

# Pregnancy

Dear (future) parents,

This is the second booklet in the GrowthGuide series. This volume is meant for all expecting parents. If you have been pregnant before, you may have fewer questions than when this is your first time. Even so, you may still find the information interesting, because we keep updating it all the time and you may have new questions. The GrowthGuide helps you make the right choices for your child and his development.

The Growth Guide consists of seven practical booklets, a website ([groeigids.nl](http://groeigids.nl)) and a collection box to keep your booklets in:

- Planning for Parenthood
- Pregnancy
- Breastfeeding
- Post-natal period
- 0-4 years old
- 4-12 years old (in Dutch only)
- Adolescence (in Dutch only)

These booklets contain information on conception and pregnancy, as well as on the development, care and parenting of your child during the various phases of his life. The Growth Guide can also serve as a guidebook for the many major and minor doubts or concerns which all parents face daily. The conveniently arranged list of contents and index make it easy to find the subject you want to know more about. Every section also offers you space for your own notes and for filing vaccination documents and messages, notes or reports from the agencies you will be dealing with.

You may perhaps want to add an ultrasound result or photos. That too is possible. This will let you have a precious overview of your child's development from the very beginning.

For the ease of reading, we have decided not to use both 'he' and 'she' continually in the text when talking about the midwife, the doctor or your child. The midwife, the GP and the gynaecologist will therefore consistently be referred to as 'she' or 'her' and your future child as 'he' and 'him'.

Certain parts of this Growth Guide were taken from the 'Pregnancy' brochure. You can find a digital version (In Dutch as well as in English) of this brochure on [rivm.nl/zwanger!](http://rivm.nl/zwanger!)

### We wish you happy reading

Since January 1, 2015, every municipality must provide an information centre to which you, as future parents, can address any question concerning your child's health, upbringing and general development. For this purpose, some municipalities have set up a Youth and Family Centre (CJG). Others organise social (neighbourhood) teams, youth teams and/or websites offering full information on care and parenting issues. If you are looking for advice concerning your baby, the Child Health Centre (consultatiebureau) is there to help you. In some cases, the Centre's paediatric nurse will even drop by during your pregnancy.



The first five booklets (Planning for Parenthood, Pregnancy, Breastfeeding, Post-natal period 0-4 years old) are available in English. You can order via [groeigids.nl/bestellen/algemeen](http://groeigids.nl/bestellen/algemeen)

This Growth Guide belongs to

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Due date

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Prenatal care from

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Other important addresses:  
(maternity centre)

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### Appointments

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If you cannot make it to the appointment, let your midwife or gynaecologist know as soon as possible. It gives them time to attend to somebody else.





Go to [groeigids.nl](http://groeigids.nl) or use the GrowthGuide app to chart your child's development and to record the details of your pregnancy. You will receive weekly updates on your child's progress. The Growth chart follows your child from birth to adolescence.



### If you speak little or no Dutch

If your Dutch is not yet good enough, it may be a good idea to take somebody with you for the translation, preferably somebody who you feel free to share confidential information with.



You will find the Growth Guide information, and much more, on [groeigids.nl](http://groeigids.nl)

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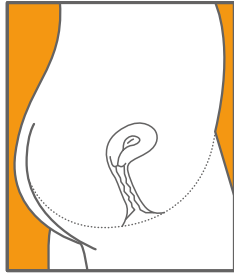
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The quickest way to find information?  
Look in the index (p 104)!



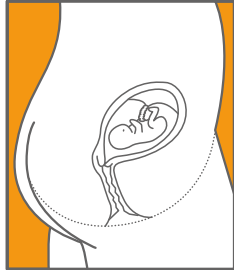
## Your unborn child: growth and development

Weekly updates on your baby's growth? Download the Growth Guide app



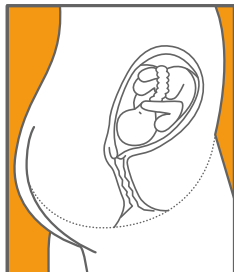
### 6 weeks

Pregnancy (on average 40 weeks) is considered to start on the first day of the last menstrual cycle, although fertilisation of the embryo takes place two weeks later. According to this calculation you are 6 weeks pregnant while the unborn child is only 4 weeks old. The heart, stomach, intestines and brain have started developing. The heart has started beating. The size of your child is now about 1 centimetre.



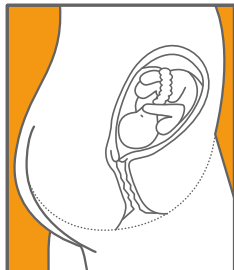
### 12 weeks

Your child is physically complete; he is growing and developing, moving arms and legs, although you cannot feel it yet. The child has grown to about 8 cm and has now started to swallow and secrete the amniotic fluid.



### 16 weeks

The child is now about 17 centimetres and weighs approximately 120 grams. Using a special device, you can hear his heartbeat. The ears are now developing and are picking up body sounds from you.

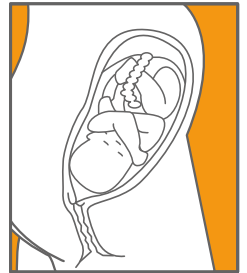


### 20 weeks

The child has grown to between 20 and 25 centimetres and weighs between 225 and 350 grams. He reacts to outside sounds. The movements can now be felt. If this is your first pregnancy, it may take you another 3 weeks or so to recognise this feeling.

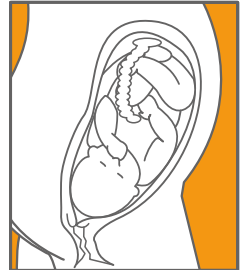
### 24 weeks

Your child is now about 30 centimetres and weighs about 600 grams. Babies too can have hiccups: when they do, the feeling is unmistakable, like a constant gentle tapping in your stomach. Your baby is picking up sounds from outside the uterus, from people in your vicinity.



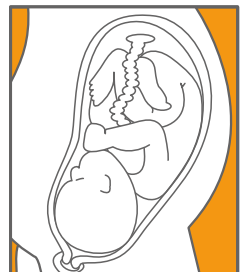
### 28 weeks

Up to 35 centimetres and weighing more than 1 kilo. A regular rhythm of sleeping, waking and sucking on a thumb. Your child is learning to open his eyes. Night-time, between 23.00 and 02.00 hrs, is when babies move around most. You can start playing your child a song or a tune, so he will recognise it later (after he is born).



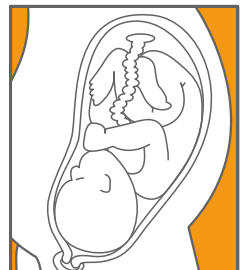
### 36 weeks

45 centimetres and almost 2,5 kilos. From now on, his weight will increase by 30 grams per day. The baby's usual position is head down. At this age, your baby can react to familiar voices.



### 40 weeks

Normally, pregnancy ends between weeks 37 and 42. This is the time that most children are born. At birth, the child will usually weigh between 3 and 4 kilos and be around 50 centimetres.





## A baby on the way!

You are pregnant; there is a baby on the way. Perhaps you have not noticed anything yet. Or maybe you already feel quite different. Your body adjusts immediately to the new situation, but it may take some getting used to and some adjustment, both for you and your partner. Besides feeling happy and proud, you may be uncertain. The midwife or the gynaecologist will help you in the coming months to prepare for delivery and to begin your parenthood full of trust and confidence. In this volume of the Growth Guide we try to give you some added support and information.

### Communicating with the baby in your tummy

There are several ways for you, future parents, to communicate with your unborn child. It may be hard to imagine, but research proves that new-born babies immediately recognise their parents' voice. It helps your child's development if both parents talk and/or sing songs to their unborn child regularly throughout the pregnancy. Many parents enjoy doing this, and so will other children in the family. By touching mother's tummy, you can caress the baby. You get to know a little bit about the body and the temperament of your child. You will be surprised to experience how your child reacts to your gestures and your voice by moving around or by suddenly keeping quiet. He is already talking to you. Communication with your unborn child is really possible.

Talking, touching, eye contact and attention continue to be important once the baby is born. By beginning before birth, you are forming a pre-natal bond, which will help your child throughout his further development.  
Go to [lichaamstaal.nl](http://lichaamstaal.nl) and [babywerk.nl](http://babywerk.nl) for further information.



### Getting to know your baby

Information sessions are held regularly. Ask your maternity assistant or the Child Health Care Centre. Videos are available for help with breastfeeding, giving birth and getting to know your baby.

# Visits to your midwife or gynaecologist

## Midwife or gynaecologist?

In the Netherlands, we differentiate between pregnancies with and without a medical indication. If your pregnancy progresses normally and you have no medical problems, the midwife is responsible for your prenatal care and she will assist you during delivery and afterwards (post-natal care). In case additional, or different, care is you will normally deliver your baby in a hospital under the care of a clinical midwife or gynaecologist. Wherever applicable in this booklet, you can substitute 'gynaecologist' for 'midwife.'

Write down any questions you may have for the midwife or the gynaecologist. That way you will not forget them.



## Preparing for the first visit

You can have your child tested for congenital diseases. During your first visit, the midwife or gynaecologist will ask you if you want further information on these tests (screening for Down, Edwards and Patau syndrome, as well as the 13 and 20-week ultrasound). It is expected that, from 1 September 2021, the 13-week scan will be available to all pregnant women. This scan is also known as the first trimester screening. To prepare

for these questions, go to [onderzoekvanmijnongeborenkind.nl](http://onderzoekvanmijnongeborenkind.nl) before your first appointment.

### The first visit

You will usually have your first appointment before you are ten weeks pregnant. During that first appointment with the midwife or gynaecologist, you will be asked a number of questions regarding your general health, the health of your partner and both families and about your lifestyle. The midwife or gynaecologist will also ask if you want to know more about the tests for Down, Edwards and Patau syndrome and the 13 and 20-week ultrasound.

These tests are not compulsory. You make your own decision. If you want more information, a second meeting will be scheduled and only then will you have to decide whether you want the tests or not.

During your first visit, the midwife or gynaecologist will usually take your blood pressure and check the size of the uterus. When you are three months pregnant, she will try to hear the baby's heartbeat. There is time to ask questions and tell her things about yourself. Your blood will be tested, see p 19.

### Is this your first pregnancy?

If this is not your first pregnancy it is important for your midwife to know how the earlier pregnancies went. Miscarriages and abortions also count as pregnancies.

### How far along are you?

When determining how far you are, the calculation starts on the first day of your last menstrual period. Conception took place approximately two weeks after this first day. If, according to the calculation, you are six weeks pregnant, that means the foetus is approximately four weeks old. A full-term pregnancy lasts an average of 40 weeks. It is important to know when the first day of your last period was, whether or not it was normal and when you stopped taking the pill or had the coil removed.

### The first ultrasound scan

The midwife will refer you for an ultrasound scan to determine the how far advanced your pregnancy is. The scan will be done around week 10 to 12, either externally or internally. The scan will show your baby's heartbeat. Very occasionally, it will show two hearts beating. In some cases, an earlier ultrasound scan may be advisable.

### Your health

The midwife will want to know a great deal about your general health. Based on your answers, she can determine if there are additional health risks for you and your baby. If you have questions about this, do not hesitate to ask your midwife.



## Changing moods

It is perfectly normal for you to feel different during pregnancy. If you are feeling down or if you worry about your feelings or those of your partner, talk to your midwife. If you have been depressed before, or suffered anxiety disorders, tell her about this too. If you are encountering mental problems during your pregnancy, it is important to discuss these with your midwife.

Hormone mutations may aggravate a temporary downturn into a more permanent depression. You will find more information in "Mentaal klaar voor je baby" (Mentally ready for your baby) (in Dutch), which you can download from [trimbos.nl](http://trimbos.nl), reference 'baby'. Do not stop taking medication you have been using without consulting your maternity assistant. In some cases, you can continue using it, or an alternative may be available.

## Centering Pregnancy

If your regular checks are being carried out by a midwife, you have a choice after the dating scan: personal care or Centering Pregnancy. Centering Pregnancy is a programme designed to coordinate all medical checks and all information concerning your pregnancy, the delivery and the immediate post-natal period. It also gives you the opportunity to ask any question you may have and to share your experiences with other women expecting at around the same time as you. For more information, please go to: [samenweetjemeer.nl](http://samenweetjemeer.nl)

## Heredity

The midwife will want to know whether you, your partner or either of the families have any hereditary diseases, hereditary conditions, congenital defects, and whether you are related to each other. Some diseases or defects can be detected in your baby at an early stage of pregnancy. This test is called prenatal screening. See page 25 and [onderzoekvanmijnongeborenkind.nl](http://onderzoekvanmijnongeborenkind.nl)

## Blood tests

Your blood will be sampled and tested in the first weeks of pregnancy. Your permission is required for this test. The lab will test your blood for infection diseases, blood groups and antibodies, iron and (sometimes) glucose levels.

### The lab will test your blood for three infection diseases:

**Hepatitis B:** this virus causes an infection in the liver that sometimes progresses unnoticed. If a person becomes a carrier of the hepatitis B virus after being infected, they can pass on the infection to others. If a mother carries the virus, it will not harm the baby during



the pregnancy. During delivery however, contact with blood can lead to your baby's infection. If the test shows that you carry the virus, your baby will receive an injection of antibodies shortly after birth. The antibodies offer protection from the virus. Your child will also need to build up resistance to the Hepatitis B virus. Babies born to mothers carrying the Hepatitis B virus are vaccinated immediately.

**Lues (syphilis):** this is a sexually transmittable disease (STD). The bacteria may endanger the pregnancy and can cause serious congenital defects. If the mother carries the infection, she will be given antibiotics to prevent the infection being passed on to the baby. At birth, blood samples are taken from the mother and baby to test whether the baby has been infected.

**HIV:** the virus that causes AIDS. Thanks to antivirals, this is now a chronic disease. HIV is caused by unsafe sex with an HIV-infected person, or by contact with contaminated blood. If blood tests indicate that you are HIV-infected, you will be referred to a specialised HIV centre. The virus can be passed on to your baby during pregnancy or delivery, and subsequently through breastfeeding. The infection risk can be greatly reduced by the use of antivirals during your pregnancy.

### The lab will test your blood for blood types and antibodies:

**Type A, B, AB or O:** in case you need a blood transfusion, it is useful to know whether your blood is of type A, B, AB or O.

**Rhesus factor:** if your blood group is Rhesus D – negative or Rhesus c – negative, there will be another blood test in the 27th week.

See for more information [rivm.nl/loedonderzoekzwangeren](http://rivm.nl/loedonderzoekzwangeren).

**Antibodies to blood types:** if the lab finds antibodies, the midwife will discuss with you whether further tests are needed.

### Some other tests that may be carried during pregnancy:

**Haemoglobin level (Hb):** this test will be done several times during your pregnancy. The Hb level in your blood may indicate a degree of anaemia (iron deficiency). This condition is almost always easy to treat and the treatment is not harmful to the baby.

**Glucose:** sometimes, your blood will be tested for glucose. If the levels are too high, this may indicate a form of (gestational) diabetes, for which treatment is usually readily available.

**German measles (Rubella):** if you have had measles before or if you have been vaccinated, you will be safe from this disease. If you have not had the vaccination, you can ask for a blood test. If you have no antibodies in your blood, a rubella infection during pregnancy may cause congenital defects. For that reason, vaccination for BMR (mumps, measles and rubella) is essential at an early age.



For more information on blood tests during pregnancy, go to [rivm.nl/bloedonderzoekzwangeren](http://rivm.nl/bloedonderzoekzwangeren).

**Other sexually transmittable diseases:** if you have, or suspect you may have, a sexually transmittable disease, you should make sure to inform your midwife. Chlamydia or gonorrhoea ('clap') may not always lead to obvious inconvenience, but for the baby they may cause premature birth or lead to eye or lung infection after birth. A cervical smear (Pap test) is used to establish the presence of the disease, which can be treated with antibiotics that are not harmful to the baby. Go to [soa.nl](http://soa.nl)

**Hereditary anaemia:** if you are (originally) from a country around the Mediterranean (Turkey, Greece, Morocco, Italy, Greece etc), the Middle East or parts of Asia (India, Indonesia) or Africa, a test may be necessary to determine whether you are a carrier of hereditary anaemia (eg sickle cell anaemia or thalassaemia). The inconvenience for the carrier is often only limited, but iron

therapy will not cure this form of anaemia. If both parents carry this form of hereditary anaemia, the child may develop a serious form of anaemia. If there is a carrier in your family or that of the father, or if you and your partner are (distantly) related, make sure to inform the midwife.

Go to [erfelijkheid.nl/bloedarmoede](http://erfelijkheid.nl/bloedarmoede) for more information

### Regular check-ups

In early pregnancy, you will see the midwife every four to six weeks for a check-up. Towards the end of the pregnancy, the intervals between the check-ups will become shorter. The number of check-ups depends upon how the pregnancy is going. Every time you go, the midwife will ask you how you are doing and perform the following checks:

**Size of the uterus.** At every check-up, the midwife will move her hands over your abdomen to feel how the uterus is expanding so as to assess the growth of the baby.

**Heartbeat.** From around the third month, the midwife can hear the baby's heartbeat. From that moment on, she listens to your baby's heartbeat at every check-up. It can be quite emotional to hear your unborn child's heart beating so fast! At a rate of 120 to 160 beats per minute, this is almost twice as fast as your own heart.