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We would also like to acknowledge the support given in the critical reading of these Guidelines by staff throughout the Sydney Local Health District (SLHD).

In addition we would like acknowledge Cathy Pratt and Catherine Dagandan from Liverpool Hospital for their participation in the review process.

Carmel Kelly, CMC Parenting and Lactation – Royal Prince Alfred Hospital
Angela Martin, CMS Lactation - Canterbury Hospital

SLHD does not accept any liability to any person for the information or advice (or use of such information or advice) provided in these guidelines or incorporated into them by reference. We provide this information on the understanding that all health practitioners accessing them take responsibility for assessing their relevance and accuracy.

Copyright ©: Health workers within SLHD, may photocopy any page or accompanying Parent’s handouts. If used outside SLHD due acknowledgement must be given to any reproduction
SLHD Breastfeeding and Safe Infant Feeding Policy Statement

Health facilities in SLHD support and encourage safe feeding for all babies. A comprehensive document which describes our practice in relation to infant feeding is available on request.

As breastfeeding is recognised as the best method of infant feeding, the facility provides staff with regular breastfeeding education about appropriate practice to support women in initiating and establishing breastfeeding. We also support staff to continue breastfeeding their own baby when they return to work and provide facilities for this purpose.

All women are given access to clear and correct information about the benefits of breastfeeding for themselves, their babies and their families and receive information that will help to increase their skills and confidence to breastfeed. This information includes:

- Placing the baby skin-to-skin immediately after birth to promote bonding (regardless of infant feeding choice)
- Keeping mother and baby together for their hospital stay so that mother gains confidence in recognising and responding to baby’s cues
- Encouraging unrestricted access to the breast
- Providing skilled assistance to work through breastfeeding challenges
- Avoiding giving the baby anything other than breastmilk
- Avoiding the use of teats or dummies for normal healthy babies as this may reduce the chance of successful breastfeeding
- Assistance to initiate and maintain the milk supply if mother and baby are separated for any reason eg. prematurity

If a mother has made a decision to use infant formula, individual instruction on safe preparation and the giving of the formula of her choice will be provided.

All mothers, before leaving hospital, are given written information about professional community support eg. Early Childhood Nurse, as well as mother to mother support eg. Australian Breastfeeding Association

Background

Aim

The aim of these guidelines is to provide referenced, current breastfeeding information for health workers in the SLHD, in an effort to reduce conflicting advice. It covers all aspects related to the initiation, establishment and maintenance of lactation in the healthy newborn and the mother who has expressed her intention to breastfeed. It is intended that these guidelines will continue to be updated on a regular basis and the format of this document should enable this to occur easily. Health workers within SLHD may photocopy any page or accompanying parent handouts. If used outside SLHD due acknowledgement must be given to any reproduction.

Australian Statistics

The World Health Organization (WHO) recommends exclusive breastfeeding to the age of 6 months and sustained breastfeeding together with adequate complementary foods thereafter for up to 2 years of age or beyond \(^1\).

It is estimated 90-96% of women initiate breastfeeding in Australia\(^2\). The Australian Infant Feeding Survey (2010) reported the proportion of babies receiving any breastfeeding declined to 74.6% at 1 month, 68.7% at 4 months and 60.1% at 6 months. Breastfeeding to 13 – 18 months was just over 18% and 7.4% of women breastfed to 18 – 24 months\(^3\).

Inclusive in any breastfeeding is exclusive breastfeeding, which describes feeding with only breastmilk and no other liquids or solids with the exception of medicinal drops or syrups. In New South Wales (NSW), mothers reported that 25% of infants were exclusively breastfed at 6 months of age in 2012\(^4\). Although well below the recommendations, this data shows an improving trend in breastfeeding in NSW compared to 2006 when 16.2% of infants were exclusively breastfed at 6 months of age\(^4\).

A NSW Population Health survey indicated poorer breastfeeding practices amongst less privileged and younger mothers (less than 25yrs old). Mothers born in Asia are amongst the earliest of the ethnic groups to stop breastfeeding\(^4\). The early decline in breastfeeding rates means a loss of important health benefits to these babies and therefore a greater cost to Australia’s economy.

In 2006 the Breastfeeding in NSW: promotion, protection and support policy was released and this policy was reviewed in 2011, with the aim of providing direction for NSW Health and Local Health Districts on how to promote, protect and support breastfeeding in the community and among staff\(^5\).
The International Code for the Marketing of Breastmilk Substitutes (The WHO Code)

The development and adoption of the International Code of Marketing of Breastmilk Substitutes(1) occurred in 1981 at the World Health Assembly and Australia was a signatory to this Code. The aim of the Code is to contribute to the provision of safe and adequate nutrition for infants by the protection and promotion of breastfeeding. It also aims to ensure the proper use of breastmilk substitutes when these are necessary, on the basis of adequate information and through appropriate marketing and distribution. The Code applies to all products marketed as partial or total substitutes for breastmilk and includes infant formula, bottles and teats.

Innocenti Declaration

Produced in 1990 setting international standards for breastfeeding – “Empowerment of all women to exclusively breastfeed their children for 4-6 months and to continue breastfeeding with complementary food well into the second year of life”. In 2001 the World Health Assembly acting on a recommendation from the WHO Expert consultation recommended exclusive breastfeeding for 6 months with the introduction of complementary food and continued breastfeeding thereafter. In 2005, the Global Strategy operational targets recommended protection, promotion and support of exclusive breastfeeding for six months and continued breastfeeding up to two years of age or beyond, while providing women access to the support they require – in the family, community and workplace.

Baby Friendly Health Initiative

The Baby Friendly Health (previously Hospital) Initiative, a global accreditation process, was launched in 1991 by the WHO and the United Nations Children’s Fund with the aim of improving standards and increasing breastfeeding rates by encouraging hospitals to implement the “Ten Steps to Successful Breastfeeding” (p7) as a minimal standard and adopt practices that “protect, promote and support” breastfeeding. Hospitals can apply for this status and are assessed by an external team of trained assessors. Once awarded, this accreditation last for three years then a further reassessment must be undertaken to retain the status.

Hospitals that are awarded this status can then be easily identified as being up to date in their approach to breastfeeding. The NSW Ministry of Health Breastfeeding policy (2011) supports the implementation and maintenance of Baby Friendly Health Accreditation for health services, including compliance with the WHO code.

Ten Steps to Successful Breastfeeding

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff
2. Train all health care staff in skills necessary to implement this policy
3. Inform all pregnant women about the benefits and management of breastfeeding
4. Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour and encourage mothers to recognise when their babies are ready to be breastfed, offering help if needed
5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants
6. Give newborn infants no food or drink other than breastmilk, unless medically indicated
7. Practice rooming-in. Allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic

Seven Point Plan for Community Health Services

1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff
2. Train all staff involved in the care of mothers and babies in the skills necessary to implement the policy
3. Inform all pregnant women about the benefits and management of breastfeeding
4. Support mothers to initiate and maintain breastfeeding
5. Encourage exclusive and continued breastfeeding with appropriately-timed introduction of complementary food
6. Provide a welcoming atmosphere for breastfeeding families
7. Promote co-operation between healthcare staff, breastfeeding support groups and the local community

Paediatric Services Ten Steps

1. Have a written breastfeeding policy that is routinely communicated to all health care staff and provide people with training to acquire the skills necessary to implement this policy

2. Provide mothers with an environment and facilities, which meet their needs for privacy, information and appropriate nutrition

3. Support mothers in their choice of feeding method and assist in the establishment and maintenance of breastfeeding

4. Provide parents with written and verbal information about the benefits of breastfeeding and breastmilk

5. Use alternative techniques conducive to breastfeeding if a baby is unable to feed at the breast

6. Give no bottles or dummies to breastfeeding babies unless medically indicated and with parents’ permission

7. Provide facilities that allow parents and babies to be together 24 hours a day in order to promote breastfeeding on demand

8. Plan all nursing and medical care to minimise disturbance to the breastfeeding relationship

9. Provide mothers with a dedicated facility that is appropriately furnished with well-maintained and sterilised equipment for the safe expression and storage of breastmilk

10. Provide parents with information about breastfeeding support groups during admission and on discharge from hospital

Summary

WHO/UNICEF International Code of Marketing of Breastmilk Substitutes

The Code applies to breastmilk substitutes, when marketed or otherwise represented as a partial or total replacement for breastmilk and includes these important provisions:

1. Advertising: No advertising of infant formula products to the public

2. Samples: No free samples to mothers, their families or health care workers.

3. Health Care Facilities:
   - No promotion of products to the public
   - No company mothercraft nurses to advise mothers
   - No gifts or personal samples to health workers eg. diaries
   - No free or low cost supplies to be given

4. Information:
   - No words or pictures idealising artificial feeding, including pictures of infants, on the labels of products.
   - Information to health workers should be scientific and factual

5. Labels:
   - All information on artificial infant feeding, including the labels, should explain the benefits of breastfeeding, and the costs and hazards associated with artificial feeding

6. Products:
   - Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.
   - All products should be of high quality and take account of the climatic and storage conditions of the country where they are to be used

Infant Formula Company Representatives

Policy Statement

SLHD promotes exclusive breastfeeding for infant nutrition for the first six months of life and support to continue breastfeeding with the appropriate introduction of solids for as long as the mother chooses. SLHD also supports mother’s choice in the use of infant formula but does not support the promotion of infant formula to the general public. This includes the display of any material which refers to a product that is within the scope of the World health organisation Code.

Under no circumstances are promotional material or product samples to be left with or accepted by any staff member.

Principles/Guidelines

Managers of Maternity & Community Services require product information for the education of staff and therefore the following standards have been formulated:

Formula company representatives are only to contact the nominated personnel below, at each facility, for the purpose of making an appointment to discuss their products. If any clinical staff member is contacted he/she must refer the formula company representative to the nominated personnel at their facility. This nominated person is then responsible for ensuring that the information is disseminated to staff without being in breach of the WHO Code.

Nominated personnel are:

- Clinical Manager – Women’s Health and Neonatology
- Nurse Managers – Maternity Services, Paediatrics & Community Services
- Nursing/Midwifery Unit Managers – Women’s Health & Community Services
- Clinical Nurse/Midwifery Consultant – Women’s Health & Community Services
- Clinical Nurse Consultant/Specialist (Lactation) – Women’s & Community Services
- Designated Neonatologist
- Dieticians

## Antenatal Breastfeeding Education

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenatal breastfeeding education to enable the mother to make an informed decision</td>
<td>Give mother appropriate breastfeeding literature early in pregnancy including information about education providers</td>
<td>Mother is encouraged to think about the importance of feeding for her baby</td>
<td>Mother is able to make an informed decision about breastfeeding</td>
</tr>
<tr>
<td>Antenatal breastfeeding education to enable the mother to make an informed decision</td>
<td>Encourage mother and her partner or support person to attend antenatal classes</td>
<td>Breastfeeding education in the first or second trimester is more effective as the focus shifts to the birth in the third trimester</td>
<td>Attendance of the partner/support person encourages on-going support</td>
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<tr>
<td>Appropriate antenatal education</td>
<td>The following information should be included in classes or given individually by the antenatal care provider:</td>
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<tr>
<td></td>
<td>1. Why breastfeeding is important for mother and baby</td>
<td>Parents need to know the advantages of breastfeeding and cost of alternatives. There is considerable evidence to suggest that there are significant health advantages for mothers who breastfeed their infants</td>
<td></td>
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<td></td>
<td>2. The risks associated with not breastfeeding</td>
<td>Allows mother to respond to baby’s needs and aids initiation of lactation</td>
<td></td>
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<td></td>
<td>3. Importance of early-uninterrupted skin-to-skin contact and the first feed.</td>
<td>Success is attributed to the ability to cope with problems as they arise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Why 24-hour rooming-in (staying with the baby) is important</td>
<td>Parents need to be aware of how long they can breastfeed for</td>
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<td></td>
<td>5. Why bottles and teats and dummies are discouraged while breastfeeding is being established</td>
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<td></td>
<td>6. It is recommended that babies be breastfed until two years of age and beyond. The first six months of which should be exclusive breastfeeding followed by the gradual introduction of solids.</td>
<td>Empowering the mother by teaching her practical skills will increase her confidence and she will have an awareness of what is normal.</td>
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<td></td>
<td>7. Basic breastfeeding and lactation management, including positioning and attachment, feeding cues and frequency of feeding</td>
<td>Specific nipple preparation is not considered necessary however there are advantages in encouraging women to be comfortable with handling their own breasts</td>
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<td></td>
<td>8. Indications that a baby is getting enough milk</td>
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<td>9. Maintaining and increasing milk supply</td>
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<td></td>
<td>10. Breastfeeding support groups and services in the community and identifying women with previous breastfeeding problems or other special needs</td>
<td>Mother feels supported Mother chooses to breastfeed</td>
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<td></td>
<td>11. Advice on prenatal nipple care – handling breasts, avoiding drying agent</td>
<td></td>
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</table>

2. Brodribb W (ed) 2006, Breastfeeding Management in Australia, Australian Breastfeeding Association
## Antenatal Breast History and Examination

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prenatal history relevant to breastfeeding</td>
<td>• Previous breastfeeding experience:</td>
<td>• Appropriate anticipatory guidance can be given.</td>
<td>Mother makes an informed decision and feels comfortable about breastfeeding with appropriate support</td>
</tr>
<tr>
<td></td>
<td>o How many children</td>
<td>• Correct information on overcoming difficulties will empower the woman and increase her confidence to succeed.</td>
<td>Referral to appropriate resources eg. Lactation Consultant, Quit Program (if available)</td>
</tr>
<tr>
<td></td>
<td>o Duration of breastfeeding</td>
<td>• May need advice on how medication and/or tobacco use may impact on lactation</td>
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<td></td>
<td>o Reason for ceasing</td>
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<td></td>
<td>• Previous breast surgery, infections, trauma, etc</td>
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<td></td>
<td>• Chronic diseases or conditions</td>
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<td></td>
<td>• Regular medication or tobacco use</td>
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<td></td>
<td>• Plans to return to work</td>
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<td></td>
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<td></td>
<td>• Family Support</td>
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<td></td>
<td>• Appropriate anticipatory guidance can be given.</td>
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<td>• Correct information on overcoming difficulties will empower the woman and increase her confidence to succeed.</td>
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<td></td>
<td>• May need advice on how medication and/or tobacco use may impact on lactation</td>
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<td></td>
<td>• Mother makes an informed decision and feels comfortable about breastfeeding with appropriate support</td>
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</tr>
<tr>
<td></td>
<td>• Referral to appropriate resources eg. Lactation Consultant, Quit Program (if available)</td>
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<td></td>
<td>• Systematic inspection and assessment of breasts and nipples noting any of the following:</td>
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<tr>
<td></td>
<td>• Lumps</td>
<td>• Specific problems may be addressed early and appropriate counselling given.</td>
<td>Referral to appropriate resources eg. Lactation Consultant, Breast Surgeon if necessary</td>
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<td></td>
<td>• Scars</td>
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<td></td>
<td>• Eczema or dermatitis</td>
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<tr>
<td></td>
<td>• Breast hypoplasia (see page 13)</td>
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<td></td>
<td>• Nipple anomalies</td>
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<td></td>
<td>• Extra large breasts</td>
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<td></td>
<td>• Any other breast pathology</td>
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<td></td>
<td>• Reinforce the information that no breast/nipple preparation is necessary</td>
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<tr>
<td></td>
<td>• No evidence has been found to support application of creams, expressing of colostrum etc.</td>
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Breast Hypoplasia

Breast hypoplasia is insufficient development of the mammary glands. Small breasts do not mean hypoplasia. Clinical features include:

- Greater than 4 cm spacing between the breasts,
- Breasts may be asymmetrical
- May have small breast base (less than between the 2\textsuperscript{nd} and 6\textsuperscript{th} rib)
- Areola may be disproportionately large or bulbous,
- Many women report few if any breast changes during pregnancy,

Whilst breast hypoplasia is associated with low supply, it has been found that 39% of women with clinical features of breast hypoplasia were able to meet their baby’s nutritional needs with exclusive breastfeeding when they had lactation support postnatally.

If breast hypoplasia is suspected adopt a “wait and see” approach. The mother should be encouraged to breastfeed but also informed of the importance of early postpartum follow up for her baby to ensure adequate nutrition. In the antenatal period she may be educated on postnatal strategies to optimise her supply such as frequent breastfeeding in the first few days as well as hand expressing pc. Motilium may also be used from early as 5 days (see handout pages 99, 100). If long term supplementation with a breast milk substitute is necessary, consider use of a supply line.
**Standard Precautions**

NSW Health Infection Control policy states that “Standard Precautions apply to all patients receiving care in health organisations regardless of their diagnosis or presumed infection status”.

Included in this are “all body substances, secretions and excretions (excluding sweat), regardless of whether or not they contain visible blood”. Breastmilk is not specifically mentioned, despite the fact that both the World Health Organisation and The Centre for Disease Control in the USA specify that these precautions should not apply to breastmilk.

Human breastmilk has been implicated in perinatal transmission of HIV, and HBsAg has been found in breastmilk of mothers infected with HBV. However, occupational exposure to human breastmilk has not been implicated in the transmission of HIV nor HBV or HCV infection to health care workers. Moreover, the health care worker will not have the same exposure to breastmilk as the breastfeeding neonate. In areas where universal or standard precautions do not apply to human breastmilk, gloves may be worn by health care workers in situations where exposures to breastmilk might be frequent, for example, in breastmilk banking.

SLHD has approached NSW Health to review the wording of this document and to distinguish breastmilk as a separate entity from other body fluids. The matter is currently under review.

4. Riordan, J. & Wambach K. *Breastfeeding and Human Lactation 4th edition* Jones and Bartlett
Antenatal Expressing

Breast expression antenatally, usually twice daily from 36 weeks, has been suggested for women who may be at risk of delayed lactogenesis 2 or who are likely to be separated from their baby eg. diabetes, however there is limited evidence for this practice, including its impact on labour and birth.

A pilot study was undertaken in Victoria to establish the feasibility of conducting an adequately powered randomised controlled trial to evaluate this practice. Cardiotocographs were undertaken after the first expressing episode and none of the infants showed any sign of fetal compromise and no women showed evidence of hypoglycaemia post expressing. It concluded, however, that the small number of women in this pilot was not an adequate number to examine safety or efficacy. The authors made the following statement about implication for practice:

“It is important that this widespread practice undergoes rigorous evaluation to assess both efficacy and safety. Until such evidence is available, the authors suggest that the routine encouragement of antenatal milk expressing in women with diabetes in pregnancy should cease”.

The same researchers are currently conducting a randomised controlled trial examining this practice.

If a woman is keen to express and collect her colostrum she should be counselled about the above research in progress to assist her decision regarding whether or not she will express her colostrum antenatally.

When a woman has decided to express and collect colostrum antenatally.

Some key points in supporting a woman to express antenatally are:

- Ensure the woman is informed of the lack of evidence around this practice
- Ensure the woman’s antenatal care provider is aware of her decision to express colostrum antenatally
- Start at 36 weeks
- Ensure the woman is aware the amount of colostrum she expresses antenatally does not indicate how much the baby will get after birth. The baby is best at getting her milk when well attached and some women are not able to express EBM antenatally.
- Educate on hand washing prior to expressing
- Educate on technique of hand expressing ( see patient handouts pages 95,96)
- Advise the woman to::: - express for 5 mins each side 1 - 2 times a day
  - collect EBM in sterile an oral syringe and seal with a cap
  - write EBM date and time of expression on her identification label and apply to syringe
  - place in freezer in a zip lock bag
- Supply the woman with oral syringes, caps, identification labels for EBM, written information on labelling EBM, expressing, storage and transport of EBM
- Advise the woman to cease expressing if she experiences any abdominal pains or bleeding during expression and contact her midwife or antenatal care provider
- Document in medical record and antenatal card

1. Diabetes and Antenatal Milk Expressing (DAME): a pilot project to inform the development of a randomised controlled trial, Forster D et al, doi:10.1016/j.midw.2009.05.009
3. Cox, S Expressing and storing colostrums antenatally for use in the newborn period, 2006 Breastfeeding review 14(3) 11-16
5. Illawarra Shoalhaven Local Health District Antenatal Expressing of Breastmilk( for women whose babies are likely to need supplementary feeds) Guideline July 2012
### Breastfeeding during Pregnancy & Tandem Feeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
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<tr>
<td><strong>Pregnancy</strong></td>
<td>Mother is pregnant and wishes to continue breastfeeding another child</td>
<td>• Reassure mother that she can continue to breastfeed during the pregnancy without any known risk to the baby she is expecting</td>
<td>• In mothers with no history of miscarriage or premature labour, breastfeeding through pregnancy carries no added risk • Breastfeeding the toddler does not deprive the unborn child of any nutrients needed to grow</td>
</tr>
<tr>
<td><strong>Maternal nutrient and energy needs</strong></td>
<td></td>
<td>• Encourage mother to have a well-balanced diet and plenty of rest</td>
<td>• Both pregnancy and breastfeeding increase requirements for energy, protein, iron, folic acid and vitamin C</td>
</tr>
<tr>
<td><strong>Nipple discomfort</strong></td>
<td></td>
<td>• Reassure mother that some degree of nipple discomfort may occur during breastfeeding, varying greatly in degree and duration.</td>
<td>• Appears to be related to hormonal changes during pregnancy and is unlikely to respond to any special treatment</td>
</tr>
<tr>
<td><strong>Decline in milk supply</strong></td>
<td></td>
<td>• Reassure mother</td>
<td>• 70% mother report a decrease in milk production during a subsequent pregnancy</td>
</tr>
<tr>
<td><strong>Change in taste of milk</strong></td>
<td></td>
<td>• Reassure mother</td>
<td>• Lactose in milk decreases, whilst sodium increases, changing the taste</td>
</tr>
<tr>
<td><strong>Child decides to wean</strong></td>
<td></td>
<td>• Reassure mother</td>
<td>• Some children wean because of decline in milk volume and change in taste</td>
</tr>
<tr>
<td><strong>Uterine Contractions</strong></td>
<td></td>
<td>• Reassure mother</td>
<td>• There is no documented danger to fetus or mother when mothers breastfeed through a healthy pregnancy and no other risk factors are present</td>
</tr>
<tr>
<td><strong>Preparation of toddler for baby’s arrival</strong></td>
<td></td>
<td>• Encourage mother to develop some pattern with breastfeeding the toddler eg. morning and night</td>
<td>• This may make managing the breastfeeding post delivery a little easier</td>
</tr>
</tbody>
</table>
### Tandem Feeding cont…

<table>
<thead>
<tr>
<th>After delivery</th>
<th>Ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Availability of colostrum</strong></td>
<td><strong>Abundant milk supply – baby not coping with fast flow</strong></td>
</tr>
<tr>
<td>• Reassure mother that colostrum is available for the newborn post delivery for a short period</td>
<td>• Consider giving each child their own breast or feed the toddler first until the flow subsides</td>
</tr>
<tr>
<td>• Mother should consider having 24 hours of getting to know her newborn and ensuring positioning and attachment are correct</td>
<td>• Each child’s needs are being met</td>
</tr>
<tr>
<td>• Mother should be encouraged to feed the newborn before the toddler.</td>
<td><strong>Newborn initiates breastfeeding and obtains colostrum</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Mother has the opportunity to concentrate on the newborn’s needs</strong></th>
<th><strong>Tandem feeding progresses well</strong></th>
</tr>
</thead>
</table>

How Does Breastfeeding Work?

Significant work in relation to infant demand and maternal milk supply has been undertaken over the last decade making it easier for clinicians to have a better understanding of how breastfeeding works and to be able to counsel the mother accordingly.

**Endocrine (Hormonal) Control**

Milk is produced in the glandular epithelial cells within the breast and is stored in clusters of alveoli. Each alveolus is surrounded by myoepithelial (muscle) cells. Adequate milk production is thought to be initially dependent on two main factors:

- Prolactin release from the anterior pituitary, which stimulates milk manufacture and is usually triggered by the baby’s sucking which in turn stimulates the nerve endings in the nipple and areola.

- Oxytocin release from the posterior pituitary, which causes the myoepithelial cells to contract and allow the manufactured and stored milk to be released and pushed down the duct system towards the nipple. This process is commonly known as “let-down”. Removal of milk is then made possible by the rhythmical pressure of the baby’s sucking. (It was always thought that the milk drained into lactiferous sinuses situated close to the nipple, but research using ultrasound has been unable to successfully identify these “sinuses”).

**Autocrine (Local) Control**

The two most important factors in successful lactation are a) the efficient removal of milk from the breasts and b) the ability of the correctly latched baby to feed to need. The lactating breast exercises a local feedback control known as autocrine control. Two local mechanisms are thought to control this: feedback inhibitor of lactation (FIL) which is a component of whey fraction in the breastmilk and prolactin receptor theory. When FIL reduces as the milk is removed from the breast the milk synthesis speeds up and when the alveoli cell is distorted due to milk fullness the prolactin cannot bind to the receptor at the base of the cell. This action is thought to match the rate of milk production to the amount of milk removed and comes into play in the early weeks of lactation.

The average mother’s potential for milk production is much greater than the average baby’s appetite. The wide range of milk intake by babies is due more to variations in demand than to limitations in milk production.

**Variations in Breastmilk Content**

The volume of milk available to the baby is greater in the early part of the feed however breastmilk fat levels rise as the milk flow lessens with subsequent let-downs. The change in fat content highlights the importance of baby-led feeding and letting the baby finish the feed in his own time rather than according to the clock.

---

5. ICLA Core Curriculum for Lactation Consultant Practice 3rd edition 2013, Jones & Bartlett
# Nutritional Properties of Breastmilk (per 100mls)

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>FUNCTION</th>
<th>FULLTERM</th>
<th>PRETERM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kcalories</td>
<td>COLOSTRUM</td>
<td>MATURE</td>
</tr>
<tr>
<td></td>
<td>Total energy value</td>
<td>67</td>
<td>65-75</td>
</tr>
<tr>
<td>Water</td>
<td>A vehicle for all constituents and regulation of hydration</td>
<td>85.1</td>
<td>87.5</td>
</tr>
<tr>
<td>Proteins</td>
<td>Energy Value 5%</td>
<td>1.8g</td>
<td>1.3g</td>
</tr>
<tr>
<td></td>
<td>Whey Casein ratio</td>
<td>90:10</td>
<td>60:40</td>
</tr>
<tr>
<td>I. Whey</td>
<td>α-lactalbumin - milk synthesis</td>
<td>218mg</td>
<td>161mg</td>
</tr>
<tr>
<td></td>
<td>Immunoglobulins – protection</td>
<td>364mg</td>
<td>142mg</td>
</tr>
<tr>
<td></td>
<td>Lactoferrin– aids iron absorption</td>
<td>330mg</td>
<td>167mg</td>
</tr>
<tr>
<td></td>
<td>Enzymes (40+) Aids digestion &amp; stimulates development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hormones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Casein</td>
<td>Growth factors – develops CNS</td>
<td>140mg</td>
<td>187mg</td>
</tr>
<tr>
<td>Carbohydrates</td>
<td>Energy Value 38%</td>
<td>5.1g</td>
<td>7.2g</td>
</tr>
<tr>
<td></td>
<td>Lactose – major component, aids calcium &amp; iron absorption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Monosaccharides</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Oligosaccharides – active against pathogens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV. Glucose – CNS development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V. Galactose – CNS development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lipids</td>
<td>Energy Value 50%</td>
<td>1.8g</td>
<td>3.5g</td>
</tr>
<tr>
<td></td>
<td>Saturated : Unsaturated (%)</td>
<td>42 : 58</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develops CNS &amp; immune system</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Most variable component</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contains fat soluble vitamins</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contains 167 fatty acids</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Triglycerides are at 98%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minerals</td>
<td>Renal solute load low</td>
<td>0.4%</td>
<td></td>
</tr>
<tr>
<td>(Monovalent ions)</td>
<td>Calcium</td>
<td>23mg</td>
<td>28mg</td>
</tr>
<tr>
<td></td>
<td>Magnesium</td>
<td>3.4mg</td>
<td>3.0mg</td>
</tr>
<tr>
<td></td>
<td>Sodium</td>
<td>28mg</td>
<td>15mg</td>
</tr>
<tr>
<td></td>
<td>Potassium</td>
<td>74mg</td>
<td>58mg</td>
</tr>
<tr>
<td></td>
<td>Chlorine</td>
<td>91mg</td>
<td>40mg</td>
</tr>
<tr>
<td></td>
<td>Phosphorous</td>
<td>14mg</td>
<td>15mg</td>
</tr>
<tr>
<td></td>
<td>Sulphur</td>
<td>22mg</td>
<td>14mg</td>
</tr>
<tr>
<td></td>
<td>Zinc</td>
<td>0.54mg</td>
<td>0.16mg</td>
</tr>
<tr>
<td>Vitamins</td>
<td>Fat soluble (A, D, E &amp; K) dependent on maternal diet</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water soluble (C, B, Thiamine, Niacin, Riboflavin &amp; Folic Acid)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vit. K highest in colostrum</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB Breastmilk PH – 6.7 to 7.4, Specific Gravity – 1031, Secretion begins from 16 weeks gestation

© Ruth Worgan, 2003 and revised in 2014 from:
2. ILCA Core Curriculum for Lactation Consult Practice, Chapter 21, Smith LJ, 2013
### Immunological Properties of Breastmilk

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>FUNCTION</th>
<th>ORGANISM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CELLULAR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Macrophages</td>
<td>Phagocytosis and bacteriostatic</td>
<td>Candida</td>
</tr>
<tr>
<td></td>
<td>Contain slgA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90% of cells in mature milk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Make &amp; facilitate lactoferrin</td>
<td></td>
</tr>
<tr>
<td>• Lymphocytes</td>
<td>T cells short term immunisation</td>
<td>NEC, meningitis, TB</td>
</tr>
<tr>
<td>• Neutrophil Granulocytes</td>
<td>Phagocytosis, short lived</td>
<td>CMV, Rubella, Mumps</td>
</tr>
<tr>
<td>• Leukocytes</td>
<td>Protects the breast from infection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passive immunity</td>
<td></td>
</tr>
<tr>
<td>• Monocytes</td>
<td>Long lived cells that prepare bacteria for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lymphocyte action</td>
<td></td>
</tr>
<tr>
<td>• Epithelial cells</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HUMORAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Secretory lgA (slgA)</td>
<td>Found in Amino Acid component, lines the</td>
<td>Polio, Coxsackie, E-coli,</td>
</tr>
<tr>
<td></td>
<td>gut from mouth to anus preventing bacterial</td>
<td>Cholera, Salmonella</td>
</tr>
<tr>
<td></td>
<td>attachment, Colostrum - 364g/100ml</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fullterm – 142g/100ml</td>
<td></td>
</tr>
<tr>
<td>• IgM and IgG</td>
<td>High levels in colostrum</td>
<td>RSV, Rubella</td>
</tr>
<tr>
<td>• IgE and IgD</td>
<td>Local mammary production</td>
<td></td>
</tr>
<tr>
<td><strong>GUT FLORA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Bifidus Factor (Combination of several Oligosaccharides)</td>
<td>Predominant non-virulent flora which creates low pH inhibiting organism invasion</td>
<td>Shigella, E-coli, Salmonella</td>
</tr>
<tr>
<td><strong>OTHERS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Resistance factor</td>
<td>Antistaphlococcal</td>
<td>Staphlococcals</td>
</tr>
<tr>
<td>• Lysozymes (found in protein component)</td>
<td>Increases with duration of breastfeeding, epidermal growth factor, inhibits bacterial invasion by altering digestion of pathogens</td>
<td>Gram positive entero bacteria</td>
</tr>
<tr>
<td>• Lactoferrin (found in protein component)</td>
<td>Binds iron required for bacterial growth, transports iron, high levels in colostrum the declines over next 5 months</td>
<td>Staphaureus, E-coli, Candida</td>
</tr>
<tr>
<td>• Interferon</td>
<td>Antiviral activity</td>
<td>Viruses</td>
</tr>
<tr>
<td>• Complement 3</td>
<td>Antiviral activity</td>
<td>Viruses</td>
</tr>
<tr>
<td>• B12 Binding Protein</td>
<td>Phagocytosis, Renders B12 unavailable for</td>
<td>E-coli, Bacteroides</td>
</tr>
<tr>
<td></td>
<td>bacterial growth</td>
<td></td>
</tr>
<tr>
<td>• Gangliosides</td>
<td></td>
<td>E-coli, cholera</td>
</tr>
<tr>
<td>• Lactoperoxidase</td>
<td>Creates frothing in the gut by</td>
<td>Streptococci, E-coli,</td>
</tr>
<tr>
<td></td>
<td>hydrogen peroxide to kill bacteria</td>
<td>Salmonella</td>
</tr>
<tr>
<td>• Interleukin 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Epidermal Growth Factor</td>
<td>Promote gut maturation with stimulation of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>epithelial cell growth</td>
<td></td>
</tr>
</tbody>
</table>

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2. ILCA Core Curriculum for Lactation Consult Practice, Chapter 21, Smith LJ, 2013
Initiating Breastfeeding

Skin-to-Skin Contact and Baby-Led Attachment for the Term Baby

Babies are born with innate reflexes that allow them to search and attach to the breast ie. the rooting and sucking reflexes. Encourage mother to support the baby in the search and assist if necessary.

The first hour may be spent with mother and baby looking at one another in a calm and alert state. This is very important for maternal release of oxytocin and should not be interrupted under normal circumstances.

Early skin-to-skin contact involves placing the naked baby prone on the mother's bare chest at birth or soon afterwards (within 5 minutes). This could represent a 'sensitive period' for priming mothers and infants to develop a synchronous, reciprocal, interaction pattern, provided they are together and in intimate contact. Routine separation shortly after hospital birth eg to weigh the baby, is a uniquely western cultural phenomenon that may be associated with harmful effects including discouragement of successful breastfeeding.

A recent Cochrane review (1) discovered that babies that are given early skin-to-skin contact and are kept with their mothers from birth are breastfed for longer. They learn to suckle at the breast when their instincts are switched on in that first hour following birth.

Skin-to-Skin Contact and the First Feed

1. Ensure mother is in a comfortable position. If she requires perineal suturing or has had a caesarean section, ensure that she is well supported with pillows and remains comfortable throughout. On average it takes approximately 1 hour for a baby to self attach after birth.
2. Ensure the positioning of the baby enables a patent airway
3. After the initial birth cry, the baby may rest vertically on mother’s chest between mother’s breasts, before he/she displays signs of the awakening stage, opening eyes, moving the head and mouthing.
4. The baby will begin an active stage – looking at mother and breast, salivating and rooting, hand to mouth movements, crawling and bobbing his head around mother’s chest.
5. Baby starts to initiate rooting reflex:
   - Turns head towards breast and opens mouth with flanged lips.
   - The tongue will drop and curl and the tip of the tongue anchors behind the gum.
   - The baby’s gag reflex is inhibited to allow the baby to accept the nipple
   - He draws it into his mouth to brush across the junction between the hard and soft palate, initiating the suck reflex.
6. During this time encourage the mother to recognise her baby’s feeding cues and respond. Encourage the mother to support the baby behind the shoulder blades and allow baby to move his head freely around breast. It may be necessary to assist the baby so that his chin and lower lip are directed towards the lower segment of the areola. The baby’s head will normally be extended when going to the breast.


Ongoing Positioning & Attachment Facilitation

If baby is having difficulty with latching, start by facilitating skin-to-skin (see previous page).

1. Since all mothers’ bodies are different there is not one posture that will fit all. Adopting a comfortable position where she has good back and neck support as well as support for her arms and legs will assist her to relax and be able to sustain the position for long periods of time. She may need a foot stool if sitting out of bed.

2. The position most comfortable is often semi – reclined or leaning back a little so her body takes some of her baby’s weight and the baby does not display anti-gravity reflexes.

3. Encourage mother to follow the baby’s lead with her baby unwrapped to allow her baby to get much closer to her breast and body and use his/her hands. It may also avoid overheating.

4. Encourage the mother to lay the baby prone/ facing her with his/ her face near the breasts and allow the baby to begin searching for her nipple.

5. If necessary, suggest the mother supports her baby behind the shoulder blades with his/ her body in close contact with the rest of her torso. The baby may be wrapped around her body and his chest touching her breast.

6. The mother may need to bring the baby’s lower arm around under the breast to get closer to the breast and allow the weight of his head to tilt back, presenting his chin first to her breast.

7. A wide gape can be encouraged by allowing baby to feel the underside of the nipple and areola with his bottom lip.

8. The mother may need to shape her breast to enable the baby to take a good mouthful of breast. When baby gapes widely, he/she should be brought to the breast with the nipple aimed well back towards the roof of his mouth and his/her chin kept well tucked into the breast. The baby’s head will remain slightly extended and the breast should be kept still during this process.

9. After an initial short burst of sucking, the rhythm will become slow and even with deep jaw movements. This should not cause the mother any discomfort. Pauses are a normal part of the feed and these become more frequent as the feed progresses.

10. When the mother feels comfortable with this process she can bring her other arm around to cradle her baby in a more natural position if she has not already done so. The baby often adopts an oblique lie across the mother’s body.

11. Baby should finish the feed of his own accord by coming off the breast spontaneously. The nipple will appear slightly elongated but there should be no evidence of nipple trauma or compression.

NB. If the baby is unable to latch please see “Sucking Problems” page 52

4. ICLA Core Curriculum for Lactation Consultants 3rd edition 2013 Jones & Bartlett
SLHD Breastfeeding Guidelines

**Occupational Health & Safety**

Breastfeeding Procedures to Assist in Reducing Manual Handling Injuries

**Goal:** The midwife or health worker will assist the mother with breastfeeding and

a) Observe for correct positioning and attachment
b) Position herself so that her/his spine remains in alignment
c) Sustain no manual handling injury during the procedure

**Assisting the mother to breastfeed when she is sitting in the chair**

When called to assist the mother with breastfeeding, check the type of assistance she requires e.g. how much the mother herself is able to manage with feeding.

- Ensure that mother is comfortable with good support e.g. a pillow or footstool
- Sit on the breastfeeding stool, if available.
- Adjust the breastfeeding stool so that it is slightly higher than the seat of the mother’s chair
- Assess the mother’s ability to latch the baby
- Explain the physiology as required

**Mother requiring verbal support only**

If the mother requires only **verbal** assistance,

- The midwife or health worker is to observe the baby feeding and
- Sit on the breastfeeding stool in an erect position while observing so that the shoulders and hips are in line

**Mother requiring hands on physical support with attachment**

If the mother requires physical support to attach baby while she **sits in a chair**:

- Sit on the breastfeeding stool in an erect position and bring it as close as possible to the mother.
- Adjust the height of the stool according to:
  a) the maternal needs e.g. maternal height, level of breasts
  b) the midwife or health worker’s needs e.g. height

The midwife is to sit in an erect position on the stool so that shoulders and hips are in a line. For the **cradle position for feeding**, have the breastfeeding stool as close as possible to the mother so that the midwife sits at a **90-degree angle to the mother’s shoulder**. This may mean the nurses will need to spread their knees wide to accommodate the mother’s knees or arm of the chair to avoid the need to lean forward excessively and to avoid twisting of the spine.

**Outcomes:** The midwife or health worker assisted and observed for correct positioning and attachment, her/his spine remained in alignment and he/she sustained no manual handling injury

Compiled by: Doreen Pawley (OH&S, TCH, 2009) Amended by C. Kelly CMC Lactation RPA Women and Babies 2014
Reviewed by Jacqueline Myers, RPAH Work Health and Safety Women, Babies and Children Workgroup (2014)
Breastfeeding for the Normal Healthy Full-term Infant in the First 48 hours

1. The baby has an effective, nutritive feed (code 5 or 6) within 1-2 hours of birth. **If not, follow flowchart below.**
2. Parents are educated to respond to baby's early feeding cues eg. baby mouthing, sucking, licking. Crying is often a late cue.
3. Educate parents that frequent feeds with early feeding cues are normal and will help stimulate milk production.
4. It is normal to have 8 feeds or more in 24 hours. However, if following feeding cues, a minimum of three feeds in the first 24 hours is acceptable, increasing to a minimum of 6 feeds in the 2nd 24 hours.
5. After the first breastfeed if there are no feeding cues, it is acceptable that the baby may sleep for up to 8 hours.

If baby does not attach and feed nutritively within 1-2 hours of birth, reassure parents, assist mother to hand express and give EBM to baby. Follow flowchart below.

N.B. Baby must have been assessed and found to be healthy.

*If any clinical concerns staff may need to refer to other relevant policies
**Offering a complementary feed without medical indication may negatively impact on the breastfeeding outcome. Few babies require complementary feeds if managed correctly.

Sucking Code for Breastfed Neonates

1. Offered but does not attach
   - Deeply asleep, drowsy, could not be roused
   - Search reflex poor or not at all

2. Interested but does not attach
   - Rooting, mouthing, sucking fists, crying

3. Attaches on and off
   - Rooting effectively with or without coaxing
   - Attaches, but does not sustain

4. Attaches but has an inco-ordinated suck.
   - Chomping at the breast
   - Audible clicking whilst sucking
   - Dimpling of the cheeks

5. Good nutritive sucking, short feed.
   - Long, slow, bursts of nutritive sucking, followed by a pause in response to the release (let-down) of milk into the baby’s mouth. Feeding takes less than 15 minutes.

6. Good nutritive sucking, long feed.
   - Long, slow, bursts of nutritive sucking, followed by a pause in response to the release (let-down) of milk into the baby’s mouth. Feeding takes more than 15 minutes.

A= Assisted
O=Observed
U= Unobserved

Expressing Breastmilk

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antenatal</strong>&lt;br&gt;Risk of mother - baby separation known in the antenatal period (eg. Threatened premature labour, planned neonatal admission to SCN / NICU)</td>
<td>• Fully discuss the benefits of colostrum for baby with the woman and her family. Discuss early expressing within 1-2 hours of birth (at least within 6 hours of birth).&lt;br&gt;• Educate the woman and her family on the technique of hand expressing and collection of EBM in oral syringes&lt;br&gt;• See below for ongoing education and expectations for the woman and her family</td>
<td>• Family will be more independent with the procedure and welcome the early initiation of hand expressing&lt;br&gt;• Mother will be more relaxed and accepting of procedure&lt;br&gt;• Promote adequate initiation of lactation to assist long term milk supply</td>
<td>Expressed breast milk is available for the baby&lt;br&gt;Woman and her family are more independent and understand the need to express early</td>
</tr>
</tbody>
</table>

| **Postnatal**<br>Mother wishes to initiate lactation but is unable to put baby to the breast successfully eg. baby in nursery, sleepy baby, uncoordinated suck, inverted nipples | • Fully discuss the current situation with the mother and the need for expressing<br>• Encourage early initiation of hand expressing within 1-2 hrs of birth and continue 7 or more times daily or if baby is with mother – each time baby has attempted a feed<br>• Use the Expressing and Storing Breastmilk handout (p95,96) and after being shown, encourage mother to take responsibility for her own expressing.<br>• If expressing continues beyond 24 hours the electric pump may be introduced in combination with hand expressing and should be at least 7 times in 24 hours<br>• Educate on both hand and pump expressing. | • During the colostrum phase hand expressing is the most effective method. It also encourages the mother to be comfortable touching her own breasts.<br>• Mother does not have to rely on the availability of staff and can express in her own time<br>• Generally more effective and less time consuming<br>• Mother should know how to hand express in an emergency | Mother is comfortable with procedure. Sufficient milk is obtained to satisfy baby’s needs |

| Mother wishes to maintain lactation but is unable to put baby to the breast at some or all feeds eg. mother working. Mother being discharged from care still expressing | • Discuss pump options with the mother eg.hiring hospital grade / purchase of electric or hand<br>• Encourage mother to express at the time baby would normally feed<br>• Try to get one feed ahead<br>• Double pumping could be encouraged<br>• Discuss pump options with the mother eg.hiring hospital grade / purchase of electric or hand<br>• Double pumping could be encouraged | • Mother should be able to make a decision according to efficiency, availability and cost.<br>• Expressing is usually easier once lactation is established | Mother is happy with chosen method of expressing<br>Mother expresses easily when away from baby |

# Caesarean Section and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post operative breastfeeding difficulties due to pain, anxiety and lack of mobility</td>
<td>• Initiate skin-to-skin contact as soon as possible&lt;br&gt;• Educate mother re appropriate analgesia&lt;br&gt;• Discuss/educate mother re various breastfeeding positions to alleviate incision pain. Encourage mother to ask for assistance with feed</td>
<td>• Maintain comfort of mother and baby during breastfeeds&lt;br&gt;• Should encourage an efficient let-down reflex and reassure mother</td>
<td>Pain free relaxed mother&lt;br&gt;Positive breastfeeding experience</td>
</tr>
<tr>
<td>Mother requiring extra and ongoing physical and emotional support</td>
<td>• Facilitate and plan with practical methods of help and support in partnership with the family</td>
<td>• To have a well rested mother to promote physical and emotional recovery</td>
<td>More confident mother</td>
</tr>
<tr>
<td>Unfulfilled expectations eg disappointment re birthing experience (leading to conflicting feelings re mothering)</td>
<td>• Reassurance and debriefing&lt;br&gt;• Empower mother so that breastfeeding meets her expectations and goals&lt;br&gt;• Refer to appropriate services eg counselling, lactation specialist if needed</td>
<td>• To promote emotional wellbeing and support breastfeeding</td>
<td>Empowered mother, father and baby</td>
</tr>
<tr>
<td>After effects of anaesthetics/analgesics e.g. sleepy baby</td>
<td>• Discuss/give information so that mother can identify babies feeding cues&lt;br&gt;• Give adequate education re: supply/demand usually 8 or more feeds per 24 hrs from day 2</td>
<td>• Mother will be able to maximise feeding opportunities&lt;br&gt;• To ensure baby has adequate nourishment</td>
<td>Well hydrated baby</td>
</tr>
<tr>
<td>Delayed Lactogenisis II</td>
<td>• Reassure mother that the milk will take longer to “come in”, but this is normal after a caesarean and the baby may require feeding more frequently.</td>
<td>• Mother acknowledges that this is a normal physiological process</td>
<td>Milk supply continues to increase.</td>
</tr>
</tbody>
</table>

Monitoring Baby’s Progress- First Week

Baby should be alert and responsive when awake with bright eyes and good skin turgor.

Feeding Needs
A full term healthy baby should be **fed to need**. Needs will vary according to the individual baby. **After the first 24 hours a minimum of six feeds would be considered normal.** Encourage the mother to be aware of baby’s early feeding cues eg. awake, alert, searching, sucking on fingers and starting to cry, and respond to them. Baby’s attachment to the breast and sucking ability should be observed, along with mother’s comfort during the feed. Baby should be offered both breasts in the first few days to maximise volume of milk available and stimulation to the breasts. Length of each feed is variable and can take up to an hour. Once the milk “comes in” mother should be advised to finish the first breast prior to offering the second breast i.e. if the first breast remains full and lumpy after the feed, baby should be encouraged to reattach to the same breast before changing breasts. The breasts should become softer and more comfortable over the next few days.

Baby’s behaviour
Baby should appear satisfied after the feed but will not always sleep immediately. Encourage mother to cuddle the baby for a little while before putting him/her into the cot and to respond to him promptly when he cries. Just prior to the milk “coming in” the baby usually seems very hungry and wants to feed more frequently. This is often called the “feeding frenzy”. He may also have a low-grade temperature. Mother should be encouraged to respond to the baby and see this as normal. After the first week there will usually be one period during the day when baby does not settle in his cot but is often happy being held.

Urine output
Urinary output is spasmodic in the first 48 hours. As long as the baby is voiding one or more times per 24 hours during this time there is usually no cause for concern and the presence of urates is not clinically significant. As milk volume increases around day 4-5, baby’s urinary output should be colourless and increase to a minimum of six wet nappies in 24 hours.

Bowel actions
For the first 24-48 hours the baby passes meconium that is greenish-black in colour. This changes to greenish brown transitional stools by day 3 and by day 4 the stools should be loose and mustard/yellow in colour. A baby who is still passing meconium at this stage may be signalling a problem with attachment to the breast or ability to suck correctly and this should be observed.

Weight
It is normal for babies to lose up to 10% of their birth weight in the first 3 – 5 days, however a baby who is not breastfeeding well will show other signs of being dehydrated from about the third day and weighing should not be seen as the main indicator. It is expected that a breastfed baby will regain birth weight by day 10-14.

Use of Dummies
The use of dummies in full term breastfed babies is discouraged for the following reasons:
- Sucking at the breast differs from sucking on a bottle or dummy
- May reduce baby’s sucking capacity
- Reduces breast stimulation
- May lead to problems such as: engorgement, breast refusal, cracked nipples, dehydration

**NB:** The hospital does not supply dummies in the post-natal ward

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Flowchart for ALL Babies with >10% Weight Loss on Discharge

Record baby’s age in hours next to the weight on the baby’s chart

▼

Observe the following and document any adverse findings on the baby’s notes:
- Breastfeeding history ie. has mother breastfed a previous child successfully
- Any medical issues eg. HDP or PPH
- Breasts for normal growth and breast changes
- Intact nipples
- Positioning, attachment & baby’s sucking
- Baby’s output appropriate for age

▼

Discuss with the Midwife-in-Charge or Lactation Consultant (if available) to devise care plan. Do not automatically start extra expressing and giving complementary feeds if there are no adverse findings.

▼

Advise mother to seek early weight check (either GP or CFHN)

▼

Either refer directly to CFHN Central Intake or CFH referral system

▼

Document the referral in the “Follow up Appointments” on Neonatal Discharge Summary. Also comment in the discharge report in the case history notes
Complementary Feeds for Breastfed Babies

There is no place for routine use of complementary feeds in a healthy term newborn.

In assessing the wellbeing of a newborn it is important to look at the full picture. Baby’s age, colour, feeding patterns, change in stools, behaviour and level of hydration. If the baby is not feeding, EBM should be given to the baby. Discourage dummy use until milk supply is well established, approximately 6 weeks.

The unnecessary use of infant formula will decrease the baby’s need to breastfeed, delay initiation of a full milk supply and increase the risk of maternal engorgement. It will also alter the flora of a baby’s gut making it more susceptible to bacterial invasion for two to four weeks. The mother is undermined with her ability to breastfeed and becomes very focused on control and “measured amounts” (1). The baby expects an instant reward when initiating sucking and a very full stomach on completion of the feed. Exclusive breastfeeding is the norm. In a small number of situations there may be a medical indication for supplementing breastmilk or for not using breastmilk at all. It is useful to distinguish between:

Acceptable Medical Reasons for Complementary Feeding.
- Infants who cannot be fed at the breast but for whom breastmilk remains the food of choice e.g. premature babies.
- Infants who may need other nutrition in addition to breastmilk e.g. hypoglycaemia
- Infants who should not receive breastmilk, or any other milk, including the usual breastmilk substitutes and need a specialised formula e.g. galactocaemia
- Infants for whom breastmilk is not available e.g. unable to provide sufficient EBM
- Maternal conditions that affect breastfeeding e.g. mammary hypoplasia, breast reduction surgery.
- Maternal conditions that may justify the temporary avoidance of breastfeeding eg. severe illness that prevents a mother caring for her infant (2).

In families with allergy history and up to 15% of those who have no history, a breastfed baby can be sensitised to a cow’s milk protein by giving one complementary feed during the first three days of life.

Suggested intake per feed of a healthy term breastfed baby is outlined below(2). Feeding should be varied to suit the individual baby’s cues, satiation and/or if the baby is breastfeeding prior to having the complementary feed:

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Suggested Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 24 hours</td>
<td>5 - 10 mls / feed</td>
</tr>
<tr>
<td>24 – 48 hours</td>
<td>5 -15mls / feed</td>
</tr>
<tr>
<td>48 – 72 hours</td>
<td>15 – 30mls / feed</td>
</tr>
<tr>
<td>72 – 96 hours</td>
<td>30 – 60mls / feed</td>
</tr>
</tbody>
</table>

Protocol for breastfed babies whose primary relatives have atopic disease
There is sufficient evidence to suggest that babies whose primary relatives have atopic disease should if possible receive exclusive breastmilk feeds. If this is not possible because of delayed or inadequate supply while the baby is in hospital, then a partially hydrolysed formula should be used as complementary feed until breastfeeding is fully established.

If the milk supply is not adequate by discharge, the formula should be continued and mother should be encouraged to express 3rd hourly until seen by the referred, appropriate community support person for help with lactation.

2. ABM Clinical Protocol #3: Hospital Guidelines for the Use of Supplementary Feedings in the Healthy Term Breastfed Neonate, Revised 2009
3. UNICEF/WHO Acceptable Medical reasons for the use of Breast-milk substitutes 2009 World Health Organisation, Department of Nutrition for Health and Development

Issue Date March 2014
Review Date: March 2017
Droplet Feeding EBM (Temporary Measure Only)

Rationale for procedure

A HEALTHY TERM BABY may have difficulty latching to the breast:

1. Skin-to-skin contact has been tried without success
2. Baby is alert and interested, but unable to latch

Goals
To aid the initiation of milk supply by early and regular expression
To ensure that baby safely receives all expressed breastmilk available
To lessen the incidence of nipple confusion

Potential Hazard
Aspiration of breastmilk (although research shows that this may not be an irritant to baby’s lungs)

Equipment
Gloves, if required
Clean container to collect milk - 2ml syringe

Procedure
Observe all preliminary standards appropriate to the procedure e.g. hand washing
Latching at the breast should be attempted for 5-10 minutes at each feed time unless baby becomes distressed. If the baby does not latch, encourage/assist the mother with hand expressing both breasts. The electric pump may be used from day 2 in combination with hand expressing, starting on a low setting and increasing according to mother’s comfort.

Midwives may droplet feed a small amount (no more than 10mls) of expressed breastmilk (EBM) directly into the front of the baby’s mouth with the following precautions:

- The baby must be alert
- Use ONLY a 2ml sterile disposable syringe
- Place the baby should be in a semi upright position
- Drip EBM slowly into the front of the baby’s mouth and observe for swallowing
- Do not encourage the baby to suck on the syringe

Outcome
Milk supply was initiated by early and regular expression
The baby safely received all expressed breastmilk available
The incidence of nipple confusion was reduced

Cup Feeding (Temporary Measure Only)

Rationale for procedure
1. Skin-to-skin contact has been tried without success
2. Baby is alert and interested, but unable to latch
3. Baby requires nutritive fluids in addition to breastfeeding
4. Cup feeding has been shown to be safe and may help preserve breastfeeding duration in situations where multiple supplemental feedings are required.
5. Step 9 of “The Ten Steps to Successful Breastfeeding” implementation standards require that when a woman is unable to breastfeed the use of a teat should be avoided.

Contraindications: Spoon and cup feeding is contraindicated in babies with marked neurological defects.

Goals
An alternative feeding method is provided to newborns when unable to directly breastfeed. Additional nutritive fluids are provided to the breastfed baby utilising a method that supports Baby Friendly Health Initiative implementation standards.

Potential Hazard
Aspiration of breastmilk / breastmilk substitute

Equipment
- Clean container to collect milk - 30ml plastic medication cup or plastic spoon
- Expressed breastmilk
- Infant formula (if required)
- Gloves, if required
Cup Feeding Procedure

Use parent handout page 98

Observe all preliminary standards appropriate to the procedure e.g. hand washing

Latching at the breast should be attempted for 5-10 minutes at each feed time unless baby becomes distressed. If the baby does not latch, encourage/assist the mother with hand expressing both breasts. The electric pump may be used from after 24 - 48 hours in combination with hand expressing (Parent handout p 95, 96).

- Each mother and baby's needs should be assessed individually
- Identify requirement for fluids in place of breastfeed or in addition to breastfeed
- Consider whether adequate volume can be fed in 20 – 30 minutes
- Baby must be awake, alert and displaying signs of hunger.
- Determine the use of a spoon or cup dependent of the volume and viscosity of milk
- Midwives / nurses must discuss the objectives of this policy with the parents
- Obtain verbal consent for procedure and written consent if using infant formula
- Wrap baby securely
- Support the baby in an upright position on your lap.
- If possible have the cup at least half full for the beginning of the feed.
- Tip the cup so the milk is just touching the inside of the baby’s lower lip. It should not be poured into the baby’s mouth.
- Rest the cup on the baby’s lower lip and allow the baby to sip milk from the rim of the cup.
- Tilt the spoon or the cup so the milk is just touching the lips. As the baby opens his/her mouth a small amount of the feed will be taken and swallowed, either by lapping or sipping
- **DO NOT POUR MILK INTO THE BABY’S MOUTH**
- Hold the spoon or cup steady while the baby is actively drinking. Remove when the baby stops
- Return the spoon or cup when the baby is showing signs of readiness to feed again
- Repeat procedure until feed completed – should be completed within 20 – 30 mins
- Assess mother’s understanding and comfort with the practical aspects of spoon or cup feeding
- Midwife / Nurse to educate and supervise mother on how to cup feed until she demonstrates proficiency and is confident with the procedure
- Provide written information about cup feeding (Parent handout page 98)
- Document indication for use, feed and outcome, revise feeding plan as required
- Discard the medication cup after use.

Outcome

Milk supply was maintained by early and regular expression
Baby receives adequate nutrition and the incidence of nipple confusion was reduced

2. Howard et al. Randomised Clinical Trial of Pacifier Use and Bottle-feeding or Cup feeding and their Effect on Breastfeeding. Paediatrics 2003; 111(3): 511-518
## Painful Nipples

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painful nipples</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
| No obvious damage     | • Ensure correct positioning and attachment  
                        • Assess baby for any structural abnormalities (see page 52)  
                        • Reassure mother that her nipples will not be damaged if her baby is well attached.  
                        • Some nipple tenderness may be experienced in first days post partum.  
                        • Encourage to detach or reattach if pain persists into feed  
                        • Encourage to seek further assistance if pain increases  | • A well attached baby is unlikely to cause nipple damage  
                        • Hormonal changes may cause tenderness  
                        • If pain persists nipple damage will increase | Easy attachment and pain free breastfeeding. Healthy nipples and mother proficient at attaching baby herself |
| Damaged nipples        |        |           |                 |
| Grazes, fissures or bleeding | • Obtain history and examine nipples  
                                • Try to offer breast at early feeding cues before baby starts crying  
                                • Observe breastfeeding and ensure optimal attachment  
                                • Apply warmth and express a little milk by hand just prior to the feed  
                                • If breasts are full, may need to hand express to soften the areola prior to latching  
                                • Apply breastmilk after the feed and leave bra open for a few minutes and allow to dry | • Easier to achieve optimal attachment  
                                • Gets milk flowing  
                                • Enables easier attachment  
                                • Assists the healing and helps prevent the breast pad/ bra sticking to nipple | Mother is able to latch and feed the baby comfortably |
# Painful Nipples (continued)

<table>
<thead>
<tr>
<th>Pain persists</th>
<th>Other causes</th>
</tr>
</thead>
</table>
| If pain persists discuss the following options:  
- Continuing to feed  
- Offer less sore side first  
- Resting and expressing for up to 48 hours (1 or 2 feeds may be all that is necessary) then assist with feed. Alleviate the underlying cause of nipple damage by improved latching technique  
- Offer symptomatic relief if required e.g. paracetamol and apply breastmilk post feed  
- If pain experienced detach and reattach  
- If using breast pads, change regularly (may need to express prior to removal to avoid sticking and further damage)  
- Ointment and creams should not be advised.  
- Avoid soap on nipples  
- Alternate position depending on area of damage e.g. Madonna, twin fashion  |   
- Nipple Vasospasm p 45  
- Nipple White spot p 47  
- Thrush p 43  
- Baby tongue tie p 50  
- Baby has an inco-ordinate suck p 50  |
| - Mother is able to make an informed choice  
- To prevent further trauma which may lead to early weaning  
- To relieve the pain so that mother can tolerate attempting to attach baby correctly  
- To assist restoration of skin integrity and protect against infection  
- There is insufficient evidence to support the use of ointments, sprays or creams to prevent or treat nipple soreness  
- Washes away normal secretions and may have a drying effect  
- To prevent further damage and make attachment more comfortable  |   
| A healed graze  
No further trauma  
A positive breastfeeding relationship  |

Please refer to relevant section in this document for information on these conditions

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## Breast Fullness/Engorgement

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normal fullness</strong></td>
<td>Counsel mother that this is normal physiology of establishing lactation  &lt;br&gt; Keep breasts well supported between feeds eg. advise mother to wear a well fitting nursing bra (not constricting)  &lt;br&gt; Remove bra while feeding and allow 2nd breast to leak  &lt;br&gt; Assist mother with gentle hand expression prior to latching baby  &lt;br&gt; Ensure correct position and attachment aiming baby's chin towards fullest area  &lt;br&gt; Ensure first breast is soft and comfortable before offering second breast</td>
<td>There is an increase in blood supply and lymph in the breast tissue that subsides with an increase in milk production  &lt;br&gt; Will support the heaviness and reduce pain and oedema  &lt;br&gt; To maintain drainage and prevent back pressure in ducts, which would depress milk production  &lt;br&gt; Will soften areola and produce a small amount of flow  &lt;br&gt; Placing baby's bottom jaw adjacent to fullest area will encourage emptying of that area  &lt;br&gt; This should avoid a blocked duct which may lead to mastitis</td>
<td>Baby correctly attached to breast and satisfied post feed  &lt;br&gt; Breast is soft and comfortable</td>
</tr>
<tr>
<td><strong>Engorgement (rare)</strong></td>
<td>See Action for Normal Fullness  &lt;br&gt; Focus treatment on measures to reduce swelling and reduce pain  &lt;br&gt; Apply and reapply cold packs if mother is agreeable and reassess in 2 hours  &lt;br&gt; Handle breasts as little as possible during this time  &lt;br&gt; Offer regular paracetamol or anti-inflammatory medication  &lt;br&gt; Attempt to breastfeed / hand express  &lt;br&gt; If using a breast pump, ensure the pressure is low</td>
<td>Will reduce vascularity and oedema and encourage milk flow  &lt;br&gt; Unnecessary stimulation may increase supply further  &lt;br&gt; Will relieve pain and alleviate any elevation in temperature  &lt;br&gt; Vascularity and oedema should be reduced</td>
<td>Breast is soft and comfortable post feed  &lt;br&gt; Mother comfortable, pain free and able to successfully breastfeed baby</td>
</tr>
</tbody>
</table>
Breast Fullness/Engorgement (continued)

Unable to attach and feed or express milk by hand or pump due to true engorgement

Ensure there are no signs of mastitis see p 40

- Continue management as above
  - May attempt intermittent compression around areola known as reverse pressure softening **.
    - Prior to attaching baby to breast or expressing, press inward toward the chest wall with fingers evenly around the areola and hold for about a minute.
  - Theorised that the areola is softer so the baby can attach better and remove milk from the breast

- Baby feeds and milk is removed and engorgement improves

* 1 Heat is not recommended in the first 10 days as it tends to increase venous engorgement, however may be used to assist with initial milk flow after this time.

** 2 Advise with caution as Reverse Pressure Softening/ Gentle Positive Pressure - has been identified in the literature but is not based on scientific evidence.

5. Academy of Breastfeeding Medicine Protocol #20: Engorgement, BREASTFEEDING MEDICINE Volume 4, Number 2, 2009 © Mary Ann Liebert, Inc.DOI: 10.1089/bfm.2009.9997
6. ILCA core curriculum for lactation consultants 2013 Jones and Bartlett p 747 - 750

Axillary breast tissue

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast tissue extending into the axilla which may become swollen, engorged and painful during lactogenesis II.</td>
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<tr>
<td>- Encourage mother to raise her arm and attempt to gently massage towards the breast if the tissue appears to be connected to the rest of the breast.</td>
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<tr>
<td>- Do not try to massage firmly or “squeeze” the milk out</td>
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<tr>
<td>- Apply ice compress for comfort</td>
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<tr>
<td>- Pain relief such as paracetamol</td>
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<tr>
<td>- Observe for signs of mastitis and treat with appropriate antibiotics if necessary</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- Reassure mother the engorgement and milk will reabsorb with time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- May be separate from the rest of the breast tissue or be connected to the tail of spence</td>
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<tr>
<td>- Potential area of milk pooling and mastitis</td>
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<tr>
<td>- If unconnected to the rest of the breast vigorous massage will increase the risk of mastitis and cause pain</td>
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<td></td>
<td></td>
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<tr>
<td>- The milk will be reabsorbed and the swelling will settle with time</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mother is reassured, emotionally supported - mother and baby continue to breastfeed</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Any mastitis is diagnosed and treated</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

1. ICLA Core Curriculum for Lactation Consultants 3rd edition 2013 Jones & Bartlett
Use of Nipple Shields

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
</table>
| Nipple shield should be tried if baby is unable to latch and feed effectively due to:  
  - Breast refusal  
  - Inco-ordinate suck  
  - Inverted/flat nipples  
  - Extreme nipple pain (used as a last resort in preference to mother weaning) | Should only be used once milk is “in” (usually day 3 onwards) and as a short term measure only  
  Discuss information in nipple shield handout and give her a copy (p 97) | Short term use may preserve the breastfeeding relationship as it keeps baby at the breast and avoids the need for expressing | Baby is able to breastfeed successfully with nipple shield |

| Reduced milk transfer | Problems can be reduced by the following:  
  - Use of a suitable silicone shield  
  - Being shown how to use the shield correctly  
  - Assessing baby’s ability to latch well with the shield and observing for changes in baby’s sucking pattern  
  - Correct cleaning and storing of shield between uses  
  - Ongoing follow-up to try baby directly to the breast. Ideally within 2-3 weeks.  
  - Extra expressing may be necessary if there is evidence of reduced milk supply | May need large or small shield dependant on nipple size  
  Lack of direct stimulation may lead to a lower milk supply and poor weight gain in the baby  
  Avoid any nipple damage and ensure adequate breast drainage and lessen the risk of infection  
  Baby may prefer nipple shield and may be difficult to get directly onto breast  
  To increase milk supply | Length of shield use is minimised  
 Baby is able to latch effectively to the breast without shield |

## Blocked Milk Ducts

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
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<th>Desired Outcome</th>
</tr>
</thead>
</table>
| Mother has a palpable breast lump with well-defined margins. Milk or cast-off cells accumulate within a duct and form a localised blockage or plug. May be caused by:  
- Poor drainage of the breast  
- External pressure eg. finger or bra  
- A missed feed  
May be accompanied by: tenderness, heat and possible redness | • Eliminate nipple “white spot” p.50 as a possible cause.  
• Avoid restrictive clothing.  
• Encourage continued breastfeeding with good positioning and attachment.  
• Moist heat prior to feed (if baby >10 days)  
• Feed on affected breast first  
• Aim chin towards area of blockage.  
• Very gentle massage over affected area during the feed. If not resolved after feeding, manual expression with fingers in alignment with blockage.  
• Discuss diet & rest | • Should ensure optimal drainage  
• Encourages milk flow while baby is sucking. Directly works on affected ducts | Plug is released. May be brown or green in colour & thick & stringy. It is not dangerous to the baby. Blockage is cleared, further complications are avoided and breastfeeding continues |

*NB Heat is not recommended in the first 10 days as it tends to increase venous engorgement*

# SLHD Breastfeeding Guidelines

## Mastitis

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
</table>
| **Symptoms**  
*● Fever >38°C  
● Flu-like joint aches and pains  
● Chills or rigors  
● Red, tender hot area on breast* | If there is no nipple damage, encourage continued breastfeeding with good positioning and attachment – refer mother for further input with this if necessary. (it is important that the whole feed is observed). Antibiotics may be required depending on severity of symptoms. | If the milk is not removed at the rate it is being produced, there is a rise in pressure in the alveoli and this forces milk into the surrounding tissue. | Symptoms resolve without further treatment |
| If nipples are cracked, antibiotics should be commenced and breastfeeding or regular expressing continued. | | Noticeable improvement within 48 hours. Redness subsided, breast soft and comfortable post feed or if expressing. No extension of nipple damage. |
| **Baby/pump not draining breast adequately**  
Contributing factors include stress, fatigue, poor attachment, cracked nipples, external pressure eg; finger or bra, missed feed | ● Moist heat prior to feed (if baby >10 days).  
● Rotate breasts normally, but ensure that the affected side is well drained. If baby does not go the 2nd breast, mother may need to express for comfort only  
● Aim chin towards area of blockage very gentle massage over affected area during the feed  
● Paracetamol as required and cold packs  
● Discuss nutritious diet, extra fluids and bed rest  
● Avoid restrictive clothing | ● Should promote letdown and aid milk flow  
● The area of the breast adjacent to the baby’s jaw will always be the best drained area  
● Mother may experience pain | Baby is able to latch and suck well  
A noticeable improvement after several feeds |
| **Requiring Antibiotics**  
(Antibiotic treatment alone without adequate breast drainage will not resolve mastitis) | **Flucloxacillin, Cephalexin**  
500mg four times a day for 10-14 days is the current recommendation. Discuss potential side effects. If no improvement in 48 hours – consider admission to hospital for intravenous antibiotics | A broad spectrum antibiotic is needed to work on gram positive organisms | Noticeable improvement within 48 hours. Redness subsided, breast soft and comfortable post feed or if expressing |

*NB Heat is not recommended in the first 10 days as it tends to increase venous engorgement  
The effectiveness of therapeutic ultrasound in the treatment of mastitis has not been scientifically demonstrated and is not recommended  
5. ILCA Core Curriculum for Lactation Consultant Practice, 2013, Jones & Bartlett p751  
## Lactating Breast Abscess

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
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<tbody>
<tr>
<td><strong>Suspected Breast Abscess</strong> ie. a localised collection of pus encapsulated in the breast tissue. Usually associated with a recent episode of mastitis and a history of inappropriate or delayed treatment</td>
<td>• Commence or recommence appropriate antibiotics (p37) &lt;br&gt;• Diagnostic ultrasound &lt;br&gt;• Refer mother to breast surgeon &lt;br&gt;• Encourage continued breastfeeding or expressing if unable breastfeed</td>
<td>• Arrests the progress of the abscess &lt;br&gt;• To confirm presence of abscess (Differential diagnosis may be a galactocele)</td>
<td>Correct diagnosis is made</td>
</tr>
<tr>
<td><strong>Confirmed Abscess</strong></td>
<td>• Needle aspiration under ultrasound guidance (usually requires multiple repeats) &lt;br&gt;• Culture and sensitivity of aspirate &lt;br&gt;• Mother should remain on an appropriate antibiotic cover</td>
<td>• Good option if abscess is small &lt;br&gt;• Can be done on an outpatient basis and does not require a general anaesthetic &lt;br&gt;• Antibiotics can be adjusted accordingly &lt;br&gt;• There is an ongoing risk of infection during aspiration procedure</td>
<td>Mother is able to make an informed choice about method of management</td>
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<td></td>
<td>• Surgical incision and drainage requires hospitalisation &lt;br&gt;• Admission with baby &lt;br&gt;• If the wound is large a daily saline wick dressing may be necessary to allow granulated healing (handout p.102) &lt;br&gt;• Milk may leak from wound during feed.</td>
<td>• May be dependent on size of abscess, availability of options at time of presentation and mother’s choice &lt;br&gt;• Slow wound healing avoids formation of milk fistula &lt;br&gt;• Wound remains sterile &lt;br&gt;• Continued breastfeeding is supported</td>
<td>Abscess is drained adequately, infection is prevented and breastfeeding continues Mother and baby are not separated</td>
</tr>
<tr>
<td>Mother requires lactation support</td>
<td>• Appropriate referral &amp; assessment of any feeding problems</td>
<td>• Mother will have improved outcome if breastfeeding continues</td>
<td>Wound heals well with no interruption to breastfeeding</td>
</tr>
<tr>
<td>Mother thinking of weaning</td>
<td>• Discuss option of weaning from affected breast only ie winding down expressing</td>
<td>• Mother is able to feed from unaffected breast.</td>
<td>Wound heals well, breastfeeding continues on one breast</td>
</tr>
<tr>
<td>Mother elects to fully wean before or during treatment</td>
<td>• Should be prescribed medication for suppression of lactation eg. Cabergoline (Dostinex®) &amp; no expressing (p. 104)</td>
<td>• Continued milk secretion without milk removal or medication will increase risk of complications</td>
<td>Wound heals well. Mother weans without complication</td>
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## Low Supply of Breastmilk

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| **Low supply suspected** due to any combination of the following:  
- Limited nutritive sucking when breastfeed observed  
- Unsatisfied baby post feed  
- Minimal wet nappies  
- Poor weight gain. See on-going monitoring of progress | Attain a full history in an attempt to eliminate the following:  
- Maternal Considerations  
  - Mother on medication  
  - Mother feeding to schedule (rather than need)  
  - Limiting time at the breast  
  - Unrelieved engorgement  
  - Only offering one breast per feed  
  - Inappropriate formula supplementation  
  - Early introduction of solids  
  - Inadequate diet/fluids  
  - Inadequate rest  
  - Over exercise  
  - Overuse of alcohol  
  - Overuse of caffeine  
  - Overuse nicotine | May all impede on mothers ability to produce sufficient milk | Underlying problem is identified |
| **Baby Considerations**  
- Poor latch  
- Overuse of dummy  
- Baby extending periods of sleep overnight  
  - Oromotor dysfunction (p52) | | Decrease in stimulation to the breast and inadequate removal of milk will decrease supply | |
| **Other contributing factors:**  
- Breast Hypoplasia (p13)  
- Breast surgery (p83)  
- Retained products  
- Post partum haemorrhage  
- Anaemia  
- Endocrine problems eg. diabetes  
- Mother/baby separation | | | |
| | | Prevents Prolactin levels from rising | |
| | | May cause a 15-20 hour delay in Lactogenesis II | |
| | | Expressing is not as stimulating as the baby feeding | |
### Low Supply of Breastmilk continued...

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<tr>
<td>Low supply suspected cont…</td>
<td>Observation (or refer for) of a breastfeed</td>
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<tr>
<td></td>
<td>1. Feed more frequently and encourage finishing the first breast and always offering the second breast</td>
<td>• Limited nutritive sucking when baby is latched well is a reliable indicator for low supply</td>
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<td>2. Encourage mother to express both breasts for 5-10 minutes after each feed either by hand, manual pump or electric pump. Double pumping could be encouraged</td>
<td>• More frequent and proper feeds will increase stimulation of the breast</td>
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<td>3. Encourage skin-to-skin contact</td>
<td>• Will increase stimulation of the breast and any extra EBM may be offered to baby</td>
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<td>• Increases baby’s natural instinct to breastfeed</td>
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<td>Low supply identified</td>
<td>Observation (or refer for) of a breastfeed</td>
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<td></td>
<td>1. Resume overnight feeding</td>
<td>• More stimulation to breast</td>
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<td>2. Cease unnecessary solids/formula</td>
<td>• Exclusive breastfeeding may increase supply</td>
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<td>3. Ensure mother has a good diet</td>
<td>• A good basic diet is essential while you are</td>
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<td>4. Discuss with mother her ability to get adequate rest</td>
<td>• Fatigue contributes to inadequate milk supply</td>
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<td>5. Check that mother has a good support network</td>
<td>• A nursing mother needs support and someone to care for her</td>
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<td>6. Lower caffeine/alcohol/nicotine intake</td>
<td>• Let-down response enhanced</td>
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<td>7. Consider option of supply line use</td>
<td>• Baby will provide better stimulation</td>
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<td>Underlying problem is identified</td>
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<td>No improvement in supply with above management</td>
<td>Discuss use of galactagogues with mother</td>
<td>Domperidone acts primarily in the periphery with minimal access across blood/brain barrier-now considered drug of choice</td>
<td>Should be a noticeable difference 3-5 days into the course</td>
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<td>Prescription drugs</td>
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<tr>
<td></td>
<td>1. Domperidone (Motilium®) (p100)</td>
<td>• Severe PPH may cause infarction of the pituitary gland</td>
<td>Treatment according to confirmed diagnosis</td>
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<td>These drugs have not been approved by the manufacturer’s for this use</td>
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<td>2. Herbal (mother’s choice)</td>
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<td>3. Acupuncture (mother’s choice)</td>
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<td>As above with a history of PPH, fatigue, hair loss, continuing amenorrhoea</td>
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<td>Investigate for Sheehan’s syndrome (rare)</td>
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<td>If complementary feeds are temporarily necessary.</td>
<td>Extra stimulation to the breast will help increase supply and keep baby near breast</td>
<td>Supply increases and complementary feed is kept to a minimum</td>
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</table>

**NB. Medication should not replace breastfeeding management. Each mother should have close follow-up by a clinician. Metoclopramide is no longer the preferred choice as it is associated with causing depression and herbal remedies of unknown composition should be avoided.**

5. ILCA Core Curriculum for Lactation Consultant Practice, 2013, Jones & Bartlett p 820
### Use of a Lactation Aid (Supply Line)

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| Mother is unable to supply sufficient breastmilk for her baby's needs and her baby requires extra nutrition and she would like to use a lactation aid. May be related to:  
  - Maternal issues eg. breast hypoplasia or surgery or mother may wish to induce lactation or relactate.  
  - Baby issues may include weak, disorganised or dysfunctional suck | - An experienced health care professional should discuss suitability, available options, benefit and cost in feeding lines with the mother.  
  - A decision is made about appropriate supplementation eg. EBM or infant formula and the amount required  
  - Demonstrate the use feeding tube for at breast supplementation  
  - Mother is shown how to use the supply line appropriately  
  - A full feed is observed and assessed  
  - Check baby’s weight and progress regularly. | - A baby using a feeding tube must be able to latch-on and do some form of sucking.  
  - Creates a behaviour-modification situation that shapes baby’s sucking pattern to one suitable for obtaining milk from the breast  
  - Sucking stimulation by the baby lessens the need for extra expressing. | Mother and baby use the lactation aid successfully  
The amount required is in keeping with the mother’s own milk production  
Baby’s feeding needs are met |
| A lactation aid may be either:  
  - Trial use: an infant feeding tube attached to a bottle with formula or 20 ml syringe. **Single use only**  
  - Mother decides to use at breast supplementation and purchases the manufactured model. It is a vented system with a bottle or breast milk bags and notched cap that enables pinching off of the tubing as required. It hangs by a cord around the mother’s neck. | | | |
# SLHD Breastfeeding Guidelines

## Oversupply of Breastmilk

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<tr>
<td><strong>Maternal symptoms:</strong></td>
<td>If baby under 4 weeks</td>
<td>If baby over 4 weeks</td>
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<tr>
<td>• Breast not draining adequately</td>
<td>• May need to express some milk prior to latching baby if breast very full</td>
<td>• Airule breastfeeding reliant on endocrine factors as well as milk removal</td>
<td>Breasts drain well and are lump free post feed</td>
</tr>
<tr>
<td>• Breast remaining hard/lumpy post feed</td>
<td>• Optimise positioning and attachment</td>
<td>• Should ensure good breast drainage</td>
<td>Settles spontaneously</td>
</tr>
<tr>
<td>• Mastitis</td>
<td>• Encourage baby to finish the first breast prior to being offered the second breast. May require the baby to go back to that breast several times at the same feed rather than offer the other side</td>
<td>• This management strategy resulted in partial or complete resolution of problems in 79% of babies</td>
<td>Supply settles</td>
</tr>
<tr>
<td><strong>Baby symptoms</strong></td>
<td>• Aim for minimum three hours from commencement of one feed to the next</td>
<td>• Should help to reduce supply and encourage a longer feed</td>
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<tr>
<td>• Gulping or having difficulty coping with milk flow</td>
<td>• Gentle handling post feed</td>
<td>• Minimise possetting</td>
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<tr>
<td>• Short, frequent feeds</td>
<td>• Discuss settling techniques with parents and reassure them that supply should settle over a few weeks</td>
<td>• Parents are more aware of how to pacify baby</td>
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<tr>
<td>• Frequent loose stools</td>
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<td>• Breasts more reliant on removal of milk (autocrine control). Extra expressing more likely to increase supply</td>
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<td>• Possessing/vomiting after feeds</td>
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<td>• Baby should manage fast flow a little better</td>
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<td>• Extremely unsettled</td>
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<td>• Minimal weight loss post birth followed by large weight gains</td>
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## Thrush

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<tbody>
<tr>
<td><strong>Maternal Nipple Thrush</strong>&lt;br&gt;NB: Differentiate between nipple vasospasm&lt;br&gt;- Itchy pink/red painful nipples and areola sometimes associated with nipple damage&lt;br&gt;- Sore breast/nipple during and after feeds with no apparent nipple damage&lt;br&gt;- Shooting, burning pain radiating through the breast (only if in combination with other symptoms)&lt;br&gt;- Recent antibiotic use in mother or baby&lt;br&gt;- History of vaginal thrush or fungal infection in household</td>
<td>- Antifungal treatment topically to nipples and baby’s mouth 4 times a day after feeds*, for fourteen days. (miconazole gel)&lt;br&gt;- Hygiene eg. meticulous hand washing, wash underwear, towels etc in hot water and sun dry.&lt;br&gt;- Keep nipples dry by changing nursing pads frequently and air nipples when possible.&lt;br&gt;- Change and wash bra daily&lt;br&gt;- Oral fluconazole: 150mg - 1 capsule every 2&lt;sup&gt;nd&lt;/sup&gt; day for 3 doses followed by nystatin 500,000 units x 2, three times a day and miconazole oral gel to nipples x 4 per day and review in 1 week&lt;sup&gt;5&lt;/sup&gt;&lt;br&gt;- If pain not improving consider repeating fluconazole course as above or one capsule daily for up to 10 days&lt;sup&gt;5&lt;/sup&gt;&lt;br&gt;- If no improvement after further course consider oral ketoconazole&lt;sup&gt;5&lt;/sup&gt;&lt;br&gt;- Diet modification. Avoid foods containing yeasts, moulds, fungi, sugar and starchy foods.&lt;br&gt;- Additional acidophilus eg. yoghurt, probiotic</td>
<td>- May eliminate fungal infection&lt;br&gt;- Good hygiene will prevent the spread of thrush&lt;br&gt;- Should speed up resolution&lt;br&gt;- If infection is chronic mother may require systemic treatment&lt;br&gt;- Dietary changes have been shown to help resolve symptoms&lt;br&gt;- Establishes a normal colonizing bacterial flora which will limit fungal growth&lt;br&gt;- A specific oligosaccharide in human milk should protect the baby from thrush</td>
<td>Breast comfort&lt;br&gt;Pain free breastfeeding and a healed nipple&lt;br&gt;Symptoms resolve&lt;br&gt;Reduce the risk of recurrence of infection</td>
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*It is unusual for exclusively breastfed infants from birth to be infected with thrush due to the oligosaccharides in breastmilk.<br>**Mammary ductal thrush has not been proven in the literature
### Thrush cont...

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<tr>
<td><strong>Baby</strong></td>
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<tr>
<td>Oral Thrush</td>
<td>• White patches resembling milk curds on palate, tongue or inside cheeks</td>
<td>• If baby has oral thrush treat with antifungal medication – either gel or oral drops and see maternal management</td>
<td>Should eliminate signs and symptoms of thrush</td>
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<tr>
<td></td>
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<td>• If baby is using a dummy discourage mother from placing it in her own mouth prior to giving it to baby. Ensure washed or boiled daily</td>
<td>• Any introduction of further bacteria in baby’s mouth will delay resolution</td>
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<td></td>
<td></td>
<td>• Meticulous hand washing</td>
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<tr>
<td>Anal Thrush</td>
<td>• Raised red pustules or scalded looking buttocks</td>
<td>• Keep area clean and dry</td>
<td>Candida thrives in a warm, moist environment</td>
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<td>• Expose to air as often as possible</td>
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<td>• Topical application of antifungal cream</td>
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<tr>
<td>Sterilisation of Feeding Utensils</td>
<td>• Boiling is recommended</td>
<td>• Spores are heat resistant</td>
<td>Adequate cleaning of equipment</td>
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## Nipple Vasospasm

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<tr>
<td>Numbness, burning, tingling and pain of nipple occurring during / between feeds.</td>
<td>• Check for oral anomaly in the baby</td>
<td>• Blanching of the nipple due to mechanical compression may occur with poor positioning and attachment</td>
<td>No nipple compression post feed Pain subsides</td>
</tr>
<tr>
<td>Associated with nipple blanching post feed and maybe triphasic colour change to white to blue to red Appears to be associated with referred breast pain from 3-4 weeks</td>
<td>• Observe feed</td>
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<td>• Ensure positioning and attachment are optimal</td>
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<td>• Assess nipple post feed for signs of compression</td>
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<td>with poor positioning and attachment</td>
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</table>

### Compression persists, despite optimal attachment

- Manually reshape nipple after feed
- Avoid cold air and apply warm compress to nipple immediately after feed
- Avoid caffeine
- Discourage smoking refer for extra support eg. Quit Program
- Suggest that mother breastfeeds for as many feeds as she can and expresses at other feeds and offers EBM

### Blanching and pain persist despite optimal attachment

- Attempt to minimise nipple compression
- Encourages blood flow to nipple
- Caffeine may induce vasoconstriction
- Even 2 cigarettes per day may increase vascular resistance by 100% and decrease cutaneous blood flow by 40%
- May encourage mother to continue with breastfeeding. Compression tends to improve as baby grows

### Mother has family history of circulation problems/Raynauds phenomenon

- Breastfeed in a warm environment supplemental magnesium and calcium
- Nifedipine (calcium channel blocker) in sustained release formulation providing 30-60mg per day are suggested
- Refer to an Immunologist for full investigation

### As above

- May be induced by cold exposure or emotional stress
- Has been found clinically useful for nipple vasospasm and transfer through breastmilk is clinically insignificant
- Has been linked with auto-immune conditions

### Desired Outcome

- Discomfort is eliminated or kept to a minimum
- Mother gradually resumes full breastfeeding with no nipple compression or pain
- Mother is able to continue breastfeeding with minimal discomfort
- Complete diagnosis is made

---

## Ductal Bleeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antenatal</strong>&lt;br&gt;Spontaneous bleeding from the ducts via the nipple</td>
<td>Previous breast history eg. surgery, infections, trauma. Assess if discharge unilateral or bilateral. Full breast examination and ultrasound if necessary to eliminate the following:</td>
<td>Single duct unilateral discharges are more likely to be surgically significant.</td>
<td>Referral to specialist if necessary.</td>
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<tr>
<td></td>
<td></td>
<td>• Trauma</td>
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<td></td>
<td></td>
<td>• Intraductal papilloma</td>
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<td>• Fibrocystic disease</td>
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<td>• Vascular engorgement</td>
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<td>• Mother may have been expressing, nipple rolling or wearing breast shields.</td>
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<td>• Bleeding usually spontaneous and unilateral – usually no palpable mass.</td>
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<td>• Common in childbearing years, often regresses during pregnancy.</td>
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<tr>
<td></td>
<td></td>
<td>• May be pain, tenderness and palpable thickening associated with rapid development of the alveoli and increased vascularisation.</td>
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</tr>
<tr>
<td><strong>Postnatal</strong>&lt;br&gt;Red tinged, pink or rusty breastmilk – commonly known as rusty-pipe syndrome</td>
<td>Ensure latching is correct. If milk does not clear within 2-3 days further investigation may be necessary. Reassure mother that her milk will not harm baby.</td>
<td>Seems to be more common in primiparous women and does not cause any discomfort.</td>
<td>Bleeding stops spontaneously within the first few days.</td>
</tr>
</tbody>
</table>

**White Spot/Milk Blister**

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible white spot on the nipple which may be accompanied by persistent pain especially during feeding and/or blockage. Usually occurs after milk supply well established and 4mm or less in diameter</td>
<td>• Warm soaks and optimal attachment may assist the thin epidermis layer to shed spontaneously within a few days</td>
<td>• May improve spontaneously so the unnecessarily risk of infection is avoided</td>
<td>White Spot resolves and breastfeeding continues</td>
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<tr>
<td>If not accompanied by pain or blockage</td>
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<tr>
<td>If accompanied by pain and blockage</td>
<td>• Prior to procedure advise mother there is risk of infection and gain her verbal consent. Encourage her to seek medical advice for antibiotics if signs of infection manifest Use aseptic technique, (thorough hand washing, sterile gloves, alcohol wipes to the area prior to procedure) • Peel away epidermis overlaying the milk spot with a sterile disposable 25 gauge needle using the bevelled edge of the needle not the point sterile • Gently compress around the areola and express any stringy plugs into a small bowl • Observe a feed – aim baby’s chin towards any blockage</td>
<td>• Lower jaw is more active when baby sucks • Continued blockage will lead to further complications</td>
<td>Continued breastfeeding</td>
</tr>
<tr>
<td>Persistent White Spot</td>
<td>• Reassurance of mother • Give mother input on self management technique • Regularly, rub the affected nipple gently with a damp cloth after softening skin (eg. in warm bath)</td>
<td>• Mother is able to self manage</td>
<td>Mother self manages and continues breastfeeding</td>
</tr>
</tbody>
</table>

# Breast Refusal

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
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<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
</table>
| Baby refusing both breasts | Full history  
- Age of baby  
- How long has baby been refusing  
- Feeding, sleeping pattern  
- Solids/formula use, when and how much  
- Dummy use  
- Assess baby for signs of  
  (a) Illness  
  (b) Lethargy  
  (c) Teething  
  (d) Recent immunisation  
Assess mother and eliminate/treat obvious causes:  
- Mastitis  
- Breast changes  
- Oversupply  
- Strong milk ejection reflex  
- Commencement of contraception  
- Pregnancy  
- Low supply  
- Menstruation  
**Never force-feed. Reassure mother it is usually temporary**  
Offer suggestions for encouraging baby to feed:  
- Minimise distractions  
- Try different positions  
- Skin to skin contact  
- Offer breast when baby is sleepy  
- Suspend solids  
- Reduce sucking from other sources eg; dummy  
**NB Maintain milk supply by expressing**  
- May be age appropriate eg, baby may be self weaning, attracted by another source  
- Baby may be tired not hungry  
- Baby may be disinterested due to illness  
- Milk may taste hotter and saltier  
- Hormonal changes can affect taste of breastmilk | Resolution of illness  
Resumption of breastfeeding | |
| Refusing one breast only, after previously having both breasts | Examine breast fully to assess for breast changes and refer for further investigation if necessary | May be an early sign of breast cancer  
Baby may obtain adequate nutrition with one-sided feeding | Causative factor is isolated and managed appropriately  
Baby's feeding needs are met |
### Sucking Problems and Oral Anomalies

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby is unable to latch to the breast and feed effectively despite skilled assistance</td>
<td>If baby is unable to breastfeed successfully, teach and assist mother to express her breast milk (p92,93) and refer to <strong>appropriate</strong> health professional for assessment and follow up. Refer to the “Breastfeeding Flow chart for the Normal Healthy Full Term Infant in the First 48 hours” if appropriate.</td>
<td>Mother can be actively involved and her supply can be initiated. Many neonatal sucking problems can be corrected with specialist / skilled help e.g. Speech Pathology.</td>
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<td>Examples include:</td>
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<td>- Audible clicking</td>
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<td>- Cheeks sucked in</td>
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<td>- Uncoordinated or abnormal tongue movements</td>
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<td>- Baby is pulling on and off the breast</td>
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<td>- Effortful swallow/s or gurgling sounds during/post swallow</td>
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<td>- Baby appears uninterested at the breast</td>
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<td>Identify any risk / contributing factors:</td>
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<tr>
<td>1. Acute illness</td>
<td>Ensure consultation and collaboration with appropriate allied / other health professional/s at all times. In addition to this: 1. Work closely with medical team and only proceed with breastfeeds once baby is medically well enough to do so. Proceed cautiously with breastfeeds with close monitoring at all times of baby's ability to cope.</td>
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<tr>
<td>2. Maternal drugs in labour</td>
<td>2. Investigate potential effect of specific drugs used in labour on infant state and activity levels and time expected for effect to lift. Consult with medical team as appropriate.</td>
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<tr>
<td>Needs and/or Problems</td>
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<tr>
<td>3. Birth Trauma</td>
<td>3. Investigate area of trauma and potential impact on breastfeeding. Handling, positioning and attachment techniques may have to be modified. See below for altered oral facial sensation and tone if relevant.</td>
<td>This will avoid direct touch or pressure to bruising.</td>
<td>Baby is assessed with appropriate and specific management implemented where indicated, resulting in baby successfully breastfeeding.</td>
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<tr>
<td>4. Tongue tie (anloglossia)</td>
<td>A thorough assessment of breastfeeding and tongue mobility should be attended to determine if frenulotomy is required. 5.1 Examine the nature and extent of the ‘tongue tie’: ● Tongue tip may be notched or heart-shaped ● Decreased forward mobility of the tongue ie unable to move tongue beyond the lower gum line ● Decreased sideways mobility of the tongue ● Tongue tip may look flat or square instead of Pointed when extended 5.2 Examine effect on feeding ● Nipple pain and damage ● Misshapen nipple or compression stripe after feeding ● Baby’s tongue loses suction while feeding and sucks in air ● Baby may make a clicking sound while feeding ● Poor weight gains If tongue tie evident, discuss the options for referral for frenulotomy with parents and breastfeeding support services for follow up. If early frenulotomy not available discuss options for maintaining mother’s milk supply and baby’s nutrition until frenulotomy can be performed.</td>
<td>Medical opinion remains divided about frenulotomy, however, if baby has restricted tongue movement and the mother has nipple pain and discomfort during breastfeeding it is unlikely the baby will be able to breastfeed successfully without frenectomy. Early frenulotomy has been associated with improved breastfeeding duration Mother may need to express and give her EBM to baby if poor milk transfer and painful feeds.</td>
<td>Baby is appropriately assessed and referred for frenectomy if necessary. Baby successfully breastfeeds. Mother maintains lactation during interval prior to frenulotomy</td>
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</table>
## Sucking Problems and Oral Anomalies cont...

<table>
<thead>
<tr>
<th>5. Structural abnormality such as a cleft condition</th>
<th>4. See cleft palate p 59</th>
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<tbody>
<tr>
<td>6. Altered oral facial sensation and tone: Increased tone (hypertonia) e.g. resulting from neurological insult or injury</td>
<td>Consult Physiotherapist or Occupational therapist &amp; Speech Pathologist for specific guidelines on positioning, handling and reducing / building tone. Try placing baby in prone on feeder’s lap before feed to encourage overall relaxation and flexion. Position for feed with focus on flexion and support; swaddling in a wrap may facilitate this.</td>
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<tr>
<td>Decreased tone (hypotonia) e.g. associated with Down’s Syndrome</td>
<td>This will reduce the potential for hypertonic reactions and patterns in the case of hypertonia, by facilitating greater organisation and control (sucking is a flexor skill, flexed positioning helps reduce the occurrence and effects of oral facial hypertonia).</td>
</tr>
</tbody>
</table>

5. The Royal Women’s Hospital, Tongue-Tie: information for families, 2008, The Royal Women’s Hospital, Victoria Australia
## Lactating Breast Pain

<table>
<thead>
<tr>
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<th>Rationale</th>
<th>Desired Outcome</th>
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</table>
| Mother breastfeeding and experiencing breast pain          | Full history and breast examination to eliminate any of the following possible causes:  
  - Breast fullness p36  
  - Blocked ducts p39  
  - Nipple white spot p50  
  - Mastitis p40  
  - Breast abscess p41  
  - Thrush p46  
  - Nipple vasospasm p48 | Eliminating possible causes should allow for correct management of the problem | Appropriate management is instigated and breast pain resolves               |

## Babies born before 37 weeks

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<tbody>
<tr>
<td>Babies born before 37 weeks may require care in a NICU/SCN and may be too immature to fully breastfeed for a period of</td>
<td>• Encourage kangaroo mother care as soon as possible following unit guidelines for eligibility</td>
<td>• Kangaroo mother care promotes stability and breastfeeding</td>
<td>Baby breastfeeds when developmentally appropriate and mother establishes her milk supply</td>
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<td></td>
<td>• Support mother to initiate and maintain lactation as soon as possible after birth (see expressing p 95,96)</td>
<td>• Early initiation of lactation will benefit the establishing of mother’s milk supply and enable baby to receive breastmilk as soon as possible</td>
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<td>• Breastfeeding plans individualised by nursing/medical staff caring for baby</td>
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<tr>
<td>Late preterm infant 34 – 37 weeks (in hospital)</td>
<td>• Encourage skin to skin between feeds</td>
<td>• Does not tire baby</td>
<td>Baby receive sufficient nutrition and mother’s lactation establishes</td>
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<tr>
<td>Risk of: Insufficient intake of milk</td>
<td>• Encourage feeding at early feeding cues - at least 8 feeds / 24 hours</td>
<td>• Ensures stimulation of lactation</td>
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<td>• Do not persist &gt; 10 – 15 mins if not interested</td>
<td>• Provides EBM for additional energy for the baby and reduces the need for formula supplementation</td>
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<td>• Encourage mother to express by hand after each breastfeeding included Code 5-6 feed</td>
<td>• Promotes adequate intake</td>
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<td>• Give any EBM collected after the next feed or feeding attempt even if baby feed well</td>
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<td>• After 24 hours combine hand expressing and pump PC to stimulate supply</td>
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<td>• If baby does not feed at least code 5, comp with EBM/ formula</td>
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<td>• Gradually reduce expression and supplementation according to weight gains</td>
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<tr>
<td>Late preterm infant 34 – 37 weeks (Post discharge)</td>
<td>• Early follow up (ideally within 3 days) for assessment of feeding and weight gain</td>
<td>• Ongoing risk of feeding problems and insufficient milk transfer</td>
<td>Baby exclusively breastfeeds and mother receives ongoing support</td>
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<td>• Ongoing regular follow up (at least weekly) until baby is at his/her due birth date and maintaining adequate weight gain with demand exclusive at breast feeding</td>
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<td></td>
<td>• Adjust feeding advice, expressing and topping up with EBM pc as baby gains weight</td>
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</tbody>
</table>

1. Academy of Breastfeeding Medicine (2011) Clinical Protocol # 10 Breastfeeding the late preterm infant (340/7 to 366/7 weeks gestation) (First revision June 2011)
2. Morton J. Preventative Management Guidelines for Babies at Risk Standard University School of Medicine
### Breastfeeding Multiples

<table>
<thead>
<tr>
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<th>Rationale</th>
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</thead>
<tbody>
<tr>
<td><strong>Mother has twins</strong></td>
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</table>
| Both babies with mother postnatally    | • Encourage individual rather than simultaneous feeding until at least one baby is assessed for effective feeding  
• Feed both babies from the breasts at all feeds although may be one baby at a time.  
• Allocate one breast per baby per feed  
• Mother to decide - rotate breasts on a day to day basis or alternate breasts and babies at each feed  
• Only feed babies together if awake and additional help available  
• Progress to twin feeding when mother feels ready and attempt this prior to leaving hospital unless mother prefers not to  
• Attach more difficult baby first | • Encourages mother to become familiar with individual baby’s needs  
• Both breasts are evenly stimulated  
• Mother gains experience whilst there is professional assistance available | Babies are fed simultaneously and supply is adequate                     |
| One baby in nursery                    | • Allocate one breast per baby per day. EBM to nursery if baby is not going to the breast | • Ensures both babies receive breastmilk and both breasts are evenly stimulated | Both babies receive breastmilk                        |
| Both babies in nursery                 | • Initiation early of hand expressing progressing to use of double pump in combination with hand expressing on day 2  
• See “Expressing Breastmilk” p26 | • Should provide maximum stimulation to breasts  | Both babies receive breastmilk                        |
| **Mother has triplets**                |                                                                        |                                                                           |                                                       |
|                                        | • As above  
• Discuss options with mother eg breastfeeds two and bottle feeds one or fully breastfeeds three babies – will need to limit feeding time of first two babies and feed the third from both breasts using a system of “triangular rotation” | • Supply should equal demand  | Mother manages feeds successfully with desired option |

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3. ILCA Core Curriculum for Lactation Consultant Practice 2013 Jones & Bartlett p567 - 569
## Breastfeeding a Baby with Down Syndrome

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
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<th>Desired Outcome</th>
</tr>
</thead>
</table>
| Baby is Down Syndrome | • Ongoing monitoring of progress  
• Mother is encouraged to breastfeed  
• **Keep mother and baby together during hospital stay** (unless baby is unwell) | • Regular review of growth paying particular attention to weight and length  
• Baby is at increased risk of upper respiratory tract infection and otitis media | Mother is aware of increased benefits of breastfeeding in this situation |
| | • Initiate breastfeeding in the usual manner.  
• Assess baby’s ability to suck efficiently and transfer milk | • May take longer to establish successful breastfeeding due to possible increased incidence of poor muscle tone | Baby is breastfed |
| Positioning at breast if muscle tone poor | • Attempt to latch baby in a more upright position supporting baby’s chin and mother’s breast | • Assists in maintaining attachment | Baby is better able to cope with the flow of milk |
| | • Oral exercises may be of benefit | • Builds tone and strength around face and mouth | Baby has decreased risk of poor weight gain if milk delivery is assisted and energy is conserved |
| | • Position supportively in flexed position | • Flexed positioning assists with coordination and control by providing greater stability |  |
| Baby unable to breastfeed effectively | • Encourage mother to express and offer EBM from bottle with soft teat  
• Offer cheek support with bottle feeds. | • Soft teat makes it easier to transfer milk  
• Cheek support during sucking bursts increases sucking strength | Baby receives breastmilk |
| Ongoing monitoring of progress | • Regular review of growth paying particular attention to weight and length | • These babies grow at a slower rate | Baby has an acceptable weight gain |

# Breastfeeding a Baby with a Cleft Palate/Lip

<table>
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</thead>
<tbody>
<tr>
<td>Baby has a <strong>cleft palate</strong></td>
<td>- Examine cleft to establish size and position</td>
<td>- The prognosis for successful feeding greatly depends on the size and position of the cleft as positive and negative pressures involved in sucking are affected.</td>
<td>Correct diagnosis is made Options are explored and an informed decision made Baby is able to obtain breastfeeding</td>
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<tr>
<td></td>
<td>- May be unilateral or bilateral</td>
<td>- Breastmilk lessens the development of otitis media</td>
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<td></td>
<td>- May extend to the hard and soft palate</td>
<td>- May occlude the cleft - normal suction</td>
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<td>- Cleft may be sub-mucous</td>
<td>- May be helpful to keep baby familiar with the breast and give him some sucking experience, which will help to satisfy him and help to strengthen the oral structure</td>
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<td></td>
<td>- Encourage giving breastmilk</td>
<td>- Upright positioning will allow milk to move into the pharynx and away from the nasal cavity</td>
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<td>- Mother may need encouragement and support to express long term</td>
<td>- May increases milk transfer</td>
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<td></td>
<td>- If small cleft in the hard palate – try feeding with nipple shield</td>
<td>- If extra expressing is not commenced supply will reduced</td>
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<tr>
<td></td>
<td>- Discuss other options of feeding baby expressed breastmilk</td>
<td>- Higher risk of growth deficiencies</td>
<td></td>
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<tr>
<td></td>
<td>- Encourage mother to familiarise baby with her breasts and have skin-to-skin contact from birth. Offer the breast in both right and left-handed underarm positions, keeping baby as upright as possible.</td>
<td>- Timing of surgery may be dependent on baby’s weight gain as well as age (may be &gt;6 months)</td>
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<td></td>
<td>- Consider breast compression during feeds at the breast</td>
<td>- Some of these babies will manage without special equipment, depending on the severity of the cleft.</td>
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<tr>
<td></td>
<td>- Express after all breastfeeding attempts and discuss options of feeding baby the expressed breastmilk</td>
<td>- Mother can assist milk delivery by squeezing the bottle.</td>
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<td></td>
<td>- Monitor weight regularly</td>
<td>- It can be a very time consuming and emotional experience to provide enough EBM and feed a baby with a cleft palate</td>
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<td></td>
<td>- Using a normal bottle and teat</td>
<td>- Minimises problems of milk entering the baby’s nose and prevents fluid getting into baby’s ears</td>
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<td></td>
<td>- Using an appropriate squeeze bottle and appropriate teat.</td>
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<td></td>
<td>- Encourage mother to enlist as much help and support as she can from family, friends, ABA and the Child and Family Health Nurse.</td>
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<td></td>
<td>- If mother has decided to formula feed, position baby in a fairly upright position for feeding.</td>
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</tbody>
</table>
Breastfeeding a Baby with Cleft Palate/Lip cont...

| Baby has a cleft lip | • Encourage mother to familiarise baby with her breasts and skin contact from birth. Feed baby in both right and left handed positions and bare breasted when practical.  
• Assess and observe a breastfeed  
• Attempt to position baby so that the breast is able to fill the cleft or the mother may use her finger to occlude the cleft so the baby can create suction | • This should make it easier to introduce breastfeeding after surgery  
• Success dependant on size of cleft, success is more likely if unilateral cleft lip in isolation.  
• This will prevent air entry and the baby should establish a satisfactory seal to maintain sucking strength | Baby successfully breastfeeds after surgery |
| Baby has a cleft lip and a cleft palate | • Baby will be unable to breastfeed successfully  
• Management as described for cleft palate according to mothers wishes | • Baby is unable to provide a seal and extract milk from the breast | Baby receives expressed breastmilk |

# Breastfeeding and Gastro-Oesophageal Reflux

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</tr>
</thead>
</table>
| Baby is suspected to have gastro-oesophageal reflux. Some symptoms include:  
- Regurgitation or posseting (may be overt or silent)  
- Sleep disturbances  
- Respiratory symptoms  
- Crying and irritability  
- Feeding difficulties | • Encourage mother to continue breastfeeding by discussing the importance of breastmilk and risks associated with formula feeding  
• Assess if associated with an oversupply of breastmilk (p45)  
• Encourage mother to feed baby in semi upright position if possible  
• Gentle handling and winding of baby after a feed  
• Cuddle baby and keep baby in the semi upright position for approximately 30 minutes after feed  
• Avoid use of thickened feeds | • Recent data indicated that physiological gastro-oesophageal reflux is less, and has a shorter duration in breastfed babies compared with formula-fed babies.  
• Symptoms may be associated with volume of milk baby receives and may be lessened with good management  
• Baby may have less symptoms | Mother continues to breastfeed  
Reflux kept to a minimum |
| Symptoms do not resolve | • Refer baby for further investigation eg oesophageal pH probe or an endoscopic examination to determine extent of reflux.  
• Medication may be required if diagnosis confirmed. | • Baby is not treated unnecessarily. | Problem is diagnosed  
Mother continues to breastfeed  
Reflux kept to a minimum |

### Lactose Intolerance in the Breastfed Baby

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby is fully breastfed and has <strong>symptoms</strong> of lactose intolerance:</td>
<td>• Reassure mother that this not an indication to wean.</td>
<td>• Functional lactase deficiency (incomplete absorption of lactose)</td>
<td>Baby continues to thrive with appropriate weight gain</td>
</tr>
<tr>
<td>• Irritable</td>
<td>• Assess if it is associated with an oversupply of breastmilk (lactose overload) and manage accordingly (p45)</td>
<td>• May settle spontaneously with good breastfeeding management</td>
<td>Baby more settled</td>
</tr>
<tr>
<td>• Loose frothy/watery stools</td>
<td>• Reassure parents that it is likely to settle with time.</td>
<td>• This management strategy resulted impartial or complete resolution of problems in 79% babies</td>
<td></td>
</tr>
<tr>
<td>• Scalded anal area</td>
<td>• May need to have one breast per feed for a period of time until symptoms settle or the baby shows signs of needing the second side.</td>
<td>• Usually associated with an oversupply of breastmilk and this will help to reduce supply</td>
<td></td>
</tr>
<tr>
<td>• Passes flatus frequently</td>
<td>• Aim for minimum three hours between feeds</td>
<td>• In most cases the intolerance due to infection persists for less than one week.</td>
<td>Breastmilk supply is maintained and baby continues to breastfeed</td>
</tr>
<tr>
<td>• Stools may test positively to reducing substances if mother has an oversupply of breastmilk making this test of questionable use</td>
<td></td>
<td>• Damage to the baby's intestine is extreme and causing malnutrition</td>
<td></td>
</tr>
<tr>
<td>Primary Lactose Intolerance is an extremely rare genetic condition which requires medical intervention from birth.</td>
<td></td>
<td>• The baby's intestine can heal and the symptoms will resolve</td>
<td></td>
</tr>
<tr>
<td>Lactose Overload</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lactate levels in the baby's gut are insufficient to digest the lactose intake and may be associated with feeding mismanagement.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Lactose Intolerance</td>
<td>• Continued breastfeeding is recommended during intestinal infection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Also an uncommon problem in infancy and is usually associated with gastrointestinal illness, antibiotic use or protein intolerance (cow's milk or soy in the mother’s diet) celiac disease</td>
<td>• Post infection if a completely lactose free diet has been advised until the bowel heals the mother can express to maintain her supply. The baby may be fed with EBM treated with lactase or a lactose free formula.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is usually transient</td>
<td>• If due to protein intolerance – remove the protein out of the mother’s diet.</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
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<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast Augmentation Surgery</td>
<td>Full history including:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reason for surgery- rule out breast Hypoplasia (p13)</td>
<td>• If limited breast tissue present prior to augmentation, supply is likely to remain insufficient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Age at which surgery carried out</td>
<td>• May all impact on breastfeeding success</td>
<td>Enables the health professional to assess the possible likelihood of breastfeeding success</td>
</tr>
<tr>
<td></td>
<td>• Breast development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Breast changes during pregnancy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate Antenatal Assessment</td>
<td>Breast examination assess:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Surgical technique used eg. infra mammary, axillary incision</td>
<td>• Method of surgery may impact on breastfeeding success</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Location of implant e.g. behind or in front of chest muscles.</td>
<td>• Previous breast surgery has a greater than 3 fold risk of lactation insufficiency, compared with women who have not had surgery</td>
<td>Mother has realistic expectations of likelihood of breastfeeding success</td>
</tr>
<tr>
<td></td>
<td>• Discuss above implications with the mother</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Never guarantee full breastfeeding success</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Suggest a &quot;wait and see&quot; approach</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Refer to hospital Lactation Consultant (if available) for additional support in the postnatal period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast Augmentation by Injection e.g. hyaluronic acid- (Macrolane). A more recent and common technique originating in Asia.</td>
<td>Full history as above</td>
<td>Effects are not permanent, usually last 18 months to 2 years. Does not transfer into breastmilk. Increased risk of mastitis due to multifocal injection sites and the products unique ability to retain water.</td>
<td>Mother breastfeeds successfully with no associated breast problems</td>
</tr>
<tr>
<td></td>
<td>May impact on breastfeeding</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Breast Augmentation/Reduction Surgery cont…

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
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<th>Desired Outcome</th>
</tr>
</thead>
</table>
| **Breast Reduction Surgery**  
Appropriate Antenatal Assessment | Full history as for Breast Augmentation  
Breast examination to assess:  
- Surgical technique used (not always possible to determine):  
  - pedicle technique  
  - free-nipple technique | Method of surgery may impact on breastfeeding success  
Success cannot be predicted. Breastfeeding success rates vary from 19-72 percent.  
Removing the nipple and areola entirely severs the blood supply and damages the nerves and makes breastfeeding success less likely  
Previous breast surgery has a greater than 3 fold risk of lactation insufficiency, compared with women who have not had surgery | Mother has realistic expectations of likelihood of breastfeeding success |
| **Postnatal breastfeeding** | Requires progressive assessment  
**Mother:**  
- Aware of breast changes over first few days  
- Aware of signs of milk let-down  
- Ability to drain breasts adequately once mature milk is “in”  
**Baby:**  
- Observed change in baby’s sucking pattern during feed  
- Observe for change in stools  
- Monitor output  
- Assess behaviour  
- Ongoing weights | May be an increased risk of mastitis  
Unable to predict success but may be able to intervene with additional strategies early eg. extra expressing for stimulation | Mother is able to breastfeed to her full potential and is given available options for management as need arises.  
Baby’s needs are not compromised |
| **Baby requires complementary feeding** | Ongoing monitoring of baby’s weight  
Discuss the use of a lactational aid (p44)  
Suggest extra expressing (p26,95,96)  
Discuss use of Domperidone (p100) | Extra stimulation to the breast may help increase supply and keep baby familiar with the breast  
Likely to have limited effectiveness if hypoplasia present | Supply reaches its full potential and complementary feeding is kept to a minimum |

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## Medication & Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Mother requires medication for a specific condition</td>
<td>• Use appropriate resource to evaluate transference into breastmilk and the degree of exposure to the baby. For example: Mothersafe 9382 6539 1800 647848 Lactmed database (via CIAP) Consider purchase of an appropriate reference book <em>Medications and Mothers Milk</em>¹</td>
<td>All medications penetrate milk to some degree, however concentrations of most medications are exceedingly low (usually&lt;1%)</td>
<td>Mother is adequately treated</td>
</tr>
<tr>
<td>General Rules:</td>
<td>• Determine if drug is absorbed from GI tract</td>
<td>Many drugs eg; some antibiotics are poorly absorbed. Compare the paediatric dose and determine if amount absorbed by baby has been reported to produce side effects</td>
<td>The benefits of breastfeeding often outweigh the risks to the baby’s well being</td>
</tr>
<tr>
<td></td>
<td>• Determine if milk/plasma ratio is high</td>
<td>If the milk concentration of the drug is high it should be avoided if possible</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Be cautious of drugs that have long paediatric half-lives</td>
<td>Try to choose shorter half life drugs, These drugs tend to peak rapidly and dissipate rapidly but may continually build up in the baby’s plasma over time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Choose drugs that have a higher protein binding</td>
<td>These do not transfer as readily to the milk or the baby</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Be cautious with drugs that affect the brain and CNS, such as lipid soluble drugs, which readily enter breastmilk e.g psychotherapeutic drugs.</td>
<td>Frequently transfers into breastmilk at higher levels due to their lipid solubility.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Consider peak time of drug and encourage breastfeeding just before the dose</td>
<td>This is when the drugs are in their highest concentration in the breastmilk. Do not exceed recommended doses</td>
<td></td>
</tr>
</tbody>
</table>

NB Pharmaceutical Manufacturers’ inserts discourage breastfeeding for fear of litigation, not necessarily for well-founded pharmalogical reasons

2. ILCA Core Curriculum for Lactation Consultant Practice, 2013, p 427
## Diabetes and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
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</tr>
</thead>
</table>
| Mother has Type 1 Diabetes (Insulin Dependent) ie. her body does not produce Insulin. This is a genetically pre-disposed condition triggered by a virus or something in the baby’s diet | - Appropriate prenatal education including particular benefits and challenges due to diabetes and strategies to overcome these challenges | - Mother knows what to expect and may be more motivated to breastfeed.  
- May have a 24 hour delay in Lactogenesis II (milk coming in)  
- At risk of mother – baby separation due to admission to Nursery | Baby is fully breastfed  
Mother is able to self monitor her Insulin needs (may reduce approx.27%)  
Mother is aware that a sudden drop in her blood glucose levels = a drop in her milk production  
Weaning must be gradual to allow for changes in diet and Insulin |
| | - Baby may have co-morbidities eg. prematurity, perinatal asphyxia  
- May require admission to SCN  
- If mother intends to express her colostrum antenatally see page 15  
- Advise mother to have a carbohydrate snack at hand whenever breastfeeding  
- Monitor baby’s BGL as per policy  
- Breastfeeding or EBM as soon as possible  
- Early expressing if baby is not going to the breast  
- Avoid use of infant formula | - Mother is able to make an informed decision.  
- She is at risk of sudden onset of hypoglycaemia when feeding  
- Baby is at increased risk of hypoglycaemia  
- Delayed feeding or expressing increases risk of undersupply  
- Breastmilk improves BGL  
- EBM is available for baby  
- If a genetically pre-disposed baby is given standard infant formula in the first 3 months – 52% more likely to develop Type 1 diabetes | |
## Mother has Gestational Diabetes

- Her body is not able to use the insulin that is produced.
- May be diet controlled or insulin dependent.

### Appropriate Prenatal Education

- Skin-to-skin and early encouragement of breastfeeding.
- Keep mother and baby together.
- Avoid use of infant formula.
- Monitor blood glucose levels according to hospital policy.
- On-going advice re diet and exercise.

### Mother knows what to expect

- Women with Gestational Diabetes are twice as likely to develop Type 2 diabetes if they do not lactate following the birth of the baby whose pregnancy provoked Gestational Diabetes.
- Exclusive breastfeeding in the first 6 months and longer duration of breastfeeding associated with reduction in childhood obesity for babies whose mothers have GDM.

### Improves glucose metabolism

- Infants of GDM who were breastfed in delivery room had a significantly lower rate of borderline hypoglycaemia than those who were not breastfed early.
- Up to 50% of women who develop Gestational Diabetes will get Type 2 Diabetes later in life.

### Mother’s health is maintained

- Baby is fully breastfed.

### Mother’s diabetes reverts to normal

- Baby is fully breastfed.

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### References


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**Issue Date** March 2014  
**Review Date:** March 2017
### Hepatitis B and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
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<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of transmission of Hepatitis B at birth through breastfeeding</td>
<td>• All women receive Hepatitis B testing during pregnancy as part of routine antenatal care</td>
<td>• To identify HbsAg positive women</td>
<td>HbsAg positive identified</td>
</tr>
<tr>
<td></td>
<td>• All neonates born to Hepatitis B Surface Antigen (HbsAg) positive women should be given immunoglobulin and 1st dose of Hepatitis B vaccine as soon as possible after birth. Baby then has second and third vaccines as per normal Hepatitis B protocol.</td>
<td>• This protocol has been successfully in reducing the risk of neonatal transmission during birth and breastfeeding</td>
<td>Transmission from mother to baby prevented</td>
</tr>
<tr>
<td></td>
<td>• Mother is encouraged to breastfeed</td>
<td>• Benefits of breastfeeding outweigh risks of transmission</td>
<td>Mother decides to breastfeed</td>
</tr>
<tr>
<td>Mother has cracked/bleeding nipples</td>
<td>• Educate and assist as necessary to improve positioning and attachment</td>
<td>• Support mother through attachment difficulties and damaged nipples</td>
<td>Breastfeeding or breastmilk feeding is not interrupted</td>
</tr>
<tr>
<td></td>
<td>• If unable to attach and feed then mother to rest/express for 24 hours or until completely healed</td>
<td>• Hepatitis B vaccination and Hepatitis B immunoglobulin virtually eliminates the risk of transmission via breastmilk</td>
<td></td>
</tr>
<tr>
<td>Risk of transmission of HBV from patient to health worker</td>
<td>• Practice standard precautions when handling breastmilk and other body fluids see p14</td>
<td>• Prevent transmission of HBV from patient to health workers</td>
<td>Transmission of HBV from patient to be prevented</td>
</tr>
<tr>
<td></td>
<td>• Hepatitis B immunisation for Health workers</td>
<td>• NHMRC recommends all health workers involved in patient care or in the handling of human milk or human blood/tissue be vaccinated</td>
<td>All health workers immunisation attended</td>
</tr>
</tbody>
</table>

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2. NSW Health Department Factsheet, 2007. Hepatitis B.
## Hepatitis C and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
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<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
</table>
| Mother has Hepatitis C and wishes to breastfeeding. **Elevated risk of transmission:**  
  - Acute phase of illness  
  - High viral load  
  - Serious liver damage | **Inform mother re benefits of breastfeeding**  
  - Inform mother re known methods of Hepatitis C transmission and that there is no greater risk of transmission for breastfed babies compared to artificially fed babies  
  - Consider reviewing viral load if PCR positive | **Mother can make an informed decision re breastfeeding**  
  - Hep C RNA is has not been found in breastmilk and the transmission via breastfeeding has yet to be documented  
  - Increased risk of transmission with high viral load but unknown if breastfeeding increases this risk | Mother makes an informed decision and breastfeeds successfully |
| Is co-infected with HIV | **See p66** | | |
| Mother has cracked/bleeding nipples | **Rest/express for 24 hours or until completely healed**  
  - Discard EBM if blood visible on nipple or in milk. | **Lessens the chance of transmission to baby** | Baby not exposed to Hepatitis C virus in maternal blood |
| Risk of transmission to staff | **Practice standard precautions when handling breastmilk and other body fluids,** see p14 | **Prevent Hepatitis C transmission from mother to staff** | Transmission of hepatitis C virus from patient to health worker prevented |

4. NSW Health, Infection Control Policy, PD2007_036
### HIV and Breastfeeding

<table>
<thead>
<tr>
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<th>Desired Outcome</th>
</tr>
</thead>
</table>
| **Mother has HIV** | • Inform mother regarding the known risks of transmission of HIV via breastmilk  
• Inform mother regarding factors likely to increase risk of transmission  
• Discuss and recommend formula feeding | • In Australia where safe alternatives to breastfeeding are available breastfeeding is not recommended to a HIV positive mother | Baby receives artificial formula  
Baby not exposed to HIV |
| **Risk of transmission of HIV from mother to baby via breastmilk** | | | |
| **Mother has HIV and is determined to breastfeed** | • Inform mother regarding the known risks of transmission of HIV via breastmilk and the Australian recommendation.  
• Early initiation of antiretroviral therapy (ART) from 14 weeks gestation and continuing to the end of the breastfeeding period (abrupt weaning is not necessary)  
• Inform mother regarding factors likely to increase risk of transmission eg. mixed feeding, if not receiving ART  
• If not receiving ART, when mother is ready to introduce other food to the baby she should be advised to abruptly wean baby from the breast | • Several clinical trials have shown the efficacy of antiretroviral in preventing transmission to the infant while breastfeeding  
• Babies of HIV+ women who are “exclusively breastfed” are not statistically different from those “never breastfed” at six months. However, both these groups are statistically significant from those who are “mixed fed” i.e. given any additional fluids or solids while being breastfed, as this may lead to gastrointestinal injury and disruption of immune barriers | Mother is fully informed and baby is not exposed to HIV |

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## Marijuana and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother wishes to smoke Marijuana and breastfeed</td>
<td>• Inform mother re benefits of breastfeeding</td>
<td>• Terminal elimination half life approx. 4.3 days (2.6-12.6). The content of marijuana cigarettes is highly variable.</td>
<td>Mother avoids use and continues to breastfeed</td>
</tr>
<tr>
<td></td>
<td>• Advise mother that “tetrahydrocannabinol” (THC) is stored in fat tissue for long periods (weeks to months), is excreted and may accumulate in milk and may also effect milk production</td>
<td>• Mother can make an informed decision re breastfeeding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Inform mother that we do not know what harmful effects it may have on baby and remind her of the short term effects on herself eg memory, difficulty with problem-solving, panic attacks.</td>
<td>• Inhibits prolactin production</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Discuss alternative methods of feeding</td>
<td>• Analysis of breastmilk in a chronic heavy user showed an eight fold accumulation in the milk compared to plasma</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Consider benefits of breastfeeding versus risk of marijuana smoking</td>
<td>• Baby may test positive for 2-3 weeks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Advise mother not to smoke marijuana while breastfeeding</td>
<td>• Studies have shown delayed motor development in babies although this is highly dose dependent</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• There have been anecdotal reports of drowsiness in babies where mothers have smoked marijuana</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If mother chooses to smoke marijuana she should be advised to discontinue breastfeeding for at least 48 hours</td>
<td>Well, healthy, alert breastfed baby Limit/prevent mothers marijuana use and therefore prevent/decrease baby’s exposure through breastmilk</td>
</tr>
</tbody>
</table>

## Tobacco Smoking and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
</table>
| **Mother is a smoker** | • Encourage the mother to breastfeed and explain the benefits  
• Explain the risks associated with smoking for the baby  
• Refer mother to a suitable program eg. Quit program  
• Nicotine patches are an acceptable alternative to smoking | • Women who smoke are less likely to breastfeed and to breastfeed for a shorter time than non-smokers  
• Breastfed babies of smoking mothers have less incidence of respiratory illness than formula fed babies of smoking mothers.  
• Babies are exposed to secondary smoke and at an increased risk of SIDS  
• Smoking can decrease milk volume and fat content and depress the milk ejection reflex prior to breastfeeding  
• Nicotine absorbed from breastmilk is less than 5% of the adult daily dose  
• No untoward effects were noted in the baby in a Nicotine patch study | • Mother decides to breastfeed and joins the Quit program |
| **Partner is a smoker** | • Explain the risks to the baby associated with passive smoking  
• Encourage the partner to join a suitable program with the baby’s mother | • A baby exposed to tobacco smoke has a higher risk of dying from SIDS however breastfeeding is protective  
• Baby is at greater risk of pneumonia, bronchitis, meningococcal disease, asthma and middle ear infection | • Partner is supportive of mother and joins a suitable program |

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2. ILCA Core Curriculum for Lactation Consultant Practice, 2013, pp. 463-464
3. Quit because you can, 2007, NSW Health Tobacco and Health Branch, North Sydney
# Methadone and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother is on Methadone and wishes to breastfeed</td>
<td>Inform mother re benefit of breastfeeding</td>
<td>Mother can make informed decision re breastfeeding</td>
<td>Mother is stable on Methadone program, therefore, baby's exposure to drugs via breastmilk is minimised.</td>
</tr>
<tr>
<td></td>
<td>Advise mother that methadone is excreted into breastmilk</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encourage breastfeeding if mother is stable on a methadone program*</td>
<td>Most studies show that only small amounts of methadone pass into breastmilk (approx 2.8% of maternal dose) despite doses as high as 105mg/day.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Breastfeeding may still be recommended if dose is higher and this should be decided on an individual basis</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Watch baby for adverse effects (neonatal abstinence syndrome) such as sedation, poor feedings, withdrawal, addiction, respiratory depression</td>
<td>These symptoms may be slow in onset and require as much as 2-6 weeks of observation</td>
<td>Well healthy breastfed baby</td>
</tr>
</tbody>
</table>

**NB** * Stable- Mother using only prescribed Methadone

1. ILCA Core Curriculum for Lactation Consultant Practice, 2013, pp. 465 - 466
## Heroin and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
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<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother is a heroin* addict and wishes to breastfeed</td>
<td>Encourage referral to Drug Health Counsellor</td>
<td>• May be opportunity for lifestyle changes</td>
<td>Limit/prevent mothers heroin use and therefore prevent/decrease babies exposure through breastmilk</td>
</tr>
<tr>
<td>*Also referred to as: smack, TNT, white junk, snow, Mexican brown, horse, Harry, boy, H.</td>
<td>Inform mother about the benefits of breastfeeding but advise her of the following facts:</td>
<td>• Addicts and recreational users may use extraordinary large doses of heroin</td>
<td>Mother is able to make an informed decision about her current drug use and breastfeeding</td>
</tr>
<tr>
<td></td>
<td>• Heroin has adverse effects on baby and breastfeeding is contraindicated for heroin users</td>
<td>• Concentrations in milk vary greatly but may be as high as 0.5mg per litre</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Heroin crosses into milk in sufficient quantities to have effects on the baby</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Baby may suffer effects such as sedation, tremors, vomiting, constipation, poor feeding and respiratory depression</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Baby may suffer addiction and/or withdrawal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If mother uses heroin during breastfeeding, she must express and discard the EBM for 24 - 48 hours</td>
<td></td>
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</tr>
</tbody>
</table>

1. Andriske L, *Drugs and Breastfeeding* 1997-1998, Pharmacy Department The Royal Womens Hospital Melbourne Australia
4. ILCA Core Curriculum for Lactation Consultant Practice, 2013 p 465
## Cocaine and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother is a cocaine user and wishes to breastfeed</td>
<td>• Encourage referral to Drug Health Counsellor</td>
<td>• May be opportunity for lifestyle changes</td>
<td>Prevent mothers cocaine use and therefore prevent babies exposure through breastmilk</td>
</tr>
<tr>
<td></td>
<td>• Cocaine use should be strongly discouraged</td>
<td>• Elimination half-life:</td>
<td></td>
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<tr>
<td></td>
<td>• It is contraindicated when breastfeeding</td>
<td>• Intranasal – 75 minutes</td>
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<tr>
<td></td>
<td>• Encourage mother to express and discard her milk for at least 24 hours after last ingestion</td>
<td>• Oral – 48 minutes</td>
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<tr>
<td></td>
<td>• Reminder for mother:</td>
<td>• Intravenous – 54 minutes</td>
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<tr>
<td></td>
<td><strong>Topical application of cocaine to the nipples is extremely dangerous and must be avoided</strong></td>
<td>• Baby may test urine positive to cocaine for days to weeks as the inactive metabolite (benzoecgonine) will still be found</td>
<td>Mother is able to make an informed decision about her current drug use and breastfeeding</td>
</tr>
</tbody>
</table>

2. ILCA Core Curriculum for Lactation Consultant Practice. 2013. p. 466
## Contraception and Breastfeeding

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
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<th>Desired Outcome</th>
</tr>
</thead>
</table>
| Effective method of contraception that is compatible with breastfeeding | Discussion with mother re methods of contraception available, including:  
- how they work  
- when they can be used  
- benefits/risks  
- effect on breastfeeding |  
- 33% of lactating women have had a menstrual period by the end of the third month  
- almost half will experience some bleeding or spotting between 6-8 weeks  
- bleeding is unlikely to indicate a return to fertility before 8 weeks |  |
| Use of combined pill |  
- The combined oral contraceptive pill containing both oestrogen and progestin is not recommended for breastfeeding mothers |  
- The oestrogen component although unlikely to have a hormonal effect on the baby may significantly decrease milk production especially in the early postpartum period |  |
| Mini-pill (also Known as Progestogen-only pill) |  
- If absolutely necessary it can be commenced from 2-6 weeks postpartum (the longer it can be left the better) |  
- The dose is quite low. Some women report a slight initial reduction in milk production, but this usually responds to a short term increase in feeding frequency |  |
| Intramuscular medroxyprogesterone acetate (Depo Provera®) |  
- Should not be considered until milk supply established although its use remains controversial |  
- If used immediately postpartum am impaired milk supply may result. |  |
| Etonogestral Implant (Implanon®) |  
- Subdermal Implant that is effective for three years. Effects reversible immediately after removal of device (should be inserted 21-28 days postpartum) |  
- May arrest early milk production ie the first 6 weeks  
- Caution is recommended although changes in milk production are unlikely | Mother can make informed decision re method of contraception she will use  
Referral to GP or Family Planning Association for further information  
Mother avoids pregnancy for as long as she wishes and continues to breastfeed |
| Emergency Contraception (Levonorgestrel method) |  
- Ideally given within 24-72 hours after unprotected intercourse |  
- Thought to have minimal effect on milk production |  |
| IUCD- Intrauterine Levonorgestrel (Mirena®) |  
- Can be inserted from 6 weeks postpartum. Effects reversible immediately after removal of device |  
- Compatible with breastfeeding |  |

## Contraception cont - Lactational Amenorrhea (LAM)

<table>
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<tr>
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<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of women for whom LAM is a viable method of contraception</td>
<td>Discussion with mother re methods of contraception available, including LAM&lt;br&gt;If mother interested in LAM as a method of contraception then information given should include:&lt;br&gt; a) how it works&lt;br&gt; b) when it can be used&lt;br&gt; c) why use it&lt;br&gt; d) benefits&lt;br&gt; e) failure rate&lt;br&gt;Mother referred to Family Planning NSW: Toll free: 1300 658 886 or GP for further information</td>
<td>Mother can make informed decision re choice of contraception&lt;br&gt;If the following criteria are met mother has 98% protection against pregnancy with breastfeeding alone:&lt;br&gt; - The mother remains amenorrhoeic&lt;br&gt; - The baby is less than 6 months old&lt;br&gt; - The baby is not receiving any supplementary food&lt;br&gt; - The baby feeds at night</td>
<td>Informed decision made&lt;br&gt; Mother can be educated in how to use LAM as a method of contraception&lt;br&gt; Mother uses LAM</td>
</tr>
</tbody>
</table>

3. ILCA Core Curriculum for Lactation Consultant Practice, 2013 pp. 71-72
# Ongoing Monitoring of Baby's Progress

<table>
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</thead>
<tbody>
<tr>
<td>Baby's behaviour</td>
<td>Adequacy of breastfeeding can be assessed by baby’s’ behaviour, feeding patterns, urine output and bowels as well as weight Rule out hunger Assess weight Support and offer options rather than advice Options include: rocking, patting, use of pram or sling</td>
<td>Unexplained crying periods between 1-4 hours per day can occur in 80% of babies with 10-35% of healthy babies crying for a long period regardless of the method of feeding From 3 weeks to 3 months babies become more wakeful and unsettled A young baby needs the comfort of an adult to assist with moving to a more organised state</td>
<td>Parents have a range of options to settle their baby</td>
</tr>
<tr>
<td>Bowel Motions</td>
<td>Frequent runny stools do not mean the baby had diarrhoea The number of bowel motions decreases between 6 weeks and 3 months. There can be intervals of several days or more between stools</td>
<td>Typical stools are loose mustard yellow but can sometimes be orange or green</td>
<td>Health professionals and mothers understand the normal bowel motions of a breastfed baby</td>
</tr>
<tr>
<td>Urinary Output</td>
<td>After day 4-5 there should be 6 or more pale odourless nappies over 24 hours</td>
<td>Adequate urine output is an indicator of adequate breastmilk supply</td>
<td>Baby is well hydrated</td>
</tr>
<tr>
<td>Baby's Weight</td>
<td>Weight is only one tool to determine progress and should be used with clinical assessment Weight should be assessed over an average of four weeks on the same calibrated scales If using growth charts the WHO 2006 Growth Charts should be used. Only bare weights should be plotted on the growth charts Breastfed babies have a lower velocity of growth after 2-3 months: when plotted on a growth chart they may appear to be faltering, even if thriving Normal baby’s cross percentiles (to attain their genetic potential) and this should be correlated with length</td>
<td>Allow baby to regain birth weight by 2 weeks Approximate weekly weight gain averaged over 4 weeks: 2 weeks-3 months --- 150-200gms 3-6 months --- 100-150gms 6-12 months --- 70-90gms</td>
<td>Baby is growing appropriately</td>
</tr>
</tbody>
</table>
## Ongoing Monitoring of Baby’s Progress cont...

<table>
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<tbody>
<tr>
<td>Baby’s unsettled behaviour</td>
<td>• Increase mothers awareness of baby’s tired signs and sleep needs</td>
<td>• Unexplained crying for short periods for 1-4 hours every 24 hours occurs in approximately 80% of babies &lt;br&gt;• It is estimated that 10-35% of babies cry for periods in excess of 4 hours daily with no apparent reason &lt;br&gt;• Baby’s do not have the ability to settle themselves</td>
<td>A more settled baby &lt;br&gt;Parents happy with ability to manage baby’s unsettled behaviour</td>
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<tr>
<td></td>
<td>• Soothing techniques such as massage, sling wearing, cuddling, feeding, rocking, patting and bathing, soothing sounds.</td>
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<tr>
<td></td>
<td>• Rule out Neonatal Abstinence Syndrome (NAS)</td>
<td>• Unsettled behaviour may indicate drug withdrawal including excessive amounts of caffeine.</td>
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<tr>
<td>Frequent feeding</td>
<td>• Feed as the baby demands</td>
<td>• Baby’s feed frequently – some days up to 12 times in a 24 hour period &lt;br&gt;• Breastfeeding works on supply and demand &lt;br&gt;• If the baby is spending a long period of inactivity on the first breast, encourage mother to change to the second breast</td>
<td>An appropriate milk supply is established</td>
</tr>
<tr>
<td></td>
<td>• Ensure positioning and attachment is correct</td>
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<td></td>
<td>• Reassure mother that baby may need to feed frequently to maintain an adequate supply</td>
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<tr>
<td></td>
<td>• Encourage rest between feeds when possible</td>
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<tr>
<td>Baby’s need for stimulation</td>
<td>• Encourage the parents to be interactive with their baby</td>
<td>• Baby’s are naturally attracted to faces &lt;br&gt;• Baby’s need appropriate stimulation to enhance brain development and attachment as well as develop gross motor, visual and language skills</td>
<td>The baby is in an environment that is sensitive to his needs</td>
</tr>
<tr>
<td></td>
<td>• Interactive floor play should be encouraged</td>
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</tbody>
</table>

Paediatric Ward
Flowchart for the Breastfeeding Mother/Baby

● Bare weigh baby as soon as possible after admission
● Is the baby exclusively breastfed?

• Calculate baby’s expected weight gain (this will give you a good idea regarding mother’s milk supply)

• Observe baby feeding at the breast and note the following:
  i) Breast fullness prior to feed
  ii) Correct positioning and attachment
  iii) Baby’s ability to suck and transfer milk
  iv) Baby’s contentment post feed
  v) Baby’s output

• If baby is feeding and observations are normal, encourage mother to continue her normal feeding pattern and offer support as required (pump is not needed)
  NB. If the baby is unwell the feeds may be shorter and more frequent

• If baby is not feeding well:
  • Offer both breasts at each feed
  • Assist with latching as required
  • Express after each feed and offer baby any EBM

• If baby is unable to feed:
  • Work out baby’s fluid requirement on 8 feeds per day
  • Encourage mother to express 3rd hourly
  • Offer baby EBM as required

Allocate an electric breastpump to the mother and explain the following according to her situation:
  i) How the pump works and the frequency + duration of use
  ii) How to clean the equipment
  iii) How to collect and store the breastmilk
  iv) Document in the notes that this has been explained

If mother’s milk supply is low:
  i) Express after each feed for extra stimulation
  ii) Consider recommending Motilium® to increase milk supply
  iii) Judicial use of formula if considered necessary
  iv) Refer to Lactation Staff if available
  v) Refer to Child and Family Health on discharge
## Dietary Considerations when Breastfeeding

<table>
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<tbody>
<tr>
<td>For the mother who wants to meet all her dietary needs</td>
<td>Refer to Dietician if on a vegetarian diet or any variable diet.</td>
<td>• A fully breastfeeding woman will require an extra 2,000-2100 kJ/day in the first 6 months but this amount will depend on the mother’s level of milk production and changes in physical activity&lt;br&gt;• Lactation increases the recommended dietary intakes for adults by between 0 (for iron) and 1.5 times (vitamin C). Most nutrient needs increase by a factor of about 50%&lt;br&gt;• The composition of the breastmilk does not vary greatly with a change in the mother’s diet, but an inadequate diet may lower the mother’s nutrient stores&lt;br&gt;• Including a variety of foods and normal portion sizes should ensure baby does not react to a specific food</td>
<td>Mother maintains her body stores of nutrients at normal levels&lt;br&gt;Mother to maintain normal body levels of “at-risk” nutrients – iron, zinc and vitamin B12&lt;br&gt;Mother to consume enough calcium to maintain body stores</td>
</tr>
<tr>
<td></td>
<td>• Recommendations for calcium during pregnancy and breastfeeding are the same as for non-pregnant women (1000mg per day). See Parent’s handout p 109&lt;br&gt;• 2.5 serves of meat/protein daily&lt;br&gt;• 9 serves cereal-based foods/bread daily&lt;br&gt;• 2 or more fruit serves daily&lt;br&gt;• 7 or more vegetable serves per day&lt;br&gt;• Iodine supplement – 150mcg / day</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Including a variety of foods and normal portion sizes should ensure baby does not react to a specific food</td>
<td></td>
</tr>
<tr>
<td>For the mother who follows a vegetarian diet</td>
<td>• Ascertain type of vegetarian diet being/to be followed:&lt;br&gt;• <strong>Semi-vegetarian</strong> diet – usually avoids only red meat but has fish/chicken/eggs and dairy foods&lt;br&gt;• <strong>Ovo-lacto and lacto vegetarian diet</strong> – avoid all flesh foods (meats/fish/poultry) but have dairy foods +/- eggs. Ensure normal blood iron and zinc levels are maintained&lt;br&gt;• Encourage regular consumption of iron-containing foods such as nuts, legumes, seeds and wholegrain cereal, eaten with a fruit/vegetable high in Vitamin C&lt;br&gt;• Avoid drinking tea/coffee with meals</td>
<td>• Lactation does not increase iron levels, and these may be low after giving birth&lt;br&gt;• Low iron levels increase tiredness and may affect milk supply&lt;br&gt;• Vegetarian diets contain non-haeme iron, which is not as easily absorbed as haeme-iron from animal foods. Non-haeme iron absorption is increased if a high vitamin C food is eaten at the same meal. Tea/coffee interfere with iron absorption&lt;br&gt;• Vegan diets are high in fibre and low in fat and rapid weight loss during lactation will decrease milk production, therefore the energy needs must be met</td>
<td>Mother and her baby are suitably nourished</td>
</tr>
</tbody>
</table>

2. ILCA Core Curriculum for Lactation Consultant Practice 2013 p324
### Dietary Considerations cont...

<table>
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</table>
| For the mother who follows a vegan diet | • Ensure normal blood vitamin B12 by use of vitamin B12 fortified soy drinks or supplements. Baby may need vitamin B12 supplements | • Long term vegan mothers produce breastmilk containing very low, or no, vitamin B12.  
• Babies without adequate vitamin B12 rapidly develop neurological problems. Plants do not contain active vitamin B12 and can only provide this vitamin if contaminated with vitamin B12 synthesising bacteria. As the food supply in Western countries is sold under strict hygiene standards, plants to not provide a reliable source of vitamin B12.  
• Therefore vitamin B12 supplemented foods or B12 vitamin supplements are recommended for vegans | | |
|  |   | • Ensure enough energy (kj) from diet by use of high fat foods like nuts, vegetable oils and ground seeds | • Vegan diets are high in fibre and low in fat and rapid weight loss during lactation will decrease milk production therefore the energy needs must be met | Mother and her baby are suitably nourished |
|  | • Ensure normal blood iron and zinc levels are maintained. Encourage iron-containing foods as per ovo-lacto vegetarians. Ensure adequate calcium intake: eg from calcium-fortified soy drinks | • Vegan diets contain non-haeme iron, which is not as easily absorbed as haeme-iron from animal foods. Non-haeme iron absorption is increased if a high vitamin C food is eaten at the same meal. Tea/coffee interfere with iron absorption | |

2. ILCA Core Curriculum for Lactation Consultant Practice 2013 p324
### Dietary Considerations cont…

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<tr>
<td>For the mother who wants to lose weight</td>
<td>Ascertain pre-pregnancy (usual) weight and monitor current weight and any changes. Aim for &lt;2kg weight loss per month by: • Regular moderate exercise (eg walking) • Avoiding high fat/high sugar foods that have a low nutritional content • Encourage fresh fruits and vegetables, low fat dairy foods • Wholemeal cereal foods and lean meats/fish, chicken and legumes</td>
<td>Crash diets with rapid weight loss increases tiredness and affects milk supply. Rapid weight loss also increases the level of environmental contaminants and trans fatty acids in breastmilk • Modest regular weight loss (2kg per month) does not affect lactational performance</td>
<td>Aim for mother to return to healthy weight range of BMI=20-25 BMI = weight (kg) / height x height(m²) For example: The healthy weight range for a 165cm tall woman is 54-68kg</td>
</tr>
<tr>
<td></td>
<td>• Encourage continued breastfeeding past 6 months</td>
<td>• Continued lactation into second six months appears to enhance weight loss</td>
<td>Mother continues to breastfeed past 6 months</td>
</tr>
<tr>
<td>For the mother who wants to commence/restart an exercise regime</td>
<td>Normal medical clearance. Also include the following: • Ascertain pre-pregnancy weight and monitory current weight and any weight changes • Advice on maintaining joint stability • Need to increase exercise gradually and to always “warm up” • Need for adequate breast support • Need to maintain hydration/fluid intake</td>
<td>• Rapid weight loss impairs lactational performance • Exercise, including vigorous exercise, does not seem to affect breastmilk production/lactation performance – as long as energy needs are being met Increasing breast size can make exercise uncomfortable, therefore good breast support is essential</td>
<td>Improved cardiovascular fitness and body tone, while maintaining weight or while slowly losing &lt;2kg per month</td>
</tr>
</tbody>
</table>

3. Stevens MF, Ebel GF and Psaila-Savona P. Organochloride pesticides in Western Australia Nursing Mothers. MJ A 1993; 158: 238-241

Issue Date: March 2014
Review Date: March 2017
## Vitamin D and Breastfeeding

<table>
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| Mother is suspected to be at risk of Vitamin D deficiency placing her baby at risk of rickets | • Assess Mother’s Vitamin D levels and supplement as required. Currently 400 IU (10mcg) is the recommendation  
• Review maternal diet to include milk, butter, eggs & oily fish  
• Encourage normal exposure of baby to the sun ie. arms and legs | • Vitamin D is necessary for calcium absorption and breastmilk has very little fat soluble Vitamin D  
• Increased Vitamin D intake results in increased levels in breastmilk  
• Usually enough to stimulate adequate stores of Vitamin D | • Risk of Vitamin D deficiency is corrected and baby continues to breastfeed |

At risk factors for mothers:
- Dark-skinned
- Inner city dwelling
- Clothing deters skin exposure
- Limited meat, fish & dairy in diet

1. National Health and Medical Research Council (2013) *Australian Dietary Guidelines*. Canberra: National Health and Medical Research Council
3. ILCA Core Curriculum for Lactation Consultant Practice, 2013, p325
# Alcohol Considerations when Breastfeeding

<table>
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</table>
| For the mother who wishes to consume alcohol             | • Advise mother that the safest option is to avoid alcohol while breastfeeding  
• Particularly avoid alcohol in the first 4 weeks and while breastfeeding is being established  
• If mother chooses to drink alcohol – advise her to limit alcohol intake to no more that 2 standards drinks per day and only after a feed. | • Alcohol enters the breastmilk and may persist for several hours after maternal consumption  
• The alcohol may harm the developing baby if ingested via the breastmilk  
• Large quantities of alcohol decrease the volume of breastmilk produced by interfering with the let down reflex. An intake of 10 to 20 gms in a day is considered safe (<2 standard drinks).  
• One standard drink = 250ml beer  
375ml light beer  
100ml wine  
60ml fortified wine  
30ml spirits  
• Drinking > 2 standard drinks per day may affect the baby's psychomotor development and disrupt their sleep – wake behavioural patterns  
• Alcohol may make the baby drowsy or unsettled and may reduce the intake of breastmilk | Low, social alcohol intake for the mother if she wishes |
|                                                          | • It is best to consume the alcoholic drink just after a feed when the baby may not be feeding again for a few hours  
• Consider expressing in advance if the mother intends to drink alcohol and express and discard her milk when drinking alcohol | • Alcohol is transferred through the breastmilk at a level similar, or just lower than, that in the mother’s blood. Consumption of alcohol just after the baby has been breastfed (and, therefore, a few hours before the next feed) ensures that the breastmilk the baby consumes at the next feed will contain less/no alcohol | Nil intake of alcohol for the baby |

## Caffeine Consideration during Lactation

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</tr>
</thead>
</table>
| For the mother who wishes to consume caffeine containing food/drinks | • Moderate consumption of tea, coffee, cola drinks and chocolate – 3 cups a day – preferably after a breastfeed  
• If cola drinks are consumed, encourage use of decaffeinated cola drinks | • Caffeine is excreted in breastmilk in low levels and reaches a maximum concentration about one hour after consumption. Large quantities may accumulate in the baby and result in jittery, wakeful baby and may decrease the baby’s absorption of iron  
• In moderate amounts caffeine has been shown to stimulate milk production (4) | Mother consumes only low to moderate intake of caffeine-containing drinks and foods |
| | • Avoid sudden changes in the caffeine intake | • Sudden changes in caffeine intake are more likely to have a noticeable effect on the baby, as the body becomes accustomed to a certain level of intake | Minimal exposure of caffeine to baby |

## Returning to Work

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<th>Rationale</th>
<th>Desired Outcome</th>
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</thead>
<tbody>
<tr>
<td>Mother planning to return to work</td>
<td>• Dependent upon how well breastfeeding is established and flexibility and support in the workplace eg. a satisfactory place to express and store breastmilk</td>
<td>• If breastfeeding is well established mother will have a greater flexibility in considering options</td>
<td>Mother makes an informed choice and both mother and baby are well established with the desired feeding routine prior to mother's return to work</td>
</tr>
</tbody>
</table>
| Prevention of breastfeeding problems associated with return to work | Discuss various options available to mother:  
• Replacing breastfeeds during work hours with EBM  
• Replacing breastfeeds during work hours with infant formula  
• Replacing breastfeeds during working hours with solid food when the baby is 6 months or older.  
• Weaning – if weaning or replacing breastfeeds with formula, slowly reduce the number of breastfeeds  
• If offering EBM and supply adequate, express at time baby would normally be fed  
• Monitor breasts for any signs of lumps or discomfort  
• Education re expressing and storing | • Slow weaning decreases the possibility of engorgement, blocked ducts or mastitis  
• The rate of milk production matches the amount removed from the breast  
• Close monitoring of breasts while reducing number of feeds or expressions reduces the likelihood of problems | No breast complications arise  
Sufficient milk is expressed for the baby while mother is at work  
Mother is able to recognise any changes in breasts |
| Separation anxiety /distress | • Discuss with mother  
• Needs to ensure the following:  
  • Support of partner and family  
  • Adequate child minding facilities  
  • Baby comfortable with alternative feeding method eg. bottle, cup | • Mother will be more relaxed with work arrangements  
• Mother knows that baby is able to feed while she is absent | Mother is able to maintain desired milk volume and has full support with working arrangements |

### Breastfeeding after General Anaesthetic

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Breastfeeding mother requires General Anaesthetic</td>
<td>See “Medication and Breastfeeding” for basic information</td>
<td>Interrupting breastfeeding for long periods is discomforting to the mother, difficult for the baby and may permanently interrupt breastfeeding.</td>
<td>There is minimal interruption to breastfeeding</td>
</tr>
<tr>
<td></td>
<td>The drug would need to be present in a pharmacologically significant amount eg. agents that produce active metabolites with long half-lives.</td>
<td>This is rarely the case with anaesthetic medications</td>
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</tr>
<tr>
<td></td>
<td>Mothers with normal term or older infants can generally breastfeed when they are awake and alert.</td>
<td>Many anaesthetic medications either have brief half-lives and/or rapid redistribution from the plasma compartment to other remote compartments eg muscle. This reduces the overall degree of exposure to the baby. Some data is available on most medications used in anaesthetics and if exposure to the baby via milk is brief this does not allow sufficient time for clinically relevant levels to build up. Drugs enter milk and in most cases exit milk as a function of the mother’s plasma level</td>
<td></td>
</tr>
<tr>
<td>Baby is young or premature</td>
<td>The age of the baby is variable and must be considered, as young or premature babies may be more susceptible to medication transfer</td>
<td>The intracellular junctions of the alveolar cells have wide gaps in the first four days post partum and for a longer period if the baby was premature. These gaps permit medications to penetrate breastmilk more readily.</td>
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</table>

## Breastfeeding and Radiological Procedures

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<tr>
<th>Needs and/or Problems</th>
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</tr>
</thead>
</table>
| • Mother requires a diagnostic procedure | • Identify the contrast to be used  
• Use appropriate resource to evaluate transference into breastmilk and the degree of exposure to the baby.  
For example:  
- Lactmed database  
- Medications and Mothers Milk  
- or phone Mothersafe:  
  9382 6539 (Sydney metropolitan)  
  1800 647848 (Non metropolitan area) | • Manufacturers’ inserts discourage breastfeeding for fear of litigation not necessarily for well-founded pharmacological reasons  
• Should be weighed against the risk of interrupting breastfeeding and the potential risks to both mother and baby particularly if baby is “at risk” eg. Premature | • Mother makes an informed decision  
• Ideally baby continues to breastfeed |
| • Mother may need to express during interruption to maintain milk supply | • Provide mother with the appropriate information so that she may make an informed decision | | |
| Procedure requires the use of a Radio-opaque agent:  
• Gadolinium-based eg. MRI  
• Iodine-containing contrast medium (ICCM) eg. CT scan, intravenous pyelogram | • No interruption to breastfeeding<sup>4</sup>  
• No interruption to breastfeeding<sup>5</sup> | • Excreted into breastmilk in extremely small amounts usually less than 0.04%  
• MRI is considered a safe procedure for a baby  
• Less than 1/1000<sup>th</sup> of the ICCM dose gets into the breastmilk and it has poor bio-availability to the baby | • Baby continues to breastfeed |
| • Thyroid scan – Radioactive I<sup>131</sup> | • Breastfeeding should be discontinued | • Enhanced risk of thyroid cancer in infant | • Baby is not exposed to harmful radioactive substance |

3. ILCA Core Curriculum for Lactation Consultant Practice, 2013, p447  
5. Royal Australian and New Zealand College of Radiologists *Iodine-Containing Contrast Medium* Inside Radiology, 2009  
## Weaning

<table>
<thead>
<tr>
<th>Needs and/or Problems</th>
<th>Action</th>
<th>Rationale</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request/desire to wean</td>
<td>Information and guidance provided from a Health Professional regarding weaning choices (p103&amp;p104)</td>
<td>Mother can make informed decision on which type of weaning she will choose.</td>
<td>Effective weaning with minimal discomfort for mother and baby</td>
</tr>
<tr>
<td>Abrupt</td>
<td>Immediate cessation of breastfeeding. Gentle expressing for comfort only, using hand or breast pump gradually decreasing each day.</td>
<td>Method of choice as this allows fat tissue to replace milk-providing tissue over a longer period of time.</td>
<td></td>
</tr>
<tr>
<td>Gradual</td>
<td>Reducing the number of breastfeeds given to baby over a chosen period of time.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast discomfort</td>
<td>Wear firm supportive bra, Analgesia (paracetamol if needed), Apply cold compress, Observe for blocked ducts, Express for comfort only if abrupt weaning, Breastfeed and drain breast if gradual weaning</td>
<td>Prevent complications eg. Mastitis (breast infection)</td>
<td>Relieve discomfort</td>
</tr>
<tr>
<td>Breast infection/mastitis present</td>
<td>Commence a broad spectrum antibiotic for 10-14 days, Paracetamol as needed, Discuss diet and rest, If gradually weaning do not reduce breast feeds further until infection cleared</td>
<td>To prevent reoccurrence</td>
<td>Improvement in signs and symptoms within a few days</td>
</tr>
<tr>
<td>Support</td>
<td>Offer support and counselling, Provide information regarding community support services eg 24 hour parents help line</td>
<td>To reduce the sense of loss and guilt</td>
<td>Mother comfortable with her decision</td>
</tr>
<tr>
<td>Use of medication to suppress lactation urgently e.g. mother requires cancer treatment or death of infant</td>
<td>Prescribe appropriate medication eg Dostinex, Advise mother of side effects e.g. dizziness, headache, No expressing, Good breast support</td>
<td>Quicker resolution of milk secretion, Allows mother to make an informed choice</td>
<td>Effective suppression with minimal discomfort to allow other treatment to take place</td>
</tr>
</tbody>
</table>

1. Lauwers J & Woessner C, *Counselling The Nursing Mother*, 1990 Avery Publishing Group Inc. USA, p226-290
SLHD Breastfeeding Guidelines

Sydney Local Health District
Parents’ Information Sheets

HANDOUTS

FOR

PARENTS

May be photocopied

SLHD does not accept any liability to any person for the information or advice (or use of such information or advice) provided in these handouts or incorporated into them by reference. We provide this information on the understanding that all health practitioners accessing them take responsibility for assessing their relevance and accuracy.
Breastfeeding is a very individual thing, no two mothers and babies are the same. It is important that you understand your baby and his/her needs. Feed your baby to need in the first few days and your breasts should start to feel full by day 3 or 4.

During each breastfeed the consistency of the breastmilk changes. Usually at the beginning of a feed the milk will look watery, at the end of the feed the milk tends to look creamier. At the completion of the breastfeed the breasts will feel softer. However, milk will always be present as the breasts start to refill as soon as the baby sucks at the breast.

Each mother’s rate of milk transfer from the breast to the baby is different. Babies take varying times to feed, and the rate of transfer may also vary with the time of day. Mothers are encouraged not to time feeds, it is more important to know how the baby feeds. For example is the baby content after the feed.

Often mothers find that their breastmilk supply is greatest in the mornings and the baby MAY only need one breast, by the evening the supply may have decreased a little, so it may be necessary to offer both breasts to ensure that the baby is completely satisfied.

REMEMBER that babies are quite different, some babies will only ever need one breast and others will always need both. It is important that at every feed both breasts are offered.

Make sure that your baby is well attached to the breast to ensure an adequate feed

Some signs that the baby is well attached to the breast are:
- It will not hurt (after the initial attachment discomfort)
- The mouth still be wide open
- The sucking action will be rhythmical, after some quick short sucks the baby begins to take longer more rhythmical deep sucks taking a brief pause. This pattern will continue until he/she is satisfied. Whilst breastfeeding it is important not to distract this sucking pattern by tickling the baby under the chin or stroking the sole of the foot
- When the baby has had enough he/she will let go of the nipple, or you will notice that he/she is not longer having any deep rhythmical sucking.

If your baby is NOT well attached the following signs will be noticeable:
- It may hurt for the whole feed
- The baby’s cheeks may dimple when he/she sucks
- Whilst the baby is sucking he/she may make a lot of noise
- The sucking pattern may be very short and fast
- The baby’s mouth may NOT be open very wide.
- Your nipple may be misshapen when your baby comes off the breast.
Guidelines for Establishing Lactation – Parents Handout (Page 2)

Tips to ensure a good start to successful breastfeeding:

- Have a comfortable place to breastfeed your baby, lean back with good back support, feet raised if this is more comfortable (phone books can be useful footstools).

- Have a glass of water close by.

- Ensure that the baby is properly attached, have the baby’s body near yours – his chest to your chest, with chin well in to your breast.

- Ensure the baby completely softens the first breast before offering the second breast.

Initially as the milk comes in, your breasts will feel very full and uncomfortable for a few days.

Until the milk supply becomes established this ‘fullness’ may continue to happen for a few weeks.

The wearing of a well supporting maternity bra and using cold packs in the early days of breastfeeding maybe helpful.

Some women find their nipples feel sensitive after the birth of the baby but this is normal, generally only lasting a few days.

In 24 hours 8 feeds or more is normal. There is no need to time your baby’s feeds, but it is important in the first 4-6 weeks to ensure that your baby has at least six feeds in 24 hours.

It normally takes about six weeks for lactation to become established.

Resting during the day when possible to get adequate sleep, and a well balanced diet are all essential to get breastfeeding off to a good start and enjoy your baby.
The Role of Family and Friends
Support to the Breastfeeding Mother.

FOR THE MOTHER
As a new mother, whether it is your first or fifth baby, you can always benefit from some extra help and support. If possible try to think about what type of support you may need before the birth of your baby. Some mothers may need more support with the day-to-day household chores while other mothers just like someone to talk to. Breastfeeding your baby is the best start for you and your baby. Even if you are an experienced mother, it can still take time to establish breastfeeding and to get to know your baby. Having extra help at this time can make establishing breastfeeding easier for you and your family. Below are some suggestions of the types of support which may benefit you. As you read the list, you may like to think about which of your family, friends or community support agencies would be the best suited for you should need it.

Physical Support
(May be needed if you have had a caesarean or intrumental delivery)
- Help with lifting heavy objects
- Help with other children
- Help with any breastfeeding problems

Practical Support
- Help with household tasks
- Help with shopping
- Help with older children
- Help so you can have extra time to yourself
- Help so you can have some time alone with your partner

Emotional Support
- Find support that is encouraging and positive
- Find support that you feel comfortable with
- Find out what supports are available in your area

FOR THE HELPER
If you are a partner, friend or relative of a breastfeeding mother you can have an important role to play in supporting a mother and baby to enjoy and benefit from their experience. Included below are a few suggestions about the way this support can be provided:
- Provide emotional support
- Offer words of encouragement
- Respect the mother’s judgement
- Respect the family privacy and space
- Do not place heavy demands on the mother. Allow her this time to breastfeed and rest.
- Provide practical help:
  - Help if mother wants help with household tasks such as cooking, cleaning and caring for other children
  - Offer drinks or snacks to the mother while feeding if possible
  - Encourage a positive, calm environment for breastfeeding e.g. comfortable room temperature, comfortable chair, footstool/pillows if preferred
  - Answer telephone or take phone off hook.
  - Perhaps mind the baby so the mother can have some time to herself to rest, sleep, take a bath, go for a walk, have some time to herself if she wants to spend some time with her partner or other children
  - Allow mother time to catch up on sleep
  - If you are actually assisting the mother to breastfeed, ensure you are in a comfortable position which then allows you to give the time it takes to help

Some Extra Hints
If someone offers to help, allow him or her to help you. Do not be tempted to look after them as a guest.
Expressing and Storing Breastmilk Parent’s Handout

Hand expressing

It is important for you to know how to express your breast milk. Hand expressing is a learned experience and is best done by you.

When you need to hand express:
- If you are separated from your baby
- You are unable to give a breastfeed at the time your baby wants to feed
- Your baby has difficulties attaching, and is demanding a feed
- To soften your areola (darkened skin around nipple) to make attaching easier
- To increase your milk supply

How to hand express

1. Wash your hands with soap and water
2. Gently massage your breasts, starting from the top and stroking towards your nipple, not forgetting the underneath.
3. Hold a clean container under your breast to collect your milk.
4. Put your thumb and first finger opposite each other on the your areola (coloured area surrounding your nipple), see picture above.
5. Gently push back towards the centre of your breast and rib cage, squeezing your thumb and finger together with the pad of your thumb and finger meeting behind the nipple. Repeat in a rhythmic action until the milk starts to flow. It should not be painful.
6. When the flow stops move your finger and thumb around your areola and repeat steps 4-6
7. Aim to express the breasts for about 10 – 15 mins each side.
8. Then change to other breast and repeat above steps.
9. You may swap to the other breast after about 5 minutes if the milk has stopped flowing, or your hands are tired. By changing back and forth from breast to breast you may be able to improve the flow of milk, particularly if your supply is low.

Expressing using a hand or electric breast pump

- If you decide to use a breast pump it is better not to use it in the first 24 – 48 hours after birth.
- Before using the breast pump wash hands and gently massage your breasts as in steps 1 -2 above
- Gently hand express for a minute or two to get your milk flowing
- Centre the funnel of the pump over your nipple and follow manufacturer’s instructions.
- If pump has adjustable suction pressures always start on minimum / low and build up to a comfortable level. If there is a rate setting, start on a fast rate, reducing the rate as milk flows.
- Your nipple should move freely in the pump flange without being squashed in around the edge
- Higher pressures can be used as long as they cause no discomfort.
- The pump if used correctly, should not cause pain, and will become easier to use with practice
### Storing your breast milk

<table>
<thead>
<tr>
<th>Breast Milk</th>
<th>Room Temperature (26° C or lower)</th>
<th>Refrigerator (4°C or lower)</th>
<th>Freezer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshly expressed into a closed container</td>
<td>When expressing for your baby in the hospital, your milk needs to be refrigerated within an hour of completing the expression. It can last up to 6 – 8 hours out of the fridge for use at home.</td>
<td>In hospital 48 hours. At home 3 days (72 hrs). Store in back of the fridge, where it is coolest.</td>
<td>2 weeks in freezer compartment inside refrigerator. 3 months in freezer section of refrigerator with separate door. 6-12 months in deep freeze (-20° C)</td>
</tr>
<tr>
<td>Previously frozen – thawed in refrigerator but not warmed</td>
<td>4 hours or less</td>
<td>Use within 24 hours</td>
<td>Do not refreeze</td>
</tr>
<tr>
<td>Thawed outside refrigerator in warm water</td>
<td>For completion of the feed. Use straight away do not store</td>
<td>4 hours or until next feeding</td>
<td>Do not refreeze</td>
</tr>
<tr>
<td>Baby has begun feeding</td>
<td>Discard when the feed is finished</td>
<td>Discard</td>
<td>Discard</td>
</tr>
</tbody>
</table>

- Breastmilk often separates when stored and may need to be shaken before use
- Breastmilk can be stored in glass or plastic containers
- Fresh breastmilk that is being refrigerated or frozen should be stored in a new container rather than being added to previously refrigerated or frozen milk
- Only fill the container ¾ full with breast milk as it will expand on freezing and the container may burst or leak in the freezer.
- Label the container with date and time and use the oldest milk first.
- Expressed breast milk only needs to be warmed to room temperature to feed to your baby.
- NEVER USE A MICROWAVE to warm baby’s milk, as this may cause burns in the baby’s mouth and throat and may change the nutritional content of the milk.
- Transport breastmilk in an insulated container with an esky or freezer brick and put in the refrigerator or freezer (if still frozen) upon immediately upon arrival.

### Cleaning Equipment
- Follow the manufacturer’s instructions
- All breastfeeding equipment including breast pump kit parts
  - needs to be rinsed in cold water,
  - washed thoroughly in warm soapy water (dishwashing liquid is appropriate),
  - rinsed thoroughly with warm running water, invert and air dry or dry with clean cloth
  - placed in a clean air-tight container.
- At home expressing equipment does not need to be sterilised.

---

Nipple Shields

Nipple shields are silicone covers that are placed over the nipple and areola to assist with breastfeeding. Their use is usually temporary.

The most common reason for using a nipple shield is flat or inverted nipples when other attempts to attach baby have been unsuccessful.

Nipple shields should not be used
- Until milk is in and flowing well.
- When nipples are damaged from poor attachment to the breast.

How to breastfeed with a nipple shield
- Express a small amount of milk into the cone of the shield
- Apply the nipple shield centrally over the nipple and hold it in place with your fingertips on the outer edge of the shield as your baby attaches onto your breast
- Ensure your baby’s mouth is wide around the nipple shield so the lips are not just on the teat part of the nipple shield
- Once on the breast you will need to move your fingers so your baby has plenty of room to attach well.
- It is important that the baby does not slip back off the shield as this will cause pinching and nipple damage.
- Make sure the baby is sucking and swallowing
- It should look like your baby is feeding as if the shield is not there

Cleaning
Make sure that the nipple shield is rinsed and washed in hot soapy water then rinsed again and kept in a clean airtight container between feeds. Sterilise once a day (eg boil for 5 mins)

A teaspoon of citric acid may be added to water to avoid a build-up of limescale.

Problems associated with use of a nipple shield include:
- May prevent the breast draining properly thereby increasing the risk of mastitis
- Lack of direct stimulation to the breast may lead to a lower milk supply and poor weight gain in the baby
- Baby may prefer the nipple shield and may be difficult to get feeding directly at the breast

The likelihood of problems can be reduced by:
Being shown how to use the shield correctly by an experienced midwife/nurse or lactation consultant.

Assessing baby’s ability to attach well with the shield and observing for changes in baby’s sucking during the feed

To ensure breasts are well drained it may be necessary to express for a few minutes after feeds

Ensuring follow up with breastfeeding support so that baby’s growth and progress may be checked

Weaning from the nipple shield
It is recommended that baby eventually feed directly from the breast. The transition from nipple shield to breast can sometimes take time. Removing the shield part way through a feed when the nipple is drawn out may make direct attachment easier.

Assistance can be obtained from a lactation consultant, or Child and Family Health Nurse.

Adapted from: “Breastfeeding Matters” as supplied from John Radcliffe Hospital UK. September 2003; & NSW Health Using Nipple Shields (SESIH Area Lactation Group 2010)
CUP FEEDING: A handout for parents

- Cup feeding provides a safe alternative to bottles and teats when your baby is unable to breastfeed effectively or requires additional fluids.

- It can also be used if you are temporarily unable to breastfeed your baby.

- Expressed breastmilk should be used. Where medically indicated or at your request a breastmilk substitute (formula) may be given. A written consent for a breast milk substitute is required in the hospital setting.

- The cup used should be small and smooth edged, the capacity should be no more than 30 mls.

HOW TO CUP FEED

1. Before starting, wash your hands thoroughly and place the milk into a clean and dry cup.
2. Ensure your baby is awake and alert prior to starting a cup feed.
3. Wrap your baby securely to prevent his/her hands from knocking the cup.
4. Place a bib under your baby’s chin; the baby may dribble some of the milk.
5. Hold your baby in a supported sitting position on your lap, so that you are both comfortable.
6. Keep your baby in an upright position throughout the feed.
7. The cup should be no more than half full.
8. Place the cup so the rim is gently resting on your baby’s lower lip.
9. Tilt the cup until the milk is at the rim.
10. Your baby will open his/her mouth and begin to sip or lap up the milk. You will hear swallowing.
11. Leave the cup in place while your baby is feeding actively. Your baby will regulate the pace and volume of the feed. Remove the cup when the baby stops drinking.
12. Return the cup when your baby is showing signs of being ready to feed again.
13. Repeat this process until the feed is finished, usually within 20 to 30 minutes.
14. Following the feed wash the cup in hot soapy water then rinse and dry. The cup can be stored in a clean container (with a lid) in the fridge for later use.

Acknowledgements: 1. Spoon and Cup feeding – alternative feeding methods in the early postnatal period, Royal Hospital for Women
2. PR2011_353 Cup Feeding Breastfed Well Babies - NSLHD
Increasing your breastmilk supply

Production of breastmilk relies on the regular and effective removal of milk from your breasts.

This is best achieved by feeding your baby to his or her need. It is also important for your baby to be well positioned at your breast and attached correctly so you are comfortable when your baby sucks.

Your baby’s suck should be slow and rhythmical with deep jaw movements and you may see swallowing. It is normal to have 8 - 10 breastfeeds in a 24 hour period.

If concerned about your supply, talk to a health professional such as your Child and Family Health Nurse, Lactation Consultant or an Australian Breastfeeding Association counsellor.

What you can do to increase your breastmilk supply

- Increase how often you feed your baby or express your breasts including during the night.
- Ensure you finish one side first (it should feel soft all over) then always offer the second.
- Do not use a dummy - use the breast to comfort your baby.
- Express your breasts for 5 – 10 mins each side after breastfeeding your baby. You can do this by hand or use a manual or electric pump. Consider double pumping for 5 - 10 mins. This increases stimulation to your breast and may produce more milk.
- Any expressed breast milk you are able to express can be offered to your baby after feeds.
- Increase skin to skin contact time with your baby.
- Avoid giving your baby any fluids or foods other than breastmilk unless it is necessary for their health.

Remember the breastmilk flows best when you are relaxed and calm. Accept any practical help at home as you try to rest, drink adequate fluids and have a well balanced diet. Limit caffeine, including tea, coffee, cola and chocolate as these can decrease your breastmilk.

Use of medication to increase your supply would only be suggested if other methods have been unsuccessful after the first week. You must continue with increased stimulation and removal of milk while taking the medication for it to work effectively.

Contacts
Child and Family Health Centres – look up community services in the phone book
Australian Breastfeeding Association Helpline 1800 686 268
 Mothersafe (Medications in Pregnancy and Lactation Service) 02 9382 6539
 1800 647 848 (non- metropolitan)
Guidelines for use of Domperidone (motilium®) tablets

While taking this medication ensure that your baby is fed whenever he/she is hungry expect at least 8 feeds in 24 hours (or every 3 hours during the day and 4 hourly at night) and you are expressing after feeds.

Presentation and storage: Domperidone is only available in oral medication in Australia and comes in a 10mg tablet. It is usually taken for about 28 days. If your supply does not increase or is not maintained after this then consult with the health professional who is supporting your breastfeeding. The regime is as follows:

Dose
Day 1 – 7: 10 mgs (1 tablet) every 8 hours
After 1-2 weeks: decrease to 10 mgs every 12 hours for 7 days
Day 21 – 28 days: 10 mgs every morning for 7 days

How does Domperidone work
Domperidone increases the production of the milk making hormone prolactin and will only be effective along with good breastfeeding and/or expressing. It usually takes 3 – 5 days to show an increase in supply.

Side effects
If side effects such as dry mouth and thirst, skin rashes, headaches, depressed mood, abdominal cramping, constipation or diarrhoea occur then cease the medication and consult your GP.

Contraindications
While on domperidone the use of travel sickness or anti nausea medication should be discussed with a pharmacist or GP.

All women must be reviewed medically prior to being prescribed domperidone.
Although considered safe for use in breastfeeding mothers, oral domperidone prolongs the QTc interval so may exacerbate the action of other medications such as methadone. It can also induce arrhythmias in hypokalaemic mothers, or women with a history of arrhythmias. (Hale 2010; MIMS 2010).

For further advice contact Mothersafe: 9382 6539 OR 1800 647 848

References

NHMRC 2012. NHMRC Infant Feeding Guidelines, Information for Health workers p46 - 47
The Royal Women’s Hospital Victoria Australia Factsheet: Medications and Herbal Preparations to increase breastmilk production (galactagogues)
South East Sydney Illawarra Health Area Lactation Group May 2009:
Increasing your supply of breastmilk
Da Silva OP, Knoppert DC, Angelini MM, Forret PA Effect of domperidone on milk production in mothers of premature newborns: a randomized double-blind, placebo–controlled trial. CMAJ 2001; 164: 1, 17-21
Medicines associated with QT prolongation and/or torsades de pointe: Pharmacy bulletin, 2007; 16.
Mastitis

Possible causes
- Inadequate drainage of the breast and can be complicated by damaged nipples
- Blocked ducts

Symptoms of mastitis
- Red, painful and sometimes a ‘hot’ area on your breast
- Feeling ‘unwell’ and having flu like symptoms such as aches and pains
- High temperature

Avoiding Mastitis
- Ensure good positioning and attachment for good breast drainage and to avoid grazed and cracked nipples
- Ensure the first breast is soft and comfortable before offering the other side
- Ensure strict hand washing to avoid bacteria from another area (eg sticky eye, wound infection) coming in contact with the breast
- Feeding baby according to their need and if a sudden change baby’s feeding needs and the breasts become very full such as your baby sleeps through the night or you are away for a feed then it is important to express your breasts or wake the baby to feed.

Treatment
- Continuing to breastfeed until the breast is soft and comfortable speeds up recovery
- If unable to feed then it is important to hand express or pump to soften the breast
- Feed your baby as often as the baby will feed
- It is important that the baby is well attached to the breast and if possible aim chin to the area of the blocked duct
- During the feed gently massage the breast to promote flow.
- Ensure that your bra is not tight and is not causing pressure on your breast
- For lumps and tender areas manage as for blocked ducts
- Try and get plenty of rest and increase your fluid intake
- Take pain relief as required – for example, paracetamol
- If there is no improvement in the next 2 – 3 feeds, see your doctor as you may need antibiotics.
- The current recommendations are *Flucloxacillin or Cephalexin* (if allergic to penicillin) 500mg four times daily for 10 – 14 days. This means you may have to obtain two prescriptions from your doctor (it may be helpful to take this information sheet with you to the doctor).
- This antibiotic can be used safely when you are breastfeeding. Your baby will not get ill as the infection involves the breast tissue not the breastmilk.
- Contact your Child & Family Health Nurse or the Australian Breastfeeding Association (1800 686 268) for further support and information

* National Health and Medical Research Council (2012) Infant Feeding Guidelines. Canberra: National Health and Medical Research Council
Breast Abscess
Pre & Post Operative Management

Feeding

Admission of baby with mother to post natal ward is encouraged so that breastfeeding is not interrupted. It is usually best to arrange for someone to stay with your baby while you have the procedure. Try to breastfeed just before going to theatre as many babies will wait for your return to the ward for their next feed. However, if possible express some breastmilk for your baby to have in your absence for your own peace of mind. Continuation of breastfeeding is encouraged as soon as possible after surgery and is considered safe after the general anaesthetic when you are alert and can respond to your baby. If this is not possible e.g. due to location of incision, then regular expression is necessary.

Wound Management

A drainage tube may be inserted into the wound and removed the morning after surgery. A dressing will be applied which will need to be changed at least daily or more often as needed.

Sometimes the wound may need to heal slowly and then is packed lightly with saline gauze to keep it open. Each time you feed, there may be some leakage of milk through the wound. You can expect that this will occur up to 2 weeks. It is normal and helps to keep the area clean and aids healing. Arrangements will be made for daily follow up dressings with the community nurse. Once you know approximately what time to expect her each day, you may like to have a shower just prior to her coming. It is quite all right for water to run over the area. If you are able to remove the packing yourself, prior to the shower, that is even better.

Antibiotics

It is important to continue taking your antibiotics until the course is completed.

Follow up

A follow up appointment will be made for you to attend the Breast Clinic / doctors rooms following your surgery. If you have any concerns before this time you should contact your hospital or your doctor.

FOR THE COMMUNITY NURSE

The wound should be LIGHTLY packed each day with SALINE GAUZE. The length of the gauze should be slightly less each day. It is expected that the wound will remain open for about 10-14 days and that milk will leak from the wound during feeding.

Suppression of Lactation
(Immediately after delivery)

It is normal for your breasts to start to fill with milk by about the fourth day following the birth of your baby. In order to minimise the discomfort, it is advisable to take measures to suppress lactation as soon as possible after delivery.

- Firm breast support – wear a well fitting supportive bra even when resting
- Avoid heat on the breasts – try not to have long hot showers
- Avoid breast stimulation – try not to handle your breasts unnecessarily

On about day three or four following the birth, your breasts will become firm, uncomfortable and may be painful. Cold packs applied to the breasts may bring relief. For example, cold cabbage leaves or a pack of frozen peas (wrapped in a light cloth) are effective as they can be moulded around the breast.

If your breasts become too painful you may need to express a little milk for comfort. Observe for any hard red areas and if accompanied by fevers, joint aches and pains or hot and cold shivers it is advisable to see your doctor as you may require antibiotics.

During this period of discomfort pain relief may be needed. An analgesic such as paracetamol e.g. Panadol, may be taken, in accordance with the manufacturer’s directions.

The Role of Medication

Medication, Cabergoline (Dostinex®), can be ordered by your doctor to suppress your breastmilk but is not seen as the first option for treatment.

Known side effects of this medication include: dizziness, headache, nausea and lowering of blood pressure.

If you decide you want to take this medication, it is most effective if given as a single dose, within 24 hours of delivery. The recommended dosage is:

- 1mg as single dose in the first 24 hours post-partum
- OR
- 250 micrograms every 12 hours for two days (total of 1mg)
  If given once the milk is “in”

Suppression of Lactation
(Gradual)

If you have been breastfeeding and decide to wean, for whatever reason, it is better to do it slowly. Gradual weaning allows fat tissue in your breast to replace milk producing tissue over a longer period of time.

You can do this by:

- Reduce the number of breastfeeds given to your baby each day. This can be done by replacing one breastfeed with a breastmilk substitute bottle feed. When your breasts have adjusted to this reduction then another breastfeed can be reduced and so on. This may be every 3-4 days or longer.

  Or

- Gradually reduce the number of time you express your milk each day. This can done by stretching the time between expressions. For example, if you are expressing every 3 hours stretch that to every 4 hours. When your breasts adjust and are comfortable again stretch to 5 hours and so on.

- When you are only expressing or breastfeeding once or twice a day, only express / breastfeed for comfort until this is no longer necessary

As all mothers are different, it is best to seek the guidance of a health professional for your particular situation.

The Role of Medication

Medication, Cabergoline (Dostinex®), can be ordered by your doctor to suppress your breastmilk but is not seen as the first option for treatment. Known side effects of this medication include: dizziness, headache, nausea and lowering of blood pressure. If you decide you want to take this medication, it is most effective if given as a single dose, within 24 hours of delivery.

If Cabergoline (Dostinex®) is deemed to be the only option in a specific circumstance the dosage is:

250 micrograms every 12 hours for two days (total of 1mg).

2. ILCA Core Curriculum for Lactation Consultant Practice 3rd Edition 2013
Care of your breasts when your baby dies

The time after the death of a baby is a time of deep sadness and can be physically and emotionally exhausting.

Colostrum (early breastmilk) is produced as early as 16 weeks into the pregnancy. Even when your baby has died, your breasts will make milk. This may start around 3 – 4 days after your baby’s birth. Some women welcome this as proof their baby was real while other women find the reminder very painful. Caring for your breasts is important, as it will help make them more comfortable and reduce the risk of blocked ducts and mastitis.

As your breasts become uncomfortable
- A comfortable, supportive bra and breast pads may be useful.
- Apply cold packs and change often (e.g. chilled washers or a bag of frozen peas).
- Avoid heat on your breasts.
- Take paracetamol as directed to relieve pain and discomfort.
- If your breasts become very full and painful you may need to express enough milk to relieve some of fullness and keep your breasts comfortable. This should not increase your supply because you are not emptying the breasts.
- It may be necessary to continue to express for several days to help prevent the pain of sudden engorgement or mastitis

Medication
Medication, Cabergoline (Dostinex®), can be ordered by your doctor to suppress your breastmilk but is not seen as the first option for treatment. Known side effects of this medication include: dizziness, headache, nausea and lowering of blood pressure. If you decide you want to take this medication, it is most effective if given as a single 1 mg dose, within 24 hours of delivery. If given once the milk is “in” the dose is 250 micrograms every 12 hours for two days (total of 1mg).

If your milk supply is established and your baby dies
Gradually decrease over several days the number of times you express and the amount of milk removed from your breasts while still maintaining breast comfort. This is particularly important for any mother who has been expressing with a pump for more than two weeks. Depending on your circumstances, this could take place either in hospital or at home. Restricting fluids is no longer recommended. If you are unsure about your particular situation seek the guidance of a healthcare professional or an Australian Breastfeeding Association counsellor.

How long will I have milk?
It may take some weeks (or even longer) for your milk to disappear completely. Leakage may continue for some time after the discomfit has settled. If you are unsure, talk with your midwife or doctor.

Mementos
Some mothers may like to freeze a small amount of breastmilk as a memento.
Care of your breasts when your baby dies (page2)

The day of the funeral
This will be a long and emotional day. These hints may help:
- Express milk for comfort before the funeral and during the day if needed.
- Your breasts may leak milk, so be prepared with breast pads and have some spare.
- Wear your bra comfortably firm but NOT tight.
- Dark-coloured or patterned tops are less likely to show wet patches.
- A cardigan or jacket may help hide wet spots.
- Paracetamol taken as directed will help ease breast pain.

Time is not a factor in the grieving process. After the loss of your precious baby, feelings of grief and sadness may come and go as you try to move on with your life. Family and friends will want to show they care even though they may not understand exactly how you feel. It may be helpful to speak with others who have lost a child e.g. SIDSandKIDS or you may wish to contact a grief counsellor or counselling service e.g. NALAG- National Association for Loss and Grief

Contacts
NALAG - National Association for Loss and Grief. Ph: 02 6882 9222

Early Childhood Centres look under Community Health Services in telephone book.

Australian Breastfeeding Association Helpline Ph: 1800 686 268 7 days a week
www.breastfeeding.asn.au

SIDSandKIDS Ph: 02 9818 8400
Ph: 1800 651 186  24 Hour Bereavement Support

Adapted from: Breast care when your baby dies SESiH Area Lactation Group May 2009
Sterilisation/Disinfection Options

Safety Points

- Wash hands thoroughly
- Rinse equipment in cold water after use, wash in detergent and hot water then rinse again before sterilising

Boiling

- Place utensils in a large saucepan
- Cover with water, eliminating all air bubbles
- Bring to the boil and boil for five minutes
- Care needs to be taken when boiling equipment to avoid scalds – all the equipment to cool in the saucepan until it is hand hot, before removing it
- Store equipment not being used straight away, in a clean container in the fridge
- Boil equipment every 24 hours whether used or unused

Steam Sterilisers

Steam sterilisers are automatic units that raise the temperature quickly to the range that kills harmful bacteria. To use, place clean equipment into the unit, add water according to the manufacturer’s instructions and switch on. The unit switches itself off when sterilisation is completed. Microwave sterilisers are also available.

Disinfection Using Chemicals

A chemical sterilant is an anti-bacterial solution which comes in liquid or tablet form. Follow the manufacturer’s instructions carefully when making up the solution to ensure the correct dilution. After 24 hours discard the used solution, thoroughly scrub the container and equipment in warm soapy water and renew the solution. Make sure all equipment is plastic or glass, not metal, as metal corrodes when left in chemical sterilant. Completely submerge everything, making sure that there are no air bubbles, and leave it in the solution for the recommended time before using. Equipment may be left in the solution until it is required for use. Store the concentrate and solution well out of reach of children.

Please note: disinfection using chemicals may not be as effective as boiling especially if bottles and others utensils are not meticulously cleaned.

**Cereals/breads**

- **#9 serves daily**
  - #1 serve
  - =1 slice bread
  - =½ medium roll or flat bread
  - =½ cup cooked rice, pasta, noodles, barley, quinoa, etc
  - =½ cup cooked porridge
  - =2/3 cup wheat cereal flakes
  - =¼ cup muesli
  - =3 crispbreads
  - =1 small English muffin or scone

**Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans**

- **# 2 and half serves per day**
  - #1 serve
  - =65g cooked lean meats
  - =80g cooked lean poultry
  - =100g cooked fish fillet or one small can of fish
  - =2 large eggs

**Vegetables and legumes / beans**

- **7 or more serves daily (5½ ≤ 18 yrs)**
  - #1 serve
  - = ½ cup cooked green or orange vegetables eg, broccoli, carrots
  - =½ cup cooked, dried or canned beans, peas or lentils
  - =1 cup green leafy or raw salad vegetables
  - =½ cup sweet corn
  - =½ medium potato or sweet potato, taro
  - =1 medium tomato
  - =1 cup (150g) cooked or canned legumes/beans such as lentils,
  - =170g tofu
  - =30g nuts, seeds, or nut or seed paste

**Fruit**

- **#2 serves per day**
  - #1 serve
  - =1 medium piece of fruit
  - =2 small pieces of fruit

**Dairy**

- **2 ½ serves daily (4 if ≤ 18 yrs)**
  - #1 serve
  - =1 cup milk
  - =2 slices (40g) of hard cheese,
  - =¾ cup (200g) yoghurt
  - =1 cup (250ml) soy, rice cereal drink

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Iodine needs = 270 mcg per day

Found in dairy, seafood and fortified bread

Daily supplements of 150mcg/day are recommended

National Health and Medical Research Council (2013)
Australian Dietary Guidelines. Canberra: National Health and Medical
Information for breastfeeding mothers who are also giving breastmilk substitutes

The National Health and Medical Research Council of Australia and the NSW State Breastfeeding Policy states that routine use of complementary feeds of any kind should be excluded for full-term breastfed infants. Breastmilk substitutes should be avoided unless medically indicated.

Reasons why breastmilk substitutes should be avoided unless medically indicated include:

- Formula interferes with the protection against infection that breastmilk is able to provide for your baby
- Breastfeeding works on supply and demand. If feeds are missed or replaced by formula, the breasts make less milk
- When milk is not removed from the breast they become painful and slow the making of milk
- Your baby may be allergic to the protein in the formula
- Demand breastfeeding lessens the chance of baby having early jaundice
- Research shows that giving the baby complementary/supplementary feed in hospital is significantly associated with a decreased likelihood of continued breastfeeding after discharge

While your baby is receiving a breastmilk substitute you can assist your breastfeeding and minimise the above effects by:

- Expressing regularly to stimulate supply and remove milk to prevent engorgement. Use this breastmilk to give to your baby
- Spending time with your baby and skin to skin cuddles where possible

Adapted from the SLHD Breastfeeding Guidelines 2010
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