

Lansinoh.



A guide to breastfeeding



Contents

02	How your body produces breastmilk	11	Five fundamental breastfeeding positions	20	When you are worried that you do not have enough breastmilk
04	Breastmilk composition	13	When to feed baby	22	Expressing breastmilk
05	Properties of colostrum and mature breastmilk	14	Overcoming Breastfeeding Problems	23	Storing breastmilk
06	Benefits of breastfeeding		<i>Flat or inverted nipples</i>	24	Your diet while breastfeeding
07	Starting to breastfeed		<i>Breastfeeding with sore nipples</i>	26	Taking medication
08	How your baby drinks from the breast – explained in three steps		<i>Engorgement</i>	27	Returning to work
09	How to attach your baby to the breast		<i>Plugged/Blocked Ducts</i>	28	Questions answered!
10	Breastfeeding positions		<i>Mastitis</i>	29	References
		18	Tiredness with a new born baby		

Breastfeeding – the best start for baby

As well as being the most natural way to feed your baby, breastfeeding creates a special bond between mother and child.

Exclusive breastfeeding is recommended for the first six months (26 weeks) of your baby's life for the wellbeing of your child and their development.

You can continue to breastfeed for as long as you and your baby feel comfortable. There are many important health benefits for you as a breastfeeding mother as well as long-term benefits for your baby, lasting right through until adulthood.

Let your instincts guide you and enjoy breastfeeding!

How your body produces breastmilk

ALVEOLI/BREAST GLAND

Where the milk develops

The lactation cells that look like grapes produce breastmilk.

Milk (Lactiferous) ducts

Through which the breastmilk flows

Small muscle cells help move the breastmilk through the lactiferous ducts.

Nipple

Where the breastmilk is released

There are 4-18 pores in the nipple which the milk flows through.

Areola

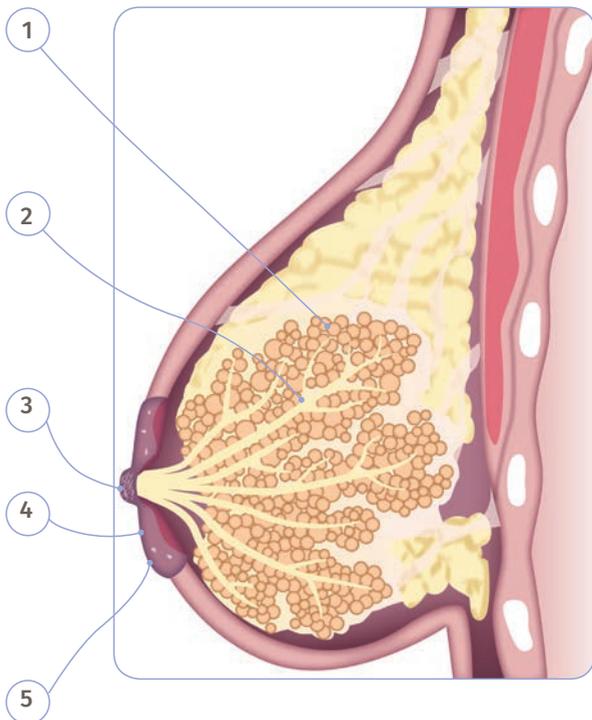
The darker pigmented area of the breast

It is thought that this may serve as a target to help the baby locate the nipple.

Montgomery Glands

Oil producing glands situated on the areola

These oil producing glands discourage the growth of bacteria on the skin and nipple area.



The female breast

The breast is a gland consisting primarily of connective and fatty tissues that support and protect the milk producing areas of the breast. The milk is produced in small clusters of cells called alveoli. The milk travels down ducts to the nipples.¹

Breastfeeding success has nothing to do with the size of your breasts or nipples. Breast size is an inherited trait and determined by the number of fat cells you have. The breasts will enlarge with pregnancy and breastfeeding. Breastfeeding is a supply and demand process. Therefore, the more you nurse, the more milk you produce!²

The nipple and areola (the dark area around the nipple) enlarge and darken during pregnancy. This may help your baby latch on by providing a clear “target”.

The small bumps on the areola are called Montgomery glands. They produce a natural oil that protects the skin of the nipple and areola during lactation, and produce the mother’s individual scent that attracts her baby to the breast.³

Use only water to clean your breasts. Soaps, lotions or alcohol might remove this protective oil.

When your baby nurses, the action of baby’s jaw and tongue pressing down on the milk sinuses creates suction. This causes the milk to flow out of your breast and into your baby’s mouth. Each nipple has (4-18) openings for milk to flow through.⁴

How your body responds to your baby’s suckling:

When your baby suckles your nipple sensory impulses pass from the nipple to the brain. In response, the pituitary gland secretes prolactin and oxytocin, two hormones that directly affect breastfeeding. Prolactin supports lactation whilst oxytocin triggers the lactation reflex also known as ‘let-down’. Oxytocin makes cells around the alveoli contract. This makes the milk, which has collected in the alveoli, flow along and fill the milk ducts. Sometimes the milk is ejected in fine streams. This reflex causes milk to enter the milk ducts so that it can be passed on to the baby through the nipple. This passing of the milk down the ducts is called the “let-down” reflex. The milk begins to flow when the baby suckles on the breast. This process is more effective the more often the baby feeds from the breast.⁵

Breastmilk composition

The composition of breastmilk changes over the course of the breastfeeding period.

Breastmilk contains all the nutrients that an infant needs in the first 6 months of life, including fat, carbohydrates, proteins, vitamins, minerals and water. Breastmilk also strengthens the infant's immature immune system, providing protection against infection⁶.

Breastmilk ingredients and their function.

The main ingredients of breastmilk are water, carbohydrates (including lactose), various fats and specific proteins.

Ingredients of breastmilk

Carbohydrates: The main carbohydrate is the special milk sugar lactose. Breastmilk contains about 7 g lactose per 100 ml, and is another important source of energy.⁷

Fats: Breastmilk contains about 3.5g of fat per 100 ml of milk, which provides about one half of the energy content of the milk. Breastmilk fat contains long chain polyunsaturated fatty acids (docosahexaenoic acid or DHA, and arachidonic acid or ARA) that are not available in other milks. These fatty acids are important for the neurological development of a child.



Protein: Breastmilk contains two types of proteins: whey and casein. These proteins have great infection prevention properties protecting the infant from viruses and bacteria.⁸

Properties of colostrum and mature Breastmilk

Colostrum (baby's first breastmilk)

Colostrum is the initial milk that develops in the breast from the 20th week of gestation and the first few days following birth. This valuable milk is rich in antibodies, yellow in colour and contains a larger percentage of protein, minerals and fat-soluble vitamins (A, E and K).⁹

Colostrum provides important immune protection to an infant when they are first exposed to the micro-organisms in the environment, and helps to prepare the lining of the gut to receive the nutrients in milk. It is important that infants receive colostrum, and no other feeds, at this time.¹⁰

Other ingredients of colostrum such as vitamin A support the babies vision and development of healthy skin.¹¹

Approximately two to four days after birth breasts may become fuller and warmer. This is often referred to as your milk “coming in”. This is the creamy milk that immediately follows colostrum. Transitional milk is produced anywhere from about two to five days after birth until ten to fourteen days after birth. Breasts will supply a much greater amount of transitional milk than colostrum, and breasts will become larger and firmer during this stage. Unlike colostrum, transitional milk already contains more fats and carbohydrates, but fewer proteins than fully developed mature breastmilk. The consistency of the milk changes from a thick to a creamy liquid, and the colour changes from golden yellow to milky white.

Mature breastmilk

Your breast will produce mature milk from eight to ten days after the birth of your child. Mature milk is produced in as great a volume as transitional milk but is thinner and more watery or even bluish; sometimes it's described as looking like skimmed milk when it is first secreted, until the fat is released later in the feeding and it becomes creamier. Unlike colostrum it contains fewer proteins but more lactose and fats. This raises the calories contained in the breastmilk.



Benefits of breastfeeding

Breastfeeding creates a special bond between the mother and child and has many other benefits:



For the baby ^{12, 13}

- Supports the development of the brain
- Provides easily digestible milk that is absorbed quickly by the body
- Reduces the risk of obesity and metabolic disease in later life
- Strengthens the bond between mother and child
- Reduces the risk of developing infections, with fewer visits to hospital as a result
- Reduces sudden infant death syndrome (SIDS), childhood leukaemia, type 2 diabetes, obesity and cardiovascular disease in adulthood



For the mother ¹⁴

- Helps to raise the mother's awareness for of the baby's needs
- Supports weight loss after birth
- Helps the uterus return to its normal size
- Reduces the risk of developing breast and ovarian cancer
- Reduces the risk of developing type 2 diabetes

Starting to breastfeed

Following the energetic and emotional birth experience, you will start a new life adventure together. Holding your baby against your skin as soon as possible after birth will calm them and give you both the chance to rest, keep warm and get to know each other. They can experience your smell and taste. Your baby might move towards the breast and work out the best way to suckle for themselves. Breastfeeding also releases lots of oxytocin in baby and mother, which will help you to feel close and connected.¹⁵

Breastfeeding is a new experience for you and your baby. It may take a while but you will learn these new skills together¹⁶. Your baby will need to take a good mouthful of breast in order to massage the milk from the breast. You'll soon learn how it feels when your baby is feeding well. In the early days be guided by what you see, feel and hear.

You also needn't worry about the size or shape of your breasts. You will be surprised how well a baby can adapt. The first breast feed should take as long as you both want – don't put yourself under pressure. If you feel it's not working the first time your baby tries to attach, ask your midwife to help you.

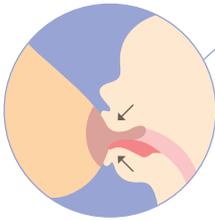
A new-born's stomach is the size of a small marble and a few drops of the honey-like, golden yellow colostrum will suffice to fill it. This very special milk has a unique composition and provides the best start in life.



How your baby feeds from the breast - explained in three steps

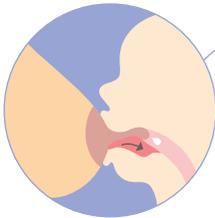
How a baby drinks from the breast.

When a baby is born it already has the ability to drink milk from its mother's breast. These three steps are designed to ensure the baby can drink effectively from the breast. If you would like to occasionally feed a bottle of expressed milk the chosen bottle should facilitate these three steps. This will allow the baby to retain its established feeding and sucking pattern.



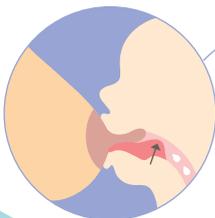
1 The baby "attaches"¹⁷

As a first step the baby tightly covers the nipple and areola with its lips and tongue. A light vacuum develops.



2 Tongue movements¹⁸

Then it starts carrying out wave-like tongue movements. These movements massage the nipple and express breastmilk into the baby's mouth.



2 The baby swallows¹⁹

Then the back of the tongue rises and directs the milk into the oesophagus.

How to attach your baby to the breast

Be aware of the signals your baby is showing you. Sucking their hand or touching and licking their lips are early signs of hunger. When you see these signs it is a good time to place your baby near your breast.

1 Preparation

It's worth getting comfortable before you feed. Use pillows and cushions if necessary keeping your shoulders and arms relaxed. Ensure that your baby is in line, close to your body, nose opposite your nipple. Tease baby by brushing them over your nipple to encourage baby to open their mouth wide, lead baby swiftly onto the breast keeping the nipple pointed to the roof of the mouth, leading in with the chin.



2 Positioning and attachment

You may feel pressure/tightness around your areola. On looking you will see that baby has a wide angle to his mouth. More areola should be visible above baby's top lip than the bottom lip. The baby's nose should be free and chin deeply indenting the breast. The baby should have full fat cheeks and be settled into your body (no squirming). You should be able to feel and see baby sucking and once the milk 'let's down' hear swallowing. Breastfeeding should not be painful after the first few sucks. If feeding is painful it is important to remove baby from the breast and try again.



3 Removing from the breast

Usually your baby will let go of your breast themselves when they are satisfied. To avoid damage to your nipples gently break baby's suction, by gently inserting a finger into the corner of their mouth to press down on the lower gum and gently slide baby off.²⁰



Breastfeeding positions

Breastfeeds vary in length and frequency as only your baby knows when they are satisfied. It is important that you start the feed in a comfortable position, which you can stay in for some time. Having your back supported will help.

Have baby's body in a straight line with his nose, belly and knees in alignment and hold your baby close to your body.

Have his nose opposite your nipple (not his mouth) and avoid touching the back of his head as he takes his head back and chin up towards the breast.

Whatever position you choose, remember:

- Bring your baby to your breast or let them attach rather than leaning towards them. Tuck them in closely to you.
- Check their ear, shoulder and hip are all in a line – not twisted round and make sure they are facing your nipple – they shouldn't turn their head. Using cushions, pillows and other supports may help in the early days.
- Many mothers take a while to get used to holding their baby comfortably.²¹



Five fundamental breastfeeding positions



The cradle hold

Hold your baby level with your breast. Your tummy and your baby's tummy should be close. Your baby will be looking in the direction of your breast. Support your baby's head with your right arm when attaching it to your right breast and with your left arm when attaching it left. If you prefer you can place your arm on a breastfeeding pillow or any other supporting pillow. Extend your forearm and hand to support their neck, spine and bottom.

This is one of the most frequent breastfeeding positions and works well for full-term babies and best for babies at about 1 months old when they have stronger neck muscles and it's easier to guide their mouth to the nipple.

The cross-cradle

In this position you support the baby's head and shoulders with the arm opposite of the side you want to attach the baby to. For instance, if you're nursing from your left breast, use your right hand to hold your baby, with your hand supporting baby's shoulders.

This position is suitable for babies who have difficulty grasping the nipple correctly or for babies with a low birth weight as you can better guide the baby onto the breast. After the baby has correctly attached and has started to feed you can switch to the cradle position or place the baby on the breastfeeding cushion.

Five fundamental breastfeeding positions continued



The clutch or rugby ball hold

In this position you are holding your baby under your arm, tucking them in like a rugby ball or clutch handbag. The baby is in line, close to you, facing your breast. Legs come around towards your back.

This position can work well if you have had a Caesarean section. It might prove easier if you have large breasts, flat nipples, or twins (in which case the position is called twins hold and you will be using a cushion under your babies as you gently support them with your hands on their upper backs).



Sitting upright

Sit the baby on your knee and support its head and shoulder.

This position is suitable for babies who are having difficulty grasping the breast and for small babies who can't suck as powerfully.

When to feed baby

Babies naturally show signals that they want to be fed. Keeping your baby close will help you recognise these.

Your baby will start to stir, wriggle, flicker their eyes, root and suck fingers. Eyes may appear wide awake. Crying is a late sign of hunger so feed baby when you see these early signs. 'watch your baby not the clock'.

How do I know when baby has had enough?

Baby knows when they have had enough. Some feeds will be long and some short. Some feeds are close together (cluster feeding) and some further apart. Babies normally feed 8- 10 times in a 24 hour period and it is not unusual for a baby to cluster feed during the evening or during the early hours of the night.

You can tell feeding is going well is by the content of the nappies. You should expect at least two yellow stools and at least 6 wet nappies in 24 hours by day 4. The baby should settle between feeds and your breast should be softer following feeds. The babies weight should be increasing.



Side-lying

Start off by lying on your side, keep all pillows out of the way but nearby to aid your comfort once baby is attached to your nipple. Turn baby completely on their side to face you. Bring their body close to you making sure that the head is tilting back and the baby can then attach to your breast.

This position is useful if you have had a caesarean section or you are finding it uncomfortable to sit or are resting in bed.

Overcoming Breastfeeding Problems

Breastfeeding is one of the most special and rewarding experiences ever and most breastfeeding issues can be avoided by good attachment and baby-led feeding. Here are some solutions to common worries:

Flat or inverted nipples

The size and shape of nipples and breasts vary widely between women. This has little to do with the ability to breastfeed – though if one or both nipples are flat or inverted, it may take a little longer to establish breastfeeding in the early days.

Before attaching:

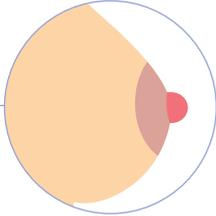
- 1 Massage the nipple and areola and ensure your baby is in a position to feed.
- 2 Try placing your thumb and finger on opposite sides of the areola (the darker skin around the nipple) and squeezing gently inwards²². Alternatively you can use a nipple everter to help shape the nipple.
- 3 Attach the baby to the breast as normal.

Ask your midwife or breastfeeding advisor about aids to form the nipple during your pregnancy (such as Lansinoh® LatchAssist™) which gently draws out the nipple.



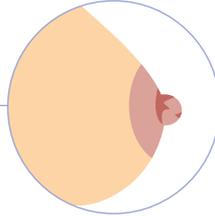
Breastfeeding with irritated/sore/cracked/bleeding nipples

The following situations are a sign that the baby has not attached deeply enough onto your breast. It is important that you seek professional help to improve attachment on the breast.



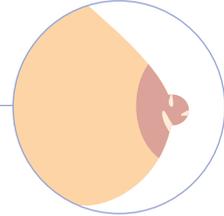
Irritated or sore nipple

- The nipple is exceptionally sensitive. Breastfeeding is unusually uncomfortable.
- The nipple is sore and inflamed without any visible damage.
- Attachment is painful; pain reduces during a feed.



Bleeding or blood blisters

- Blisters, including blood filled blisters have developed.
- A strong vacuum may develop while the baby is sucking on the breast.
- Strong attachment pain that usually remains during the entire feed.
- The baby may spit out blood-stained milk.



Cracks

- Cracks on the tip or on the side of the nipple.
- The nipple looks like cracked, dry skin.
- Painful when touched or when the baby is sucking.
- In this case the baby may also spit out blood-stained milk.

Tips that may help you heal

- Check positioning and attachment (see page 9). Ask your midwife, health visitor or peer supporter for advice on positioning and attachment.
- Use a pea-sized portion of HPA® Lanolin nipple cream to support the healing process. This cream can be used before and after breastfeeding.
- Feed on the least sore side first, then when the milk is flowing, switch breasts.
- Use and regularly change highly absorbent, breathable breast pads to avoid infections.

Engorgement – an excessive build up of milk within the breast.

It is normal for the breasts to feel warm, heavy and tender when they first fill with milk around 3 days after the baby is born. However, if the breasts feel hot, painful, hard and tight, it may be a sign that your breasts have become overfull. If left unresolved this may lead to further problems such as reduction in milk supply or Mastitis.

Enabling the baby to attach effectively can be difficult with an engorged breast. Gently expressing some milk at the start of feeds to soften the nipple can help to enable the baby to attach and have an effective feed. Following feeds, if the breasts remain full, further expression to soften the breast until comfortable will help avoid milk stasis (build-up of milk) which can reduce future milk production. Warmth before feeding/expressing can help milk flow more easily.²³

Plugged/Blocked Ducts

A plugged duct is an area of the breast where breastmilk is blocked. You will usually notice a hard lump to touch, it may be wedge-shaped and feel tender, hot, swollen or look reddened, although there may be tenderness or pain without any lumps. A plugged duct can feel more tender before nursing and less so afterwards because the strength

of baby nursing can dislodge some of the plugged duct. Mum can also feel tenderness between feedings as milk builds up. While it is not always the case, mum can sometimes get a low fever (less than 101.3°F/38.5°C).

As soon as you recognise that you have a blocked duct feed your baby frequently from the affected breast first. A delay in recognising and/or taking preventative measures could lead the milk to overflow into your breast tissue and this can lead to mastitis.

If you think you have a plugged duct:

- Continue nursing, and get proper rest and nutrition.
- Nurse frequently to drain the affected breast.
- Use heat and gentle massage on the affected area before and during nursing to encourage milk flow. Use warmed compresses such as Lansinoh® THERA° PEARL® 3-in-1 Breast Therapy packs before feeding sessions to encourage milk to flow and loosen the plugged duct.
- Avoid wearing tight clothing and underwired bras.
- Nurse first on the plugged duct side as baby's strong sucking at the beginning of breastfeeding can help dislodge the blocked area.
- After nursing, pump or hand express any leftover milk to ensure the breast has been emptied.
- Use cold compresses or cooled THERA° PEARL® 3-in-1 Breast Therapy packs in between feeding sessions to soothe and reduce inflammation.

Mastitis

Mastitis is a condition which can involve flu-like symptoms such as aches, a high temperature (fever), chills and tiredness. It usually occurs on one breast. The affected breast is very red, painful and swollen. It is usually caused by a bacterial infection. Mastitis usually occurs within the first three months after giving birth, but may develop at any time during breastfeeding. If the issue is not resolved in the first 12-24 hours, you may need to go on antibiotics. It is important to consult with a breastfeeding advisor or your healthcare provider to ensure that breastfeeding is not interrupted unnecessarily and that the medication prescribed is compatible with breastfeeding.

Treatment

If you think you have Mastitis, you should always visit your GP. They usually prescribe an antibiotic that can be administered while breastfeeding and does not have a negative effect on the

baby so that you do not have to stop breastfeeding. The treatment of mastitis also should involve staying in bed, a fever-controlling therapy and applying warm pads (to relieve engorgement and encourage let-down) and cool pads (to relieve pain and swelling due to engorgement).

If you think you have mastitis:

- Continue nursing and get proper rest, hydration, and nutrition.
- Nurse frequently to drain the breast. If baby won't nurse from one side, continue to pump to maintain your milk supply.
- Use heat and gentle massage on the affected area before and during nursing to encourage milk flow.
- Loosen tight clothing or bras.



Tiredness with a new born baby

Women experience life with a new-born baby differently and can have varying levels of fatigue. Sometimes it can be a great challenge to remain positive when you are sleepy or tired-out. Get some help from your family or friends and take some time for yourself to rest.

Physical fatigue

- **Sleep interruptions**

At first, babies don't know that night-time is for sleep and day-time is for being awake²⁴. The frequency of feeds a baby requires may vary considerably. Sometimes they will feed infrequently from your breast for a longer time, other times more frequently but for a shorter period. Unfortunately, this happens at night, too. Relaxing during daytime will help you both adjust to each other and find a joint rhythm. It is important to adjust your own rhythm of life to the requirements of your baby.²⁴



Mental fatigue

- **Take time to recover**

The lactation hormone (prolactin) relaxes breastfeeding mothers and makes you tired. It is natural for you to become very relaxed during breastfeeding. It is a good plan to relax and take a nap when baby settles. Recover from your tiredness while your baby is sleeping instead of doing housework!

- **Do activities with your baby**

Going for a walk with your baby can be refreshing for both of you. There also are many other exercise options, e.g. a gym, or yoga studio offering postnatal courses or classes, which allow you to do sporting activities with your baby.

Being active with your baby will help you to feel better and bring your body back into shape after a birth. Enjoy having fun with your baby and creating a deeper bond!

- **Look after yourself**

From time to time it is important to take a short break. If you are finding it difficult to get help from your family you can also contact a babysitter or daytime child minder. If your baby is being looked after you can concentrate on what is important to you and focus on the baby again later. Please remember to express your breastmilk and give it to the person who will be feeding the baby.

If physical exhaustion should continue for a longer period and you experience tiredness or inner sadness do not hesitate to speak to your GP, midwife, health visitor or peer supporter for advice.



When you are worried that you do not have enough breastmilk

The more often you breastfeed, the more breastmilk will be produced by your body.

As well as monitoring your baby's weight, you can often tell by the way your baby looks the way they feed, the quantity and frequency of wet and stool filled nappies, whether your baby is receiving enough breastmilk.

During the first days after birth you will feed your baby with colostrum and as soon as the milk production starts the number of wet nappies will rise. Frequent crying and a soft breast may indicate that you are not producing enough breastmilk. The amount of breastmilk increases and stabilizes the longer you are breastfeeding.

If you need some reassurance your baby is getting enough milk, it's a good idea to get a midwife, health visitor or breastfeeding specialist to watch your baby feed.

Baby's behaviour

There can be many reasons for a baby's behaviour other than a lack of milk. Some of the most common worries and possible explanations are detailed below.

1. Your baby often wakes up or cries while they are sleeping

Even if your baby has received enough milk it may have a light sleep or feel uncomfortable for other reasons. In many cases they might just want your company and are crying to get it.

2. Your baby frequently wants to drink from your breast

A baby's stomach is quite small and can only hold a limited amount of milk. Breastmilk is also very light and is quickly digested, so your baby might not feel full for long. This is why the intervals between breastfeeds are often very short. This breastfeeding behaviour is called "cluster feeding" and is quite normal.

Your baby also will experience various growth spurts. In phases of greater growth and development, they will demand feeds more frequently.



3. Your breast will no longer feel as swollen

About 2 to 3 weeks after birth the mother's breast is no longer as swollen. The breast tissue has "adapted" to producing breastmilk and the light swelling resulting from that will reduce. This usually makes the breast feel considerably softer. It does not mean that the milk production has decreased.

4. Your breast has reduced in size

It is well known that the size of the breast is in no relation to the amount of breastmilk produced. Smaller breasts are also capable of producing sufficient milk.

5. The baby seems to be drinking too little milk.

The amount of breastmilk a baby drinks while feeding varies from baby to baby. Increasing weight is a key indicator of whether your baby is drinking enough.

6. Only small amounts of milk are produced through expressing

The amount of breastmilk expressed and the amount of milk that a baby drinks while feeding may not be identical.

Expressing breastmilk

There are many reasons why you may wish to express and store your breastmilk – returning to work or a night out with friends.

Expressing will help to empty and stimulate your breast to make more milk. Express after your baby has had a breastfeed. To start with you may not get much milk – persevere as your body needs time to adjust to the increased demand.

When to express?

One of the key session times is the night time feed. At this feed your prolactin levels are at their highest because your body wants to make milk for the next 24 hours of breastfeeds. It is always preferable to breastfeed your baby at the night time feed.

Expressing breastmilk

Wash your hands thoroughly before starting to express. Sit in a comfortable position and relax your shoulders down. This will help with milk release.

Remove tight clothing/consider not wearing any tops. This will give you unrestricted access to your breasts especially when just starting to express.

Hand massage is an ideal way of stimulating your hormones and breast tissue. It will also help to warm up your breast which will help your milk to flow. A warm pad may also help. You can express milk using your hand or a breast pump.

Additional expressing of breastmilk, may trigger increased milk production.

Let your midwife, Health visitor or peer supporter show you the expressing technique or how to use a breast pump.



Breast pump

Storing breastmilk

- Wash your hands thoroughly
- Refrigerate or freeze as soon as possible
- Do not add freshly expressed breastmilk to frozen milk
- Get into the habit of labelling your storage container/bag, include; 'your name' 'breastmilk' 'date' and 'time'
- Remember not to overfill each bag as milk expands when frozen. 60mls is the maximum you should put in each bag
- Whilst freezing, bags can catch on other foods or the freezer racks. To reduce the risk of your bag being damaged consider putting a large plastic tub, into your freezer. Place each bag flat carefully to prevent damage to bags

Lansinoh® Breastmilk Storage Guidelines

How long can breastmilk be stored?		How long can thawed breastmilk be stored?	
Room temperature	6 to 8 hours	Fridge (up to 4° C)	unopened 24 hours
Fridge (up to 4° C)	Up to 3 days	Fridge (up to 4° C)	after opening 12 hours
Freezer 0° F (-18° C)	6 months		

Source: La Leche League International, 2008

Tips for expressed and stored breastmilk

- Breastmilk that has been heated once should not be cooled or frozen again.
- Breastmilk should never be heated in the microwave as it destroys many valuable nutrients.
- Remember to date all stored expressed breastmilk and use the oldest breastmilk first.

Your diet while breastfeeding

It is important for your health that you eat a varied and nutritious diet. Breastfeeding women can often feel thirsty, so make sure you drink enough fluids (water, milk and unsweetened fruit juice are good options) and always have a drink at hand when you settle down to feed your baby. If your urine is dark in colour you may need to drink more fluids. Drink to satisfy your thirst, but don't overdo it – there is no proven link between fluid intake and milk supply.

Due to the lack of sunlight in the UK, some pregnant and breastfeeding women are at risk of vitamin D deficiency. Therefore, as a precaution, it is recommended that breastfed babies be given additional vitamin D from birth. Your GP or health visitor can advise you on vitamin D supplements for you and your baby.

Do not restrict your diet too much in order to lose weight as it may not only have a negative effect on your health but also on the quality of your breastmilk.

A healthy diet includes²⁵

- At least five portions of a variety of fruit and vegetables a day, and no more than one 150ml glass of 100% unsweetened juice.
- Starchy foods: Wholemeal bread, pasta, rice and potatoes
- Fibre: Wholemeal bread & pasta, breakfast cereals, rice, pulses such as beans and lentils, and fruit and vegetables.
- Protein: Lean meat and chicken, fish, eggs, nuts, seeds, soya foods and pulses – at least two portions of fish a week is recommended, including some oily fish.
- Dairy: Milk, cheese and yoghurt – these contain calcium and are a source of protein.
- Drinking plenty of fluids: Have a drink beside you when you settle down to breastfeed: water or milk are good choices.



Effects of alcohol, smoking and caffeine

If you intend to have a rare drink on a special occasion, expressing breastmilk in advance is a good idea. If you have been drinking alcohol, never share a bed or sofa with your baby.

It has been proven that nicotine has a direct effect on the baby. It causes vomiting, diarrhoea, an increased pulse rate and restlessness. A smoke-free environment is also an important element of a healthy sleeping environment for a baby. It can reduce the risk of sudden infant death syndrome.

Caffeine-containing drinks such as tea, coffee and some fizzy drinks result in caffeine being passed into the breastmilk.

An increased amount of caffeine therefore may cause irregular sleep patterns for the baby. If you cannot miss out on your early morning coffee, you should drink two cups per day max. or try caffeine-free variants.

In summary

- Eat well-balanced and varied meals.
- No foods are forbidden but everything in moderation.
- Drink enough liquids (approx. two litres per day).
- Avoid too much caffeine, less than 300 mg per day, as babies may react sensitively to it²⁶.
- Avoid nicotine and alcohol.
- Vegetarians and vegans should consult their midwife, lactation consultant, health visitor or GP about suitable foods.



Taking medication

If you are taking medication during breastfeeding, you should consult your GP.

Many medications enter the breastmilk and are passed on to the baby during breastfeeding. However, there are only few medications that have a negative effect on your breastmilk, the milk volume and the baby.

To be sure please consult your GP before you take your medication, even prescription-free and herbal medicines should be checked.

A GP can evaluate side effects and possible risks.



Returning to work

How you can combine breastfeeding with returning to work:

Returning to work is a big step and leaving behind your breastmilk for your caregiver to feed your baby is one of the best things you can do. By expressing your breastmilk and storing it will give you peace of mind when you are away from your baby and will keep up your milk supply so you and baby can breastfeed when back together. Seek support from your family, your employer or childminder so you can combine your work with breastfeeding. When bringing your expressed breastmilk home from work, a coolbag is recommended for transportation.

A manual breast pump can be used for those times when you feel full and will only be gone for a short time, and electric pumps help quicken the process when you are expressing frequently and larger amounts.

You also want to think about where and how you are going to store your breastmilk at work. Lansinoh® Breastmilk Storage Bags are specially designed to keep breastmilk safe and secure so it can be stored in the fridge or the freezer. Always follow the storage instructions.

- Breastfeed immediately before and after work.
- Wear clothing that makes it easier for you to breastfeed or express breastmilk such as button down tops.
- Get a breast pump so you can extract milk while at the office.
- Freeze the milk you extract so that it can be thawed and used throughout the day.
- To make extraction easier and trigger lactation take a photo of your baby with you to where you will be expressing.
- Ask your childminder, babysitter or relative not to feed your baby immediately before you collect them.
- Breastfeed regularly during the night and on weekends.



Questions answered!

Important questions while preparing to breastfeed

The following questionnaire can help you if you want to speak with your midwife or GP during your pregnancy.

Take advantage of the time when you are pregnant to get your questions answered so that you are more relaxed and prepared when you start breastfeeding.

What do I have to know about breastfeeding?

What support can I get with breastfeeding during the first days after birth?

Who is running breastfeeding classes to offer advice and support?

What can I do if I am experiencing problems while breastfeeding?

Who should I discuss my interest in to breastfeeding with? The midwife, health visitor?

Are there procedures or complications during birth that can influence breastfeeding?

How can I continue to breastfeed when I return to my workplace?

Here is space for your questions to be answered by your health professional/ breastfeeding advisor:

References

- 1 **Journal of Anatomy (2005)** "Anatomy of the lactating human breast redefined with ultrasound imaging" Ramsay DT, Kent JC, Hartmann RA and Hartmann PE, at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1571528/>
- 2 [http://www.babies.sutterhealth.org/breastfeeding/bf_production.html#Anatomy of the female breast](http://www.babies.sutterhealth.org/breastfeeding/bf_production.html#Anatomy%20of%20the%20female%20breast)
- 3 **World Health organisation (WHO) (2009)**, *Infant and Young Child Feeding: Model Chapter for Textbooks for Medical Students and Allied Health Professionals, Session 2 The physiological basis of breastfeeding*, <https://www.ncbi.nlm.nih.gov/books/NBK148970/>
- 4 **Journal of Anatomy (2005)** "Anatomy of the lactating human breast redefined with ultrasound imaging", Ramsay DT, Kent JC, Hartmann RA and Hartmann PE, at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1571528/>
- 5 **Journal of Anatomy (2005)** "Anatomy of the lactating human breast redefined with ultrasound imaging", Ramsay DT, Kent JC, Hartmann RA and Hartmann PE, at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1571528/>
- 6 a **World Health organisation (WHO)**. *Infant feeding: the physiological basis*. Bulletin of the World Health Organization. 1989;67(Suppl.):1-107. [PMC free article] [PubMed]
- b **Breastfeeding: A guide for the medical profession**. 6th Edition. Lawrence RA, Lawrence RM. London: Mosby; 2005.
- c **Preface. The Pediatric Clinics of North America**. 2001;48(1):xix-xx. Schanler R, guest editor.
- d **Breastfeeding and human lactation**. Boston, USA: Jones and Bartlett; 2004. *The biological specificity of breast milk*. Riordan J.
- 7 **Breastfeeding and human lactation**. Boston, USA: Jones and Bartlett; 2004. *The biological specificity of breast milk*. Riordan J.
- 8 **Breastfeeding and human lactation**. Boston, USA: Jones and Bartlett; 2004. *The biological specificity of breast milk*. Riordan J.
- 9 **Breastfeeding: A guide for the medical profession**. 6th Edition. Lawrence RA, Lawrence RM. London: Mosby; 2005.
- 10 **World Health organisation (WHO) (2009)**, *Infant and Young Child Feeding: Model Chapter for Textbooks for Medical Students and Allied Health Professionals, Session 2 The physiological basis of breastfeeding*, <https://www.ncbi.nlm.nih.gov/books/NBK148970/>
- 11 **World Health organisation (WHO) (2009)**, *Infant and Young Child Feeding: Model Chapter for Textbooks for Medical Students and Allied Health Professionals, Session 2 The physiological basis of breastfeeding*, <https://www.ncbi.nlm.nih.gov/books/NBK148970/>
- 12 **UNICEF UK**, *Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK* https://353ld710iigr2n4po7k4kgv-wpengine.netdna-ssl.com/babyfriendly/wp-content/uploads/sites/2/2012/11/Preventing_disease_saving_resources.pdf
- 13 <http://www.nhs.uk/conditions/pregnancy-and-baby/pages/benefits-breastfeeding.aspx>
- 14 **UNICEF UK**, *Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK* https://353ld710iigr2n4po7k4kgv-wpengine.netdna-ssl.com/babyfriendly/wp-content/uploads/sites/2/2012/11/Preventing_disease_saving_resources.pdf
- 15 https://353ld710iigr2n4po7k4kgv-wpengine.netdna-ssl.com/babyfriendly/wp-content/uploads/sites/2/2014/05/happybaby_leaflet-web-2016-2.pdf
- 16 <http://www.nhs.uk/Conditions/pregnancy-and-baby/Pages/breastfeeding-positioning-attachment.aspx>
- 17-19 <http://www.pigeon.com/products/bottlesandnipple/>
- 20 **American Academy of Pediatrics**. *New Mother's Guide To Breastfeeding*. Bantam Books. New York. 2011. <https://www.verywell.com/break-the-suction-431645>
- 21 **www.nct.org.uk**
- 22 <https://www.laleche.org.uk/inverted-nipples/>
- 23 <https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/support-for-parents/engorgement/>
- 24 <https://www.nct.org.uk/parenting/your-baby%E2%80%99s-sleeping-pattern>
- 25,26 <http://www.nhs.uk/Conditions/pregnancy-and-baby/Pages/breastfeeding-diet.aspx>

We hope that you and your baby have
a great start to your life together
and wish you all the best throughout
your breastfeeding journey.



www.lansinoh.co.uk

Lansinoh.

Lansinoh Laboratories Inc.
Suite 11, West Wing, Jason House
Kerry Hill, Horsforth
Leeds LS18 4JR

Tel: + 44 (0) 113 205 4201
E-Mail: info@lansinoh.co.uk