Growing Together

YOUR THIRD TRIMESTER PACKAGE

Prepared for you by the physicians
at Foothills Maternity Group

foothills
maternity group

Your Third Trimester Guide

As you prepare to welcome your baby, this guide has been put together to support you through the final weeks of your pregnancy. Inside, you'll find information on what to expect, how to prepare for labor and delivery, ways to monitor your baby's well-being, and resources to help you make informed decisions about feeding and newborn care.

This package includes:

- Colostrum collection
- Signs of labor and when to seek care
- Monitoring your baby's movements
- Recommended vaccines during pregnancy
- Feeding your baby

Please take some time to review these resources over the coming weeks. Every pregnancy is unique, so if you have any questions or concerns, don't hesitate to discuss them with your healthcare provider at your next appointment.

We look forward to supporting you through the remainder of your pregnancy and helping you prepare for your baby's arrival.

Collecting Colostrum While You're Pregnant

What is colostrum and why is it important?

- Colostrum is a fluid the breast makes from about the 20th week of pregnancy, up to the first few days after your baby is born.
- Colostrum is easy for your baby to digest—it's the ideal first food for your baby.
- It can range from dark yellow to clear, and can be quite thick and sticky.
- Colostrum gives the nutrition that all newborns need. It has a lot more protein than mature milk.
- Some of these proteins called antibodies help make your baby's immune system stronger.
- Colostrum has fat-soluble vitamins, some minerals, and salt. All help to protect your baby from becoming dehydrated in the first few days, before breastfeeding is established.
- While the breast doesn't make large amounts, colostrum is high in energy and helps the meconium pass (the baby's first bowel movement), which then helps prevent jaundice.

Why should I think about expressing colostrum by hand?

- Breastmilk is the recommended food for all babies, especially for babies with more health needs.
- In some cases, babies need to be fed shortly after birth, for example, babies with low blood sugar.
- By expressing colostrum by hand (antenatal expression) and bringing it with you to the hospital, you'll have this ideal food source ready for your baby, if needed.
- Mothers who collect colostrum while they're pregnant have more success establishing and maintaining breastfeeding.

When can I start expressing colostrum?

Doctors usually recommend you start when you're at least 37 weeks pregnant. You do not want to express before 37 weeks as it can stimulate contractions.

How do I hand express colostrum?

Put warm compresses on your breasts or begin expressing after a bath or shower, as the heat may help the colostrum flow better. It may take a few days of practice before you start seeing a few drops of colostrum.

It's strongly recommended that you watch the Stanford Hand Expression video at:
http://med.stanford.edu/newborns/professional-education/breastfeeding/hand-expressing-milk.html

Note: This video shows expressing milk after the baby is born. You will likely only make a small amount of colostrum while you're pregnant, and that's normal.

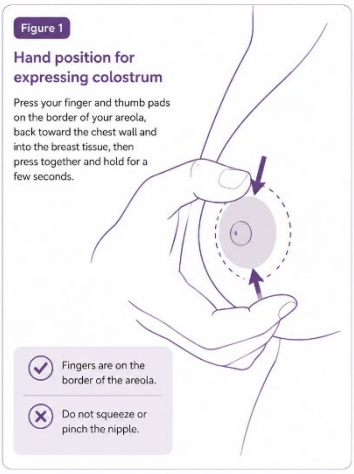
Before You Start

- Go to your pharmacy and buy syringes that hold 3 to 5 mL of liquid. You'll use the syringes to collect the colostrum after you express it.
- Make sure the cup or spoon you're using to collect the colostrum is clean and sterile.

Getting Started

1. Wash your hands.
2. Sit in a comfortable, upright position, leaning slightly forward.
3. Start with a gentle breast massage, stroking from the back of your breast towards the nipple.
4. Gently press your finger and thumb pads (not your fingertips) on the border of your areola back toward the chest wall and into the breast tissue, then press them together and hold for a few seconds (see Figure 1). Your fingers should be well back from your nipple, on the border of your areola, and shouldn't tug or drag on your nipple. Don't squeeze or pinch your nipple.
5. Repeat, using a rhythm like that of a baby suckling at the breast.

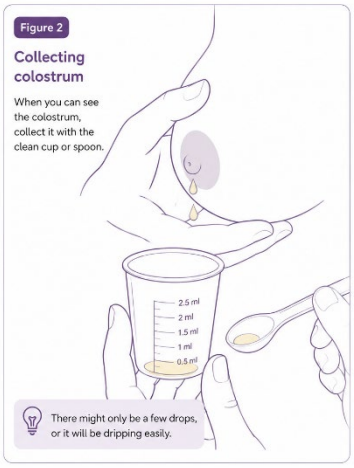
Expressing should be comfortable. Speak to your doctor if you have any discomfort or concerns, as you may need to see a lactation consultant.



When the Colostrum Starts Flowing

When you can see the colostrum, collect it with the clean cup or spoon (see Figure 2). There might only be a few drops from the nipple or it will be dripping easily.

1. When the colostrum stops flowing, rotate the position of your fingers and thumb around the areola and repeat the expressing process.
2. Switch to the other breast when the flow slows down or after 2 to 3 minutes.
3. Express on each breast twice during a session.



When You're Done Collecting

1. Collect the expressed colostrum from the clean cup or spoon using a syringe.
2. Label the syringe with your name, the date, and the time(s) you expressed.
3. Place the syringe in a freezer bag in the fridge until you're done collecting for the day. You can express colostrum 2 to 3 times each day.
4. At the end of the day, put the freezer bag in the freezer. The frozen colostrum can be stored for up to:
    - 4 months in a 2-door fridge or side-by-side fridge/freeze
    - 12 months in a deep freezer

Colostrum must be used within 24 hours after it's been thawed.

Bringing the Colostrum to the Hospital

1. Make sure everything is still labeled.
2. Put the freezer bag of syringes in a cooler or in a bag full of ice before bringing it to the hospital. Make sure the colostrum doesn't thaw before you get it to the hospital.
3. Tell your health care provider you brought frozen colostrum, so it can be put in the breastmilk fridge.

Note: If your baby needs the colostrum, you'll give about 3 to 15 mL. Not all hospitals have a freezer to keep your colostrum frozen during your stay, and all colostrum must be used within 24 hours of thawing.

Labour Information

Congratulations, your big day is almost here. Below is some information to help you prepare for labour, especially if you have not had the opportunity to do prenatal classes.

Please read through the AHS information '**Labour and Delivery'** on the **Healthy Parents: Healthy Children Website** for more information.
https://www.healthyparentshealthychildren.ca/im-pregnant/labour-and-birth

(This link also on clinic website under Third Trimester, Labour and Delivery)

You do not need to pre-register at the hospital. You can check our website under 3rd trimester for the **'Foothills Map'** and watch the **'Foothills Hospital Orientation'** video so you know where to go on the day.

When to go to Hospital?

You'll most likely begin labour somewhere between 37–41 weeks, typically 1–2 weeks before or after your estimated due date. It's usually safe to stay at home until active labour is well underway. Staying at home helps with coping and the progress of labour. Depending on where you live, the weather conditions, and if you have had a fast labour in the past you may need to leave for the hospital earlier.

You will need to come to the **Labour and Delivery Unit 51, 5th floor, Foothills Medical Centre** when:

- **Contractions are becoming stronger and are 4-1-1**:
    - You can use the 4-1-1 rule as a *guideline* - contractions have been 4 minutes apart for 1 hour, intense so you can't walk or talk through them, and lasting about 1 minute each.
    - Contractions typically start far apart and get closer together. However if your contractions stay far apart and you are exhausted/worried/not coping, or conversely they start intense and very close together *you can come to the hospital for assessment at any time.* Your doctor will ensure you and baby are safe, and admit you to the hospital for delivery if needed. If it is too early in labour to admit you, we can give you an injection for pain, and some coaching around when to return.
- **You're leaking fluid from your vagina** (your membranes may be ruptured)
    - Your baby's fluid sac is their protection from infection. If your waters are broken we do not want it to be a long time before you deliver.
    - Sometimes the leak is big and obvious, other times it is small - if you have repeated small amounts of clear fluid coming from your vagina and think your water may be broken come to the hospital. We will do an exam/tests to find out if this a leak of the amniotic fluid
- **If you notice your baby is not moving as much.** If you are not sure, please come for an assessment right away. Active babies are healthy babies.
- **If you have vaginal bleeding** - Spotting or brown/red/pink discharge is normal in labour. If you have bleeding like a period there may be a problem and we want you to come to the hospital for an assessment.

- **If you're not sure, you're not coping, or if you're worried it is always ok to come to the hospital**. If you have never had a baby before it can be hard to know what to expect. If you come and it is too early in labour to be admitted your doctor will make sure you and baby are safe, we can give you pain medication, and we can coach you about when to come back to the hospital.

Fetal Monitoring Information

Fetal Monitoring is used to observe your baby's heart rate (a measure of wellbeing) during labour. Labour can be a time of stress for your baby. With each contraction, there is a temporary decrease in the amount of oxygen the baby receives.
Most babies go through labour without any problems, but there are some babies that cannot deal with the stress and can have quite serious issues. It is for this reason that is important to monitor the baby's heart rate during labour. Techniques have been developed to help the doctors decide which babies are able to manage the stress of labour, and which are having some difficulties that require intervention.

There are two types of monitoring:
1. Intermittent Auscultation - is where a nurse will listen to your baby every 15- 30minutes during the first part of labour and every five minutes while pushing. The nurse will wait for a labour pain and then listen to the baby's heart for about a minute. They will listen to the rate of the baby's heart and whether or not they hear increases or decreases in the heart rate.

- Intermittent Auscultation allows for you to be able to walk around more, and if desired makes it easier to take a shower for pain relief.
- This technique also has shown to decrease the risks of interventions such as vacuum, forceps and caesarean sections.
- For patients who have a low risk pregnancy, Intermittent Auscultation has been proven to have the same results for babies as if the nurse was to be listening non-stop.

2. Continuous Monitoring - is a constant checking of the baby's heart rate through the use of a monitoring device. For most cases, a monitor is strapped around your belly (with a belt or a mesh band) which tracks the baby's heart rate at all times.

- If there are problems showing the heart rate or if the baby's heart rate is decreasing, an internal monitor may be used (a thin wire placed on the top of the baby's head). The internal monitor can increase the chance of infection so is only used when necessary.
- Continuous Monitoring is recommended for patients who have a pregnancy with certain complications and may have a baby less likely to be able to handle the stresses of labour.

Pain Relief in Labour

To help better prepare you for labour and the pain relief options available to you at the Foothills Hospital, we've prepared this short guide. There is more information on the Healthy Parents:Healthy Children Website - Labour and Delivery (link above or on the clinic website)

Going Natural
One of the most effective pain relief options is your own endorphins, which are naturally occurring narcotics (pain killers) produced when your body experiences pain. As pain increases, so does the production of endorphins. Most labours increase gradually and so will your endorphins.

- Even with pain medication, it's important for you to stay as relaxed as possible between contractions and to breathe rhythmically through contractions in a non-panicked fashion. You can learn labour breathing techniques in prenatal classes. There are many videos online as well.
- Along with correct breathing, you shouldn't worry about how much pain you may be in later. Remember, you'll produce more endorphins as pain intensifies. Just deal with one contraction at a time.
- Hot showers or a hot bath may help to distract the pain fibers and give you the sensation of heat/cold which can result in feeling less pain. All the birthing rooms at the Foothills Hospital have showers.

- Other comfort or distraction items can also help ease pain (ie. funny movies, favorite music, massage tools, and comfort clothing)
- Studies show most women find labour more painful if they are lying down. Walking and/or sitting on a birthing ball (available at the hospital), or rocking in a chair can all decrease pain. Look on https://www.healthyparentshealthychildren.ca/im-pregnant/labour-and-birth for more options for positions as well as diagrams. Plan to try a variety of positions to see which works best for you.

  ***Even if you need continuous monitoring for a medical reason, you don't have to stay in bed.**

Laughing Gas

As labour proceeds, some women need more pain relief. One option is Entonox, better known as laughing gas. Entonox is a gas and inhaling it lessens the sensation of pain. It works and is exhaled from the body quickly. It has no adverse effect on the baby or labour. Some women experience nausea and dizziness with Entonox, which disappears within one minute of stopping breathing the gas.

Morphine

In the early phases of labour, morphine is the narcotic suggested by your physician if you request pain relief. This is given by injection into the muscle of your buttock and the effect of the medication lasts four to six hours. Side effects include drowsiness and nausea. Gravol is usually added to the injection to lessen nausea.

If you are not in the active phase of labour, morphine can mask contractions to allow you some rest. Morphine does have the potential to make the baby drowsy at birth and lazy with breathing efforts. This actually happens very rarely, as your physician will try to time the narcotic so it will wear off prior to delivery. If the infant is affected, there is a medication that can be given to the newborn to reverse the effect of the narcotic. The medication does not cause any long term effects on the baby.

Fentanyl

If you are in the more active phase of labour and request narcotic pain relief, fentanyl might be suggested.

> **NOTE - this is hospital grade fentanyl and is a very safe and effective medication when used correctly. It can only be used once you are in a labour room as you will need to be monitored 1:1 by your labour nurse.**

Fentanyl is a short-acting narcotic administered intravenously. It acts and wears off quickly. The nurse can give it through your intravenous, or it can be delivered through a pump that you control with a button. Fentanyl is unlikely to cause drowsiness or depressed breathing in your baby.

Epidural

This procedure is done by the anesthetist - a pain specialist doctor. You also need to be in a labour room ro receive an epidural. The anesthetist places some local freezing in your lower back and inserts a needle into the space around your spine. A thin plastic tube is threaded through the needle into this space. The needle is removed and the tube is taped into place and then medication is inserted into the tube. The medication tends to freeze from your belly button downwards so pain is relieved.

Often women can still move their legs and feel pressure with the epidural in place. The anesthetist always uses the combination of drugs that allow for the "walking epidural", but the reality is few women walk with the epidural other than to make trips to the washroom.

The epidural is usually hooked up to a pump so you can push a button if you require more pain relief - it does not run out. At times the anesthetist will "top up" (put more medication in the epidural) if you become too uncomfortable.

Advantages/Benefits - it may completely remove the pain of contractions. It can help relax the pelvic floor and decrease maternal stress hormones, both of which can help your labour progress.

Disadvantages/Risks - the most common but still infrequent risk is of bleeding or infection around the area of the tube and the possibility of a "wet tap" which can lead to a temporary significant headache.

Sometimes, when the epidural is initiated the baby's heart rate drops. This heart rate drop usually recovers and has no adverse effect on the baby, but it can cause a lot of anxiety at the time. This risk is mitigated by giving you extra fluids through your IV prior to epidural being placed.

With an epidural it is more likely that a medication called syntocinon will need to be used to increase labour - whether this is because of the epidural, or because women having a challenging labour are more likely to get an epidural is not clear. It is also more common to need to have your membranes ruptured.

While epidurals may impair labour, the opposite also occurs. Some women are so anxious about the pain of labour that their labour is slowed. An epidural may cause these women to relax enough to make progress better.

Epidurals have also been associated with reducing the ability to push effectively, which can lengthen the pushing stage, can increase the need to deliver the baby with vacuum or forceps and also, therefore, increase likelihood of an episiotomy.

Final word

You do not have to make decisions about pain relief prior to labour. Your physicians just ask that you inform yourself of pain relief options. You can't predict how you will respond to labour or how long your labour will be. When you are in labour, your nurse and physician will help you with decisions if you request their advice.

Fetal Movement and Kick Count

An active baby is usually a healthy baby. You will feel your baby stretch, kick, roll and turn every day once you are about 20-24 weeks pregnant. Every baby is different, some are more active than others. All babies have periods of sleep during the day when they are not as active.

You know your baby's movement pattern the best. The pattern may gradually change during your pregnancy but you should always feel movements on a daily basis once you are at 24 weeks of pregnancy.

As you go about your day-to-day activities keep an eye on your baby's movements. When you have a pregnancy without risk factors you may choose to do a fetal movement count daily, but this is not necessary if you are reassured by a normal movement pattern. If you have a pregnancy with risk factors (such as gestational diabetes or high blood pressure) you do need to do a daily kick count once you are at 28 weeks and beyond in your pregnancy.

If at any point from 28 weeks of pregnancy onwards you feel that there is a decrease in your baby's movements, take the time to do a fetal movement count.

<u>How to do a kick count:</u>

• Get into a comfortable position and place one or both hands on your abdomen

• Note the start time

• Count each time that you feel your baby move. If you feel many movements all at once, count each movement that you feel (however hiccups do not count as movements).

• Stop counting when you have counted six movements

If you have not felt six movements within two hours OR if, despite feeling six movements within a two-hour period, your baby's movements still feel decreased compared to their usual pattern then go immediately to the hospital (Unit 51 at Foothills Medical Centre) for an assessment. At the hospital your baby's heart rate and movements will be checked using a fetal monitor.

Vaccines Recommended During Pregnancy

Why do we vaccinate in pregnancy?

- **Protection for mom**
  - Pregnancy is a time when women are more at risk of getting severely ill from infections. This can lead to complications such as increased risks of preterm birth or having a smaller than expected baby.
- **Protection for baby**
  - Boosting your immunity in pregnancy will allow you to pass antibodies to your baby through the placenta, as well as through your breast milk, if you choose to breastfeed. Your baby will have the protection of your antibodies in their system until they start to develop their own, in response to their vaccines which start at 2 months of age.

Vaccines recommended in Pregnancy:

1. **Flu vaccine**

   The vaccine is safe any time in pregnancy and is offered seasonally, usually between October and February annually. The baby will get the most protection if the vaccine is given before 36 weeks. This vaccine is free of charge.

2. **COVID-19 vaccine**

   Every pregnant woman should have the initial 2 doses of the covid vaccines if they have not had them previously. Another shot is recommended during pregnancy if it has been greater than 6 months since your last covid vaccine or confirmed covid infection. The vaccine is safe any time in pregnancy but the baby will get the most protection if it is given before 36 weeks. If there are high rates of covid in the community it may be beneficial for you to have the vaccine earlier in the pregnancy. Please discuss with your pharmacist about costs and funding options.

3. **Pertussis (whooping cough) vaccine (also called dTap)**

   The vaccine is safe any time in pregnancy and is ideally given between 27-36 weeks gestation in every pregnancy. This vaccine is free of charge.

4. **RSV (Respiratory Syncytial Virus) vaccine or monoclonal antibody**

   There are currently a few different options available to help protect your baby from RSV during pregnancy and after birth. One option is a maternal vaccine (Abrysvo) that you can receive while you are pregnant that provides some protection to your baby via the antibodies that would pass down through the placenta. The vaccine currently in Alberta has a cost of about $300. It is recommended between 27-36 weeks. The other option is to give a monoclonal antibody, which is a medication NOT a vaccine, to your newborn. Currently, the cost of this in Alberta is $700-900. Please ask your doctor which option is best for you and discuss with your pharmacist about costs and funding options.

   Please note: The RSV vaccine can be given at the same time as the pertussis and flu vaccines.

   Learn more: Scan the QR code below to access the Society of Obstetricians and Gynecologists of Canada (SOGC) RSV information handout.

Vaccines for family and friends

People of all ages who will be around baby should consider up to date flu and covid vaccines. Adults should receive a pertussis booster every 10 years.

Please talk to your doctor about any of the above if you have any questions.
https://www.vaccinesinpregnancycanada.ca/

Introduction to Newborn Feeding

There are several ways to feed your baby, including direct breastfeeding, feeding expressed breast milk, donor human milk, formula feeding, or a combination of these methods. The best feeding plan is one that supports your baby's growth and development while meeting your family's needs and circumstances.

The World Health Organization (WHO) recommends exclusive breastfeeding for the first 6 months, followed by continued breastfeeding alongside complementary foods up to 2 years and beyond. However, not all families are able to breastfeed or choose to do so. Formula and other feeding approaches can also support healthy infant growth and development.

Human Milk and Breastfeeding

Human milk contains nutrients, antibodies, and other components that support infant growth and development. The composition of breast milk changes over time to meet a baby's changing needs. Breastfeeding and feeding expressed breast milk have been associated with reduced rates of some childhood infections, including respiratory, ear, and gastrointestinal infections, and a lower risk of sudden infant death syndrome (SIDS). Some studies have also found associations between breastfeeding and lower rates of conditions such as asthma, obesity, and diabetes later in life. For the breastfeeding parent, breastfeeding is associated with lower lifetime risks of breast and ovarian cancer.

Getting Started

Before your baby arrives, it can be helpful to learn about infant feeding options and available supports. Some families planning to breastfeed may choose to collect colostrum after 37 weeks of pregnancy after discussing this with their healthcare provider.

After birth, skin-to-skin contact can support bonding and early feeding. Babies often show feeding cues within the first few hours of life. Newborns commonly feed 8 to 12 times per day, whether directly at the breast or through other feeding methods that meet their nutritional needs.

For families who are breastfeeding or providing expressed breast milk, regular milk removal through breastfeeding or pumping every few hours helps establish and maintain milk production.

Getting a Good Latch

A comfortable and effective latch allows the baby to remove milk efficiently while minimizing discomfort for the breastfeeding parent. A deep latch generally involves the baby sucking on the whole nipple and part of the areola. Positioning can affect latch quality. Many parents find it helpful to bring the baby toward the breast rather than leaning toward the baby. Supporting the breast and ensuring the baby's head and body are aligned may also improve comfort and feeding effectiveness. In summary, reminders for latching baby are:

1. Have baby “skin to skin” and “tummy to tummy”

2. Support the breast you are feeding baby with, using a “sandwich hold”
3. Support baby, holding them at the shoulder blades with your fingers supporting their head
4. Bring *baby to the breast*, allowing them to extend their neck and allow their jaw to open wide

Several breastfeeding positions can be used, including cross-cradle, cradle, football hold, laid-back, and side-lying positions. Different positions work best for different families and situations.

Pumping Basics

Breast pumps can be useful for families who wish to provide expressed breast milk, increase or maintain milk production, return to work, or supplement direct breastfeeding. There are several types of pumps, including manual, electric, wearable, and hospital-grade pumps. The best choice depends on individual needs and feeding goals. Proper flange sizing is important for comfort and effective milk expression.

Bottle Feeding and Alternative Feeding Methods

Many babies receive some or all their nutrition by bottle, either with expressed breast milk or infant formula. When bottle feeding, a slow-flow nipple and paced feeding techniques may help babies feed comfortably and recognize their natural hunger and fullness cues. For short-term supplementation, cup feeding or syringe feeding may sometimes be recommended.
Families who do not plan to breastfeed or express milk can discuss feeding options and postpartum breast care with their healthcare provider.

Feeding Challenges and Troubleshooting

Feeding challenges can occur regardless of feeding method. For breastfeeding families, pain or difficulty latching may be related to positioning, tongue-tie, tight neck muscles, or other factors. These can sometimes be corrected with education, positioning adjustments, practice, nipple shields, a tongue-tie clipping, or physiotherapy. Concerns about low milk production may sometimes improve with adjustments to feeding or pumping routines, herbal supplements, or prescription medications. Oversupply or a fast let-down may also be managed with changes to feeding patterns and, occasionally, medical treatment.

When to Get Help

Seek support if:

- Feeding is painful or consistently uncomfortable.
- Your baby is having difficulty latching or feeding effectively.
- There are concerns about your baby's weight gain, hydration, or feeding volume.
- You have concerns about milk supply, pumping, or formula feeding.
- You develop symptoms of plugged ducts, mastitis, or other breast concerns.
- You would like guidance on developing a feeding plan that works for your family.
- You do not want to breastfeed or want to quit breastfeed

Key Takeaway

Feeding a newborn is a learning process, and many families benefit from support in the early weeks. Whether your baby receives breast milk, formula, or a combination of both, the goal is a well-fed baby, a healthy parent, and a feeding plan that works for your family.

For More Information and Support

• Book a postpartum feeding consultation with our specialist physicians.

• Healthy Parents Healthy Children:
https://www.healthyparentshealthychildren.ca/im-a-parent/feeding-your-baby

• New Parent and Newborn Line – 24/7 phone support for parents with children younger than 2 months:
1-833-805-BABY (2229)