you will notice that it becomes easier to stand straight when your front torso is flexible. You can hold your arm high or low depending on where you want to feel the stretch. Breathe calmly, hold your body still and see if you can hold the stretch for up to 30 seconds.

Back home

Psychological reactions after childbirth

Many women feel very vulnerable initially after having given birth. They feel unsure of themselves and experience mood swings for no apparent reason. Way back – in Denmark – people would say that the fourth day after childbirth is “the day of tears”. This is not true but if you do feel down in the dumps, you mustn’t think there is cause for alarm – you are having to deal with many new, intense feelings and can be overwhelmed. Perhaps you are weeping either because you feel you have to deal with looking after your baby on your own or because the responsibility just seems so enormous. Or you may be upset because a particular breastfeed did not go too well, or because your baby’s skin is a little yellow.

Having a new baby is a momentous change. If he / she is your first child, everything will be new and unknown to you. And being unsure of yourself is a common reaction. It does pass. Trust in the fact that you can do it. The best help is to speak to your friends and relations about it. It may be difficult but you must reconcile yourself with the fact that initially you will be spending your entire time looking after the baby, breastfeeding him, changing him, and sleeping. Being a mum may initially be different from what you had thought.

Dad

Fathers are entitled to paternity leave. In this way you can share the experience of getting to know your new baby right from the very beginning. Suddenly everything revolves around the baby. Share the responsibility and generally help and support each other. Fathers can’t breastfeed but in every other way they are part of the “team” and can bond as closely with the baby as his / her mother. Fathers can play games, talk to the baby, put him to Mummy’s breast, burp him, comfort him, walk him in the baby carriage, and change diapers. Most fathers enjoy being alone with their baby, and you both need to establish your identities in your new roles. You could, for example, decide how to distribute the work.

If you are both exhausted because of the huge changes that have taken place, and because of having your sleep interrupted, paternity leave makes it possible for Mum and Dad to take turns at taking a nap. This may give you the energy to spend a quiet time together later in the day when the baby is sleeping.

Check for books on this and related subjects under recommended books at the back of this book.

Siblings

If you already have older children, you will probably have considered this:

How do you avoid or minimize jealousy because so much time and attention is focused on the new baby? (Jealousy is a completely natural feeling – see below).

The best thing you can do is to get your older child involved in every way you can – to the extent he / she wants to.

You may also suggest to friends and relatives who come to visit you that they bring something for the baby’s big sister or big brother rather than for the baby. This will turn attention back to the older child.

You could also arrange for breastfeeding time to be a time of togetherness with the older child as well, if this is possible. Perhaps the two of you have a special book you can share, or some building bricks the two of you can play with while you breastfeed. In some families it works, in others it doesn’t!

Consult your health visitor; she knows a lot about siblings and jealousy.

Single mother

Being a one-parent family is, of course, a very different experience. It also makes a big difference whether it was the new mother’s own decision to be on her own or whether she has been left by her partner either during pregnancy or soon after the birth of the baby.

Becoming a mother is a momentous change, not least if you are on your own 24 hours a day. In these situations help and support from friends and relations are needed.

Many single mothers say that they miss somebody with whom to share day-to-day experiences, for example when the baby is being fussy and crying because of a sore tummy, and not least on the day the baby smiles for the first time.

Speak to your health visitor about your situation so that she can support you and perhaps put you in touch with other single mothers, for example, a mums’ support group.

In some cases, you may need to contact a social worker or a psychologist.

You will also be able to get help and support from Mødrehjælpen, a private Danish support organization for single-parent families, pregnant women and families with children. You will find

the organization's phone no. at the back of the book. If you are looking for a manual containing rules and regulations - and your rights - you might want to consult "Forældrenes bog" which is listed under recommended books at the back of this book.

Visitors

Most people love visiting a family to see the new baby. Perhaps you had many visits when you were still in hospital.

But don't expect you'll have the energy for more than one or two visits a day. Once you are back home, it may ease the situation:

- If you gather some of your friends and have them visit you as a group
- If you agree how many visits you will accept and for how long
- If you agree a sign between yourselves that it is time for Dad to indicate to your guests that it is time to leave!
- If - before the event - you tell friends and relations that a visit of 30 minutes is as long as you can manage.

Visits can be very tiring and it can be very hard to say no or that you've had enough. But you could do the following:

- You could perhaps ask your visitors to bring a meal
- Or you could perhaps agree with friends and relations who want to see the baby that you will visit them instead once you are back home. In that way you can leave when it suits you.

Is your baby doing well?

Many new parents don't feel they can judge whether their baby is doing well or not. You need to get to know your baby. You will discover that even if the baby has no words, he can actually express himself. A baby who falls asleep after being fed or a baby lying quietly looking around is a baby who is doing well.

In other situations you may be in doubt. Consult your health visitor.

An example of a day with a newborn

In this example, the infant wakes up at 6 am and is tucked in for the night at 10 pm

In the course of these 16 hours the baby slept 6 hours

| | |
|--|------------------|
| 7 x breastfeeding | 2h |
| 6 x change of diaper | 1h 30m - 2h 30m |
| Exercises, massage and playing | 50m |
| Bath | 30m |
| 3 x walking the baby carriage | 1h 30m |
| With parent in kitchen | 30m |
| With parent tidying | 1h |
| 5 x being tucked in | 1h |
| Baby-parent togetherness in the course of the day | 2h |
| Total time spent with your newborn baby | approx. 13 hours |

How to care for your baby

How to care for your baby

Choose your changing station (baby changing table) with care. You will need:

- A changing mat with a raised edge
- A "work surface" at a height that suits your back
- The height should be such that your elbows are slightly bent when you stand with your hands on top of the changing station. And you should be able to get your feet in under the changing unit to avoid overstretching your knees.

- If one of you is taller than the other, you can either set the changing table height to suit the taller partner and have the other one stand on a footstool, or you could use a thick foam mattress under the changing pad to elevate the baby to suit the taller partner
- The frequency with which babies need changing varies. Many parents change the baby six to eight times in every 24 hours during the first couple of days of his / her life. If the baby has a bowel movement in every diaper, you may need to change the baby more often than that but bowel movements do tend to become less frequent after a couple of days. When that happens it would be natural to tend to the baby by wiping his face lightly, washing his hands and bottom and giving him a clean diaper before putting him down to sleep. If all he's done in his diaper is pee, you don't have to wash him with water every time you change him but you should give him a wash before putting him down for the night when he may sleep a little longer than at other times (see below).

Check that you have everything ready by the changing station before you begin.

Use a twin washbowl, keeping one compartment for his head and one for his bottom.

You will also need clean clothes and disposable diapers - as well as cloth diapers. One to wipe his bottom clean, one to place under his head and one for spitting up on. You will also need a pedal bin lined with a polythene bag for dirty diapers.

Never leave the baby on the changing station on his / her own

Bathing station

It is quite common to feel unsure of yourself to start with when bathing the baby. Take your time doing it, and preferably choose a time when you won't be disturbed, and when the baby is not hungry or tired, and you will soon get into a routine. Perhaps your changing station and your bathing station are in two different places. If so, be careful with your back in both places.

Equipment

If you do not have a dedicated baby bathtub, you can use your bathroom sink until you get one. Clean it before you bathe your baby.

Face cloths, cotton wool or cut-up old towels are useful.

You will need a large towel, preferably made from very soft toweling.

You may want to use baby shampoo on rare occasions but it is not necessary. You will also need a fine-toothed comb.

If you wear rings or you have long nails, be very careful not to scratch your little one.

Good hygiene

Good hygiene matters when it comes to the number of infections babies are likely to get. Particularly colds, infections of the middle ear and pneumonia are often preventable by washing your hands often.

Here are a couple of tips for good hand hygiene:

Wash your hands

- When you arrive back home from somewhere
- Before you start preparing a meal
- After you have been to the toilet
- Before you start eating
- Before and after washing and changing your baby
- After you have blown your nose or wiped your baby's nose
- After you have handled dirty clothes or vomit.

Washing your baby

The temperature of the water should be approx. 37 degrees C (body temperature). Use your elbow to check whether the temperature of the water feels right.

If you are not bathing the baby, you can wash him / her in this way:

- Start with his eyes. Use a damp cloth or some damp cotton wool, having first dipped it in the water in the bowl and wrung it well. Wipe from the inside out

- Then wash his face, making sure you wash behind his ears, and don't forget his neck. Then wash his arms and torso, both front and back, and dry him well, including all his various skin folds. This helps prevent his skin from getting "raw"
- If his skin needs moisturizing, add a little oil to the water in the bowl. But do not add oil to the water until after the umbilical cord stump has dropped off
- Make sure that you dry his belly button well. You might want to use a cotton bud to keep your baby's belly button clean
- Wash his bottom as the last thing - and always from front to back. Wash your baby girl carefully between the labia if she has had a bowel movement
- Make sure the baby doesn't get cold. You could perhaps cover his / her bare parts with the cotton towel.

When you put the clean diaper on, make sure that it doesn't interfere with the umbilical cord stump if it hasn't yet dropped off. Point your baby boy's penis downward so that he doesn't pee towards his navel.

Dress the baby in a vest or a bodysuit but remember his clothes must be big enough not to be uncomfortably tight. Make sure they do not pull the diaper up between his buttocks or press his arms and shoulders down so that he can't move freely.

Clean the baby's ears - but only the outer part of his external auditory canal - if and when needed. This may vary from a couple of times a week to perhaps just once a week.

If his nails need cutting, you can rub them with your fingers until the nail is skin-free. When his nails become too hard for rubbing - when he is approx. 1 month - start cutting them straight across with a pair of baby nail scissors.

Comb his hair very carefully with a fine-toothed comb - first against the natural direction of growth, then back the right way. This is to prevent cradle cap.

Bathing your little baby

Some babies love having a bath - others don't.

The temperature of the bath water must be approx. 37 degrees C (body temperature) - the same as for washing him. Use your elbow to check whether the temperature of the water is right. You can also buy a small bath thermometer to help you ensure that the baby's bathwater is at the correct temperature.

Note that a daily bath will not harm the baby's skin. But do not use much soap. Soap is not needed even if the baby has had a bowel movement.

This is how you might go about bathing your baby: Start by washing your own hands. Keep a secure hold of the baby's back when bathing him unless he is in a body-shaped bath tub.

- Wash his face, ears (behind his ears as well) and his neck
- Lift the baby's arms and wash his armpits
- Rub his scalp with the palm of your hand. You could massage his scalp gently with some water. Lift his chin, and wash under his chin - and his neck.
- Wash his bottom as the last thing. If he has had a bowel movement, you should wash his bottom before you start bathing him. Make sure you - very gently - get into the skin folds between his thighs and body.
- Use your hand or a facecloth to wash his back.
- Lift him out of the bath tub and dry him carefully - including all his skin folds - before dressing him.

A little exercise and some massage with a moisturizer would be good if you have the time and energy. Or you could perhaps do that at some other time.

Teeth

Babies are born with no visible teeth but their teeth lie hidden in their gums. From the age of five or six months the baby's gums can swell, and he will perhaps dribble more than usual as his teeth emerge. Most babies get their first tooth around 6 months. Some babies show signs of being a bit run down when a tooth is about to emerge, have a slightly increased temperature and get a diaper rash. This is the time they will benefit from a teething ring. It is a good idea to start brushing the baby's teeth with a soft toothbrush from the time the first tooth appears. We advise against applying anaesthetizing ointment to the baby's gums.

Diaper rash

Babies urinate often, and this means that his / her diaper should be changed five or six times in every 24 hours, perhaps sometimes even eight to 10 times. We recommend that you check his diaper before and after each time he is fed, and that he is always put down to sleep wearing a dry diaper. If his skin is unbroken and dry, we recommend that you apply a little scent-less talc in his skin folds. Make sure the talc doesn't form any lumps. This helps prevent diaper rash. But no matter how careful you are, it can be very difficult to avoid the baby getting a rash. In really bad cases, his bottom may turn a burning red or there may be some broken skin in places.

The reason for this type of skin irritation is that feces and urine contain substances that affect the skin. The rash may also be a heat rash or be due to an emerging tooth. His clothes may be too tight, or he may simply be wrapped up in too many clothes.

Keep his bottom clean and expose it to the air for a little while every time you change his diaper - and change his diaper often.

Wash his bottom with cotton wool or a soft "face cloth". It can be very difficult to clean your baby properly with disposable foam wipes. But cutting up old cotton towels to make small cloths for the purpose is a good idea. Wash the cloths at 60 degrees C. Do not use soap or oil on your baby's skin if he has a rash, and be careful with the application of rich ointments. A zinc lanolin and petroleum-jelly mix and zinc ointment (in Danish: zinklanolinvaselin and zinksalve) are better. If he has a persistent, inflamed diaper rash, it may take a week of extra care on your part before his skin regains its normal robust, healthy state. Often, your health visitor will also be able to help you with some good advice quickly.

You can also use a hair dryer at its lowest setting to make sure that your baby's skin folds are dried properly.

In case of broken skin on your little one's bottom, use **cotton rags**:

Use old, well worn, washed-out cotton sheets, torn into small pieces. Boil them, wring them almost dry and cool them to room temperature. Make sure you have washed your hands when you apply them to your baby's clean, dry bottom, before putting on his diaper. Use new rags every time you change his diaper, and the broken skin will soon clear up.

Fungal infection

Fungal infection can make the baby's bottom look raw. You can buy ointment to treat it from the chemist's, or contact your health visitor or your doctor because fungal infections must be treated.

Thrush

Thrush is a fungal infection which often appears in infants. You can minimize the risk by keeping your baby's bottle-nipples (teats) and pacifiers (dummies) clean by sterilizing them in boiling water daily. And make it a rule that neither you nor the baby's siblings ever put a bottle-nipple or a pacifier in their mouth before using it for the baby.

Thrush presents as a white coating on the tongue, the palate and the insides of the cheeks. It doesn't hurt but a bad case of thrush can bother the baby when he is feeding. Thrush is treated by cleaning the mucous membranes in his mouth with some gauze which is first dipped in chamomile tea, carbonated mineral water or salt water, then wrung out and wrapped around your finger. If you are breastfeeding your baby, you must treat your nipples as well.

If you find it difficult to get rid of the fungus, ask your doctor which prescription medication you should use. Some breastfeeding mothers have achieved an improvement in the situation by avoiding the intake of refined sugars and wheat flour - fungal infections thrive on these.

Oral thrush is often accompanied by thrush in the diaper area - via the stomach and intestines - or in the mother's case, by vaginal thrush, one symptom of which is itching.

Heat rash

You may accidentally wrap up your little one too tightly and too warmly because you want to make sure that he / she isn't cold. He may get fussy and out of sorts, and he may also develop a heat rash. The rash will quickly disappear again once his clothes are loosened or taken off, and his skin gets a chance to cool.

You should be aware that your baby's internal "thermostat regulator" remains immature during his first 12 months or so of life. For this reason it is important to dress him in "breathable" clothes so that his skin can breathe - and in not too many clothes. Your baby's clothes should preferably be made of wool or - close to his body - cotton. You should avoid clothes for your infant made from artificial (man-made) materials.

A suitable temperature in the room where he sleeps is 16-18 degrees C.

Neonatal acne

Neonatal acne shows up as small zit-like spots which infants can develop during their first few months of life. They are due to hormones passing from mother to fetus or from mother to baby through breast milk. Neonatal acne is a natural occurrence due to the transitions which both mother and baby undergo after the baby's birth. It will disappear of its own accord.

Dry skin

Many newborns have dry skin which peels off - almost like a snake shedding its skin. This is natural and doesn't warrant special treatment in the form of creams or moisturizers. However, a couple of drops of oil in the baby's bath water would be a good idea. Remember that the baby's sebum production has not yet stabilized and is therefore easily disturbed if you use moisturizers and creams too early in the baby's life.

It is important that you keep the infant's skin clean. Consult your health visitor or doctor if you are in doubt about how to look after your little one.

Cradle cap

Some babies develop cradle cap on their scalp. Cradle cap presents as greasy, brownish and yellowish scaly patches on the baby's scalp. It consists of dead skin cells and sebum from the glands in the baby's skin and is due to reduced blood circulation. It may take a while to get it under control.

Preventing cradle cap in the first place is a better option:

- Wash and towel dry the baby's scalp every day
- Comb the baby's hair (scalp) using a fine-toothed comb - first in one direction, then in the other.

If, however, your baby does develop cradle cap, you can get rid of it as follows:

- Rub his / her scalp with olive oil
- Leave the oil on the baby's scalp overnight
- Next morning, wash the baby's hair and remove the scaly patches with a fine-toothed comb.

This will get rid of the scaly patches in most cases. If the baby's cradle cap affects his forehead and eyebrows, you should ask for a good shampoo at the chemist's, or you can use a 2% salicylic petroleum jelly. Be aware that this should not stay on the baby's scalp for more than a few hours.

If cradle cap persists, consult your health visitor or your doctor.

The hiccups

Many babies get the hiccups while still in the womb and continue doing so after being born. This may be due to a full stomach or possibly the effect of something cold. There is no danger to the baby and the hiccups normally pass. It may sometimes help to place the baby on his tummy or to give him a little water on a teaspoon. If your baby starts hiccupping while you are breastfeeding him, there is no reason for you to discontinue feeding him.

Spitting up and vomiting

Spitting up means that the baby - within an hour or so after a feed - gets a backflow of food into his / her mouth and lets it run out.

Most babies spit up. It may coincide with a burp. It is important that you remember to give your baby little breaks during a feed so that he gets the opportunity to burp. Don't involve the baby in vigorous exercise just after he / she has been fed. If the baby is gaining weight and does not seem adversely affected, spitting up is no cause for concern. The volume expelled may look considerable even if it isn't.

Too much food as well as too little food can cause spitting up.

Too little food can make the baby fussy and over-eager to feed with the result that he swallows too much air while feeding - which will make him burp a lot. If, on the other hand, the baby eats more than his stomach can hold, he is also likely to spit up. The baby's weight and general condition will guide you.

Severe and frequent vomiting may mean that the baby is ill. If the baby loses weight, becomes less active, or if urination or bowel movements become scarce, you should contact your doctor.

Bowel movements

Breastfed babies' stools (bowel movements) will often be yellow and grainy or "seedy" with an acidic smell. How often a breastfed baby has a bowel movement varies widely. Some babies produce a stool in every diaper; others only have a bowel movement once a week. Formula-fed babies may produce greenish stools, or - if they get iron supplements - almost black. Very firm stools can bother the baby. Massaging clockwise around your baby's belly button can be of some help. It may be necessary to administer a laxative, such as lactulose. This is a sugar which is not absorbed by the intestines and works by increasing the water content of stools, making them softer. Always consult your doctor before trying a laxative. If your baby has very runny and frequent stools, this may be due to an infection. In this case, it is important to make sure that the baby gets sufficient liquid. You should be aware, however, that runny stools are perfectly normal in breastfed babies.

You should continue breastfeeding him, even if he has a runny tummy. It may be necessary to give your baby extra liquid if he is ill. Consult your doctor about this.

Colds

Infants breathe mostly through their nose. They may therefore have difficulty suckling when they have a cold. Buy some saline solution at the chemist's and apply a few drops to each of your baby's nostrils before breastfeeding him / her. This usually helps. Place some telephone directories or something similar on the floor under the head of the baby's cot to elevate his head - this too will help. Keep his nose clean and wipe away any runniness to protect the skin around

his nose. You can apply a little zinc ointment under his nose to prevent broken skin. Generally protect your baby from getting colds by keeping his feet, hands and head warm.

Fever

Newborns have more difficulty regulating their body temperature than adults. A fever is unusual in an infant under three months. Your baby is presumably not very ill if he seems bright, suckles actively as usual and is gaining weight.

But if your newborn baby seems listless or too hot, and you are in any doubt, you should take his temperature.

If your baby's temperature exceeds 38.5 degrees C and he / she seems generally poorly or listless, and this is not due to being wrapped up in too many clothes, contact your doctor

Signs of illness in infants can be harder to spot than in older children.

If your baby often contracts infections during his first months, his motor development may be delayed for a while.

It is quite common for some babies to run a slight fever in connection with their immunization at three months.

Eye inflammation

If the baby's eyes are a little red and gummy when he wakes up, his eyes may be slightly inflamed. The easy way to treat this is by cleaning his eyes with a moist cotton pad which has been dipped in a little boiled and cooled water. Use a fresh pad each time you touch his eyes. If your baby's eyes get redder and produce more pus, medical care is needed. In that case contact your doctor.

The startle reflex

Infants have a reflex which makes them start or startle. It is called the Moro reflex; it gradually disappears when the baby is around three months old.

When can you take the baby outside?

You can always take a newborn baby outside unless it is very cold and wet. You must make sure, however, that no cold drafts can reach the baby in his baby carriage. Wrap the baby up sensibly. It is a good idea to air the baby's duvet every time he has had a nap.

A piece of traditional advice: if the back of your baby's neck feels warm, he is not feeling cold

On cold and windy days you can place a woolen blanket over the duvet - or newspapers - or you could place a polystyrene sheet as insulation at the bottom of the baby carriage.

In frosty weather you need to protect the baby's skin with an oil-rich cream, preferably with no water content. If there is any water in the cream, you need to apply it approx. 20 minutes before taking the baby out in the cold. By this time any water will have evaporated.

Perhaps you can use yourselves as an example. Imagine that you were the one to lie sleeping in a baby carriage - what would you wear?

If the weather is dry, you won't need to put the baby carriage cover over the baby's duvet in the baby carriage. Remember to attach the insect netting.

On warm, sunny days, dress your baby in light, airy clothes. Never leave your baby to sleep in the baby carriage in the hot sun. Avoid covering him with a lamb fleece as this might give rise to an allergic reaction.

The baby doesn't need a cap or hat from May till September unless it is a really cold May or September day!

Sun:

The Danish National Board of Health advises against leaving children in the sun, and babies under six months must not be exposed to the sun, at all. If you decide to go to the beach one day, you must protect your baby by applying a sunscreen to his skin and dressing him in airy cotton clothes. A sunscreen lotion SPF 15 (in Danish: faktor 15) applied in the right amount, stops 93.3% of UV rays.

Use at least 20 ml of sunscreen lotion - that is one small handful of sunscreen per application

Be aware that sunlight reflects off water and sand - even off a white parasol. If your baby is badly sunburned repeatedly, he will have an increased risk of developing skin cancer when he grows up.

The National Board of Health has published a leaflet on the subject, "Beskyt børnene i solen". If you are in any doubt what to do, your health visitor is happy to discuss baby clothing and life outdoors with you.

Crying

Crying

Long ago, the received wisdom was that crying was healthy for infants. It was supposed to help develop their lungs.

This is not true.

Crying is a way for the infant to contact the people in his / her surroundings. The infant is totally dependent on how these people react. Every baby has his own sound when he cries, and even from early on in the maternity unit many parents recognize the cry of their own baby and can distinguish between it and that of other newborns.

Believe that you can comfort your baby because he can sense if you are unsure of the situation.

Crying is the infant's way of communicating. The baby cries, for example, when he / she needs:

- Contact
- A change of diaper
- To be fed
- To be burped
- To be tucked in

- or whatever else it may be. It is not always possible to find an explanation for his crying.

Surveys show that infants cry or are fussy for an average of just under two hours out of every 24 during their first three months of life, and for one hour out of every 24 from the age of four or six months.

Many parents are surprised to find that hearing their own baby cry affects them whilst hearing other babies cry doesn't. And many new parents - who do not yet recognize what the baby's crying signifies - often feel inadequate and unsure of their own role. But the calmer you can be, the better you will be able to interpret your baby's signs and react accordingly.

If your baby is crying because he is very hungry and therefore very fussy, he will often have difficulty suckling. His mum is therefore likely to become stressed, and her milk may not let down or may quickly dry up. In this situation it will be a great help if his dad holds him for a few minutes to give both mother and baby a little time to calm down before breastfeeding resumes in peace and quiet.

Infants often have certain times during the day or night when they tend to be particularly fussy. Carry the baby close to you and rock him gently in your arms, or swaddle him in a blanket as mentioned under colic (see *Infant colic*). Surveys show that many infants calm down when this is done. Or you may need to walk him in the baby carriage with his duvet tucked in around him - that seems to work in many cases.

Infants are often fussy at night. And this, of course, is also the time when his parents are likely to be tired. It is therefore very important that his mum manages to get some rest earlier in the day.

A temperamental disposition

All infants are unique and are born with very different temperamental dispositions. An infant's temperamental disposition decides how and how much he / she cries. Some babies cry a lot, others scream very loudly and / or cry in many different ways.

It can be nerve-racking to look after a very temperamental baby who screams very loudly. Initially, this is likely to require extra resources on your part. There are advantages to having a temperamental baby, however.

As you get to know the baby better it will become easier to interpret why he cries. Infants quite often become fussy because they are tired even if they have only been awake for an hour or so, so be sure to watch for signs of tiredness.

If you are in doubt about why your baby cries, discuss it with each other, and consult your health visitor.

Infant colic

Colic is every parent's nightmare. Colic is rare. Quite often insufficient sleep can be mistaken for colic. Colic is a condition in a baby involving repeated bouts of excessive crying and movements which seem to indicate stomach pain, presumably painful contractions in the intestines. The baby will cry incessantly and cannot be comforted. Colic usually starts when the baby is

approx. three weeks old - and he cries for at least three hours in every 24 - on at least three days out of every seven - for at least three weeks. The cause is not known.

The baby will typically have his crying bouts in the late afternoon or evening. Apart from this, he will seem quite normal, he will feed normally and have normal bowel movements.

Consult your health visitor or your doctor. Other parents who have themselves had a colicky baby can perhaps give you some advice or help. Having a colicky baby is very stressful, and parents who go through this are likely to need help and relief.

The association Parents and Birth (Forældre og fødsel) which is listed at the back of this book will be able to put you in touch with other families who have had colicky babies. Do contact them before you flip your lid completely over the constant crying. See the recommended books / leaflets / DVDs, etc., at the back of this book, and visit www.kolik.dk - this website will give you some ideas for removing certain foods from your own diet. (You might want to ask a Danish-speaker to help you.) Cows' milk may be one of the culprits.

You can also obtain information on how to swaddle your baby in a certain way. Surveys show that many colicky infants calm down when this is done.

Never shake the baby

Most parents can experience rising panic when their baby cries consistently. You may feel like shaking the baby. Don't ever, ever do it!

Shaking an infant puts him at great risk

It may result in permanent brain damage, and a baby can die from shaken-baby syndrome.

Put your baby down and walk away until you've got a grip of yourself. Ask friends and relatives for help. The baby senses your agitation, so as soon as you calm down this will have a calming effect on the baby.

Your health visitor

Your health visitor is a registered nurse who has attended both theoretical and practical postgraduate training courses. She has considerable experience of working with pregnant women, families and their children.

Once you have a little baby living with you, many - perhaps unexpected - questions come to the surface:

- How do we as a family best adjust our routines to include the needs of a baby?
- What do we do when the house is in total chaos, and we are just about dropping with tiredness?
- Do I have enough milk?
- How should I breastfeed the baby?
- Is our baby well and developing physically and psychologically as expected?

You will be able to find books about these subjects but you must also trust your own intuition. You can also find support and get personal guidance from a health visitor.

The Danish health-visitor system varies depending on your local authority. Visits by a health visitor are free. She will visit you within the first two weeks after your midwife has reported the birth of your baby. It is up to you whether you want to accept visits from the health visitor - 99% of all families do so. It is also up to you how to use her services. Some families choose to discuss only the baby while others feel they have a need to discuss their new roles as mother / father, their relationship to each other, etc. But whatever you choose to discuss, she will always monitor your baby's development.

The frequency of visits from the health visitor differs.

In some local-authority areas the health visitor will visit you already during pregnancy. This gives you the chance to get to know each other and discuss the thoughts you have about becoming parents. The health visitor can give you good advice about a lot of things, so be sure to ask her if there is anything you want to know.

She is very knowledgeable and experienced on the subjects of health and illnesses in babies and toddlers, school children and families generally, and can often come up with advice or ideas you wouldn't have thought about yourselves.

Most health visitors arrange "Mother-and-Baby" and "Mother-and-Toddler" groups where you can meet other mothers with children of the same age as yours. And most health visitors also arrange consultations. In some areas the health visitor even arranges "Father-and-Baby" groups.

The telephone hours of health visitors vary. If you have any questions, you can phone up and speak to your health visitor and perhaps arrange an extra visit. In most local-authority areas she also has fixed "surgery hours", a set time when families can turn up to consult her.

Health visitors cooperate with doctors, educators, social workers and midwives.

Preventive health check-ups for children

According to Danish law you have the right for your child to be given health check-ups and immunizations by your doctor. Free, preventive health check-ups are available for your child until he / she is about five years old.

The purpose of these check-ups is to help ensure that children and young people grow up under the best possible conditions.

Immunization is not mandatory in Denmark. All immunizations and preventive health check-ups for children are voluntary and free of charge.

Read more in the leaflet "Pjece om Børnevaccinationsprogrammet i Danmark" published by the National Board of Health. It is available from your health visitor or your own doctor. You can also visit the SSI (Statens Serum Institut) website to read the latest updates.

If you have given birth at home or as an outpatient, you can have your baby examined by your own doctor when the baby is one week old.

Childhood immunization

All through pregnancy the baby receives antibodies from his mother via the placenta. This means that - at birth - the baby has antibodies to protect him / her against childhood diseases.

The baby is, for example, protected against measles and chickenpox. If the baby's mother has had these two diseases before she fell pregnant, it is unlikely the baby will develop any of these diseases in the first three or four months of his life even if he is subjected to contagion. This protection, however, is only effective for the first few month of the baby's life. After this time, the baby has to fight any contagion he is subjected to on his own, including measles and chickenpox.

The children's immunization program has been developed to prevent the serious development of certain diseases and any intercurrent complications. Vaccine is produced on the basis of dead or weakened germs which will provoke the body to build up resistance without the body showing any symptoms of the diseases in question. The Danish National Board of Health recommends that you have your child immunized. There are very few or no side effects from immunization. Many children do get a little feverish after being immunized and show some injection-site reaction.

If you do choose not to have your child immunized and he / she gets one of the "childhood diseases" or polio, tetanus, hemophilus meningitis or diphtheria later on in life, there is a real risk that the attack of the illness will be both serious and extremely unpleasant.

| Age | Medical check-up | Immunization |
|-----------|------------------|---|
| 5 weeks | x | |
| 3 months | | Di-Te-Ki-Pol and Hib 1 ^{*)} + Pneumococcus |
| 5 months | x | Di-Te-Ki-Pol and Hib 2 ^{*)} + Pneumococcus |
| 12 months | x | Di-Te-Ki-Pol and Hib 3 ^{*)} + Pneumococcus |
| 15 months | | MFR 1 (MMR) |
| 2 years | | x |
| 3 years | | x |
| 4 years | | x |
| 5 years | | x Di-Te-Ki-Pol 4 |
| 6 years | | x |
| 12 years | | MFR 2 (MMR) |
| 15 years | | x |

The baby's development

An infant's growth rate is considerable; he / she will normally double his / her weight in the first five months of life with most of the weight gain occurring during the first couple of months. The infant grows approx. 25 cm in length during his first 12 months, and both your own doctor and your health visitor will be monitoring his growth.

Contact

An infant will sometimes lie awake looking around. While he is awake, you can have eye contact with him. The baby sees clearly at a distance of 20-30 cm. This corresponds to the distance from his eyes to his mum's face when he is being breastfed.

The infant's senses

All man's known senses function from birth.

This does not mean that the baby is born with the ability to be conscious of and acknowledge his experiences - this comes with time as he develops. But he uses his senses to enjoy what is happening around him. Particularly when he is with his mum and dad. Talk to your little one, babble; tell him, for example, what you are thinking or doing.

The infant needs people who speak to him in order to feel safe and loved. Linguistic development begins in infancy. Newborns react to the language they hear around them by moving with the cadence of the spoken word.

Notice how your baby listens to voices and notices light, colors and facial expression. Babies' eye sight is well developed, and they are very intense when they have eye contact with you. Your baby may lie quite still with his eyes open observing his surroundings with impressive attentiveness. He will look deep into your eyes from the time he is just a few weeks old - reciprocate and feel the depth and intensity of the contact between you.

Your baby will develop language through body movement, sounds, smiling, crying, eye contact and the interaction between Mum / Dad and baby.

He will also smell the smells around him and feel how you hold him.

An infant's senses are completely unadulterated and his experiences form the background for his development. When the baby tires of stimulation and playing, he will turn his head away, yawn, cry or become fussy, and it is important to respect these signs that he has had enough for now.

Infants very quickly learn based on what they experience but often in a different way from the way adults learn. They do not learn to "figure it out"; they learn at a more fundamental level, they learn whether they can trust the people around them, and whether their own activities have any effect. This is how babies learn basic trust. Reacting to a crying infant by picking him up in your arms, holding him and comforting him does not mean you are spoiling him. What you are doing is giving him a feeling that he can trust the world around him; you are contributing to making him a strong and trusting person.

You cannot spoil an infant

Basic needs

To eat your fill, to be dry and warm and to be in close bodily contact with Mum and Dad, to be cuddled and spoken to by them, these are the best things in life when you are little. We repeat: there is no way you can spoil an infant.

Make an effort to be conscious of what your baby is "telling" you:

- He is hungry
- He wants contact
- He wants some peace and quiet.

Babies cry to get your attention. Different kinds of crying can mean different things. Familiar things and routines build up confidence.

Every infant is unique

Children are all different, right from infancy. In many ways they are just as different from each other as people are later on in life. Just think how individual they are when it comes to what bothers them - how much or how little it takes before they become unhappy, and how they react to what they don't like.

They differ as to what comforts them and how easily - or not - they are comforted. They also differ in what they like, for example, how they like being held, and what kind of things they like to look at.

Parents with more than one child also notice from early on how their children react differently from each other.

New parents - who may feel awkward and unsure of their roles as parents - should perhaps note that parents actually tend to react with sensitivity and understanding to their own children and are much more sensitive to their needs than they give themselves credit for

Who knows best?

It is also good to know that the best development for a normal, healthy infant is achieved when he is in the general, every-day, reasonably relaxed company of his parents, and particularly through

his own activities. Many parents think that they need to keep the baby stimulated and make great efforts to keep thinking up something new to entertain him. But little babies do not need a massive onslaught of inputs and stimulation. The best form of togetherness with a little baby is to be very observant and conscious of what the baby does and how he expresses himself through movement, sounds and other activities - and to react and respond to these in a gentle and playful way. This means that time together is spent on the baby's terms as well as on your terms as parents - this will make it pleasurable for both you and the baby while the baby continues to develop. You could, for example, use a playpen to let him play in.

It is up to you if you like attending baby-massage classes, rhythmic activities for babies, etc. What matters is that you do what suits you and your baby. Consult your health visitor or search the net for activities in the area where you live.

Baby swimming classes

When the baby weighs approx. 5 kg or has reached the age of about **two months**, mum's lochia discharge will have stopped. At this stage many mothers decide to join baby swimming classes. These take place in warm water - 32-34 degrees C - and you and your baby will normally spend about 30 minutes in the water. Many babies show obvious pleasure when swimming about in the warm water.

Massage

If you enjoy giving your baby a massage, he / she is likely to enjoy it as well. Choose times when he is awake and hasn't just been fed. And you could perhaps ask your health visitor how to go about it. But if it doesn't seem right to you or your baby for you to massage him, he wouldn't benefit from it anyway. Watch him while you are massaging him to see whether he is enjoying it. If he looks away, cries, spits up or becomes fussy, these could be signs that he is not enjoying it.

It's all happening so fast

An infant develops at an incredible rate during his / her first few months of life. If one of you spends a few days away from him, you will see the changes when you get back. The infant learns all the time and will soon begin to be able to control his movements. **At three months** many children will discover their hands and be able to follow toys and other objects with their eyes.

Placing the baby on his tummy

It benefits infants to be placed on their tummy while they are awake; it strengthens their back and neck muscles. If your baby doesn't enjoy lying on his tummy, you can - once he reaches the age of **two months** - place a rolled-up towel under his chest so that he doesn't fall on his face every time he reaches for a toy. Your baby will lift his head and look around, follow your movements with his eyes and sometimes attempt to crawl forwards. When he is a little older, he will lift himself up on his arms to be able to see further.

You can place him on a quilt, an aerobics mat or some other suitable mat. Placing a hand on his bottom will support and stimulate his play.

If you have set up his changing station somewhere light and warm, you can let your baby benefit from this by letting him lie there with no clothes on - both on his back and on his tummy - to let him enjoy moving his arms and legs freely for a while.

Seeing things and grasping hold of them

Your baby will enjoy having things to look at, a hanging mobile of shapes or anything that moves - preferably in black and white early on in the baby's life, later in bright colors - hanging above his bed, his baby bouncy chair, car seat or playpen. A bouncy chair suitable for infants is a nice change for him; only use it for 10-15 minutes each time. It is a good idea for your baby to have something within reach that he can grab hold of. You could, for example, hang a toy from trouser elastic. This will, of course, bounce when he touches it or lets go of it.

Chatting and singing

Even if the baby doesn't understand what you are saying, he benefits from having both parents and siblings chat and sing to him.

Use your voice to imitate his sounds. This will encourage him to use his voice to make noises and to imitate sounds and movements. Be patient, allow gaps in your own communication to your baby every so often and listen to give him a chance to express himself and imitate language. Already during his first months of life he will begin to smile at you, pout and try out little "babababa" and, later, "aah boo" sounds.

The longer your baby lies awake, the more chances you have of chatting to him, and the better he / she will enjoy your company and want to be part of what's happening. Most babies enjoy everything from kisses on their face or tum to a tickle or a warm raspberry blown on the back of their neck. You can chat and babble to your baby anywhere, for example, when you are changing him on the changing station - or when he is in his carry cot or on a rug on the floor, even when you are doing other things. If you use a baby bouncy chair or auto seat, don't let your baby sit in it for too long. Lie down on the floor instead and play with him / her down there.

At about **three months** the baby can hold his head erect, and follow comings and goings in the room with his eyes. Try crouching down at baby height and see how he lifts his head to see what you are

doing. Suddenly one day he will turn over onto his tummy. It will be easier for him to learn to crawl if he is used to being placed on his tummy.

Get as involved in your baby's activities as you feel you can, and play "baby body" games with him / her.

The playpen is also a good - and safe - place to play.

At approx. **two to three months** the baby will have greater control of his / her arms and hands. Try giving him a light rattle to hold. He can lie for a long time looking at his hands and attempting to grasp things, for example, a rattle or something colorful hanging - or being held - near him. A sensory rug can be a good investment; perhaps you can sew one yourself. A sensory rug is a type of patchwork rug made out of different bits of material with a range of textures. You could perhaps mix lambswool patches with off-cuts of a silky material and some coarse canvas.

Control of movements

At **five or six months** babies usually discover their legs and feet. They may suck their toes. At around this time babies will start to be in better command of their muscles. Many babies - if lying on their tummy - will now begin to be able to roll onto their back. You can help your baby achieve this by taking hold of one of his legs and pulling him gently round. Or hold a mirror or a toy he likes at the side to which you want him to turn. A third possibility is to place him on his side and tempt him to roll over with a rattle or similar.

The baby is also getting to the point where he will love being dandled on your knee.

Occupying himself

Having a baby is a great challenge and a great joy. Experiment with leaving the baby to lie or sit by himself / herself with a toy while you are doing something you want to do. If he can hear you move about, he will often be quite happy to play on his own. It is important that you know how to set your own limits.

The baby will know from quite early on if you are playing with him halfheartedly

Until about **four months** your baby needs you to react immediately when he / she cries. When you do, he / she will build up a basic trust in you. After this time it is all right to postpone his needs - GENTLY and SHORT-TERM - while you finish or semi-finish what you were doing. Later he will, of course, also discover a different kind of trust when you react immediately if he is doing something that places him in danger, or if there is something you do not want him to touch. Read more in the leaflet "Opdragelse og konflikter" which you can download from www.libero.dk or in "Opdragelse med hjertet" published by The Danish National Council for Children (Børnerådet).

Baby carriers

A baby carrier (harness) can be a good investment if you want an alternative to carrying the baby in your arms. It feels safe and cozy for the baby to be so close to Mum or Dad, and fussy babies often calm down when carried this way.

The most common baby carrier is a harness worn by the parent where the baby is strapped into a carrier secured on the parent's chest. If you choose this type of carrier, the top of the baby's head should be level with your collar bone. In other words, the baby carrier must be adjusted to the person doing the carrying.

Only leave a very young baby to sit in the baby carrier for a short while, and always with his face towards you and his neck well supported.

Remember that the baby doesn't have the option of changing his position and it can be hard on his back and legs to hang in the harness for a prolonged period. If the baby whimpers or tries to move, it means that he wants to get out of the baby carrier. Later - when he is a little older - he will be able to sit in the carrier a little longer at a time. At **three or four months** you can also let him sit briefly facing away from you. But remember that your little one can quickly be overwhelmed by all the impressions rushing in on him when he faces away from you. You will know that this is the case if he gets more and more fussy.

Baby slings

In many cultures infants and babies are carried in baby slings and sit or lie on their mums' back for long periods. You can also use a shawl to carry your newborn close to your chest. Make sure that the baby's neck is supported. One advantage to the sling is that the baby can move about once he / she is a little older. The sling also supports the baby's legs so that they don't dangle in one, fixed position. Remember that the sling must be adjusted to the baby, not the other way around. Once the baby becomes older, he / she can sit more upright and look out on the world. These slings are becoming more common in Denmark, and a baby can be carried in one for long stretches at a time. The advantage of using a sling is close contact with Mum or Dad where the

baby can listen to Mum's or Dad's heartbeat, and Mum can breastfeed while carrying the baby in the sling.

Irrespective of which type of baby carrier or sling you choose, you must put it on right. Read the guidelines before putting it on, and make sure it is properly secured when you carry your baby in it.

Visit www.slyngebarn.dk

Mum - dad - baby

Many people imagine that when you have a baby your happiness is complete. Because children are conceived in love. But love and sex require time, resources and privacy. New parents have none of these. When you finally have the time and the privacy, you may not have the resources, and vice versa.

Becoming parents is totally overwhelming, especially when you are parents for the first time. It involves many joys and wonderful experiences, and many moments of doubt, frustration and the desire just to be allowed to be by yourself for a moment.

Are you prepared?

Prepare for your life as parents by discussing your expectations, dreams and values and discuss what is important to each of you. Discuss your roles and family patterns.

You may not be aware just how big and time-consuming a job being a parent is.

Once the baby has arrived, you will have to adjust your lives - perhaps to a greater extent than you would have thought - to the needs of the new little member of the family. There will inevitably be some conflict between adult habits and needs and those of the baby. Many new parents find that what is needed is first and foremost an open and honest discussion of how to arrange your lives in this new situation.

Many parents report that they changed as persons when they became parents.

Longing for a baby

Some parents "hit the jackpot" the first time, and others may have spent years trying for a baby. Some have been through stressful inseminations - or an adoption procedure. Irrespective of how you became parents, expectations will be high and much will be demanded of the man, the woman - and the baby. It can be difficult to live up to these expectations. The best thing you can do is to be open to the surprises that come your way and deal with things as they happen. Remind each other why you wanted a child!

Family patterns

Mother-father-child is a classic unit of three. Within this framework you can also form units of two: Mother-baby, father-baby, and father-mother or - better - man-woman. Being a unit of three as well as being a unit of two involves closeness, warmth, harmony and joy - but also negative feelings. The time around the birth of your first child may lead to a development crisis in your relationship. It is important that you remain "a couple with a child".

If it is possible, spend the time while your baby is sleeping as a couple. This can entail a quiet talk in the sofa or a rest in each other's arms.

Being a family

When you first bring your baby home, you need to find a new rhythm together, to get to know each other and enjoy each other's company. You have been looking forward to the day when you were back from hospital with your little baby. But perhaps things don't turn out exactly the way you planned.

Great love for the baby doesn't just appear out of nowhere

It may take a little while.

Discover situations where you can be together, and when each of you can spend time alone with the baby. It is all right for each of you to do different things for the baby.

Little babies don't have the inhibitions of adults. They will get the hiccups, bad tummies and cry whether it suits you or not. And they won't necessarily sleep when it suits you. They demand attention and care. You will perhaps have to adjust your mealtimes and refrain from making as many plans as you used to. And when you are finally seated at the table to eat your dinner, there is perhaps no peace to relax and enjoy it. It is difficult to concentrate on each other and manage to discuss things. Sometimes your entire lives may seem disjointed. Sometimes it may seem deeply frustrating, at other times almost hilarious. Being able to laugh can be a great help!

There may be nights with too little sleep making you tired and irritable the next day. Perhaps you start dreaming about the time "before we had the baby ..." Your everyday life is suddenly different from what it was when there were just the two of you.

The first time you experience being a family of three can be challenging and demanding physically and emotionally and yet be totally wonderful at the same time. One day everything can be fine, and the next day everything seems insurmountable. Perhaps you daren't discuss how you really feel

because you worry it will be interpreted the wrong way. It is normal for each of you to feel like this at times.

Do not repress and ignore the things you find difficult and cumbersome. Discuss what annoys each of you, and speak about what you would like to be different.

The baby will be able to sense it if you are unsure of yourselves and cross with each other, and he / she will react to it. The baby is a "barometer" of how Mum and Dad are doing.

If you have had children before, you may feel that you are well prepared. You will remember both the good and the bad. But most people are actually very good at forgetting how challenging becoming a parent can be.

Handling conflicts

Just how challenging and demanding a new little baby can be may catch you by surprise. It is true that your baby reinforces your relationship - and there are times, as already mentioned, when life is wonderful. But a baby can also sometimes turn the tables, so you actually feel you are being pulled apart.

You must try to accept and respect each other's ways of being a parent

But minor disagreements can grow large, and sometimes they can become so overwhelming that it may be difficult to find a way to resolve the conflict. Perhaps you do not want to engage in couple therapy. And it may not be necessary. Many couples manage to get to grips with their problems by talking them through face to face. On the other hand, you may benefit from conflict counseling and a little "here and now" advice. Perhaps you have some friends who can help you or perhaps your health visitor or doctor can - or they can refer you to somebody who can. It is important to be able to speak to somebody, and it is beneficial to have somebody listen to and understand the thoughts and needs that sparked off your disagreements in the first place. A third party can perhaps also help you to communicate to each other in a way which makes your conflicts more manageable and makes it possible to reach out to each other again. The person counseling you about the way you handle conflicts may also be able to help you uncover what lies behind your anger and frustration. The objective is to work through conflict having gained greater confidence in and acceptance of each other.

Depression

If one - or both - of you persistently feels down or is generally joyless, you should consider speaking to a psychologist. Ask your health visitor or doctor how to go about this. Talking to a psychologist can in many cases relieve you of some of the thoughts that prevent you from feeling joyful and confident in your relationship with the baby.

Postnatal depression

Between 10 and 14% of all new mothers experience a psychological reaction to having given birth which involves intense and long-lasting depression. This is called a postnatal depression or "the baby blues". It may start when the baby's dad goes back to work, and the mother is left to deal with the baby on her own. An postnatal depression may express itself in various ways. The most common signs are a general feeling of hopelessness, helplessness and a feeling of guilt vis-à-vis the baby. The baby's mother is worried that she is not being a good mum. Day-to-day tasks can seem totally insurmountable, and the mother may have anxious and / or aggressive thoughts about the baby.

Many women and families try to keep this problem to themselves. But that is inclined to make it worse. If this situation continues for a long period, there will be a corresponding period where the mother's relationship with the baby is complicated and not enjoyable for either mother or baby. That is why it is important to discuss it with other people, and particularly to talk to the health visitor about it. She may be able to help by referring the mother to a psychologist. Experience shows that depression and the baby blues actually can be alleviated through counseling. Some fathers, approx 7%, may show corresponding signs of depression.

Babies are little personalities

Each baby is different just as adults are different from each other. Your baby is unique and has his / her own traits right from the time of birth. And these traits play a part in their interaction with you. The way you interact has a particular effect on all of you, and this plays a part in the way your baby develops and affects the child he / she becomes.

If your baby is active and temperamental or is very sensitive and cries a lot and is easily frightened, you as parent will have a greater challenge on your hands than parents whose baby fits into a regular routine and is always content and happy!

Great efforts are also necessary by parents whose baby is shy, sulks, generally demands a lot of attention, or who is difficult to comfort.

Human beings are disposed towards becoming small and plump or tall and thin, temperamental or laid back. But we are also influenced by our social environment and can change with time.

You may need a little help and support if you have a "difficult" baby and have got into a vicious circle. Discussing this with your health visitor, a couple from a "mothers' and fathers' group" or a couple from your circle of friends may make all the difference. It's certainly worth a try!

Having sex

Having sex again

There are no set rules for when it is normal to start having sex again after becoming parents. It differs a lot! Most couples have had sex again by the time the baby is three months old although many first-time parents do not have an active sex life until the baby is six months old.

The most important prerequisite for a good sex life is that you both want to and that you feel confident in each other. Remember that to the degree that you share the responsibility of parenthood, you will also be sharing the experience of becoming a family; this will to some extent synchronize your mutual need for sex and closeness. Speak to each about your needs. Try also to speak about the things that disappoint or anger you. Don't bottle it up. Bring it up while the situation is fresh in your mind because if you don't, it will get in the way when you finally have a bit of peace to enjoy each other's company.

A woman's body changes

Many women have difficulty getting used to the fact that their body has changed after pregnancy and childbirth. Some women expect their body to be like before and are perhaps disappointed that it is so different. But you have been through nine months of physical and psychological changes; you have become a different person, and your body is different too. In the beginning after childbirth you still have a tummy "pouch", your breasts are large and sore, and your sexual organs look different from before you became pregnant. It will, of course, all improve! The "pouch" will all but disappear (although there will probably always be a little additional skin on your tummy), and your sexual organs will contract so that you can enjoy sexual relations again the way you did before you had your baby.

When having sex is sore

Some mothers had a lot of stitches in their pelvic floor. The scar tissue may be hard and sore making having sex difficult or even impossible in the beginning. Spray water on the scar every day when you shower, and you could perhaps begin to massage the area gently once the stitches are gone to accustom that part of you to being touched.

If you spend your days with your pelvic-floor muscles totally tensed up - perhaps because you feel your insides are "open" or "heavy" - it can be difficult to relax when you are having sex, and if you can't relax, it may hurt. It may help you to do the [exercises for your circulation](#) and the [pelvic-floor exercises](#) every day. You can also stretch your pelvic-floor muscles by resting on your hands and knees. Don't do it if it is really painful, it should feel like a stretch. Do not lift anything really heavy and try to get some rest several times a day.

You need to be able to relax to enjoy sex, and you need to want to enjoy the moment with your partner. You cannot enjoy sex on command but you can create the right preconditions - and you are both responsible for ensuring that the preconditions are right.

Mothers' / fathers' groups

In most public-authority areas the health visitor sets up mothers' groups.

Most mothers' groups are a private forum where it is possible to share your thoughts and feelings with others in the same situation as you. Many mothers' groups meet weekly for the duration of the mothers' maternity leave, and many mothers also choose to take part in various day-time activities. In some groups fathers are invited too. It can happen, however, that a particular mothers' group becomes a forum for showing off "perfect motherhood" or the "perfect baby". This does not leave room to air the difficulties that living with an infant may involve. Speak to your health visitor if your mothers' group develops this way. This will make her aware that her presence is perhaps needed at group meetings from time to time, or she can help you split up the group and perhaps help you join other mothers with babies the same age as yours.

A few local authorities also have fathers' groups. Here fathers may discuss their thoughts on:

- How wonderful it is to become a father
- How do I find more time to spend with my baby?
- Why can I never do things with my baby - my wife always seems to take over?
- I get uptight when my baby is crying. Does anybody else feel like that, and is it normal?

- Is it necessary for me to get up to see to the baby at night, considering that my wife is already doing it?
- Sex - any ideas as to how we can manage to get back together again?

There are several private initiatives (Foreningen mandebevindsthed, Aktive fædre) and adult evening classes with various initiatives for fathers. If there is nothing on those lines where you live, you could contact your local adult evening-class college, perhaps in co-operation with other new parents.

Grandparents

It will greatly benefit all three generations - children, parents and grandparents - if you develop close relationships with each other.

If you as parents and grandparents have very different ideas of what children should be allowed to do - and not to do - it might be a good idea to agree from the start that you decide in your home and they decide in theirs. Both children and adults will understand this.

Many grandparents still work when their children have children, or they may live far away. This will make it difficult to have close contact. But some grandparents may live closer to you and have the time as well as the inclination to act as babysitters when you want to go out.

Some grandparents may even be willing to look after the baby one day a week, making it a "day off" when the baby doesn't have to go to the crèche or kindergarten. Or grandparents can be good carers when the baby is ill and can't be taken to the crèche. Ask them and see - leaving the baby with them can be of great help to you and will often be a source of great joy to everyone concerned.

Siblings and jealousy

Siblings

Many people think it is wise to wait until your older child is over 2 years old before thinking of a little brother or sister. One reason for this is that the older child can't always deal with having to share Mummy and Daddy with a sibling. Other people think that siblings will benefit greatly from being so close to each other in age as to be "pseudo twins".

Be that as it may, if you already have a child, you should prepare him or her for the arrival of the new baby. Involve the older child in the fact that Mum is pregnant, involve him / her in what is happening with Mum and how the new baby is developing, let him / her feel the baby kicking in Mummy's tummy. And involve your older child in preparations for the new arrival.

The more you involve the older child, the closer he will feel to the new baby.

And have the older child visit you as much as possible while you are at the hospital with his little brother or sister. It is also important to let the older child take part in looking after the baby if he / she wants to.

This can be one of the advantages of being an older child.

But this doesn't mean that the older child will not have some feelings of jealousy. It can be difficult for parents to accept "negative" feelings. But it is important both for the child himself and for the relationship between him and the baby that he is allowed to express his feelings. So listen to your older child and show him that you do understand whatever anger, sorrow and envy he may feel.

Helping your older child cope with his jealousy is very demanding for both parents - it requires time and a lot of attention. But it does teach the child to discern between what is acceptable and what isn't (and many adults would benefit from having been taught this): the child will come to understand that all kinds of feelings are allowed but that certain actions are not, for example, hitting the baby.

The family member for whom the new arrival is hardest is without doubt the older sibling. So do not expect the older child to love the little new baby immediately - and do not try to force the feelings in him that you would like to see.

You cannot force feelings to arise but you can create the right conditions for them to arise

To what extent and in what way the older child expresses jealousy depends on many things. The older child's age will influence how he expresses jealousy and when it arises. Where the age difference is more than a few years, difficulties may not be apparent until a few months down the line, for example, when the little new brother or sister has clearly become a permanent and natural part of the family's everyday life.

Children of school age may not acknowledge "forbidden" feelings of jealousy and may seemingly not express such feelings. Jealousy may be expressed more indirectly in the form of strict "moralizing" and reprimands over something the baby does - or perhaps by totally over-the-top "motherliness". Finally, a jealous child can react to his new situation in other social situations when he is away from home, for example, in the kindergarten or at school.

Many parents will experience being asked by their older child which child they love the best. When a jealous, i.e. somewhat anguished child wants assurances that he is loved the best, it is not necessarily a question of competition. Quite often it is a clumsy attempt at getting an unqualified assurance that he is loved, totally and completely.

Unfortunately, many adults choose to be "honest", "fair" and "realistic" in the way they reply. They find it necessary to say things like "now mum and dad love you both equally". This will always disappoint the child. What the child needs is a clear, unqualified, unreserved assurance of the parent's total love for him.

Perhaps you could say to your older child that you love him because you know him best and because ... (here you mention all your child's good points), and you love the little one because ... and you love daddy because without him you would not have the two wonderful children that you have now.

And it would be a good idea if you as parents - together or each of you at different times - make a point of spending time with the older child without the baby's presence.

This will give you the chance to get involved in something the older child enjoys and which puts the focus on him / her. Once you have managed to re-establish your older child's confidence in your love for him, positive feelings between the siblings can develop and thrive. For fortunately, the older child will react with positive feelings as well as jealousy when he gets a little brother or sister. Interest, tenderness, concern and love are some of the feelings between siblings. The little baby's unconditional interest in and acceptance of his older sibling will encourage this positive development.

Recommended books

Pregnancy and childbirth:

Arndal, Lotte
[9 måneder før – 9 måneder efter](#)
People's Press 2007

Bertelsen, Anne Mette Holme
& Gohr, Camilla
[Den gode fødsel](#)
Museum Tusulanums Forlag

Dencker, Gitte
[Gravid uge for uge](#)
Aschehoug 2005

Jensen, Skov Lene
[Politikkens graviditetsbog](#)
Politikkens forlag

Hern, Pia
[Fødsel og smerte](#)
- hvordan du forbereder dig
til fødselssmerter
Munksgaard 2004

Langer, Jerk W
[Kost og graviditet](#)
Nyt Nordisk Forlag 2004

Lykke, Christa m.fl
[Bogen om kejsersnit](#)
- en anderledes måde at føde på
Lindhardt & Ringhof

Pedersen, Bent Klarlund
[Graviditet og motion](#)
Nyt Nordisk Forlag 2004

Nilsson, Lennart
[Et barn bliver til](#)
Gyldendal

Stern, Daniel N.
[En mor bliver til](#)
Hans Reitzel 1999

Sundhedsstyrelsen 2006
[Barn i vente](#)

Taxbøl, Dorthe
[Fødselsforberedelse i vand](#)
Borgen 1993

Family life and living with an infant:

[Politikkens bog om babymassage
og zoneterapi](#)
Politikken 2006

Andersen, Helle
[Babyhåndbogen 2007](#)
Aschehoug

Arndal, Lotte
[Den hele kvinde](#)
-en guide til stærkere bækkenbund
People's press

Behrendt, Maria m.fl.
[Du kan bare vente dig](#)
Aschehoug 2000

Bonde, Hans m.fl.
[Når du bliver far](#)
Aschehoug A/S, rev. 2005

Borelius, Maria et al
[Når du bli'r mor](#)
Aschehoug, rev. 2003

Daneskov, Lars
[Far på færde](#)
Jyllandspostens Forlag

Fyhr, Gurli
[Den "forbudte" sorg](#)
- om forventninger og sorg omkring det handicappede barn.
Komiteen for Sundhedsoplysning 2002

Grønning, Joan Tønder
[Bogen om tvillinger](#)
TekstXpressen

Guldager, Else
[År 1 – når I har fået barn](#)
Lindhart & Ringhof 2007

Holst, Hanne Vibeke (fiction)
[Tereses tilstand](#)
[Det virkelige liv](#)
Gyldendal

Juul, Jesper
[Det kompetente barn](#)
[Her er jeg – hvem er du?](#)
[Smil vi skal spise](#)
- børnefamiliens måltider
Apostrof

Kavanagh
[Politikkens bog om babymassage
og zoneterapi](#)
Politikkens Forlag

Lagerheim, Berit
[At leve og udvikles med handicap](#)
Hans Reitzel 2002

Madsen, Svend Aage
[Bånd der brister – bånd der knyttes](#)
Hans Reitzel

Madsen, Svend Aage et al
[Kend din krop mand](#)
Aschehoug

Madsen, Svend Aage et al
[Fædres tilknytning til spædbørn](#)
Hans Reitzel

Misvær, Nina
[Dit barn – de første 6 år](#)
Lindhardt & Ringhof

Nordahl, Bertil
[Den kvindelige mor](#)
[Den mandlige far](#)
Nielsens

Rasmussen, Lizette
[Når det gør ondt at være mor](#)
Gaia's forlag

Roldgaard, Stine & Tatarczuk, Christina
[Alt om amning](#)
IRIS I/S 2007

Sellin, Kirsten
[Svøb dit barn](#)
Olivia

Simonsen, Flemming & Damsø, Mogens
[Handicappede børns sociale rettigheder](#)
Frydenlund

For parents who lose their baby at birth or whose infant dies:
Schwartz Hansen, Anni
[Den usynlige sorg](#)
[Når et barn dør ved fødslen](#)
Hans Reitzel

Thorning, Marion
[Børns søvn](#)
Borgen
[Mormor – din datter er blevet mor](#)
Gyldendal

Tholstrup, Annette
[Det lille barn og dig](#)
Fremad

[Et nyt liv – en brugsbog om unge mødre](#)
Mødrehjælpen og Komiteen for
Sundheds-oplysning

Østergaard, Susanne
[At miste et barn er en livsproces](#)
Frydenlund

Leaflets

Arbejdstilsynet (The Danish Working Environment Authority)
Phone: 70 12 12 88
www.at.dk
[Arbejds miljø og sunde børn](#)
[Gravide og ammendes arbejds miljø](#)

Danmarks Astma-Allergiforbund (The Danish Asthma and Allergy Association)
Phone: 43 43 59 11
www.astma-allergi.dk
[Forebyggelse af allergi hos småbørn](#)

Danske Fysioterapeuter (The Association of Danish Physiotherapists)
Tel.: 33 13 82 11
[Bækkenløsning](#)

Forbrugerstyrelsen (Danish Consumer Protection)
Phone: 32 66 90 00
www.forbrug.dk
Udstyr og køretøjer til nye verdensborgere 2005

Consumer information
Ren besked:
Børneudstyr

Foreningen Sex & Samfund (The Danish Family Planning Association)
Phone: 33 93 10 10
www.sexogsamfund.dk
Når to bli'r til tre
– hvad så med sexlivet
Klar besked om prævention
Er du gravid? (also available from your chemist's)

En vejledning fra Kirkeministeriet
Fra vugge til grav

Komiteen for Sundhedsoplysning (The Danish Committee for Health Education)
Phone: 35 26 54 00
www.sundkom.dk
Kort og godt om amning
I form før fødslen
I form efter fødslen
Tvillinger
Ved du det om børn
Børn og ulykker
Får du D-vitamin nok?
Opdragelse med hjertet
Mad til spædbørn & småbørn
Risikovurdering og fosterdiagnostik

Fødevarestyrelsen (The Danish Veterinary and Food Administration)
www.fvst.dk
Råd om mad og motion når du er gravid

SCA Hygiene Products A/S Rode, Ulla Virgin, Cecilia
Bryst er bedst til hverdag og fest
Til bedsteforældre – om amning

Til dig, der skal være far
Ulla Rode
Madsen, S.Aa.
Sørensen, Lene

Det lille barns søvn, Rode, Ulla
Heigaard, Vibeke, Sørensen, Lene

Gode råd om småinfektioner,
ondt i øret og allergi
Ulla Rode

Kan man(d) få en efterfødselsreaktion
Høeg, Gunild, Rode, Ulla

Skalmeje
Præstegårdsvej 49, 7451 Sunds
Phone: 97 14 25 41
www.forlagetskjalmeye.dk
Amning – Tidlig kontakt
0-3 år Lille menneske – stor udvikling

Sundhedsstyrelsen (The Danish National Board of Health)
Phone: 72 22 74 00
www.sst.dk
Sådan forebygger du allergi hos dit barn
Beskyt børnene i solen
Vuggedød kan forebygges

Rygning, graviditet og fødsel
2006

Landsforeningen Spædbarnsdød (The Infant Death Association)
Phone: 39 61 24 51
www.spaedbarnsdoed.dk
Vis at du ved det

Miljøstyrelsen 2006 (The Danish Environmental Protection Agency)
Phone: 72 54 40 00
www.mst.dk
God kemi er ikke altid nok

Forældre og Fødsel
Phone: 70 23 14 00
www.fogf.dk
Kejsersnit
Tidlig fødsel – tidlig kontakt

For parents whose child has a heart defect:
Phone: 97 59 36 00
www.hjerteforeningen.dk
Hjerteforeningens børneklub
Medfødte hjertefejl

Forældre til et barn med handicap
Guide til hjælp og støtte
Socialministeriet 2005

At få et hjerneskadet barn med udviklingshæmning
- en oplysningspjece fra LEV
handicapudvikling
www.lev.dk

Socialguide
Diabetesforeningen
www.diabetes.dk

Fleksibel Barselsorlov – til forældre
Arbejdsdirektoratet &
Ligestillingsministeriet, 2004

Fleksibel Barselsorlov – til forældre
Arbejdsdirektoratet &
Ligestillingsministeriet, 2004

Værd at vide om tvillinger
Komiteen for Sundhedsoplysning, 2004
This leaflet – which costs kr. 50 – can be requested by visiting
www.sundhedsoplysning.dk

Rigshospitalet 2006
Mænd og fødselsdepressioner

Organon
Phone: 44 84 68 00
www.organon.dk
Sex og prævention når du er blevet mor

Video films / DVDs

Amning af for tidlig fødte børn
Ulla Jacobsen & Cecilia Virgin
Phone: 89 49 38 45 (Århus Local Authority)

Kærtegn for livet

About baby massage

Production Inger Hartelius

Efterspil

- a film about sexual relations and relationship problems after giving birth

Production Ulla Rode

SCA Hygiene Products A/S

Phone: 48 16 81 16

Godt begyndt

- a film about breastfeeding

Prod. Ulla Rode, SCA Hygiene Products A/S & Den Almindelige Danske Jordemoderforening

Phone: 48 16 81 16

Mors mave, baller, lår

Vallentin, Anne

Production Libero

Phone: 48 16 81 16

Vandfødsel

Dorthe Taxbøl

Winding

Phone: 32 94 24 14

Tidlige trin

Production Anja Dalhoff

Statens Filmcentral

Lulus dagbog

- a film about communicating

with your child from 0 - 12 months

Production Saga Video -

Shorts Anja Dalhoff

Børns udtryk er altid meningsfulde

Jesper Juul

Kempler Institut

Phone: 86 54 45 35

9 Months – holistic guide

DVD with pilates and yoga exercises, etc.

www.9Months.dk

Advisory services and websites

Advisory services

Astma-Allergi Forbundet (Danish Asthma and Allergy Association)

Allergirådgivningen

Phone: 43 43 42 99

www.astma-allergi.dk

Børns vilkår (child protection association)

Forældretelefonen,

Phone: 35 55 55 59, weekdays from 12.00-21.00

www.bornsvilkar.dk

Mødrehjælpen af 1983 (private Danish support organization for single-parent families, pregnant women and families with children)

Phone: 33 12 11 21 from 09.00-17.00

Open to all families with children

www.mhj1983.dk

Center for små handicapgrupper (Center for lesser known disabilities)

Phone: 33 91 40 20

www.csh.dk

Postnatal reactions

(postnatal depression, anxiety, physical reactions)

GAIA - instituttet

Phone: 70 10 11 22

www.gaia-instituttet.dk

Center for fødselsdepression og familieudvikling (Center for postnatal depression and family development)

Mariahospitalet, Vejle

Phone: 75 72 31 22

www.fd-center.dk

Handling conflicts

www.korax.dk

Detailed guidelines on food and diet

www.cetcenter.dk

Tvillingeforeningen FREJA (Twins and Multiple Births Association)

Borgergade 12, 7140 Stenby

Phone: 70 22 33 32

formanden@tvillingeforeningen-freja.dk

www.tvillingeforeningen-freja.dk

Websites

www.tvillinger.com

(leaflet on how to breastfeed twins)

[www.su.dk/Du får barn](http://www.su.dk/Du_far_barn)

[www.danmark.dk/Samfundsnøglen/At få et barn](http://www.danmark.dk/Samfundsnøglen/At_få_et_barn)

www.netborger.dk/emneindgang/

Familie - Børn

www.videnscenterforamning.dk

www.ammespecialisten.dk

www.netjordemoderen.dk

- Questions & Answers on the Internet

www.gravidmedjob.dk

www.at.dk

www.forbrug.dk - shopping information

www.ifavndanmark.dk

- swaddling your baby

www.mama.dk

www.sexogsamfund.dk

- about contraception

www.sst.dk - about immunization, etc.

www.ungmor.dk

www.sundhed.dk

- links to various

Danish hospitals

www.netsundhedsplejersken.dk

- Questions & Answers on the Internet

www.akutsundhedsplejersken.dk

- acute Questions and Answers

www.spaedbarndsdoed.dk

www.klinikkenmaia.dk

- midwives working in a private maternity clinic

www.scanningsjordemoderen.dk

- 3D scanning

www.flaskebarn.dk

- read up on bottle-feeding

www.babykemi.dk

- 9 tips on cosmetics,
baby products and toys