



# Your Breast Milk Journey

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my expert  
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Helping you feel like you again

Even before a pregnancy test confirms that you are pregnant, your breasts are one of the first parts of the body to change and you may already be noticing swelling, soreness, and the feeling of fullness in your breasts. This is due to hormones such as progesterone and oestrogen.

**Your body is already preparing to feed your baby after they are born!**

There are often visible changes including larger and darker areolae (the pigmented skin around your nipple), more prominent veins and an increase in size. Your nipples will likely become larger, more prominent, or even change shape. Women can still feed from flat or inverted nipples (more support may or may not be needed).

# Your first milk



**All the milk that your breasts produce is breast milk, including colostrum, and is designed to sustain your baby, build their immune system, and contribute to their short and long-term development.**

As your baby's first food, you might expect your breast milk ingredients to include basic essential nutrients, such as carbohydrates, proteins, and fats, as well as water to keep them hydrated, which it does. But breast milk is no ordinary food – it has more value than nutrition alone. Colostrum is often thought of as separate milk to “breast milk” but in fact, colostrum is just the name of the first milk you make. You may have heard names for your breast milk such as colostrum, mature milk, fore milk and hind milk. Well, they are all breast milk, and they are all tailor-made to your baby's specific needs for their age and current

demand that day. Growth, illness, and environment can all influence your breast milk composition.

Colostrum transitions usually around day 3-5 when fattier milk starts being produced. It is already being produced prior to birth and can be seen by many women during pregnancy. Some women don't see any colostrum until after birth but it is still there.

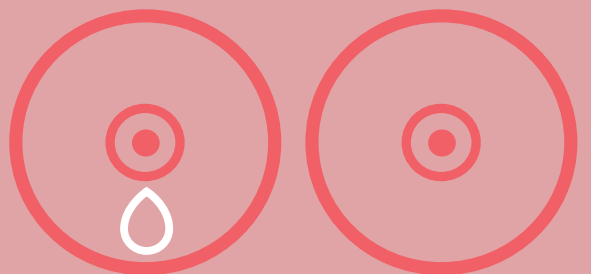
Colostrum is richer than the transitional and later breast milk to come, with a different nutritional profile. In regard to composition, colostrum actually has more in



common with blood than it does with breast milk since it's full of white blood cells and immune-boosting properties. This liquid gold is also higher in protein, and lower in sugar and fat, so it's an easy first food to digest.

Colostrum contains antibodies to protect your new-born against disease and infection, growth factors and other bioactives that help to activate their immune system, jumpstart gut function, and seed a healthy gut microbiome in the first few days of life, giving your baby the best possible start.

Harvesting (collecting colostrum via syringe pre-birth) can be beneficial for women for a variety of reasons.



# How to hand express colostrum

Colostrum is the milk your body produces the first few days following the birth. It is calorie dense and contains antibodies to help develop your baby's immune system.

Colostrum is the milk your body produces the first few days following the birth. It is calorie dense and contains antibodies to help develop your baby's immune system. [Collecting and storing your colostrum](#), from 37 weeks of pregnancy, can be a great back up plan if your baby doesn't breastfeed well for the first few times. It can

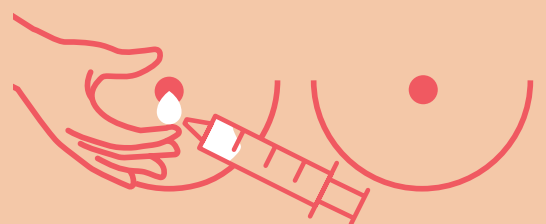
be frozen and then defrosted when needed. Having expressed colostrum can be a great help if your baby takes a little longer to establish a good latch or if feeding after birth needs to be monitored - such as when your baby's blood sugars need checking if you've had gestational diabetes or if your baby needs special care.

[My Expert Midwife Colostrum Harvesting Kit >](#)



## Here is a guide to hand expressing:

- > Find a time where you can relax for at least 30 minutes without being interrupted - it may be easier to practise whilst having a warm and relaxing bath the first few times.
- > Wash your hands.
- > Slowly and firmly, but comfortably, stroke your breasts from the top down towards the nipple with either a flat hand or make your hand into a fist.
- > Watch at the nipple for signs of any colostrum, which can be clear or milky coloured. It does not matter if you don't see any as just the action helps to stimulate the production.
- > After a couple of minutes, make a 'C' shape with your thumb and fingers around 2-3cms from the nipple end and use a gentle stroking and squeezing movement (only squeeze briefly and don't squeeze until its painful).
- > After a few attempts you should start to see colostrum gather at the nipple end, which you can collect in a sterile container or plastic syringe.
- > Any colostrum collected can be dated, labelled and stored in your freezer so it is ready to give to your baby, should they need it after they are born.



# Transitional milk



**If colostrum is your baby's first food and mature milk is their long-term nutrition, transitional milk is the bridge between the two.**

From day 5 to 14, your milk is called transitional milk. As the name suggests, it's changing from colostrum to mature milk. It becomes creamier in colour and texture, higher in fat and lactose (a natural sugar), whilst still containing antibodies and 'good' bacteria for their gut. It is ideal food for your rapidly growing baby.

The changes are fine-tuned to fit the demands of your baby's development. The quantity of milk you produce over this period increases dramatically too: you may make a whopping 600 - 700 ml over 24 hours – compared to the tiny amount of

colostrum you produced at first. Think of them as three different stages of breast milk, rather than three separate types. The basic ingredients remain the same for as long as you breastfeed, but their levels go up or down depending on circumstances. It is during this transitional period that they change most, on a daily basis, just as your baby's needs change.

Around day 3-4, or sooner if you have birthed a baby before, you will often notice an increase in the size of your breasts. This can be commonly referred to as 'your milk coming in' but we know that this saying can provide confusion to women



believing themselves not to have had milk in their breasts up until this point, whereas in fact you have absolutely had your breast milk all along, all be it your first milk for your baby.

Your breasts are now in ‘build supply’ mode as they learn how much milk your baby needs.

During the transitional period, the composition of your breast milk is adjusting remarkably. By the end of the first month, your milk becomes fully mature. This means it’s suitable for your baby as they grow older. Its make-up won’t change that much again, whether you continue breastfeeding for a few months, a year, or far beyond.

Although your baby is still tiny, over the first couple of weeks they’re already starting to develop their own immune system and need less immediate protection from you.

The protein content of the milk actually comes down around this time too. The protective proteins are synthesised at the same rate, but they are diluted by the higher volumes of milk being produced.

The concentrations of the minerals zinc, copper, and manganese – all of which help to support your baby’s immune system – also drop as your baby’s immunity improves.



# Mature milk



**By the time your baby is four weeks old, your breast milk will be fully mature. It's rich in protein, sugar, vitamins and minerals, plus numerous bioactive components – such as hormones, growth factors, enzymes, and live cells – to support your baby's healthy growth and development.**

From four weeks the nutritional content and levels of ingredients in mature milk generally remain fairly consistent. But the composition of your breast milk can still change from day to day and feed to feed.

For example, if you or your baby are ill, your body will make antibodies to fight that particular illness, which become part of your milk. And, remarkably, as your baby begins exploring the world and putting toys in their mouth, the level of protective bacteria-fighting enzymes in your

milk rises. This variation in breast milk composition shows how it adapts to your baby's changing needs.

# Fore and hind milk



You may notice your milk seems thicker and creamier towards the end of a feed. This is because, as the feed progresses, the fat composition gradually increases due to the mechanics of milk moving through the breast. It's often referred to as hindmilk, while the first more 'watery' milk is known as foremilk.

These two names might lead you to think there is a switch where foremilk becomes hindmilk, but there isn't - the change is a gradual process. Both are essential parts of a completed feed, and rich in vitamins, minerals, protein, and sugars.

Your milk's fat content relates to how drained your breast is. Your breasts will be fuller at the start of some feeds (milk lower in fat) and more drained at the start of other feeds (milk higher in fat).

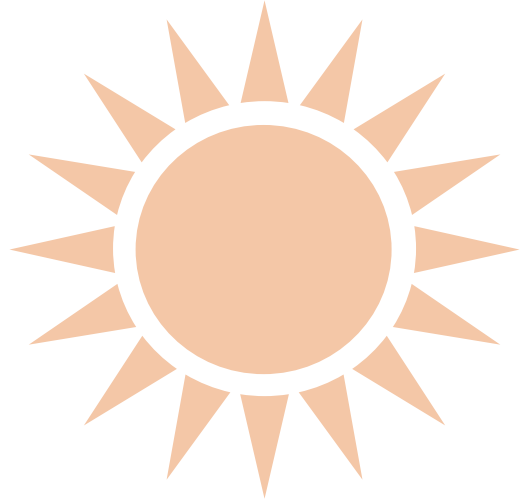
## How it all works

Breastfeeding is a supply and demand system. The more demand on the system through breastfeeding the baby, the more milk the body makes. Sometimes the body takes a day or two to catch up to baby's increased breastfeeding demand during a growth spurt and this results in your baby very naturally feeding more frequently during this period. This is normal and does not mean your baby is not getting enough. Keep well hydrated and eat well during this time. The frequency

of feeds will slow down once the supply has been increased. You may find applying your own breastmilk or a nipple cream soothing during frequent feeding.

### Hot weather and holidays

Your baby will often feed more in hot weather too but for shorter periods. Your breast milk is mostly made up of water and shorter feeds enable your baby to get more low-fat milk and so quenching their thirst more effectively. There is no need to give water to your baby. Allow your baby to feed responsively. Your body is very efficient at making milk for your baby, even if you feel thirsty your baby will be well hydrated.



### When your baby is unwell or teething

The levels of immunity-boosting cells, called leukocytes, in your milk also rise rapidly whenever your baby is unwell. And because breast milk is very easy to digest, it is also the ideal food for babies with upset tummies.

Breastfeeding at this time is not only a comfort but relatively easy for your baby to do, especially if your baby is older and on solids and does not have the energy to eat. Keeping your baby well hydrated during the period of illness will help them to fight off infection as well as allowing the mucus secretions to be thinned out if they have a cold or are congested.



## Responsive breastfeeding

Responsive breastfeeding involves a mother responding to her baby's cues, as well as her own desire to feed her baby. Crucially, feeding responsively recognises that feeds are not just for nutrition, but also for love, comfort and reassurance between baby and mother. For example, when a mother breastfeeds her baby responsively, she may offer her breast when her baby shows signs of hunger or when her baby is distressed or fractious. Breastfeeding can help settle baby after an immunisation if baby is unwell or to reassure them in an unfamiliar environment.

You can also offer your breast to meet your own needs, for example before you go out, before bedtime or because you want to sit down, rest and have a cuddle with your baby. Therefore, breastfeeds can be long or short and at varying times in the day, depending on why you and your baby have decided to feed.

The key to understanding responsive feeding is that it is what ultimately makes both breastfeeding and early parenting easier. Feeding becomes the first and usually most successful action when responding to baby's needs. It is important to know that your baby cannot be overfed or 'spoiled' by 'too much feeding' and that breastfeeding will not tire you any more than the normal tiredness that all mothers have when caring for their new-born baby.

Whilst responsive breastfeeding can be instinctive to many mothers, others can struggle in western cultures where there are often very strong attitudes regarding what constitutes a 'good' baby and the routines that should be achieved. Family and friends, baby-care 'experts', books and the media frequently reinforce the message that limiting feeds and enforcing a daily routine will make life easier. Therefore, mothers will often fight their instincts to respond whenever they or their baby wants to feed, and instead try and fit their baby into what they see as the desired pattern of feeds. All babies and mothers have different needs, and many babies may need to feed more frequently than the desired pattern dictates. This can leave the baby unsatisfied and distressed, which in turn undermines the family's confidence in the adequacy of breastfeeding. Limiting feeds to fit into this routine can also threaten the mother's milk supply and reduces the chances of successful ongoing breastfeeding.



## Top Tips for Breastfeeding

- ✓ Believe in yourself and the process. Your confidence in yourself can be attributed to higher success rates!
- ✓ Be prepared for your baby to feed frequently, especially in the first few days and weeks of life. Your baby is programmed to do this.
- ✓ Get comfortable utilising pillows and cushions. Try to remove any tension in your neck always bringing your baby towards you and not you to your baby.
- ✓ Breastfed babies often feed more at night. You will produce a hormone to help you get back to sleep after a feed, and your milk will contain increased levels of certain components which will help settle your baby.
- ✓ Keep hydrated and rest or sleep when your baby is asleep.
- ✓ Try to avoid soothers or bottles for at least two weeks to avoid confusing your baby.
- ✓ You may get sore – this does not necessarily mean that your latch is poor, however never be afraid to ask a midwife or breastfeeding expert to observe a feed to ensure your baby is latched correctly.
- ✓ Remember your breast milk acts as a natural healer! If you are sore, rub your milk around and over your nipple and areola post feeds.
- ✓ Purchase a good quality nipple balm and use liberally before and after feeds, or try using your own milk.
- ✓ Muslin cloths to clear up spills can be of fantastic use.
- ✓ Eat well and consider a daily breastfeeding vitamin to supplement your diet.
- ✓ Watch your baby grow! The frequency of wet and dirty nappies will reassure you that your baby is being nourished as well as your baby being weighed and numbers going in the right direction. Feel proud as you see your baby's rolls develop!

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