

A lot of Mums have a love/hate relationship with expressing or pumping, but for some mother baby pairs it is an essential tool to continue their breastfeeding journey. In fact, 85% of breastfeeding mothers use a pump at some stage. As with a lot of breastfeeding medicine, there is unfortunately little evidence around the topic. Most of the Doctors at Adelaide Mums and Babies Clinic have come to know our breast pumps quite well over the years and thought we would summarise in “Expressing 101”.

WHAT ARE THE REASONS FOR EXPRESSING BREAST MILK?

- Mother and baby are separated (i.e. work, travel or mum/baby in hospital)
- Baby is premature or unwell and unable to suck well at the breast
- Unresolved issues with fit and hold
- To increase supply by adding extra stimulation
- To assist in emptying breasts when supply is low or blocked ducts/mastitis (good fit and hold is still essential)
- Mum wishes to store breast milk
- Severe nipple trauma and the need to “rest” the nipples while still removing milk
- Emotional reasons (e.g. previous abuse)

HOW DO YOU EXPRESS BREASTMILK?

There are a few options for expressing breastmilk/colostrum. Antenatal expression of colostrum (expressing colostrum for storage prior to the birth of your baby), is something our team are more than happy to discuss with pregnant Mums. The technique utilised for this is hand expressing, and some Mums prefer this in the first few days postnatally or even later on. [Here is a useful link to a video on how to hand express.](#)

The other option is using a breast pump. There are a number of options which can make things confusing! Breast pumps can be either single or double (i.e. express both breasts simultaneously) and electric or manual. Some pumps are described as “hospital grade” which adds further confusion, as this is not a regulated term. A hospital grade pump simply means that the pump can be used by multiple users, such as what would happen in a hospital setting. Some manufacturers use the term to suggest that their pump is superior. There are varying degrees of portability between different pumps and different pumps suit different scenarios. Double pumping does reduce the amount of time taken to express and there is evidence that it does improve milk supply, especially in mothers with preterm infants. For our double pumping hacks, [click here.](#)

To express breast milk using a pump, it is important that you wash your hands first and be in a comfortable environment. In order to achieve a let down reflex it is useful to be as relaxed as possible. Some Mums find looking at photos or videos of their baby helpful in achieving a let down. Warmth or massage (e.g. a warm shower) prior to expressing may make things easier as well.

When you first use the pump, set it on the lowest setting and ensure your nipple is in the centre of the flange (see below for flange sizing). It should not hurt to express breast milk. Once you are comfortable with the pump, you can increase the suction setting. The milk expressed may vary in colour and composition based on a number of factors. “Hands on” expressing (compressing the breasts gently whilst using a pump) is shown to increase the volume expressed.

It is important that you change pump parts in accordance to the manufacturer’s instructions in order to get the most “bang for your buck” out of the pump.

HOW OFTEN DO I NEED TO EXPRESS?

This is dependent on how old your baby is and the reason why expressing is required. If you are expressing for a newborn baby, for example one that is premature and receiving nursery care with no time on the breast, you will need to express 8-10 times in 24 hours, roughly every 2-3 hours. Do not be disheartened if you do not seem to produce a lot of milk/colostrum. Newborn babies have very small stomachs! Some Mums recommend trying not to look at the volume expressed during an expressing session to avoid anxiety about the yield. There has even been a suggestion on social media recently to cover the expressing bottles with baby socks so you can’t see the yield! Importantly, don’t think the amount of milk you pump is reflective of your supply – your baby usually is a better pump and removes more milk from the breast!

For Mums separated from their babies when they return to work, it is recommended that they try to express roughly when a feed is “due” (bearing in mind a lot of babies feed on demand and this will vary on the age of the baby). This will provide a supply of milk to be offered to the baby whilst Mum is away, as well as potentially avoiding engorgement/blocked ducts/mastitis by skipping feeds.

For those Mums expressing in order to build a “stash” of breast milk, supply does fluctuate during a 24 hour period and you may find you manage to express more breast milk in the early morning as opposed to the evening hours. Other good times include pumping after a feed if baby has only taken one breast.

If you are pumping to try and increase your supply, it is best to leave a little time between finishing a feed and pumping, perhaps 15 minutes. The reasoning is two-fold. If you give it a bit more time after a feed, your breasts will start to refill, and you should get more volume, which you can use as a top up if you need. The other reason is that letting a breast partly refill and then emptying again is a more potent signal to the breasts to make more milk, rather than just keeping breasts empty for longer (which is what happens when you pump straight after a feed). It is important to acknowledge here that this is an incredibly challenging regime and Mums need to be very kind to themselves if embarking on this and accessing as much support as possible.

HOW LONG DO I NEED TO EXPRESS FOR?

It is recommended you express until the milk flow slows to a drip. This is different for every Mum and may be dependent on the type of pump used as well. Usually 10-15 minutes will suffice.

WHICH BREAST PUMP IS RIGHT FOR ME?

The Australian Breastfeeding Association has an excellent summary on different types of breast pumps available, which can be found by [clicking here](#). Manual pumps are good for those that pump infrequently or need the portability, but may not empty your breast fully and some may not get much volume at all. Then there are a range of electric pumps - single or double. Generally, the more you pay, the better the quality of the pump and the more settings to optimise milk removal. Increasingly there are all-in-one pumps that sit inside your bra and are super portable and discrete. Again, women will have varying success with these.

HOW DO I DETERMINE THE FLANGE SIZE?

Not all nipples are created equal! To account for this, breast pump shields/flanges come in a number of different sizes. Having the incorrect size may result in discomfort and lower milk volumes. A flange that is too small will result in your nipple rubbing on the sides. If the flange is too large, the areola will be drawn into the flange, which may result in pain at the base of the nipple. To determine the appropriate flange size, you will need to measure the base of your nipple. The Medela website has good information about this ([click here](#)). Different flanges are compatible with different pumps. Another great resource is the website "Pumpables", where you can access a "nipple ruler" and send a video (if comfortable) for assessment ([click here](#)). And of course, our team of GPs are more than happy to evaluate this in person.

WHERE CAN I GET A BREAST PUMP?

There are options to both hire or purchase a breast pump. Adelaide Mums and Babies Clinic hires Spectra pumps from the Rose Park location, [click here](#) to learn more. The Australian Breastfeeding Association also hire breast pumps (1800 686 268) as do several pharmacies and birthing hospitals. If you decide to purchase a breast pump, these can be purchased in baby stores, pharmacies or online. There are several brands available including Medela, Spectra, Avent, Ardo and Amela.

HOW DO I STORE EXPRESSED BREAST MILK?

The National Health and Medical Research Council (NHMRC) produce infant feeding guidelines regarding the storage of expressed breast milk. Once an infant has begun feeding, any milk not consumed should be discarded. If the milk has been freshly expressed, it can be stored at room temperature for 6-8 hours, in the refrigerator (back rather than the door) for up to 72 hours and 2 weeks to 12 months in the freezer depending on the temperature of the freezer. [A nice summary of the guidelines can be found here](#) on the ABA website. The Academy of Breastfeeding Medicine also has a fabulous protocol called "Human Milk Storage Information for Home Use for Full-Term Infants", and covers this in detail.

It is recommended that breast milk is warmed in a water bath rather than in a microwave. Some Mums use bags to store breast milk and others use bottles. If your baby is reluctant to take a bottle, perhaps try storing in smaller amounts to avoid wasting that precious expressed breast milk!

You do not need to discard your breast milk if you experience mastitis or thrush, however if your baby is diagnosed with a dietary intolerance the milk expressed prior to this diagnosis may need to be discarded (or donated!).

HELP! MY BABY DOESN'T SEEM TO LIKE MY THAWED BREAST MILK!

There are Mums who encounter no issues feeding their baby freshly expressed breast milk, but once it is refrigerated or frozen and thawed, their baby does not appear to enjoy the taste. This may be because of an enzyme named lipase. Lipase is normally in human milk and has many beneficial effects. If it is present in excess however, it may make the milk smell and taste "soapy" (it does not mean it is unsafe to drink). To deactivate the lipase, the milk can be scalded prior to storage, however it is important to note that this may destroy some of the anti-infective properties of breast milk.

HOW DO I CLEAN PUMP PARTS?

Contrary to popular belief, the evidence suggests that you don't need to sterilize pump parts for a healthy, term baby. For those expressing several times a day, it is recommended you rinse your pump parts to remove milk and then store them in a clean closed container or plastic bag in the fridge. You should clean the parts well at least daily by cleaning thoroughly with detergent and hot water, rinsing at least twice in hot water and air drying on a clean tea towel.

By Dr Rhiannon Smith