

Breast-feeding

Dear (future) parents,

You have one of the volumes of The Growth Guide series in your hands. The Growth Guide consists of seven practical booklets in a collection box:

- Planning for Parenthood
- Pregnancy
- Breast-feeding
- Post-natal period
- 0-4 years old
- Primary school age
- Adolescence

In the Growth Guide you will find a great deal of information concerning pregnancy and the development, health and parenting of your child in the various phases of life. You will also be able to find practical tips for the sometimes troublesome and difficult moments in parenting. The Growth Guide can also serve as a handbook for the many major and minor doubts or concerns which, in practice, all parents are faced with. With the conveniently arranged table of contents and the index, you can easily find the subject you want to know more about. At the back of the various volumes of the Growth Guide, testing data can be recorded. In this way, they are easily available.

Every volume also provides space for your own notes and for the storage of vaccination records and messages, notes or reports from other facilities you and your child deal with. In order to keep the Growth Guide easily readable, we have decided not to use both 'he' and 'she' continually when talking about your child. A child is, therefore, consistently referred to as 'he' and 'him.' This also of course, refers to girls.

Maternity nurses in the Netherlands

In the Netherlands, post-natal care is given by a specially trained maternity nurse. She comes to your home until the child is eight days old, helps the midwife during delivery and performs important medical checks of you and your baby's health. She helps you to get started with breast-feeding. She observes your baby and works with the midwife.

We wish you happy reading!

On our website (www.groeigids.nl) you will be able to start a digital history of your baby, including photographs. Or use the GrowthApp. Print your own booklet, with the growth chart, vaccinations and other important moments in your baby's life.



Youth Healthcare Services

At the end of the postnatal period, the maternity nurse will transfer the care to the Youth Healthcare Services [Jeugdgezondheidszorg]. The maternity nurse fills in a transfer form for the breast-feeding so that the child health centre is also brought up to date. You can go to the child health centre for questions concerning breast-feeding.

Information on specific subjects such as breast-feeding twins, can be found in Dutch on the website www.groeigids.nl. Or go to your local CJG website, to be found easily on www.cjg.nl.



This Growth Guide belongs to:

Our midwife(s) or gynaecologist(s):

space for stamp

Our maternity nurse:

Youth Healthcare Service:

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Introduction

The WHO (World Health Organisation) and UNICEF have drawn up a list of 10 guidelines for successful breast-feeding. This Growth Guide is based on these guidelines. The WHO recommends breast-feeding for two years, as long as both mother and child are comfortable with it. A mother's breast milk contributes to the baby's physical and cognitive development. Full information can be found on www.zorgvoorborstvoeding.nl.

The following is a summary of regulations applicable to all organisations involved in child- and maternity care:

1. The breast feeding policy must be available in a written document and communicated to all personnel involved in maternity care;
2. All personnel should acquire the skills necessary to carry out that policy;
3. All pregnant women are to be informed of the advantages and daily practice of breast-feeding;
4. Within an hour of the baby's birth, mothers will receive assistance to start breast-feeding;
5. Mothers will receive instruction how to latch on their baby and how they can keep the production of milk going, even when the baby has to be separated from the mother;
6. New born babies should be given breast-feeding only, unless for medical reasons;

7. Mother and child can stay in the same room, day and night;
8. Breast-feeding will be actively promoted (on request);
9. New born babies on breast-feeding will not be given a dummy;
10. These organisations will liaise with other organisations and disciplines concerning breast-feeding and will refer parents to breast-feeding organisations.

Advantages of Breast-feeding

Breast-feeding is the best start for a child. It is recommended that a baby should have breast-feeding only for at least six months. The longer a baby is breast-fed, the more he benefits from the advantages.

The WHO recommends breast-feeding for up to two years, as long as mother and child are comfortable with it. Breast milk contributes to the baby's physical and cognitive development. Research shows that breast-fed children are ill less often and less seriously. Breast milk protects against allergies. The nutrients in the milk are easily digested and the composition is geared to the age of the child. The fatty acids in breast milk are important for the development of the brain. Sucking the breast is good for the development of the baby's jaw and thus for his speech. At later ages, there is less risk of cardio-vascular disease, diabetes and obesity. All that because of breast-feeding.

Also good for the mother

Through breast-feeding the uterus recovers more quickly after delivery. Breast-feeding helps to lose weight gained during pregnancy more quickly. It has also been proven that there is a protective effect against osteoporosis and

ovarian and breast cancer if a mother has nursed her baby for a long period of time.

Your partner's role

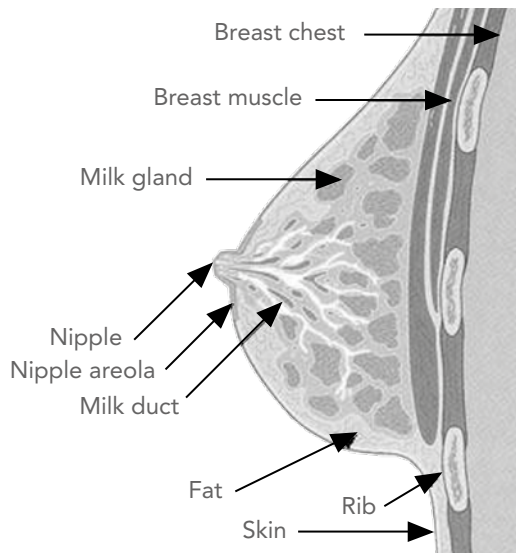
Your partner has an important role to play in the period of breast-feeding. Just because he is not in a position to feed the child, does not mean he or she has less of an opportunity to establish a firm and warm bond with the baby. Looking after the baby, caressing, playing, talking will provide plenty of opportunity to make contact. For instance, your partner could pick up your baby from the bed for his night feeding. Your partner's support will help you to keep breast-feeding going longer. Another advantage is that because the baby does not smell milk on your partner's body and therefore will not seek out the breast, he will calm down more easily. Once the baby has fully mastered the drinking technique (from the age of 4 weeks), your partner could, from time to time, give him pumped milk in a bottle.



Let your pharmacist and family doctor know that you are breast-feeding in case you must take medication.

How does breast-feeding work?

There are clusters of milk glands in every breast. This is where the breast milk is made. The 'building blocks' come from the blood. The milk flows via milk ducts to the nipple. Milk production is primarily regulated by two hormones: Prolactin regulates the milk production from the blood and oxytocin ensures that the milk is propelled forward: The let-down reflex. When the baby nurses, a signal is sent to the mother's brain to manufacture these hormones. Large as well as small breasts can manufacture sufficient milk to feed a baby.



Latching on

It is extremely important to lay your baby at the breast correctly. The first few times, you will probably get help from the midwife or the (maternity) nurse.

Do you know what you must be aware of?

- Make sure that you can sit or lie in a comfortable and relaxed position.
- With the aid of sufficient cushions, you raise the baby up so that his nose is at the level of the nipple.
- The baby lies with his head and body in a straight line with his stomach against you so that he does not have to turn his head when taking the nipple.
- He lies up against you with his chin on your breast.
- If necessary, support your breast with an open hand or let him rest on a cushion. A full-term baby is born with reflexes that are focused on finding the nipple, such as the rooting reflex.
- Stroke his lips with your nipple. He will then open his mouth wide and stick out his tongue a bit.
- This way he can take one big bite and get as much of the aureola as possible into his mouth.
- When drinking, the baby's lips will curl outward.

When the baby is well positioned, he is lying up against you with his nose and chin on your breast. In this way, you prevent painful nipples.

How can you see if the baby is latched on properly?

When the baby is well positioned, he is lying up against you with his nose and chin on your breast. He has a large part of the areola in his mouth, his lips are curled to the outside and his tongue is under the nipple. You hear him swallowing regularly and his eyes are open. Also, pay attention to the sucking rhythm. The baby will start by sucking superficially in a fast rhythm. This generates the let-down reflex. As soon as the milk starts to flow, you will see that he starts to take big gulps; his whole jaw moves. Short breaks are nothing to worry about. At the end of the feeding, the pauses become longer and the sucking rhythm changes. You do not see large jaw movements anymore, but rather small, short movements with only his mouth. This is the moment to remove the baby from the breast. He has often attached himself firmly. You can break the vacuum by carefully inserting your little finger into the corner of his mouth. Often, a baby will fall asleep at the end of the feeding and let go of the breast himself. Hold him up so he can burp. Then, after a diaper change, you could offer him the other breast until you think, or he lets you know, that he has had enough.

You can also tell from your nipple that your baby has had the breast in his mouth correctly: the nipple must be round -- not flattened -- and intact after the feeding. If the nipple

hurts, if there are visible striations or if the nipple is white (bloodless), this means that the baby has not yet mastered the technique. In that case, let an expert watch as you put the baby to the breast. Nipple problems can best be prevented! By the way, the best protection for your nipple is to spread a single drop of breast milk over the nipple and then let it dry by itself. Do this after every feeding.



If you attend an information evening on breast feeding before the delivery you will then know what to expect. You will then be able to solve most of the problems yourself. Ask your midwife or maternity centre when and where these information sessions are held in your neighbourhood.



The first days

During the first few days after the birth, the breast milk is called 'colostrum'. This first milk is extremely rich in antibodies and other substances that make mother's milk so extraordinary. Antibodies protect the baby from diseases. This first milk is rich in protein, low in fat and, therefore, easily digestible. Moreover, colostrum relaxes the intestines so that the baby can easily pass his first stool movement (meconium).

Babies 'tell' their mothers when they are hungry by giving them signals. Waking up is such a signal, as is making smacking sounds, searching movements with their mouths and, only at the very last, crying. If you keep the baby with you in your room, you will easily notice these signals. During the first months, it is advisable to keep your baby very near you for 24 hours a day. That is the best way to get to know him and to recognise early feeding signs. Do not hesitate to go to your maternity nurse or your midwife for advice.

Nursing for the first time and engorgement

Within an hour after birth, the baby is put to the breast, naked. Physical contact is a very important step in the bonding process. At that time, the baby is alert and awake and will be able to remember this first attempt well. The first days are practice days as milk production gets started. It is a good idea to use this period and to put the baby to

the breast often. Both the baby and the mother must learn nursing. Supplementary feeding is not necessary and in fact, disturbs the balance between supply and demand.

If supplementary feeding turns out to be necessary, then you must start pumping. Bottle feeding should only be given on medical advice, or at the request of the mother. If your baby is given the opportunity to nurse as much as possible (eight to twelve times per day) during the first days, the milk production will get started more quickly and serious engorgement can be prevented. It is normal for your nipples to be sensitive at the start (the first 20 to 30 seconds). This is called 'sucking pain' and is caused by the stretching of small nipple muscles. This should pass in a couple of days, after which breast feeding should no longer be painful.

Engorgement

Engorgement is the phenomenon that occurs on the third to fourth day after the birth when the breasts fill up with milk. The blood vessels are then also extra-active in order to supply the ingredients for the milk. Breasts will feel fuller and warmer. That can be painful. A warm cloth or a warm shower can provide some relief during engorgement. If this does not do the trick, take some paracetamol (with a maximum of 3000 milligrammes per 24 hours). You can

decrease the engorgement by (gently and delicately) having the baby nurse regularly and drink as much as possible. In this way, the engorgement will pass within one to two days. Once the milk production is well started and the supply and demand are in balance with each other, the baby will ask to be fed around once every three hours. However, babies vary greatly from each other and some babies will want to nurse more -- or less -- often. Your breasts will then no longer feel so full during the day; they have adjusted to their new task. Don't worry though, there is enough milk in them.

How do you know if your baby is getting enough?

It is a good idea to offer the baby both breasts at every feeding. Hormones will make sure that enough milk will be available. Let him nurse at the first breast until he is satisfied or no longer drinking actively. This generally takes 10 to 20 minutes. Then, change the baby and burp him. That will then wake him up. Offer him then the second breast for as long as he still wants to drink. For the next feeding, you start with the breast that the baby was given last. After that, the baby is of course given the second breast again. It is important that one breast is completely emptied during each feeding. That way the baby gets both foremilk and hindmilk. The foremilk is the milk that comes out of the breast first. As the feeding progresses, the milk has a higher

fat content. Every baby has his own drinking pattern and drinking speed. You will learn to recognise this increasingly better as you pay attention to your baby's behaviour. You can trust that your baby is getting sufficient nourishment: if he is growing, if he is given at least six feedings per day during the first few weeks, if he has at least six wet diapers and regularly has poopy diapers, if he is satisfied after the feeding and if, after the feeding, the breasts are clearly softer. In the first months, breast milk is easily digestible so that a baby can drink more of it and gain weight faster.

If you are not sure whether your baby is drinking enough, have him weighed at the Child Health Centre. You can drop by during the open visiting hours or the special weighing sessions.



Adjustment days: Supply and demand; cluster feedings

Breast-feeding works through the 'supply and demand' principle. The more the baby nurses, the more milk is produced. Because breast-feeding is given on request, not every day will be the same. Sometimes, a baby wants to drink more often for a day or two. In this way, the baby 'regulates' the production of breast milk and adapts it to his needs. These days are called adjustment days, which normally occur at the age of ten days, six weeks and three

months. The feedings will be the most pleasant for you if you take the time for them and sit or lie quietly and calmly. In this way, the feedings become a moment of rest which you can enjoy: A lovely moment to recharge your batteries and to enjoy a feeling of warm contact with your baby. From around the tenth day after birth, many babies display a pattern that is called 'cluster feeding.' The baby wants only short feedings very close together, -- generally in the evening --, sometimes even every hour. Wanting to drink more often in the evenings is -- certainly when a baby is growing well -- not at all a sign that he is not getting enough nourishment. Supplementary feeding is therefore not necessary and will not help him sleep through.

Sleeping position

The safest sleeping position for a baby is on his back. He turns his head to the side while asleep, so you do not have to be afraid that he will choke when spitting a little. If he lies on his side, he can roll over on his stomach by himself: when he is on his back, this is not possible. The risk of cot death increases if he sleeps on his stomach.



Ask for the brochure on Sleeping Safely ('Veilig Slapen') at the CJG. Or go to www.veiligslapen.info

Sucking at the breast

Better not to use a pacifier (dummy) for the first four weeks. The baby is not receiving nourishment, but the sucking still requires an effort (see p 46). Furthermore, the dummy may cause you to miss feeding signs from your baby, in which case he may drink from the breast less often. And there is a risk that using the bottle or the dummy may teach him a faulty sucking technique. The tongue plays a different role when sucking on a pacifier than when nursing at the breast. If your new born baby cannot or will not drink, this may be difficult for you. Your midwife or maternity nurse can advise you on the best way to feed him. Or consult a lactation expert.

A short tongue fraenum

A tongue fraenum that is too short or too tight can cause drinking problems for a baby, both in nursing and in drinking from a bottle. A tight tongue fraenum is a congenital defect that occurs now and then. The tongue fraenum is the membrane under the tongue. If the baby has a tongue fraenum that is too tight, he cannot stretch his tongue out far enough to the front. That makes it difficult for him to take the nipple and the areola into his mouth well enough for him to drink. You will then hear a clicking or smacking sound during nursing when the vacuum is interrupted. Often, the baby cannot drink as well and does not grow sufficiently. Moreover, there is a danger that cracked nipples will develop, even if the mother places the baby to the breast correctly. Cutting the fraenum in the first week can achieve a good result. If you are considering this, contact your paediatrician or lactation expert. The baby will be sent to an experienced specialist for this. The procedure itself is a minor one. It does not take longer than 10 to 15 seconds. An anaesthetic is not necessary for babies younger than 1 year old, because the fraenum is a very thin membrane and has little or no veins or nerves. Haemorrhaging is almost negligible and painkillers and antibiotics are not necessary. The baby can resume drinking from the breast immediately.

Breast-feeding during a pregnancy

During a new pregnancy, milk production can decrease somewhat. The milk may taste differently. It is important to make sure that the baby keeps growing well. He also must be getting sufficient fluids. It need not be a problem, at all: pregnancy and breast-feeding. In principle, it is therefore not necessary to stop breast-feeding.

After the birth of the new baby, breastfeeding is still possible for both babies. Always feed the youngest baby first.





Nursing Positions

The photos show the various positions for feeding your baby.

Nursing in a sitting position (photo page 26)

Nursing in a sitting position allows you to make sure the baby is well latched on. Sit up in a comfortable and relaxed position, if you like, with a stool to put your feet on. The baby now lies in the crook of your arm on the side of the breast he is going to nurse from. His body lies on your arm with your hand supporting his buttocks. This is called the Madonna position (see photo on the left). Here too, the baby lies with his belly against your belly. Support your breast with your free hand. When the baby has finished drinking from the first breast, you may turn him after a little burp and offer the other breast. You could also scoot him down to the other breast so that he is in the cradle position, also called the rugby position (see p 30-31). This too is a pleasant feeding position. You can check for yourself if your child is well latched on.

Nursing in a lying position (photo page 29)

Lie on your side with your legs pulled up slightly. Place your baby on his side, up against you with his nose just under the nipple. When the baby opens his mouth wide, pull him towards you. This position is handy for the first few days when you are not yet so mobile. It is also a pleasant and easy way to nurse at night.

Biological Nurturing

Biological Nurturing is a relatively new approach to breast-feeding. Firmly supported in your back, you take a semi-reclining position and the baby lies on your belly. The baby will now deploy his innate feeding reflexes and look for the nipple. If latching on in the normal way is a problem, this approach often works better.



Go to www.groeigids.nl for the video on Biological Nurturing.



Cradle or rugby position (photo page 31)

In this position, the baby lies on a large cushion next to you with his legs under your arm (see photo on the right). You place that arm under his back and support his head with your hand. Place him close to the nipple and support the breast with your free hand. In this position, you have a good view of what is happening. This is primarily a handy position for very small babies or (because of the mother's incision) after a caesarean section. Twins can be fed simultaneously in this position. Moreover, a mother who has somewhat larger breasts often finds this position comfortable.







Cross-cradle or Madonna position (photo page 32-33)

Very small babies in particular have a tendency to slip away when held in the sitting position. In that case, you can sit as described above, but now you support the baby's head with your hand (do not hold the baby's head by the neck) and your arm holds the baby from behind. You can then use your free hand to hold the breast and offer the nipple.

Other positions

When children are older, they can nurse in many different ways: for example, sitting up on mother's lap (see photo) or standing next to the mother for a quick sip.

We recommend regularly changing feeding positions. To spare your nipples and to encourage your baby to get used to drinking anytime and anywhere.



Support during problems

Spitting up

Sometimes a baby regurgitates some milk after the feeding. That is called 'reflux.' The milk often comes up when he burps. This is also because a very young baby's stomach does not yet close completely. This is all normal. Leave your baby in the feeding position for ten minutes after every feeding, so that his stomach can come to rest. If you hold the baby upright against you, he will be able to burp and his feeding will be digested calmly. Playing games with the baby or bathing him shortly after feeding is not a very good idea because the food will come back up more easily.



Spitting is in fact only a problem if the baby is not gaining enough weight. If that is the case, drop by during the open visiting hours of the Child Healthcare Centre, have your baby weighed and get relevant advice. If a baby spits up too much, or if there is projectile vomiting after a feeding, consult your midwife, the Child Healthcare Centre or the family doctor.

Stomach cramps or adjustment day? Or cluster feedings?

Many babies are bothered by stomach cramps during the first weeks of their lives. This is logical; up until birth, the baby was fed by the mother's body via the placenta and the umbilical cord. Now, his own stomach and intestines must digest the food and that is a major adjustment for the baby! Their intestines generally adapt quickly to easily digestible breast milk, ensuring adequate functioning of the intestinal flora. Formula feeding may disturb this process. There is no food that is harmful to breastfeeding, but some products (like spices and herbs) may bring on cramps. If you are suspicious, test the product by eating it again. If the cramps come back, stop eating the food in question for a while. As long as you can easily console your baby, there is no reason for alarm. If you are worried, you can always consult the Child Health Centre. When your baby is having cramps, you can stroke his tense little tummy. A warm cloth may also help. There is one consolation: the cramps will cease after a month and a half, four months at the outside. If your baby cries more often or if he appears unsettled, remember your adjustment and cluster days, see pages 21 and 22: Adjustment days, cluster feedings. If you want to change the type of feeding anyway, always consult the nurse of the child healthcare services.

Thrush: a sore mouth

Thrush is a troublesome fungus infection that affects the skin and the mucous membranes. In most cases, thrush infections will disappear without the help of medication. There is no need for immediate action, as long as you or your baby have no problems. If thrush gets in the way of drinking or if you, as the mother, are in pain, then medication may help. A baby can be bothered by thrush. He then cries more and sometimes does not want to drink. Thrush looks like a white deposit, or white spots on the tongue, the jaws inside of the cheeks, the lips or the roof of the baby's mouth. You cannot wipe it off. If you are breast-feeding, you and the baby can infect each other. As a consequence of thrush, you may have a burning or painful sensation in your nipples. Thrush can also cause cracked nipples. As the mother, you will usually be the first to notice the infection. Painful nipples and a sensation of sharp needles deep inside your breast can be a sign that your baby is suffering from thrush.



In order to ensure that you and your baby do not continue to re-infect each other, you must both be treated for thrush for at least three weeks. After a few days, the baby can also get a diaper rash from the thrush which has then relocated to the intestinal tract. Be extra hygienic with thrush: Wash your hands and change wet nursing compresses often.

Support during problems

If the breast-feeding is not going as expected, you must get help quickly. Do not allow yourself to get discouraged and do not give up too quickly! Often, you just need a bit more time.

- During the postnatal period, you can go to the maternity nurse and the midwife with all your questions or the lactation expert from the maternity centre.
- After the post-natal period, you can turn to the child health centre.
- If you have nursing problems, you can also see a lactation consultant. Addresses can be found via www.nvlborstvoeding.nl.
- There are, moreover, two volunteer breast-feeding organisations in the Netherlands: 'vereniging borstvoeding natuurlijk' [Society for Breast-feeding] and the breast-feeding organisation, 'La Leche League'. Both organisations have a telephone information line and websites where many questions are answered.

There is a forum for raising questions and exchanging information.

Check your health insurance policy to see if lactation advice is covered.





Taking good care of mama!

The production of breast milk demands extra energy. Women who breastfeed need approximately 500 extra calories per day. That is easily done if you simply eat a bit more. A good starting point is: Pay attention to your weight, do not lose weight too quickly and, most certainly, do not gain weight. Eating a varied diet is important. In this way, you and your baby will get a sufficient amount of all of the nutrients that you need. Nursing mothers are also given the advice to have 450 ml of milk products every day. It is also important to drink enough fluids. It is good to get into the habit of drinking something yourself at every feeding. Alongside of the recommended amounts of milk products, you can also drink, for example, tea, mineral water, fruit juices and soft drinks. Do not forget to get some rest yourself when your baby is sleeping. www.voedingscentrum.nl.

Eating and drinking sensibly

It is important that you, as a mother, eat a well-balanced and varied diet and drink a sufficient amount. There are no foods that are bad for breast-feeding, but some products can give a baby cramps. In any case, do not drink alcohol, do not smoke (certainly not in the presence of the baby) and, if you use medication, consult your midwife, the family doctor or the child health services.

Think of yourself

Becoming a parent and feeding from the breast are activities that demand a lot of energy. No wonder you feel tired or stressed from time to time. However, stress is not good for breast-feeding and should be avoided. Maybe you are expecting too much from yourself. It may help to change your way of life, by lowering expectations, by saying 'no' more often or by sharing the domestic chores. Try to get sufficient rest. Doing relaxation exercises is also a good idea.

Leaking breasts

A nursing mother can be bothered by 'leaking breasts' during the day as well as at night. There is so much milk in them that the breasts overflow. This can do no harm, but it

is often awkward, certainly if you have gone back to work. A nursing mother feels more comfortable if she wears breast compresses in her bra. These compresses must be changed regularly.

Breast-feeding can be continued even when the mother is ill. It may even be just the right time for a peaceful moment for both mother and child.



Blocked milk duct or breast infection

Check your breasts after each feeding for hard, painful or red spots, because that can indicate a blocked milk duct. Offer the painful breast first at the next feeding, have the baby empty it well and then, if necessary, gently massage the blocked area away, in the direction of the nipple. Put the baby in a position in which his chin points in the direction of the blocked milk duct. Warm the breast before the feeding (or before pumping) so that the milk ducts become dilated and the milk can flow more easily. A warm shower may help too. If a blocked milk duct is not opened, it can result in a breast infection. A breast infection can sometimes occur from bacteria penetrating the breast via cracked nipples. With a breast infection, the breast feels painful, warm and taut and you have a fever (above 38.5°C). Generally, the

breast is also (partially) red. You can feel really bad, as with flu. Consult your family doctor and, in any case, it is important to stay very quiet. It is essential that the milk can flow though well and that the breasts are emptied as well as possible. After each feeding, feel your breasts for hard spots and gently massage them. Therefore, put the baby to the breast often and, if necessary, pump between feedings. Nursing can be painful for awhile, but the baby can continue to nurse -- there is nothing wrong with the milk and the symptoms will decrease if the breasts are well emptied. Warm compresses on the infected area before the feeding and cold compresses after the feeding sometimes work to decrease the pain. If you regularly have blocked milk ducts or even a breast infection, this could be an indication that the breast feeding is not going as it should. In that case, contact a lactation consultant or the child health centre.



Make sure you get enough rest: exhaustion can bring on breast infections. Get enough rest, for instance when your baby is sleeping.

Birth control

It happens much more often than you think: A mother becomes pregnant again while she is still nursing. If you are not yet ready for another pregnancy, it is better to be on the safe side: make sure, as soon as possible, of reliable birth control. You can talk to your family doctor or midwife about what is best for you, in combination with the breast-feeding. Check www.anticonceptie.nl and www.richtlijnenborstvoeding.nl/anticonceptie (for advice on breast-feeding and birth control).

It is an old wives' tale that you cannot get pregnant while you are nursing. Talk to your family doctor about suitable birth control or use condoms with a lubricant when having sex. (All of the mucous membranes can be dryer if you nurse)



Sucking needs

Thumb or pacifier?

Many babies not only want to suck when they are nursing, but also when their tummies are full. These are babies who have greater sucking needs. Sucking a dummy demands a lot of energy. Many babies find, in time, their own thumb or fingers to suck on. Thumb sucking has the disadvantage that it has an adverse effect on the shape of the mouth and of the (future) teeth. That is less when a pacifier is used. Moreover, it is easier for a child to stop using a pacifier than to stop sucking his thumb. Only give your baby a pacifier if you are certain that he is growing and has surpassed his birth weight again and, moreover, if you are certain that you can differentiate between the hunger signals and the need to suck. To prevent sucking confusion, it is recommended that dummies/pacifiers should only be used after four weeks. Sucking the breast is the first skill that needs to be learnt and mastered.

You can decide yourself if and when you give your child a pacifier and when you take it away -- for example, once the child has fallen asleep or does not want it any more. If you give your child a pacifier often and for long periods of time, he might nurse less than is good for him. The risk is that your child's growth will slow down and

that you yourself may suffer painfully full breasts. A good pacifier is sturdy, flat and the end slopes upwards. There should be small openings in the shield at the mouth. Do not fasten the pacifier on a cord around the baby's neck: This is much too dangerous.

Night feedings and supplementary feeding

Every baby has his own rhythm

After one week, a feeding rhythm will develop automatically. How long that will take varies per child. Feed your baby as often as you wish. In the first days, this may be ten to twelve times a day. After a week, it could be seven or eight times. Some children will be happy with five or six feedings a day. All of this is quite normal. Night feedings are very normal for young babies. Forced attempts to stop night feedings almost always fail and only lead to stress. Changing to bottle food, or using it a supplement, will not help to establish a rhythm earlier.

Vitamins

Your baby needs Vitamin B for good coagulation. He needs Vitamin D for strong bones and teeth. Breast- and bottle feeding does not contain enough Vitamin D, so you should give your child 10 mcg per day till the age of four. Vitamin K is included in bottle food, when you are breast-feeding you should give your child 150 mcg per day for the first three



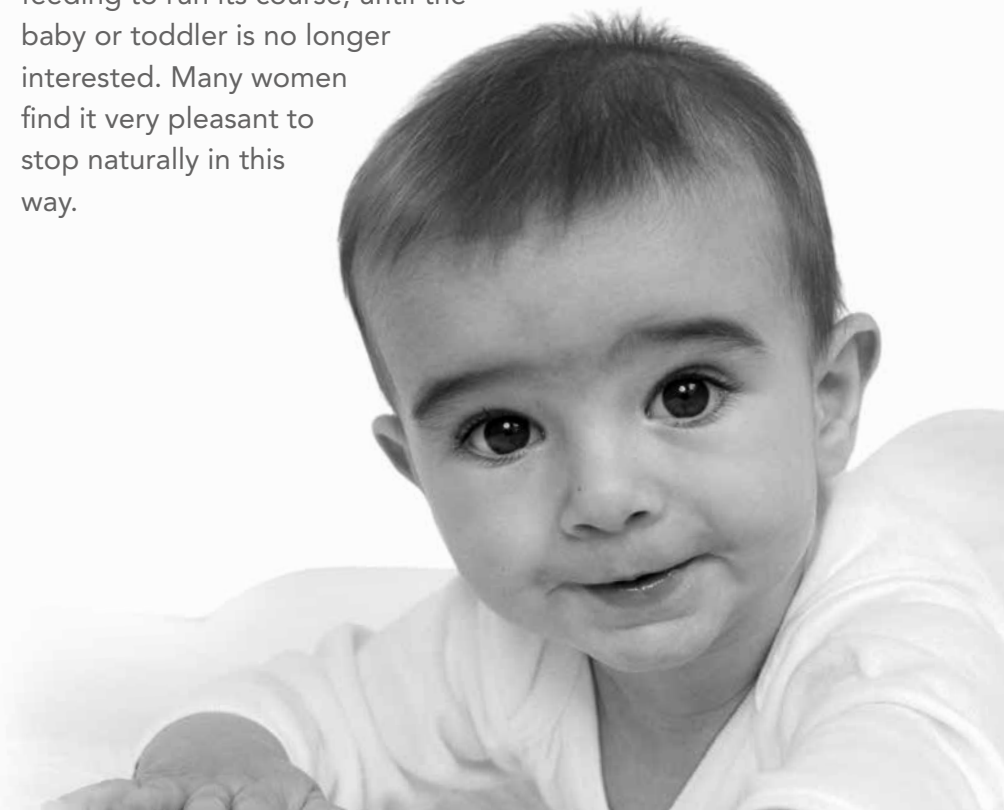
months. The paediatrician will give you a recipe for the baby's Vitamin D and K.

Six months of mother's milk

The advice of the World Health Organisation (WHO) is to breast-feed exclusively for the first six months. The baby does not need any supplementary feeding. The body of the mother automatically adjusts the composition and amount of milk to the age of her child. For a two week old baby, for example, the breast milk is different than for a newborn baby. Also, a premature baby gets breast milk that has a slightly different composition than the breast milk for a full term baby. It is not until a baby is around six months old that his intestines are mature enough to be able to digest other foodstuffs. By that time, he can also chew a bit. This is a good moment to start with supplementary foods, such as vegetables or fruits.

Adding solid foods

When your six months old baby starts to eat fruits and vegetables, he will gradually decrease the amount of breast milk he is drinking. The milk production will automatically adjust to this. During this period, breast milk is still an extremely healthy source of nourishment, better than follow-up milk! Most babies and mothers also still find breast-feeding cosy and easy for quite awhile, because it is of course not just about drinking: the close contact is equally important. It is certainly possible to allow breast-feeding to run its course, until the baby or toddler is no longer interested. Many women find it very pleasant to stop naturally in this way.



Pumping

Pumping is simply removing the breast milk from the breast. In order to evoke a let-down reflex for a breast pump, the let-down reflex is necessary. This causes the milk waiting in the breast to come out. This occurs under the influence of the hormone oxytocin. This hormone is released when the baby stimulates the nipple, if you think about the baby or if you hear your baby crying. In order to evoke a let-down reflex, for a breast pump, it is important to sit comfortably and to relax, for instance by looking at a photo of your child. It may also help to warm the breast or to stroke it gently. The colour of the breast milk can differ per pumping session.

Many types of breast pumps

There are different kinds of breast pumps on the market. Before you invest in one, it is a good idea to consider a few things: how often am I going to use it, where am I going to use it and how much money do I want to spend? You can rent a breast pump. This is convenient if you need it only for a short period or if you want to try one out before buying. Before you buy a breast pump, consult with your kraamverzorgende, the Youth Healthcare Services or the lactation consultant about which pump is suitable for you. Breast-feeding organisations (La Leche League and Borstvoeding Natuurlijk) have up to date information, or go to www.borstvoeding.com.

Manual pumping

Manual pumping comes closest to the way the baby drinks from the breast. Your manual pressure will force the milk out of the breast; the front of your breast receives more stimulation than from a pump. This encourages lactation and increases milk production. Even when you are using a pump, it is advisable to use your hands some of the time. Let your breast rest in your hand, with your fingers under the areola and your thumb on the edge. Shape your hand like a C and move your fingers towards your chest, without squeezing. You will find full, illustrated instructions for manual pumping on www.groeigids.nl.

Breast-feeding and work

Many women decide during pregnancy that they want to breast-feed their baby. When they go back to work, they continue nursing. In order to combine breast-feeding and work successfully, it is important to be well prepared. It is necessary to understand how milk production actually works and how you can 'play' with it. Think carefully about how you want to organise the breast-feeding or pumping during your work and discuss this well in advance with your employer and colleagues. You may choose to continue to breast-feed only or to combine breast-feeding with

bottle feeding, by reducing breast-feeding or by gradually terminating it altogether. In order to do this, you will need a breast pump and, possibly, some attachments. Below, you will find a number of practical tips on how to combine breast-feeding with a job.

Rights and obligations

Apart from pregnancy leave and parental leave, a nursing mother has additional legal rights. According to the Working Hours Act, she has the right to a quiet, private space, a refrigerator to store the milk in, an electrical outlet for her breast pump and warm water to rinse off the breast pump components. The Act allows 25% of the mother's working hours, until the baby is nine months old, to be spent (on full pay) feeding or pumping breast milk for her baby. This means that you may go to your child to feed him, have the child brought to you or that you may pump while at work. In practice, it has become clear that few women need so much time, certainly not once they have mastered the technique. Are your employer and colleagues not aware of the legal regulations? You can download the fact sheet 'Kolven op het werk' (Pumping at work). Moreover, if necessary, you could request a meeting on this subject with the company doctor, the personnel manager or a health and safety expert.

See www.postbus51.nl, under “Werk en loopbaan” [Work and career]. There, you will find a clear explanation of the legal regulations on work, pregnancy and breast-feeding. There you may also request brochures and receive advice over the phone. More information is to be found on www.voedingscentrum.nl and on www.borstvoeding.nl.

Work and pumping

If you want to continue nursing exclusively with breast-milk, you will have to pump at work at the times that the baby would normally be nursed. A separate room -- one with a door that can be locked -- is very convenient for this. At work, you then pump just as often as you nurse on the days that you are at home. Your baby can then drink the pumped breast milk the next workday when he is with the babysitter or at the daycare centre. It is a good idea to practice this starting around four weeks after the delivery: you can practice pumping and your baby can practice drinking from a bottle. After breast-feeding, pump for about ten minutes. The next feeding can then be straight from the breast. Preferably do so once every day. You will get used to the pump and the baby can get the small amount of pumped milk in a bottle, thus practicing a new drinking technique. It is a unique opportunity for your partner to feed the baby. Your child may react differently when you are not there,

because he cannot hear or smell you. Sometimes, in the first weeks, the baby may not want to drink at all if you are not there; he will catch up once he can hear or smell you again. If he drinks little during the day, he will (temporarily) ask for more frequent night-time feedings. It may be possible to prevent more frequent night time feedings, if you feed the baby just before you leave and immediately after you return.

When you pump, have a photograph of your baby at hand and try to relax as much as possible. This will improve your let-down reflex.



How often must you pump?

If you are used to giving six feedings per day and you can give the morning, evening and night feedings yourself at home, then it will be necessary to pump three times per day. If your baby gets five feedings per day, then pumping twice a day will be sufficient. In principle, you pump at approximately the times that you would feed the baby at home. There is, of course, some leeway here. In the beginning, pumping might not yet go so smoothly. You are not able to relax enough or you are too involved in your work. Do not make this into a problem. If a pumping session does not produce as much milk as you need, do not hesitate to pump an extra time.

How much milk must you pump?

It is difficult to say how many millilitres (ml) a baby drinks. This depends upon the weight of the baby, the number of feedings and the composition of the pumped milk. A baby drinks, per day, approximately 150 ml per kilo of body weight. Thus, every day, a 5 kilo baby needs 750 ml of breast milk. If he gets six feedings, it will be approximately 110 ml per feeding. A child of 7 kilos needs approximately 1000 ml (1 litre) every day. That is around 200 ml per bottle if he has five feedings. Babies almost never drink more than 1 litre per day. What happens if, once or twice, pumping does not produce enough milk? If your baby is satisfied, you do not have to worry. For further questions, contact the Healthcare Centre.

A supply of breast milk

Before your first day of work, it is a good idea to put a small supply of breast milk in the freezer. You can make such a buffer if you practice now and then with the breast pump and then place the small amounts of pumped milk -- after it has cooled off -- in the refrigerator. Don't forget to label the frozen milk with the date and the amount, so that you know how long it can be preserved and can thaw the right amount.

Combination of breast-feeding and bottle feeding

If you choose a combination of breast milk and bottle feeding, you can start decreasing the daytime feedings around two weeks before your first day of work. You first replace one breast-feeding with a bottle and do that at the same time for a few days. Once you no longer have any engorgement or an overfull feeling around the time of this feeding, you can cut back the next feeding. You keep doing this until you have stopped giving the desired number of feedings. You can keep nursing for the morning, evening and night feedings. Page 62 gives you an example of a timetable for partial phasing out of breast-feeding.

Emergency supply

One handy tip is to make sure that there is an emergency bottle of breast milk in the freezer at, for example, the daycare centre. This way, you will not have to worry if, at some point, you have to pick up your baby later than you planned.

Storing and transporting breast milk

You want, of course, to keep your expressed breast milk as fresh as possible because of the valuable nutrients it contains. That works best if you place the expressed breast milk in the refrigerator as soon as possible after pumping. If you know that you are not going to be using the milk within the next three days, place the supply in the freezer as quickly as possible. You can store breast milk in bottles (no glass), in special Lansinoh breast milk storage bags or in ice cube bags. Small portions (for example, in the form of ice cubes) are easy because you can take only what you need out of the freezer. Never add warm (just expressed) milk to cold or frozen milk. This can cause spoilage. Milk that has been warmed, but not drunk, must be thrown away and may not be reheated.

Reheating breast milk

Frozen expressed milk can best be thawed out slowly in the refrigerator or in a bottle warmer at the lowest setting. To heat expressed milk, use a bottle warmer or a microwave. A microwave often heats the milk unevenly so that so-called 'hot spots' can develop in the bottle. This prevents needless loss of protective ingredients. The time required for heating a bottle of breast milk depends on the amount of milk and

on the microwave. In general, a 100 ml bottle will take about 30 seconds to heat in a 600 watt microwave.

Shake the bottle well back and forth and feel a droplet of milk on the inside of your wrist.



Breast milk stays good:

- For 4 to 6 hours at room temperature;
- For 3 days in the refrigerator, position 3 or 4 (4 degrees Centigrade);
- For two weeks in the freezer compartment of the refrigerator;
- From 3 to 6 months in a freezer compartment at – 18 degrees Centigrade;
- From 6 to 12 months in a freezer compartment at – 20 degrees Centigrade;
- Defrosted breast milk in the refrigerator for up to 12 hours.

Defrosted breast milk at room temperature should be used as quickly as possible. Defrosted breast milk can smell or taste different than fresh breast milk. Freezing and re-heating breast milk may reduce its protective quality. Even so, a lot of its protective and valuable ingredients are retained.



Stopping with breast-feeding

The time can come when you yourself decide that you have nursed long enough. You, as the mother, are the only one who can decide when that will be. Once your breast-feeding is well established and you are feeding around six times per day, you cannot simply stop completely from one day to the next. Your body must cut back the milk production. You can do this by replacing the breast-feeding -- one feeding at a time -- with bottle feeding. It is generally a good idea to start with a daytime feeding. That is when the baby was not being nursed. You then also stop pumping for that feeding. For a few days in a row, you give the baby a bottle of formula at this time. Your body will then adjust to the fact that no breast milk is necessary at that time of day. If, after two to three days, (one feeding period) you no longer have engorged breasts around that time, you can then replace the next feeding with a bottle of formula.

Put into a schedule, the planning can look like this:
 (BF is breast-feeding, F is formula)

Period	Feeding (regular 2 to 3 day periods):						
	0	1	2	3	4	5	6
1st	BF	BF	BF	BF	BF	BF	F
2nd	BF	BF	F	F	F	F	F
3rd	BF	BF	BF	BF	BF	F	F
4th	BF	F	F	F	F	F	F
5th	BF	BF	BF	BF	F	F	F
6th	BF	BF	BF	F	F	F	F



Go to www.groeigids.nl or use the GrowthApp to prepare a digital file for your child. Print out your child's own booklet, including its growth chart, vaccinations and other important events in his life.



Checklist for breast-feeding in the first 2 months

	yes	no
nursing is painless		
the baby is awake during most of the feeding		
the baby takes large, rhythmic swallows in a row followed by short pauses		
after the feeding, at least 1 breast is clearly softer and supple		
each feeding lasts for at least 15 to 40 minutes from 2 months on: 10 to 30 minutes		
the baby gets 6 to 10 feedings per 24 hours; from the age of 2 months, 5 to 7 feedings		
the baby sleeps peacefully for 2 to 4 hours at a time, several times per day		
the baby is wide awake several times per day		
the baby has at least 6 wet diapers and 2 poopy diapers per 24 hours in the first month		

If your answer is 'no' to one or more questions, or if you have any questions concerning breast-feeding, get in touch with the paediatrician at the Youth Health Centre.

Information via the Internet

www.groeigids.nl

Breast-feeding

www.borstvoeding.nl, or call (0343) 57 66 26

www.nvlborstvoeding.nl nederlandse vereniging van Lactatiekundigen [Dutch Association of Lactation Consultants]

www.borstvoedingnatuurlijk.nl vereniging borstvoeding natuurlijk

www.lalecheleague.nl Breast-feeding organisation La Leche League

www.zorgvoorborsvoeding.nl [Care for Breast-feeding]

www.babyvoeding.org stichting baby voeding [Foundation for baby feeding]

Tobacco, alcohol and medicine

www.stivoro.nl (stivoro, on the consequences of smoking and stopping smoking)

www.alcoholpreventie.nl (Foundation for Alcohol Prevention)

www.voedingscentrum.nl

Other information

www.minszw.nl (parental leave)

www.kinderopvang.startpagina.nl (all you need to know about childcare)

www.minvws.nl (Ministry of Health, Welfare and Sports)

www.socialezekerheid.nl

www.ikvader.nl

Professional organisations

www.knov.nl (Royal Dutch Society of Midwives, KNOV)

www.nvog.nl (Dutch Association for Obstetrics and Gynaecology, NVOG)

www.gezondebaby.nl (National Institute for Public Health and the Environment, rivM)

nhg.artsennet.nl (Netherlands Society of General Practitioners)

www.cvz.nl (Board of Healthcare Providers)

Pre- and postnatal training

www.zwanger.startpagina.nl

www.samenbevallen.nl

www.mensendieck.nl

www.yoga.startpagina.nl

www.haptonomie.startpagina.nl

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Personal notes, questions or reminders

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Colophon

The Growth Guide is a publication by the GGD [Municipal Health Service] Amsterdam. The Guide consists of seven volumes:

- Planning for Parenthood
- Pregnancy
- Breast-feeding
- Post-natal period
- 0 - 4 years old
- Primary school age
- Adolescence

These seven volumes together make up the Growth Guide, but they can easily also be used separately. If you want another volume, go to www.groeigids.nl. The first five volumes are available in English.

The following organisations contributed to this Growth Guide: paediatricians, maternity centres, lactation experts, the GGD Youth Health Centre 'Hollands Midden', Jong Florence, CJG The Hague, Youth Health Services for the Amsterdam Health Centres, GGD Amsterdam Youth Health Services, GGD Amsterdam Health Promotion and Epidemiology, Youth Care Office for Greater Amsterdam, pedagogic consultants, SO&T Foundation – quality in upbringing and growing up, dieticians, logopedicians, information officers, Eigen Taal & Cultuur, school and community experts and several parents.

Editor : Remmers & Dering
Design : Hollandsch-Welvaren B.V.
Studio : Basix
Photos : Anne Dokter
Printing : Drukkerij de Bij
Organisation, final editing : drs. A. Kesler, MD
GGD Amsterdam
Translation : Tolk- en vertaalcentrum NL

ISBN numbers

Growth Guide:

Planning for Parenthood	978-90-5348-171-4
Pregnancy	978-90-5348-172-1
Breastfeeding	978-90-5348-173-8
Postnatal Care	978-90-5348-174-5

GroeiGids:

Kinderwens	978-90-5348-145-5
Zwanger	978-90-5348-196-7
Borstvoeding	volgt
Kraam	978-90-5348-168-4
0-4 jaar	90-5348-136-2
Basisschoolkind	978-90-5348-189-9
Puberteit	978-90-5348-193-6

The Growth Guide has been put together with great care. The GGD Amsterdam is not responsible for damages that are directly or indirectly related to the advice included in this volume.

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