Breastfeeding – antenatal expression of colostrum for women with Diabetes
Breastfeeding provides many emotional and physical benefits for both you and your baby.

King Edward Memorial Hospital is a Baby Friendly Health Initiative Accredited Hospital (BFHI). The Baby Friendly Health Initiative aims to reduce practices in maternity situations that have a negative impact on breastfeeding.

Infants of Mothers with Diabetes are at increased risk of hypoglycaemia (low blood sugar), and may require supplementation with either breast milk or formula if indicated.

However, antenatal expression of colostrum is a method used to possibly avoid the use of formula if supplementation is required after birth.

Providing colostrum to infants at risk of hypoglycaemia has been shown to improve exclusive breastfeeding and decrease formula supplementation [Tozier, 2013].

**Colostrum**

- Colostrum is the first milk that is produced by the breast during pregnancy and the first few days after the birth of your baby.
- Colostrum contains many protective substances for the immune system of the newborn infant
- Colostrum is low in volume but high in energy and helps with the passage of meconium (the baby’s first bowel motion) which assists in preventing jaundice (yellow skin colour).

If you have Diabetes and are considering expressing colostrum antenatally please discuss this with your doctor, midwife, diabetes educator or lactation consultant.
It is important you do not express antenatally if:

- You have a history of threatened or actual preterm labour
- You have cervical incompetence
- You have a cervical suture preventing preterm labour
- You have had any bleeding in your pregnancy
- You have placenta praevia

**Commencing Expressing in the Antenatal Period for women with Diabetes**

- Hand Expressing can be commenced at 36 weeks gestation
- Commence with three to five minutes of hand expressing on each breast; twice per day
- Cease hand expressing immediately if you are having tightening or contractions

Hand Expressing must be pain free. If you require additional assistance or support please contact the Breast Feeding Centre of WA on 6458 1844
How do I express by hand?

- Wash your hands with soap and water and dry on a clean towel prior to expressing.
- Use a clean container, medicine cup or syringe.
- Ensure you are sitting comfortably.
- Gently stroke the breast towards the nipple. This stimulates the let-down reflex.
- Place the fingers underneath the breast, so the first finger is just below and the thumb is just above the areola about 3-4cm back from the nipple.
- Gently **Press** the fingers and thumb pads (not fingertips) back towards the chest.
- Then **Compress** the breast tissue and hold briefly.
- **Release** the breast tissue.
- Do not squeeze or pinch your nipple.
- Repeat the action in a rhythm similar to baby’s sucking.
- Rotate the position of the fingers and thumb around the breast to express all of the breast.
- When colostrum is pearling or dripping easily, it is time to collect the colostrum.
- Express both breasts in turn while the colostrum is dripping.
- Express both breasts twice during each expressing session. The expressed milk is stored in the freezer during your pregnancy.
What do I do with my expressed colostrum?

Colostrum can be collected twice each day in the same syringe. You will need to store the syringe in the fridge between expressions. At the end of the collecting day, the colostrum can be frozen—place the syringe into a zip-lock bag before putting into the freezer. Label both the syringe and the bag (separately) with a sticker detailing the date and time of the first expression collected.

Your colostrum will remain frozen until you come to hospital. Make sure each container/bag of colostrum is labelled with your name, hospital record number, date and the time the colostrum was expressed.

**Freshly expressed colostrum should be cooled before being added to previously expressed chilled or frozen colostrum.**

**Storage of your expressed colostrum:**

<table>
<thead>
<tr>
<th>Breast milk</th>
<th>Room temperature</th>
<th>Refrigerator</th>
<th>Freezer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshly expressed into a clean container</td>
<td>6 to 8 hours (26°C or lower)</td>
<td>3 to 5 days (4°C or lower)</td>
<td>Two weeks in freezer compartment inside a refrigerator</td>
</tr>
<tr>
<td>Store in refrigerator if one is available</td>
<td>Store in back of refrigerator where it is coldest</td>
<td>Three months in freezer section of refrigerator (with separate door)</td>
<td>6 to 12 months in deep freeze (-18°C or lower)</td>
</tr>
</tbody>
</table>

*Australian Dietary Guidelines for Children and Adolescents table. Copyright Commonwealth of Australia reproduced by permission.*
When you come to hospital for the birth of your baby:

- Bring your expressed colostrum clearly labelled into the labour and birth suite/ward.
- Give the colostrum to your midwife to store.
- When your labour is well established, ask the midwife to take one of the containers of colostrum out of the freezer to defrost.
- If you are having a booked caesarean section, bring your frozen colostrum with you on admission and give it to your midwife for storage.
- Ensure a container of your clearly labelled colostrum is taken to theatre for your baby.

What happens after the birth of my baby?

- Providing you and baby are well you will be encouraged to have skin to skin contact with your baby in the first one to two hours following birth.
- Breastfeeding is encouraged and should be unrestricted.
- If your baby is experiencing difficulties or is uninterested in breastfeeding at this time you will be encouraged to hand express some colostrum to give to your baby. You may also use any colostrum you have brought into hospital with you.
- Should you and your baby continue to experience breastfeeding challenges or blood glucose levels are low, the midwife and paediatrician will guide you on further treatment and feeding.

There is wide variation in amount of colostrum different women can express antenatally. There is no evidence to suggest that a woman who expresses small amounts of colostrum antenatally is at risk of low breast milk supply.
References


