



BRANDON REGIONAL HEALTH AUTHORITY

BREASTFEEDING PRACTICE GUIDELINES For the Healthy Term Infant



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INTRODUCTION (SUMMARY):

Scope:

The World Health Organization (WHO) and the United Nations Children Fund (UNICEF) have implemented standards and initiatives to help promote breastfeeding worldwide. The Brandon Regional Health Authority (Brandon RHA) Breastfeeding Practice Guidelines for the Healthy Term Infant are based on these respected documents. Breast milk is recognized as optimal nutrition for infants with health benefits for women, families and communities. As a result, notable organizations including the Canadian Pediatric Society and Health Canada recommend exclusive breastfeeding for the first six months of life with continued breastfeeding for two years and beyond. Recommendations also include that nutrient-rich complimentary foods, with particular attention to iron, should be introduced at six months and that breastfed babies should also receive a daily vitamin D supplement until their diet provides a reliable source or until they reach one year of age.

Goal:

The purpose of this document is to provide evidence-based practice guidelines for the care of breastfeeding families that promote optimal initiation of breastfeeding in the postpartum period and continuation of exclusive breastfeeding for the first six months of life. This document is intended to guide practice in collaboration with primary care providers, nursing partners and family members.

Recommendations for the Care of Breastfeeding Families Across the Care Continuum:

1. Have a written breastfeeding guideline that is communicated to all health care providers and reviewed as necessary.
2. Train health care providers in the knowledge and skills necessary to practice within these guidelines.
3. Inform all pregnant women and their identified supports of the benefits and management of breastfeeding.
4. Encourage and assist all women who have decided to breastfeed to initiate breastfeeding within one hour of birth.
5. Show all women who have decided to breastfeed how to breastfeed and how to maintain lactation even if they are separated from their infants.
6. Refrain from giving food or drink other than breast milk unless **medically** indicated to infants who are being breastfed. Encourage exclusive breastfeeding to six months.
7. Encourage rooming in on a 24-hour basis.
8. Encourage breastfeeding on demand.
9. Refrain from giving pacifiers or artificial nipples to breastfed infants.
10. Inform all women of the breastfeeding resources available in the community and refer to breastfeeding support services upon discharge from hospital.
11. Document any breastfeeding difficulties on the Public Health Referral form.
12. Refrain from discriminating against any women in her chosen method of infant feeding and fully support her when she has made that choice.
13. Support mothers to initiate and maintain breastfeeding after discharge from hospital.
14. Encourage exclusive breastfeeding to six months and continued breastfeeding, with appropriately timed introduction of complimentary foods.
15. Provide a welcoming atmosphere for breastfeeding families.
16. Ensure cooperation between health care staff, breastfeeding support groups and the local community.

Suggestions to Operationalize These Principles:

- 1. Have written breastfeeding guidelines that are communicated to all health care providers and reviewed as necessary.**
 - These guidelines define the commitment of the Brandon RHA to the promotion, protection, and support of breastfeeding.
 - Breastfeeding is the normal method of newborn and infant feeding and human milk is the optimum form of newborn and infant nutrition.
 - All interventions and care plans directed toward the newborn or lactating woman will support breastfeeding and thus protect this valuable resource.
 - These guidelines should be communicated to all appropriate staff upon employment and on a regular basis.
 - These guidelines will be available as a practice resource for all staff throughout the Brandon RHA.

- 2. Train health care providers in the knowledge and skills necessary to practice within these guidelines.**
 - All staff who provide care for mothers, newborns and infants will receive breastfeeding education consistent with Brandon RHA Breastfeeding Guidelines within six months of their employment, with updates provided on a regular basis.
 - Education will include: the advantages of breastfeeding; anatomy and physiology of breastfeeding; how to solve common breastfeeding problems; and the impact of introducing formula and artificial nipples or pacifiers before breastfeeding is established.
 - Education will also include supervised clinical experience, a system of referral to breastfeeding specialists after hospital discharge, and a list of community resources.

- 3. Inform all pregnant women and their identified supports of the benefits and management of breastfeeding.**
 - During the prenatal visits to the physician/midwife as well as prenatal classes, women will be provided with pertinent information on the benefits of breastfeeding and the potential health risks of formula feeding.
 - All materials and teaching will reflect the WHO/UNICEF Baby Friendly best practice standards.

- 4. Encourage and assist all mothers who have decided to breastfeed to initiate breastfeeding within one hour of birth.**
 - The baby will be immediately placed on the mother's abdomen regardless of the intended feeding method.
 - The mother will be encouraged to breastfeed within an hour of birth.
 - Breastfeeding will be encouraged without interruption, in an unhurried environment, except if there is a medical contraindication.
 - In the case of a cesarean, skin-to-skin contact and breastfeeding will be started as soon as possible.
 - In case of other medical emergency, skin-to-skin contact and breastfeeding will be started as soon as possible.
 - Mothers will be given the opportunity to remain close to their newborn regardless of type of birth, as long as the health of the mother and newborn remain uncompromised.
 - Breastfeeding assessment, education and intervention will be completed with first feeding after birth and at least once a shift until discharge, unless more frequently indicated.

- 5. Show all women who have decided to breastfeed how to breastfeed and how to maintain lactation even if they are separated from their infants.**
 - The instruction and support given during the hospital stay allows mothers to acquire the knowledge and the necessary skills to breastfeed their babies, including instruction on cues for feeding, positioning and latching onto the breast.
 - All breastfeeding mothers will be given information on how to express their milk.
 - Within the first 18-24 hours post-birth, if feedings at the breast are incomplete, ineffective, or the mother is separated from her infant, the mother will be instructed to pump her breasts eight times in a 24-hour period, with continued assistance by an experienced staff member.

- 6. Refrain from giving food or drink other than breast milk unless medically indicated to infants who are being breastfed. Encourage exclusive breastfeeding to six months.**
 - Supplementary water or artificial baby milk will not be given to breastfeeding infants unless required for a medical condition or upon informed parental request.
 - If supplementation is required, the method chosen should not interfere with the initiation of breastfeeding; mothers will make an informed choice regarding a supplementation method.
 - All weaning information should reflect the aim of exclusive breastfeeding to six months and partial breastfeeding for two years and beyond.

- 7. Encourage rooming in on a 24-hour basis.**
 - Mothers and newborns will be encouraged to remain together night and day unless separation is medically indicated.
 - The nurse will help the mother and family plan for periods of rest/sleep, both day and night.

- 8. Encourage breastfeeding on demand.**
 - Mothers will be encouraged to breastfeed their newborns on cue.
 - Breastfeeding during the hospital stay will take priority over non-emergent events such as newborn bath, pictures and visitors.
 - The mothers will be taught to recognize hunger cues, assess an adequate feed, and monitor wet and soiled diapers as signs of sufficient intake.
 - Newborns need to feed 8-12 times every 24 hours, after 24 hours generally should be offered the breast every 3 hours.

- 9. Refrain from giving pacifiers or artificial nipples to breastfed infants.**
 - The use of artificial nipples should be discouraged. Pacifiers will not be given to breastfeeding infants.
 - Health care staff will advise the mother and family to avoid artificial nipples that may interfere with the establishment of breastfeeding.
 - If supplementation is necessary, appropriate alternate methods should be explored, using expressed breast milk (EBM) as first choice.
 - No gift packs including formula or formula advertisements will be given to the mother upon discharge whether breastfeeding or bottle feeding.
 - Nipple shields may be considered after assessment by a health care provider, ongoing breastfeeding support is required.

- 10. Inform all women of the breastfeeding resources available in the community and refer to breastfeeding support services upon discharge from hospital.**
 - Upon hospital discharge mothers will be verbally informed and given a list of support groups with telephone numbers.
 - Members of the health care team should use their influence wherever possible to encourage a breastfeeding culture in the local community.
 - The CPPP Nurse will make contact with the client the day after discharge.
- 11. Document any breastfeeding difficulties on the Public Health Referral form.**
 - Documentation of breastfeeding difficulties, assessment, intervention and discharge plan will be faxed, with the referral form, upon discharge.
- 12. Refrain from discriminating against any women in her chosen method of infant feeding and fully support her when she has made that choice.**
 - When a mother makes an informed decision on infant feeding, she will be provided with individual support and education.
 - When a mother makes an informed decision to artificially feed, she will be provided with individual instruction on the choice and preparation of infant formula.
- 13. Support mothers to initiate and maintain breastfeeding after discharge from hospital.**
 - The CPPP nurse or midwife will endeavor to home visit every breastfeeding family within 24 hours of discharge to observe a breastfeeding session and perform a breastfeeding assessment.
 - The CPPP nurse or midwife will advise the mother regarding optional positions and assist her to choose a position with which she is comfortable and which optimizes breastfeeding.
 - The CPPP nurse or midwife will assist the mother to attach/latch the infant successfully and ensure the mother can identify the signs of a correct latch, suck, letdown and effective milk transfer.
 - The CPPP nurse or midwife will provide information regarding expression of breast milk.
 - The CPPP nurse or midwife will endeavor to prevent and promptly assist the mother with common issues related to breastfeeding.
 - In the presence of any identified breastfeeding difficulties, the nurse will obtain a thorough history and offer hands-on infant, maternal and breastfeeding assessment.
 - The CPPP nurse and Public Health Nurse or midwife will provide follow up based on client need either in-home/drop-in to monitor feeding patterns, infant weight and provide remedial assistance as required. The PHN will continue to follow until identified issues are resolved and the mother can latch and feed baby independently.
- 14. Encourage exclusive breastfeeding to six months and continued breastfeeding for the first two years of life or longer, with appropriately timed introduction of complimentary foods.**
 - Care providers will communicate the benefits of continued breastfeeding for the mother and child.
 - Care providers will provide information on the introduction of available and safe complementary foods at the appropriate time.
 - Care providers will provide information about continued breastfeeding in the workplace.
 - Care providers will provide information and promote discussion about contraceptive methods that are compatible with breastfeeding.

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- 15. Provide a welcoming atmosphere for breastfeeding families.**
 - Care providers will ensure breastfeeding is welcome at all Brandon RHA sites.
 - Private breastfeeding areas will be provided for mothers who prefer this option.
 - Signage to address the above two options will be provided.
 - Staff will be aware of how to support breastfeeding at all Brandon RHA sites.

- 16. Foster cooperation between health care staff, breastfeeding support groups and the local community.**
 - A reliable and formal system will be available to communicate a mother's breastfeeding progress as she moves from hospital to community.
 - All mothers will be aware of breastfeeding support services in the community and which services are most appropriate to assist with breastfeeding concerns.
 - Local community-based breastfeeding support programs (including peer support programs) will participate in the development of breastfeeding policies.
 - Other health providers, community groups, businesses, schools and the media will collaborate to work toward a breastfeeding culture in the community.

Validation and Evidence:

These guidelines were adapted from the Winnipeg RHA Breastfeeding Practice Guidelines for the Healthy Term Infant. They are currently in use provincially in the Winnipeg, Central and Assiniboine RHAs and are based on the WHO/UNICEF Baby-Friendly Initiative and the International Lactation Consultant Associations [Evidence Based Guidelines for Breastfeeding Management During the First Fourteen Days](#).

Health Canada's recommendations for breastfeeding are followed and an extensive review of the literature has been completed as well as information provided by the top authorities in lactation. The committee members who reviewed and edited this document have over 100 years of combined breastfeeding experience.

Breastfeeding Practice Guidelines for the Healthy Term Infant

DEFINITIONS:

ABM:	Artificial breast milk
AC/PC Weights:	Weight calculated before and after feeding to determine intake at the breast
BF:	Breastfeeding
CPPP:	Community Postpartum Program
EBM:	Expressed breast milk
Exclusive Breastfeeding:	No food or liquid other than breast milk, not even water, is given to the infant from birth by the mother, health care provider, or family member/supporter
FF:	Finger feeding
FTT:	Failure to thrive – Infant fails to gain expected weight or loses weight and drops below the 3 rd percentile or two standard deviations below the mean weight for the reference population
IUGR:	Intrauterine growth restriction
LGA:	Large for gestational age
MER:	Milk ejection reflex
MW:	Midwife
OTC:	Over the counter
PHN:	Public Health Nurse
SGA:	Small for gestational age
SNS:	Supplemental nursing system (feeding tube at the breast)
Supplementation:	When an infant requires nourishment from a source other than direct breastfeeding, including receiving food (expressed breast milk and/or formula) during, after, or in place of breastfeeding

BREASTFEEDING INITIATION:

1. Normal Newborn Behavior and First-Day Sleep Patterns

Age	Behavior
Birth to 2 hours	Alert
2 to 20 hours	Light and deep sleep
20+ hours	Increasing wakefulness Often includes a cluster of 5-10 feedings over 2-3 hours followed by 4-5 hours of deep sleep

Normal Feeding Patterns/Frequency

Birth to 24 hours: 4 or more feedings

After 24 hours: ≥ 8 feedings in 24 hours

2. Feeding Cues

Teach mothers to recognize feeding cues such as:

- Rapid eye movement
- Sucking motion(s) in sleep
- Flexed arm, clenched fist, hand-to mouth and active rooting in the quiet alert state

3. Breastfeeding Initiation

Unbundle the infant and place skin-to-skin. Allow time for nuzzling and licking. During first feeding, ensure optimal latch. The infant should be breastfed on one side until no longer swallowing effectively. If the infant does not swallow, elicit swallows with breast compression. When the infant stops swallowing on the first breast, switch the infant to the other side until no longer swallowing. The infant may not feed as well on the second side; **assessment of swallows is more important than length of time at breast.** Frequent breastfeeding does not cause nipple damage if the infant is correctly positioned and latched. Frequent breastfeeding has been associated with improved lactation outcomes. It also increases early milk production and infant weight gain.

4. Satiety

Satiety is indicated by the infant spontaneously letting go of the breast, relaxed arms and body, and closed mouth.

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5. Normal Infant Output

DAY	VOIDS	STOOLS
1	At least 1 wet Concentrated	At least 1 meconium (sticky, dark green)
2	At least 2 wet Concentrated	At least 2 meconium
3	At least 3 wet (pale and no odor) Measure of hydration	At least 2 meconium
4	At least 4 heavy wet *Urates should not be present	3 transitional (brown, green to yellow) <ul style="list-style-type: none">▪ Measure of caloric intake▪ Meconium should not be present
5	At least 5 heavy wet	3 breast milk (seedy yellow)
6+	At least 6 heavy wet	At least 3 breast milk (seedy yellow)
4 wks	At least 6 heavy wet	Stooling patterns change at about 1 month of age at which time some healthy growing infants may stool as infrequently as every 1-7 days. These stools are usually large; stool color should be yellow.

6. Normal Weight Loss and Gain

<ul style="list-style-type: none">▪ Most babies will lose 5-7% of birth weight in first 3-4 days.▪ Begins to gain weight at 5 days.▪ Gains 4-8 ounces a week in the first 3 months.▪ Never loses more than 10% of birth weight.▪ Regains birth weight in 2 weeks.▪ Birth weight is doubled at 6 months.▪ Weight is 2 ½ to 3 times birth weight at 12 months.▪ Breastfed infants grow more rapidly in the first 2 months than ABM fed infants.▪ Breastfed infants weight gain slows from 3-12 months.▪ Weight should never drop below 3rd percentile or 2 standard deviations below the mean on standardized growth charts.▪ Length and head circumference does not differ from breastfed to ABM fed infant.▪ Breastfed infants self regulate energy intake.

NOTE: Utilize appropriate written resources, as an adjunct to nurse teaching is required; ensure family understands both written and verbal information.

MANAGEMENT OF COMMON PROBLEMS IN THE FIRST FEW DAYS:

1. Contributing Factors to Problems in the First Few Days May Include:

- 1.1 Anatomical nipple variations which interfere with latch
- 1.2 Effects of labour and labour interventions
- 1.3 Effects of birth
- 1.4 Neonatal jaundice
- 1.5 Circumcision
- 1.6 Care giving routines including:
 - Separation, bundling, soothers, lack of skin to skin
 - Over stimulation by visitors, family
 - “Forcing” baby to breast
 - Prolonged breastfeeding attempts
 - Inefficient latch/feeding; insufficient intake at breast; hypocaloric state

2. Latch Issues Due to Anatomical Nipple Variations

- 2.1 Normal newborns have the ability to attach/latch to the breast regardless of nipple and/or breast variations. Optimizing the initiation of breastfeeding will promote early learning related to latch and milk transfer. Nipples that are everted are “easy” for a newborn to position at the junction of the hard and soft palate where the suck reflex is stimulated.
- 2.2 If nipples are flat or inverted, ensure the initial feeding experience occurs at the breast to ensure that the newborn “learns” how to position his/her mother’s nipple in his/her mouth to optimize latch and milk transfer, a nipple shield may be required to achieve this.

3. Use of Latch Strategies and Devices

If latch is not achieved due to nipple variations, the following strategies/devices may assist latch:

- 3.1 **If the baby continues to have difficulty latching, a silicone only nipple shield may be used as an option (see guideline – No Latch/Ineffective Breastfeeding).**
- 3.2 **Nipple everter** is a syringe-like device that is placed over the nipple. It can assist in forming a nipple that is easier for the infant to latch onto. To use:
 - Mother applies the plunger and gently pulls back to apply suction to the nipple to comfort
 - Suction is held for approximately 30 seconds
 - Can be used prior to each feeding or repeated between feedings as required
- 3.3 **Breast pump** can also be used to apply gentle pressure before feedings. May assist with nipple eversion and assist latch-on.
- 3.4 Assess all mothers/infants with latch difficulties early and ongoing in the hospital and after discharge. If devices to assist with latch are employed during breastfeeding initiation, ongoing assessment and follow up is required to assist with weaning from these devices.

If infants are not latching effectively by 18 hours, mothers should be encouraged to pump their breasts every 3 hours with a hospital grade electric breast pump after trying to breastfeed. If baby has nursed well initially at some time during the 1st 24 hours, pumping need not start until 24 hours.

4. Managing A Frantic Baby

- 4.1 Characteristics include:
- Feeds constantly
 - Does not settle
 - Mother is exhausted
 - Confidence to feed is affected
- 4.2 To intervene:
- Ensure optimal position and latch
 - Leave mother and baby together skin-to-skin
 - Reinforce early feeding cues and respond by immediately moving baby to breast
 - Feed before over hungry; crying increases disorganized behavior
 - Express colostrum to entice baby to latch/feed
 - Encourage breast compression
 - Cup feed small amount of colostrum to settle if necessary
 - Consider pumping to stimulate earlier milk production
 - Reassure mother that baby will settle when milk volume increases
 - May need to bundle if skin-to-skin not effective

5. Managing A Sleepy Baby

- 5.1 Characteristics include:
- Difficult to awake for feeds
 - Latches but does not feed vigorously or nutritively
 - May result in weight loss
 - May result in inadequate voids and stools
- 5.2 To intervene:
- Ensure optimal position and latch
 - Leave mother and baby together skin-to-skin
 - Do not over bundle baby; leave hands free
 - Reinforce early feeding cues and respond to early subtle feeding cues by immediately moving baby to breast
 - Encourage mother to stimulate baby to stay awake at breast with the use of breast compression, gently touching and cool cloths
 - Encourage mother to wake the baby to feed every 3 hours after 24 hours of age
 - Feed before over hungry; crying increases disorganized behavior
 - Encourage massage and expression of milk to start feeding
 - Cup feed small amount of colostrum to provide calories and prevent hypocaloric state
 - Supplement with expressed colostrum (or alternate source of nutrition) if required
 - Consider pumping to stimulate earlier milk production

6. Managing A Jaundiced Baby

- 6.1 Predisposing factors:
- Source of bilirubin is the breakdown of red blood cells
 - Immature newborn liver is unable to quickly metabolize this red blood cell load
 - Bruising (from birth process), prematurity, blood incompatibility contributes to newborn jaundice
 - Peaks on Day 3-4
 - Insufficient intake of breast milk is a contributing factor
- 6.2 To intervene, increase frequency of effective breastfeeding.

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

SUPPLEMENTATION OF THE BREASTFED BABY:

Supplementation: If an infant requires nourishment from a source other than direct breastfeeding, EBM is the feeding of choice. If EBM is not available, an alternate fluid may be used. **Supplemental feedings are not necessary in most situations.**

1. Indications for Supplementation in the Hospital Setting

- 1.1 Maternal infant separation.
- 1.2 Maternal illness/need for contraindicated medications.
- 1.3 Infant demonstrating clinical signs of dehydration.
- 1.4 Hypoglycemia or at high risk for hypoglycemia **and** not feeding effectively.
- 1.5 Infant who has not fed effectively at 18 hours of age.
- 1.6 Parental decision. If parental decision:
 - Determine reason for the request.
 - Provide reassurance and teaching that supplement is not necessary except in a few circumstances.
 - Work with parents to alleviate any potential or existing breastfeeding problem.
 - Discuss the negative effects of supplemental feeds to enable parents to make an informed decision.
- 1.7 After a **thorough** physical examination and assessment of sleep/wake patterns, milk transfer, voids, stools and blood glucose level as appropriate, the following babies **may** require supplementation:
 - Baby has lost 8-10% of birth weight **and** is not feeding effectively.
 - Baby has not fed the recommended number of feeds in a 24-hour period.

There are a few contraindications to breastfeeding. In these situations, the infant may require supplementation. See Appendix E.

2. Negative Effects of Routine Supplemental Feedings

- 2.1 **Insufficient Milk Supply**

Infant suckling at the breast results in the release of prolactin, the hormone that stimulates breast milk production. Breastfed infants who receive artificial feedings will breastfeed less frequently and for shorter periods of time, thus decreasing nipple stimulation and milk production.
- 2.2 **Nipple Preference**

Breastfeeding and bottle-feeding require different mechanisms for sucking. It is best to prevent artificial nipple preference in a breastfed infant by not giving an artificial nipple for the first 4-6 weeks while the infant is learning to breastfeed and even then teaching that artificial nipples may lead to early weaning.
- 2.3 **Engorgement**

Breastfed infants who receive artificial feedings breastfeed less frequently and for shorter periods. This can result in inadequate drainage of the breast, engorgement, and decreased milk supply.
- 2.4 **Psychological Effects**

When a woman's infant appears to require frequent supplementary feedings, she may perceive that her body is not capable of producing sufficient breast milk to sustain the infant. **Perceived** insufficient milk supply is the most common reason for weaning before the mother's breastfeeding goals are met.

3. Care Plan Related to Supplementing A Breastfed Baby

These principles ensure a foundation upon which to base a **mutually negotiated plan** for intervention.

- 3.1 A thorough assessment of mother and infant and breastfeeding is required before supplementation is begun. Complete breastfeeding assessment and review history (e.g. narcotic use in labour, forceps or vacuum extractor, visitors causing mother to restrict breastfeeding).
- 3.2 Attempt to optimize breastfeeding whenever possible prior to beginning supplementation.
- 3.3 Gentle waking techniques should be attempted for 5 to 10 minutes if baby is sleepy.
- 3.4 Frantic infants who will not breastfeed due to extreme hunger tension may be calmed with a few drops of EBM so that effective breastfeeding can follow.
- 3.5 When attempts to improve "ineffective breastfeeding" have failed, supplement is required. Expressed breast milk is always preferred.
- 3.6 If supplementing, the parents will need further information about the preferred method of supplementation and other relevant information.
- 3.7 Whenever possible supplement with EBM. If EBM is not available, consider ABM if baby is over 24 hours of age. If baby is less than 24 hours of age 2 to 5 mL of colostrum is a sufficient amount of supplement. Do not mix small amounts of EBM and ABM if both are to be given. Give EBM first to ensure it is not wasted.
- 3.8 If baby is not nursing or is nursing ineffectively, mother should start pumping breasts with hospital grade pump every 3 hours as soon as possible (by 18 hours post delivery).
- 3.9 Feed baby whenever baby exhibits feeding cues.
- 3.10 Encourage frequent breastfeeding and skin-to-skin contact.
- 3.11 When the infant is able to latch, offer the breast first at each feeding.
- 3.12 Most alternative feeding methods are time consuming; therefore it is an advantage to provide supplementation at the breast whenever possible.
- 3.13 The amount of supplement will vary dependent on the size of the infant, age of the baby, type of supplement and the presenting situation.
- 3.14 Increase or decrease supplement according to infant response, signs of milk transfer, satiation and adequate hydration. Supplements can be stopped when infant's stooling, voiding and weight gain is consistent with expected outcomes for the breastfed infant. Continue to encourage frequent breastfeeding at least 8-12 times in 24 hours.
- 3.15 Mother must demonstrate independence in the use of alternate feeding method prior to leaving hospital.
- 3.16 Continue to follow the family in the community until mother is observed to manage breastfeeding independently and expresses confidence in her ability to do so.
- 3.17 When acute dehydration is identified, immediate rehydration and referral to a physician or midwife is required. *See Dehydration.*
- 3.18 Infant weight gain is to be monitored at home visit according to birth weight and baseline weight at first visit. Baby should be weighed naked and on a scale that is checked annually for accuracy.
- 3.19 Close monitoring by phone/home visits and ongoing weight checks are essential until the nurse, the family and the physician or midwife are satisfied that the infant is stable, well hydrated and growing.

4. Supplementation/Alternative Feeding Methods

Feeding System	Strengths	Limitations
Cup Feeding/ Teaspoon	<ul style="list-style-type: none"> ▪ Quick way to supplement a baby that does not contribute to nipple confusion ▪ Allows baby to pace his/her feeding ▪ Helps tongue move down and forward ▪ Does not cause breathing problems or oxygen desaturation ▪ Provides positive feeding experiences ▪ Can be used with an already nipple confused baby 	<ul style="list-style-type: none"> ▪ Does not teach sucking at breast ▪ Does not increase milk supply ▪ Term babies can easily become so accustomed to the cup that they will not go to breast
Syringe/ Dropper	<ul style="list-style-type: none"> ▪ Can be used to entice baby to latch at breast ▪ Can reinforce proper sucking ▪ Can create milk flow to establish and regulate sucking ▪ Rewards sucking attempts 	<ul style="list-style-type: none"> ▪ Often needs a second person to help ▪ Is a foreign object in the mouth ▪ Milk can be improperly injected into mouth ▪ Is a slow way to feed baby
Feeding Tube Devices at the Breast/SNS	<ul style="list-style-type: none"> ▪ All feeding experience is at the breast – less opportunity for faulty imprinting ▪ Consistent practice and reinforcement for appropriate sucking at breast ▪ Frequent breast stimulation for enhanced milk production ▪ Establishes milk flow to regulate sucking 	<ul style="list-style-type: none"> ▪ Only useful if baby can “latch” ▪ May be cumbersome and unappealing ▪ Needs continuing expert follow up and teaching ▪ Improper tube placement with no monitoring may exacerbate problem with baby’s sucking action and mouth conformation ▪ Baby may suck on the tube like a straw ▪ Parts can break, may be expensive for some
Finger Feeding	<ul style="list-style-type: none"> ▪ Can be used to train baby for sucking at breast ▪ Mouth must be open wide ▪ Keeps tongue down, forward, and cupped ▪ Delivers milk only with correct sucking action 	<ul style="list-style-type: none"> ▪ Finger is firm and does not change shape with sucking ▪ Baby may become reliant on firm nature of finger ▪ Baby may not learn to draw nipple into mouth if finger is simply inserted through closed lips ▪ No breast stimulation ▪ Potential for irritation of palate from tubing
Bottle Feeding	<ul style="list-style-type: none"> ▪ Faster and easier for baby to obtain milk ▪ Does not require large time expenditure 	<ul style="list-style-type: none"> ▪ May create nipple confusion ▪ Ease of use may decrease mother’s desire to continue breastfeeding ▪ Artificial nipple may weaken baby’s suck, suppress central grooving of the tongue, and decrease masseter muscle activity and development ▪ May reinforce improper oral configuration ▪ May induce bradycardia, apnea, and oxygen desaturation ▪ Does not teach sucking at breast ▪ Does not increase milk supply ▪ Babies can become accustomed to the bottle and may not go to breast

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5. Supplementation Guidelines for the Healthy Term Infant: Psychologic Feeding Amounts

Age of Baby	Type of Fluid	Amount of Fluid per Feeding
0-24 hours	Colostrum ABM	2-5 mL (no more than 10 mL) Reflects small stomach size
24-48 hours	EBM ABM (if EBM not available)	10-15 mL 10-15 mL
48-72 hours	EBM ABM (if EBM not available)	15-30 mL 15-30 mL
Day 3-5*	EBM ABM (if EBM not available)	100 mL/kg (Based on birth weight)

Over Day 5 see Guideline – Dehydration

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

NO LATCH/INEFFECTIVE BREASTFEEDING

PURPOSE:

1. Breastfeeding families will receive consistent and appropriate care when breastfeeding is ineffective.
2. Care will be provided according to the following guidelines.

IMPLEMENTATION:

1. Assess infant for the following symptoms:

1.1 Feedings:

- Refusal to latch/difficulties latching
- Breastfeeds less than 8 times per 24 hours (after 24 hours of age)
- History of long feeds (longer than 30 minutes per side or 60 minutes total feed)
- Short feeds (less than 5 minutes per side)
- Refusal to maintain latch (on and off breast frequently)
- Baby is “mucousy”/gags frequently
- No audible or visible swallowing
- Absence of open-pause-close type of suck (indicates swallowing)
- Rapid, nibbling, shallow type of suck
- Indrawing of cheeks/smacking or clicking sounds
- Difficulty eliciting milk ejection reflex (MER)/letdown

1.2 Behaviors:

- Usually sleeps 4-6 hours at a time/hard to waken after the first 24 hours
- Infant is sleepy and refusing to feed
- Fussy after feeds, chews hands or uses pacifier for very long periods
- Infant is irritable and restless
- Acts “hungry” all the time
- Sucks fist or blanket
- Moves head from “side to side” rapidly

1.3 Output:

- Less than 6 wet diapers in 24 hours after day 6
- Urates after day 4
- No stools in 24 hours
- Meconium stools after day 4
- Stools may appear “green” in color – this may be an indicator of insufficient caloric intake
- Stooling patterns change around 1 month of age at which time some infants may have a large stool as often as every 1-7 days; these stools should be yellow in color. Stools that are infrequent and/or green may indicate ineffective breastfeeding.
- **Note:** The earliest sign of inadequate breast milk intake is infrequent passage of stools.

2. Assess mother for the following symptoms:

- 2.1 Lack of breast fullness or apparent milk supply
- 2.2 Breasts do not soften after feed – engorgement unrelieved by feeding
- 2.3 Persistent or increasingly painful nipples
- 2.4 No discernible change in milk volume and composition by 3-5 days

3. Consider precipitating factors in the maternal/infant history which may include:

- 3.1 Primigravida
- 3.2 Medicated birth (Demerol or epidural)
- 3.3 History of induction of labor and/or IV fluids
- 3.4 Caesarean birth
- 3.5 History of maternal infant separation
- 3.6 Delay in first breastfeed experience
- 3.7 History of “forcing” infant to breast
- 3.8 Early supplementation
- 3.9 Jaundice
- 3.10 Maternal depression
- 3.11 Maternal exhaustion
- 3.12 Inadequate teaching/support

4. Provide care to:

- 4.1 Support infant’s nutrition and maternal milk supply through optimization of breastfeeding management (correct latch and position, increased frequency of feeds, teaching re: suck/swallow ratio, breast compressions, switch nursing).
- 4.2 Support family’s efforts, including teaching signs of hydration and how to know baby is getting enough.

5. Support infant nutrition:

The goal of the feeding plan is to maximize calories with minimal energy expenditure:

- 5.1 Assess ability to latch/breastfeed – often calorie deprivation leads to an infant who has sufficient energy to effectively breastfeed.
- 5.2 If poor or no latch, discuss feeding options with family. Best practice shows that infants can do well without breastfeeding being interrupted. If baby is latching, consider SNS as your first option. If no latch, consider spoon, cup feeding and finger feeding and bottle with the family. Encourage the mother to continue with feedings at the breast and limit feeding times using SNS to maximize time at the breast. If family is not comfortable with SNS, the mother can offer the breast for a short period and then supplement with alternate feeding method.
- 5.3 Discuss alternate feeding options with family and allow family to choose method they are most comfortable with. The family should realize that baby may not effectively breastfeed until back to birth weight and/or gaining well.
- 5.4 **A nipple shield may be considered if the baby continues to have difficulty latching, despite optimal position.** A nipple shield is a thin silicone (not rubber) shield, which is placed over the nipple and areola on which infant sucks. A 24 mm nipple shield in most cases is the preferred size. Only after assessment by a breastfeeding specialist should smaller sizes be considered. A nipple shield can assist with latch-on due to flat or inverted nipples or when the infant is unable to open mouth wide enough to achieve deep latch. Ongoing breastfeeding assessment and support is needed.

To use nipple shield:

- Introduce as short-term strategy only; should be used judiciously in term population as “nipple preference” to shield can occur.
 - Roll shield back and then apply to nipple/areola; this places the mother’s nipple deeper into the shield. The infant will pull the nipple even further into shield after several minutes of sucking.
 - Remove shield at this point and place infant quickly onto the breast before nipple/areola loses its shape.
 - If the infant does not latch, instruct mother to keep practicing latch at each feeding after the infant has sucked on the shield for several minutes.
- 5.5 Preference for supplementation should be with expressed breast milk. If no EBM, then supplement with ABM to ensure adequate calorie intake.
- 5.6 Infant should be fed at least 8 times in 24 hours after 24 hours of age.
- 5.7 Family needs to waken infant to feed since hypocaloric babies in particular will sleep through hunger – awaken to feed q3h for first 48 hours.
- 5.8 Offer breast first, supplement as needed. Entire feeding session should take no longer than 1 hour, i.e. 40 minutes to feed (max), 10 minutes to settle, 10 minutes to pump. This will give mother and baby 2 hours to sleep before next feeding.
- 5.9 Encourage skin-to-skin contact before and after feedings.

6. Support maternal milk supply:

With the goal of providing enough breast milk to eliminate need for artificial baby milk:

- 6.1 Assess maternal milk supply – a hypocaloric baby may not stimulate maternal milk production.
- 6.2 If baby cannot breastfeed effectively, milk production should be stimulated, increased, or maintained with a hospital grade electric breast pump.
- 6.3 Provide loaner pump if available at BRHC, if not encourage family to rent one or purchase appropriate equipment. Express at least 8 times in 24 hours.
- 6.4 Reassess milk supply after 24 to 48 hours of pumping.
- 6.5 Discuss the potential use of galactagogues if milk supply is less than baby’s daily oral requirements. Natural galactagogues may also be considered.

7. Wean from supplementation:

- 7.1 Ensure position and latch are optimal.
- 7.2 Assess weight gain, nutritive sucking pattern and audible or visible swallows.
- 7.3 If infant does not have energy for entire feeding or consecutive feedings, inform mother that baby may still require supplementation in addition to attempts at breast.
- 7.4 If baby is fussy/inpatient at breast while waiting for MER, try SNS or small amount of supplement by alternate feeding method prior to breastfeeding.
- 7.5 When baby is breastfeeding for almost full oral requirements, encourage mother to offer frequent breastfeeding and slowly decrease supplementation.
- 7.6 Wean from galactagogues when baby no longer requiring supplementation.

8. Follow up by the care provider:

- 8.1 Frequent follow up should include assessment of:
- Infant weight gain
 - Infant energy level
 - Infant hydration status
 - Milk supply
 - Volume of supplement
- 8.2 Support mother's effects.

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

SORE NIPPLES

PURPOSE:

To provide support and consistent approach to breastfeeding mothers experiencing sore nipples.

IMPLEMENTATION:

1. **Assess infant factors:**
 - 1.1 Poor latch/improper placement of tongue
 - 1.2 Clamping/clenching response
 - 1.3 Short frenulum

2. **Assess maternal factors:**
 - 2.1 Nipple type and condition
 - 2.2 Engorgement
 - 2.3 Milk blister due to plugged duct
 - 2.4 Candidiasis **See Breastfeeding Yeast**
 - 2.5 Nipple vasospasm/blanching of nipples

3. **Discuss the following strategies with the family:**
 - 3.1 Proper latch and positioning
 - 3.2 Discuss and assist with correct latch and position trying a variety of positions to relieve nipple soreness

4. **Discuss the following comfort measures with the mother:**
 - 4.1 Apply warm moist compresses as needed
 - 4.2 Apply colostrum/breast milk to nipples after feedings
 - 4.3 Apply Lansinoh/Purelan if nipple soreness continues
 - 4.4 Do not wash nipples frequently; daily bathing is sufficient
 - 4.5 For moderate to severe pain, presence of cracks or blisters, discuss prescription ointments such as all purpose nipple ointment. **See Appendix H.** Apply a small amount after nursing with no need to wash off. (**NOTE:** Ointments containing steroids should not be used for longer than 10 days.)
 - 4.6 For severe nipple trauma, presence of exudate and/or infection and pain consider antibiotics.
 - 4.7 If nipple pain is intolerable, consider pumping for 24-48 hours (a double electric pump is optimal to maintain milk supply when baby is not breastfeeding).
 - 4.8 Consider alternative feeding methods if required.

5. **Follow up by the care provider:**
 - 5.1 Frequent follow up should include assessment of:
 - Nipple condition and healing
 - Breastfeeding progress
 - Infant latch
 - Infant weight gain
 - 5.2 Support mother's efforts

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

BREASTFEEDING YEAST

PURPOSE:

1. Breastfeeding families will receive consistent and appropriate care for the signs and symptoms associated with breastfeeding yeast.
2. Care will be provided according to the following guidelines.

IMPLEMENTATION:

1. **Assess mother for the following symptoms of breastfeeding yeast:**
 - 1.1 Sore nipples after a time of pain free nursing (pain from Candida may begin without an interval of pain free nursing)
 - 1.2 Burning or shooting pain during and/or after nursing
 - 1.3 Itchy nipples or flaking skin on nipples
 - 1.4 Pink or red nipples with shiny taut areola
 - 1.5 Crescent shaped cracks at nipple/areolar junction
 - 1.6 Cracks that do not heal with a good latch/thriving baby
 - 1.7 Blanching of the nipple during or after feeding (vasospasm)
 - 1.8 Vaginal yeast infection
 - 1.9 **Can have no symptoms at all
2. **Assess infant for the following symptoms of breastfeeding yeast:**
 - 2.1 A white tongue or oral mucous membrane
 - 2.2 Diaper rash that does not clear
 - 2.3 Change in behavior – fussiness while feeding, refuses to feed
 - 2.4 Pulling off the breast or “clicks” while feeding
 - 2.5 **Can have no symptoms at all
3. **Assess for other factors:**
 - 3.1 Maternal diabetes
 - 3.2 Maternal and/or infant history of antibiotic use
 - 3.3 Previous sore nipples due to position/latch
4. **Treatment for breastfeeding yeast:**
 - 4.1 Breastfeeding can and should continue during treatment
 - 4.2 **It is important to treat both mother and baby, even if only one has signs of a yeast infection**
 - 4.3 Treatment should continue until both are symptom free at least one week and then weaned slowly
5. **Treatment Options – First Line Local Treatment:**
 - 5.1 For Baby:

Nystatin oral suspension (prescription required) can be applied to baby’s mouth after every breastfeeding. This liquid may decrease the growth of yeast between feedings, even if baby has no symptoms. To apply, pour ½ dropper into a small cup. Dip a Q-tip into this liquid and paint the inside of the baby’s mouth (all areas of the gums, cheeks, palate, and tongue). Baby can swallow any leftover medicine. Note that almost 45% of Candida strains are resistant to Nystatin (Hale & Berens, 2002) and therefore this treatment is less effective at eliminating Candida than other treatment options.

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- 5.2 For Mother:
All Purpose Nipple Ointment (Newman & Pitman, 2000) can help many causes of nipple pain including Candida, dermatological conditions, and bacterial infections of the nipple. It is a prescription ointment containing:
- Mupirocin 2% ointment 7.5 g
 - Betamethasone 0.1% ointment 7.5 g
 - Miconazole 4% cream 15 g
- Apply sparingly; rubbing in well after feeding and use until all symptoms/soreness has passed. Continue to use for another week and then gradually decrease the number of times each day until no longer needed.
- 5.3 For Mother and Baby:
Gentian Violet 1% Solution in Water (OTC) can be used for the baby's mouth as well as the mother's nipples (Newman & Pitman, 2000).
- Apply once a day for 4-7 days
 - Paint the infant's mouth and breastfeed. It is thought that the sucking of the baby allows the Gentian Violet to get in all the crevices of the nipples and the baby's mouth for more effective treatment.
 - Paint the infant's mouth and mother's nipples *after* feeding
 - After three days the pain should be gone
 - If NO RELIEF in four days seek further help
 - Caution mother that Gentian Violet is messy and will stain the clothing
 - Can be used with All Purpose Nipple Ointment

6. Treatment Options – Second Line Systemic Treatment:

- 6.1 For Mother:
Oral Fluconazole – prescription treatment. Used when topical treatments are ineffective or when yeast is causing deep breast pain. 400 mg loading dose, then 100 mg two times daily for at least two weeks or until mother is pain free for one week (Newman & Pitman, 2000). *Use with All Purpose Nipple Ointment.*
- 6.2 For Baby:
Oral Fluconazole – prescription treatment. 6 mg/kg on day one, then 3 mg/kg for at least two weeks (Amir & Hoover, 2002).

7. Natural Treatment Options (Mohrbacher & Stock, 2003):

- 7.1 Grapefruit Seed Extract capsules 250 mg three times daily
- 7.2 Grapefruit Seed Extract liquid – mix 10 drops in 30 mL of water. Swab nipples and areolas after feeding and let dry. Use until pain is gone.
- 7.3 Acidophilus for mother – one capsule three times daily
- 7.4 Limit sweet foods and yeast containing foods

8. Discuss Other Considerations:

- 8.1 Good hand washing for the entire family with non-antibacterial soap
- 8.2 Consider using paper towels to prevent spreading yeast
- 8.3 Daily boiling of any items that are in contact with breasts or baby's mouth (i.e. soothers, nipples, bottles, breast pads, bras, and pumping equipment)
- 8.4 Take medication for pain relief such as ibuprofen
- 8.5 Other family members may require topical or oral treatment if yeast does not clear

NOTE: Utilize appropriate written resources as an adjunct to teaching as required; ensure family understands written and verbal information.

PLUGGED NIPPLE PORE

PURPOSE:

1. To ensure breastfeeding mothers will receive consistent and appropriate care when dealing with a plugged nipple pore.
2. To ensure care will be provided according to the following guidelines.

IMPLEMENTATION:

1. **Assess mother fore the following symptoms:**
 - 1.1 White dot or “whitehead” on tip of nipple – usually smooth, shiny and less than 1 mm in diameter. It blocks the terminal opening of one of the lobes of the breast. It may be associated with milk stasis/plugged area in a larger portion of the breast.
 - 1.2 Pinpoint pain described as throbbing.
 - 1.3 Pain increases during feeding as pressure behind plugged pore increases with letdown of milk.
 - 1.4 White dot may increase in size during feeding.
2. **Assess infant for the following symptoms:**
 - 2.1 Infant may be “fussy” during feeding because of slower flow of milk from plugged area.
3. **Provide care to:**
 - 3.1 Support infant’s nutrition.
 - 3.2 Manage maternal milk supply.
 - 3.3 Support family’s efforts.
4. **Discuss the following care strategies with family:**
 - 4.1 Apply warm compress to plugged nipple pore before feeding; this may soften skin over plugged area.
 - 4.2 Another approach is to wear a cotton ball soaked in olive oil in the bra to soften the skin and then attempt to peel away the thickened layer of skin; then express any remaining material by compressing the nipple behind the plug.
 - 4.3 Start breastfeeding on affected breast first; baby’s suck may be more vigorous resulting in plugged nipple pore “popping” with feeding.
 - 4.4 If plugged nipple pore persists, mother should be referred to care provider for “opening” with a sterile needle.
 - 4.5 Procedure may require repetition as plugged pore often reforms and requires reopening.
 - 4.6 Mother requires directions for preventative nipple care to ensure healing without infection; prescription ointments may prevent bacterial and/or yeast infection. (Note: ointments containing steroids should not be used for longer than 10 days.)
 - 4.7 Consider pain medication as directed on label or by pharmacist.
 - 4.8 Ultrasound treatment may be useful for repeated plugged pores or ducts (**see Plugged Ducts**).
 - 4.9 Lecithin may be useful as well for recurrent plugged ducts or pores (**see Plugged Ducts**).

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understand both written and verbal information.

ENGORGEMENT

PURPOSE:

1. Breastfeeding families will receive consistent and appropriate care when experiencing engorgement.
2. Care will be provided according to the following guidelines.

IMPLEMENTATION:

1. **Assess mother for the following symptoms:**
 - 1.1 Bilateral breast swelling
 - 1.2 Tenderness
 - 1.3 Warmth
 - 1.4 Redness
 - 1.5 Throbbing pain
 - 1.6 Low grade fever
2. **Assess infant for difficulty latching to the breast:**
 - 2.1 Engorgement can interfere with latch; breast swelling may make nipple/areolar area taut and less everted.
 - 2.2 Engorgement can interfere with milk transfer; breast swelling can compress milk ducts inhibiting flow.
3. **Consider precipitating factors in the maternal/infant history:**
 - 3.1 Previous breastfeeding experience
 - 3.2 Medicated birth (narcotics or epidural)
 - 3.3 Caesarean birth
 - 3.4 History of maternal infant separation
 - 3.5 Delay in first breastfeed experience
 - 3.6 Early supplementation
 - 3.7 Jaundice
 - 3.8 Inadequate teaching/support
 - 3.9 Large amounts of IV fluids in labour
4. **Provide care to:**
 - 4.1 Support infant's nutrition and maternal milk supply through optimizing breastfeeding management (correct latch and position, increased frequency of feeds, assessment of swallows at breast, breast compressions).
 - 4.2 Support family's efforts including teaching optimal latch and assessment of adequate intake.
5. **Discuss the following strategies:**
 - 5.1 Brief (~ 5 minutes) use of heat and massage right before breastfeeding.
 - A warm shower or the application of warm moist heat immediately before breastfeeding will encourage milk flow.
 - Immersing breasts in a warm or tepid basin or sink full of water before feedings stimulates milk flow.
 - **Prolonged heat may increase swelling and inflammation.**
 - Hand express to soften breasts prior to feeding.
 - Gentle circular massage from the chest wall toward the nipple area will stimulate letdown.
 - For severe engorgement, combine heat and massage until breasts are emptied.

- 5.2 Frequent breastfeeding, with baby “finishing the first breast first”.
- Breastfeeding every 2 hours prevents congestion in the breast.
 - Ensure breasts are emptied. Engorgement tends to be less severe if baby is allowed to nurse on the first breast until he/she comes off on his/her own rather than switching breasts sooner.
 - If the baby feeds for a shorter period on the second breast at a feed, start the next feeding on the breast that the baby finished eating on.
 - Massage and breast compression throughout the feeding ensures breasts are emptied.
- 5.3 If the baby does not breastfeed long enough on both breasts to soften them, hand express just long enough for the breasts to feel comfortable. Draining the breasts of milk is more effective at relieving discomfort than other methods (cabbage or cold treatments).
- 5.4 For severe engorgement, fully drain the breasts once or twice daily with an effective breast pump until engorgement is resolving. This increases breast drainage more quickly and contributes to maternal comfort. **Caution when pumping as too much pumping can prolong engorgement.**
- 5.5 Cool compresses between feedings will reduce swelling and relieve pain. Protect skin with a small towel and then apply ice packs for approximately 20 minutes, or until mother is comfortable (cold compresses can be crushed ice, gel packs, frozen veggies, disposable diaper (wet and cold or frozen).
- 5.6 Cabbage leaves are recommended as another home remedy for engorgement. **Only use until the engorgement subsides, breasts are softened, and baby is able to drink from the breast.** To use:
- Rinse cabbage leaves.
 - Apply the cabbage leaves directly to breasts, not over the nipples, wearing them inside of bra.
 - Remove wilted leaves and reapply fresh leaves.
 - Engorgement relief with the use of cabbage leaves usually occurs within 8 hours of application.
- 5.7 Consider medication for pain and fever as directed on label or by pharmacist.

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

PLUGGED DUCT

PURPOSE:

1. To ensure breastfeeding mothers will receive consistent and appropriate care when dealing with a plugged duct.
2. To ensure care will be provided according to the following guidelines.

IMPLEMENTATION:

1. **Discuss precipitating factors:**
 - 1.1 Physical obstruction to flow of milk, such as:
 - Tight fitting or under wire bra
 - Straps on baby carrier
 - Mother's fingers during feeding
 - Sleeping on one side
 - Carrying baby on one side
 - 1.2 Incomplete or irregular emptying of breasts, due to:
 - Increasing time between feeding (baby starts to sleep through night)
 - Not replacing a feeding with pumping
 - Weaning
 - Poor latch and breastfeeding
 - Oversupply of milk
2. **Assess mother for the following symptoms:**
 - 2.1 Palpable lump
 - 2.2 Warmth in the area
 - 2.3 Redness
 - 2.4 Mild to severe localized pain
 - 2.5 Gradual onset
 - 2.6 May shift in location
 - 2.7 Mother feels generally well
 - 2.8 May be accompanied by a plugged nipple pore ("bleb") or white dot on tip of the nipple
3. **Assess infant for the following symptoms of plugged ducts:**
 - 3.1 Infant may be "fussy" during feeding because of slower flow of milk from plugged area.
4. **Provide care to:**
 - 4.1 Support infant's nutrition
 - 4.2 Manage maternal milk supply
 - 4.3 Support family's efforts
5. **Discuss the following strategies:**
 - 5.1 Apply wet or dry **heat** to the affected area, gently massaging the area while it is warm. Suggest the mother lean over a basin of warm water or lie on her side in a warm bathtub and soak her breasts for 10 minutes or so 3 times a day. Also recommend the mother take warm showers, use hot wet packs, a heating pad, or a hot water bottle before feedings.
 - 5.2 Suggest the mother **massage** the affected area gently while it is warm, working over the lump using the palm of her hand and all her fingers in a gentle but firm circular motion. If she can do it comfortably, also suggest the mother use her fingertips to knead her breast as part of the massage, starting at the armpit and working toward the nipple.

- 5.3 Encourage mother to **breastfeed** the baby or hand-express some milk immediately after treating the area with warmth and massage. Getting the milk to flow while the breast is still warm will help unplug the affected duct.
- 5.4 Breastfeed the baby on the **affected side**. While the baby is feeding massage and compress the area. Encourage the mother to breastfeed every two hours, including during the night, as long as the breast is tender or warm to touch, nursing on the affected side first at each feeding. Frequent breastfeeding will keep the breast from becoming overly full and keep the milk flowing freely.
- 5.5 **Loosen constrictive clothing**, especially her bra. The mother may benefit from not wearing a bra for a few days. If she is more comfortable with a bra, suggest she wear one that is a size larger or one that has a different cut or style. This should relieve any pressure that her usual bra may have been putting on the milk ducts.
- 5.6 Make sure the baby is **well latched**. Proper latch-on is essential to effective breastfeeding.
- 5.7 Position the baby at the breast so that his/her chin or nose points towards the plugged area.
- 5.8 If the baby will not feed on the affected side and/or it is too painful to feed, **pump** to empty the breast every 2-3 hours.
- 5.9 **Rest**. Encourage the mother, if possible, to go to bed with the baby and stay there until she is feeling better. If she can't do this, suggest, at the very least, that she eliminate all extra activities and spend an extra hour or two with the baby at her breast and her feet off the floor. Rest is an important part of the treatment.
- 5.10 A plugged duct may be associated with a plugged nipple pore. If there is a plugged nipple pore (white spot on the nipple) and it does not hurt, the mother can allow it to resolve on its own; this may take several weeks. If it is painful, apply moist heat with warm compresses or soak the nipple in warm water before feeding and try to manually express the plug. Another approach is to wear a cotton ball soaked in olive oil in the bra to soften the skin and then attempt to peel away the thickened layer of skin; then express any remaining material by compressing the nipple behind the plug.
- 5.11 See Health Care Professional within 24-48 hours if symptoms persist or sign of infection develop.
- 5.12 Ultrasound treatment may be useful for repeated plugged ducts. The recommended dose is 2 watts/cm² continuous for 5 minutes once per day. Usually only two treatments are necessary (Newman & Pitman, 2000).
- 5.13 Recurrent blocked ducts can also be treated/prevented with lecithin available at health food stores. The dose is one tablespoon, 3 or 4 times per day or 1-2 capsules (1200 mg each) 3 to 4 times per day (Newman & Pitman, 2000).
- 5.14 Nonsteroidal antiinflammatory medications such as Ibuprofen can be used for discomfort.

6. Frequent follow up by the PHN and/or PHN/Lactation Consultant:

Assessment should include:

- 6.1 Maternal health
- 6.2 Infant weight gain

MASTITIS

PURPOSE:

1. To ensure breastfeeding mothers will receive consistent and appropriate care when dealing with mastitis.
2. To ensure care will be provided according to the following guidelines.

IMPLEMENTATION:

1. Discuss precipitating factors:

- 1.1 Milk stasis due to:
 - Plugged duct
 - Plugged nipple pore
 - Engorgement
 - Decreased or delayed feeding times
 - Breast surgery
 - Maternal illness, stress and/or fatigue
 - Sore nipples
 - Poor latch and ineffective breastfeeding
 - Use of underwire bras

2. Assess mother for the following symptoms:

- 2.1 Palpable lump
- 2.2 Sudden onset
- 2.3 Localized
- 2.4 Breast is pink or red, hot, tender and swollen
- 2.5 Redness may appear in a wedge shaped area on the breast
- 2.6 Intense localized pain
- 2.7 Mother has flu-like symptoms
- 2.8 Temperature is 101°F or 38.4°C or higher

3. Assess infant for the following symptoms:

- 3.1 Infant may be “fussy” during feeding because of slower flow of milk from affected area.

4. Provide care to:

- 4.1 Support infant’s nutrition
- 4.2 Manage maternal milk supply
- 4.3 Support family’s efforts

5. Discuss the following care strategies with family:

- 5.1 Apply wet or dry **heat** to the affected area to promote breast drainage. Suggest the mother lean over a basin of warm water or lie on her side in a warm bathtub and soak her breasts or take warm showers, use hot wet packs, a heating pad, or a hot water bottle for 10 minutes before feedings.
- 5.2 Suggest the mother **massage** the affected area gently while it is warm, working over the affected area using the palm of her hand and all her fingers in a gentle but firm circular motion. Encourage mother to **breastfeed** the baby or hand-express some milk immediately after treating the area with warmth and massage. Getting the milk to flow while the breast is still warm will help thoroughly drain affected area.

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- 5.3 Breastfeed the baby on the **affected side**. Encourage the mother to breastfeed every two to three hours, including during the night, as long as the breast is tender or warm to touch, nursing on the affected side first at each feeding. Frequent breastfeeding will keep the breast from becoming overly full and keep the milk flowing freely.
- 5.4 **Loosen constrictive clothing**, especially her bra. The mother may benefit from not wearing a bra for a few days. If she is more comfortable with a bra, suggest she wear one that is a size larger or one that has a different cut or style. This should relieve any pressure on the affected area.
- 5.5 Make sure the baby is **well latched**. Proper latch-on is essential to effective breastfeeding.
- 5.6 **Vary nursing positions**. Varying nursing positions may help drain the affected area as long as the mother is able to latch the baby on well in all the positions she uses. At least once during each feeding the mother should position the baby at the breast so that the baby's chin or nose points towards the affected area.
- 5.7 If the baby will not feed on the affected side and/or it is too painful to feed, **pump** to empty the breast every 2-3 hours.
- 5.8 **Rest**. Encourage the mother, if possible, to go to bed with the baby and stay there until she is feeling better. If she can't do this, suggest, at the very least, that she eliminate all extra activities and spend an extra hour or two with the baby at her breast and her feet off the floor. Rest is an important part of the treatment.
- 5.9 If the mother has symptoms **consistent with mastitis** for more than 24 hours and symptoms are worsening, she should see a health care professional for assessment and antibiotics for 10-14 days if required. Dr. J. Newman (2000) recommends Cephalexin 500 mg po QID for 10 days.
- 5.10 See **Health Care Professional** within 24-48 hours if symptoms persist or signs of increasing infection develop. Should be treated immediately to prevent worsening mastitis or abscess formation.
- 5.11 Nonsteroidal antiinflammatory medications such as Ibuprofen can be used for discomfort.

6. Frequent follow up by the PHN and/or PHN/Lactation Consultant:

Assessment should include:

- 6.1 Maternal health
- 6.2 Infant weight gain

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

DEHYDRATION

1. Predisposing factors for dehydration:

Insufficient milk intake can lead to severe newborn malnutrition, dehydration or hypernatremia (increased sodium levels). Hypernatremia is an electrolyte imbalance that can result from severe dehydration and accompanying large weight loss. **Dehydration and the risk of hypernatremia are serious conditions that require medical attention.**

There are a number of underlying risk factors to be considered when assessing for evidence of adequate hydration.

1.1 Maternal History

Previous/Existing Medical History	Labour and Delivery / Hospital Experience	Physical Factors
<ul style="list-style-type: none"> ▪ Previous breastfeeding difficulty ▪ Previous breast surgery (particularly periareolar incisions for breast reduction) ▪ Previous breast abscess ▪ Systemic illness (hypothyroidism, cystic fibrosis, diabetes, heart disease, and polycystic ovary syndrome) ▪ Anemia/previous postpartum hemorrhage/severe hypotensive episode (can lead to pituitary insufficiency syndrome) 	<ul style="list-style-type: none"> ▪ 2-24 hour delay in initiating breastfeeding and/or milk expression ▪ Perinatal complications such as hemorrhage, hypertension and/or infection ▪ Retained placenta ▪ Difficulty/unsuccessful breastfeeding attempts in hospital ▪ Epidural and use of narcotics ▪ Difficult delivery (depletion of energy reserves) 	<ul style="list-style-type: none"> ▪ Lack of breast growth during pregnancy ▪ Nipple or breast abnormality (i.e. tubular breasts) ▪ Asymmetric breasts ▪ Flat or inverted nipples affecting infant latch-on or milk transfer ▪ Severe breast engorgement ▪ Large pendulous breasts ▪ Sore nipples (cracked or bleeding) ▪ No indication of increasing milk production by day 4 ▪ No previous breastfeeding experience ▪ Heavy flow with large clots (retained placental fragments may contribute to insufficient hormonal stimulation for milk production) ▪ No postpartum breast fullness or engorgement noted

1.2 Infant Factors:

- Prematurity (< 37 weeks)
- Birth trauma/neuromotor problems
- Acute or chronic illness
- Infants who are SGA, LGA, IUGR are more at risk
- Tight frenulum
- Inconsistency/difficulty with positioning and latch
- Evidence of inadequate milk transfer
- Inappropriate frequency and duration of feedings
- Passive, sleepy baby
- Jaundice
- Weight loss; birth weight not regained by 2 weeks
- Challenges to infant suck, swallow, or breathing (e.g. prematurity, cleft lip/palate, Down’s syndrome, etc.)
- Irritable infant described as “excessively crying, demanding personality”

- 1.3 **Other:**
- Lack of knowledge re: breastfeeding
 - Inadequate support in home/exhaustion
 - Not enough time at breast
 - Timed or scheduled feeds
 - Perceived insufficient milk supply
 - Cultural/language issues
 - Maternal age older than 37 years
 - Smoking
 - Stress/lack of confidence
 - Slow to respond to infant
 - Multiple births

2. Early signs of dehydration requiring immediate and ongoing monitoring until situation is resolved:

- Dry and sticky mucous membranes
- Decreased skin elasticity
- Inadequate output
- Concentrated urine
- Urates after day 4
- Inadequate stools
- Meconium after day 4
- A “worried looking” baby
- 10% weight loss
- Exacerbated in the presence of jaundice
- Sleepy baby

3. Acute later signs of dehydration requiring immediate medical assessment:

- Listlessness
- High pitch cry
- Clammy or mottled extremities
- Sunken eyes
- Abnormal temperature, most often elevated
- Depressed fontanel
- Tenting of pinched skin
- Tachypnea (> 60 respirations/min)
- Tachycardia (> 160 beats/min)
- Elevated serum NA (> 150 umol/L)

4. Care plan related to supplementation of the dehydrated baby:

- 4.1 In the presence of acute dehydration (late signs of dehydration) immediate rehydration and referral to a physician or midwife is required.
- 4.2 In the presence of **early** signs of dehydration, take history, complete a breastfeeding assessment and attempt to optimize breastfeeding whenever possible before beginning supplementation.
- 4.3 Encourage frequent breastfeeding and skin-to-skin contact. Dehydrated babies tend to be sleepy. Gentle waking techniques should be attempted for 5 to 10 minutes.
- 4.4 If infant latches well and milk transfer (swallow) is evident, encourage the mother to use breast compression, and to pump after every feeding (minimum of 8 times a day) to maximize breast stimulation and milk production. A home visit is required the next day and the infant should be monitored closely until well hydrated and gaining normally. If the infant is able to latch, but supplementation deemed necessary (insufficient swallows), offer the breast first at each feeding.

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- 4.5 If infant does not latch well and/or milk transfer (swallow) is not evident then immediate supplementation is necessary.
- 4.6 Use expressed breast milk whenever possible. If mother does not have a pump, she should be encouraged to hand-express. A warm shower or compresses may help mother hand-express milk for her baby.
- 4.7 Whenever possible supplement with EBM. If EBM is not available, supplement with ABM. When baby is fed EBM and ABM, feed EBM first (to ensure it is not wasted) and then ABM to requirements. EBM and ABM however may be safely mixed.
- 4.8 Parents will need information and appropriate teaching about their preferred method of supplementation (**see *Supplementation of the Breastfed Baby***).
- 4.9 When baby requires supplementation, mothers should be encouraged to pump every 3 hours with a full sized electric breast pump to ensure stimulation and maintenance of a full milk supply. Provide loaner pump if available at BRHC, if not encourage family to rent or purchase appropriate equipment.
- 4.10 Consider communication with primary care provider prior to supplementation. Provide primary care provider with proposed plan of care via telephone contact.
- 4.11 Increase or decrease supplement according to infant response, signs of milk transfer, satiation and adequate hydration and continue to monitor closely as to weight, intake and output.
- 4.12 When dehydration is present, supplementation is required until hydration and weight gain is evident. Supplements should be stopped when infant well-being is consistent with expected outcomes for the breastfed infant. Continue to encourage frequent breastfeeding at least 8 times in 24 hours.
- 4.13 Close monitoring by phone/home visits and/or weight checks are essential **every 2 days** until the PHN, the family and the primary care provider are satisfied that the infant is stable, well hydrated, growing and the family expresses confidence to manage independently.

5. Determining the amount of supplement – factors to consider:

- 5.1 Age
- 5.2 Evidence of milk production, transfer and intake at breast
- 5.3 Whether supplementation is feeding replacement (no latch, breast refusal)
- 5.4 Type of supplementation (EBM or ABM)
- 5.5 Mother’s commitment to mutually negotiated plan, i.e. comfort with recommended technologies
- 5.6 Approximate “stomach capacity” per age and approximate amount of “usual milk/colostrum production” per age (**see *Supplementation of the Breastfed Baby***)
- 5.7 Acuity of the situation (signs and symptoms of hypoglycemia/hydration status/late signs of dehydration/weight loss if baby is over 48 hours of age)

6. Calculating infant supplementation for infants < 5 days of age:

See ***Supplementation of the Breastfed Baby***

7. Calculating infant supplementation for infants > 5 days of age:

- 7.1 Requirements should be based on birth weight until this growth indicator is met.
- 7.2 The following guidelines should be used:

If growth adequate	▪ 120-150 mL/kg of body weight/# of feeds per day
If growth faltering and “catch up” weight required	▪ 150-180 mL/kg of body weight/# of feeds per day
If baby exhibits characteristics of failure to thrive (FTT)	▪ 180-200 mL/kg of body weight/# of feeds per day

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8. Frequent follow up by the PHN and/or PHN/Lactation Consultant:

- 8.1 Assess:
 - Infant weight gain
 - Maternal milk supply
- 8.2 Support of mother's efforts

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

INSUFFICIENT MILK SUPPLY

PURPOSE:

1. To provide breastfeeding families with consistent and appropriate care when maternal milk production is insufficient to meet the infant's nutritional requirement.
2. To ensure care will be provided according to the following guidelines.

IMPLEMENTATION:

1. **Assess infant for the following symptoms:**
 - 1.1 Losing weight after the first week
 - 1.2 Infant does not regain birth weight by two weeks
 - 1.3 Weight loss greater than 10% of birth weight
 - 1.4 Evidence of malnutrition/dehydration – sunken fontanel, grayish pallor, lethargy, loss of fat layer under the skin, strong urine, inadequate stools
 - 1.5 Weight loss below 10th percentile at one month
 - 1.6 Fussy at the breast; refusal to feed
2. **Assess mother for the following symptoms:**
 - 2.1 History of factors that impact on maternal milk production:
 - Breast surgery
 - History of hormonal related illness or infertility
 - Suboptimal initiation of breastfeeding
 - Early supplementation
 - Maternal medication (oral contraceptives; antihypertensives)
 - 2.2 No report of initial “engorgement” or fullness in the early postpartum period
3. **Provide care to:**
 - 3.1 Support infant's nutrition and maternal milk supply through optimizing breastfeeding management (latch, positioning, breast compressions, switch nursing, increased feeding frequency)
 - 3.2 Support family's efforts
4. **Support infant nutrition:**

Goal of feeding plan is to maximize infant caloric intake while supporting maternal milk production.

 - 4.1 Assess ability to latch/breastfeed. Calorie deprivation may lead to an infant who has insufficient energy to effectively breastfeed.
 - 4.2 If poor or no latch, discuss feeding options with family, including finger feeding, cup feeding and bottle-feeding. (See ***Supplementation of the Breastfed Baby***)
 - 4.3 Family should choose method that they are comfortable with and can manage. They should realize that baby may not effectively breastfeed until back to birth weight or growing well. Close follow up is important to monitor weight and continued need for supplements.
 - 4.4 Supplementation should be with either breast milk or iron fortified infant ABM, to ensure adequate calorie intake. Mom should be encouraged to pump every 3 hours with double electric pump if possible.
 - 4.5 Volume of supplementation should reflect infant age and condition. (See guidelines ***Supplementation of Breastfed Baby*** and/or ***Dehydration***)
 - 4.6 Infant should be fed at least 8 times in 24 hours.
 - 4.7 Family needs to waken infant to feed since hypocaloric babies in particular will sleep through hunger; awaken to feed q3h for first 48 hours.

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- 4.8 Entire feeding session should take no longer than 1 hour, i.e. 40 minutes to feed (max), 10 minutes to settle, 10 minutes to pump, this will give mother and baby 2 hours to sleep before next feeding.
- 4.9 Encourage skin-to-skin contact before and after feedings.

5. Support maternal milk supply:

- 5.1 Assess maternal milk supply; hypocaloric baby may not stimulate maternal milk production.
- 5.2 If baby cannot breastfeed effectively, milk production should be stimulated, increased or maintained with a hospital grade electric breast pump.
- 5.3 Provide loaner pump if available at BRHC, if not encourage family to rent or purchase appropriate equipment. Express breast milk in conjunction with infant's feeding times (goal is to provide enough breast milk to eliminate need for ABM).
- 5.4 Reassess milk supply after 24 to 48 hours of pumping.
- 5.5 Consider galactagogue if milk supply is less than baby's daily oral requirements.
- 5.6 Galactagogue should be maintained at full dose until infant off all supplements.
- 5.7 When baby is fully BF and gaining 4 to 7 ounces a week for at least 1 week, weaning from galactagogue can be considered.

6. Frequent follow up by the PHN and/or PHN/Lactation Consultant:

- 5.1 Assess:
 - Infant weight gain
 - Maternal milk supply
- 5.2 Support of mother's efforts

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

OVER-ABUNDANT MILK SUPPLY AND/OR FORCEFUL LET-DOWN

PURPOSE:

1. To ensure breastfeeding families will receive consistent and appropriate care when dealing with over-abundant milk supply and/or forceful letdown.
2. To ensure care will be provided according to the following guidelines.

IMPLEMENTATION:

1. Assess infant for the follow symptoms:

- 1.1 Baby regains birth weight rapidly and continues to gain weight rapidly in the early weeks and months.
- 1.2 Baby is alert, active with good muscle tone and a strong suck and has been found by the doctor to be healthy.
- 1.3 Baby has frequent wet diapers and several bowel movements per day. These bowel movements may be very loose (like diarrhea) and “green” (from high content of lactose in the foremilk). It is important to make sure that “green” stools are not from insufficient intake; these infants will not be growing well.
- 1.4 Baby demands to be fed very frequently (foremilk is digested quickly).
- 1.5 When latching to the breast, as the letdown occurs, the baby may squirm, sputter, choke, arch his/her back and pull off the breast.
- 1.6 You may be able to hear the baby swallowing, or hear a sound like milk hitting the bottom of the baby’s stomach (lots of air being swallowed/gulping).
- 1.7 Baby may have fussy periods, often in the evening lasting several hours or baby may fall asleep and wake up after a short period, acting as if he/she is hungry.
- 1.8 Baby may spit up and pass gas frequently.

2. Assess mother for the following symptoms:

- 2.1 Mother may notice that letdown reflex is painful and that more then one can be felt during a feeding.
- 2.2 When the baby pulls off the breast as the letdown happens, mother may notice that milk sprays from the nipple.
- 2.3 Mother may find that it is very easy to express milk, milk sprays or spurts out.
- 2.4 Mother may notice that as the baby feeds at one breast the other one leaks, however this can be a normal finding.
- 2.5 Mother may be experiencing sleep deprivation and/or be overwhelmed.

3. Provide care to:

- 3.1 Support infant’s nutrition
- 3.2 Manage maternal milk supply
- 3.3 Support family’s effort

4. Discuss the following care strategies with family:

- 4.1 Initiate the letdown of milk prior to latching the baby, or take the baby off the breast as the initial letdown occurs. Prior to latching baby to the breast, stimulate the letdown reflex, allowing the milk to drip into a cup or towel. Then latch the baby. Or latch the baby and as mother begins to feel the letdown, unlatch the baby and allow the milk to run into a towel. Then latch the baby again.

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- 4.2 Use one breast at each feeding; use the same breast each time in a 2-3 hour period (block feeding). This reduces breast stimulation and increases “hind milk” intake. During fussy periods, the baby may wish to nurse frequently. Doing so on **one** breast can be a source of comfort to the baby. If the other breast becomes too full, express just enough to relieve the milk pressure in that breast. Expressing milk for storage and later use is **not** a good idea at this time. If the baby needs another feed in less than 2-3 hours from the beginning of the last feed, use the same breast. In extreme cases, the time of block feeding on one breast per feeding can increase.
- 4.3 Breastfeed the baby immediately upon waking. Watch for signs that the baby is beginning to wake up and nurse baby then. This makes the baby suckle more gently than if he/she was fully awake and very hungry. Babies often gulp less air when fed as they wake up. If baby wakes shortly after falling asleep, offer the least full breast as a little more suckling may assist him/her in settling.
- 4.4 Try different breastfeeding positions. Be careful to keep the baby’s head level or even above the breast. One of the most successful positions in terms of controlling the flow of milk, especially when the breast is full, is to have the baby latch in the cross-cradle, then the mom lies down with her head on a pillow, and baby is essentially feeding against gravity. This position especially works in more severe situations. This directs the flow of milk away from the back of the baby’s throat and decreases gulping. Try a variety of positions to see which ones help baby to cope with the flow of milk. Side lying positions often work, as do positions where the baby is in more of an upright or sitting position (football hold).
- 4.5 Burp the baby frequently. Frequent burping brings air out of the stomach before it travels to the intestine where it can cause cramps. Effective burping techniques put pressure on the baby’s stomach while patting the baby’s back. If the baby begins squirming at the breast, take him/her off and burp him/her.
- 4.6 Avoid the use of pacifiers or supplements. Overuse of pacifiers can delay feedings and increase the milk volume at the next feeding. Supplements are **not** appropriate for babies under six months of age. Some mothers report that although their babies seem to improve initially on ABM, they often encountered other problems associated with early introduction of bottles to breastfeeding babies.
- 4.7 Decrease maternal milk supply by applying cold compresses or cabbage leaves to the breasts. When mothers start feeding the baby on one side for several hours, the other breast may become very full. Cold compresses or cabbage leaves on the breasts (15 minutes every 3 hours) can help to decrease this fullness. If mothers feel very full (lumps in the breast), the mother may need to express a small amount of milk from her breast(s) to prevent plugged ducts or a breast infection. This can be done in the shower, by hand or with a breast pump.
- 4.8 In some situations, as milk supply decreases, the baby may start to get frustrated at the breast, and pull off (the baby now gets frustrated with dealing with a “normal” flow). Mother needs to continue feeding on one breast for the allotted time that was working for her and the baby. Breast compressions and distractions will help the baby adjust to the lesser milk supply and slower flow. This challenge can be frustrating for mom as she fluctuates between thinking she is drowning her baby with milk to starving the baby.

5. Frequent follow up by the PHN and/or PHN/Lactation Consultant:

Assess:

- 5.1 Infant fussiness
- 5.2 Maternal milk supply
- 5.3 Family health
- 5.4 Infant’s weight gain weekly

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

GROWTH ISSUES

PURPOSE:

1. To provide breastfeeding families with consistent and appropriate care when the infant is not gaining weight appropriately.
2. When breastfeeding mismanagement is the cause of growth issues in the breastfed baby, care will be provided according to the following guidelines.

IMPLEMENTATION:

1. Assess infant for the following symptoms:

1.1 Feeding:

- Breastfeeds less than 8 times in 24 hours
- Long feeds (> 30 minutes per side)
- Very short feeds (< 5 minutes per side)
- Refusal to latch/difficulties latching
- No audible swallowing
- Absence of open-pause-close type of suck (nutritive sucking pattern)
- Rapid, nibbling, shallow type of suck
- In drawing of cheeks/smacking or clicking sounds
- Difficulty eliciting milk ejection reflex (MER)/letdown
- Unable to maintain latch
- On and off breast frequently

1.2 Behaviors:

- Sleeps 4-6 hours at a time/hard to waken
- Sleepy and refusing to feed
- Fussy after feeds, chews hands, always “hungry”
- Uses pacifier for very long periods of time
- Infant who is irritable and restless

1.3 Output:

- Inadequate infant output
- No stools in 24 hours or decreasing stool pattern
- Meconium stools after day 4
- “Green” stools (indicative of a hypocaloric state)
- Infrequent wet diapers (< 6/day after day 6)
- Diapers are not “heavy” wet
- Urates in urine after day 4

NOTE: The earliest sign of inadequate breast milk intake is infrequent passage of stools. “Green” stools can be an indicator of insufficient caloric intake.

2. Assess mother for the following symptoms:

- 2.1 Breasts do not soften after feed
- 2.2 Persistent or increasingly painful nipples
- 2.3 Engorgement unrelieved by feeding
- 2.4 Lack of breast fullness or apparent milk supply
- 2.5 No discernible change in milk volume and composition by 3-5 days

3. Assess infant growth:

If infant *younger than one month* assess infant for the following symptoms:

- 3.1 Weight loss greater than 10% of birth weight
- 3.2 Still losing weight after the first week
- 3.3 Infant does not regain birth weight by two weeks
- 3.4 Little or no growth in length and head circumference
- 3.5 Evidence of malnutrition, dehydration – sunken fontanel, grayish pallor, lethargy, loss of fat layer under the skin, strong odor to urine, inadequate stools
- 3.6 Infrequent and/or ineffective feeds

If infant *older than one month* assess infant for the following symptoms:

- 3.7 Erratic or nonexistent weight gain
- 3.8 Weight below 3rd percentile
- 3.9 Drop in rate of growth, including length and head circumference
- 3.10 Infant falls two standard deviations on the growth chart (definition of FTT)
- 3.11 Evidence of malnutrition, dehydration – sunken fontanel, grayish pallor, lethargy, loss of fat layer under the skin, strong urine, inadequate stools
- 3.12 Infant does not meet developmental milestones
- 3.13 Infrequent and/or ineffective feeds

4. Review maternal infant history for:

- 4.1 History of maternal infant separation
- 4.2 History of factors that impact on maternal milk production
 - Previous breastfeeding difficulty
 - Previous breast surgery (particularly periareolar incisions for breast reduction)
 - Previous breast abscess
 - Systemic illness (hypothyroidism, cystic fibrosis, diabetes, and heart disease)
 - Anemia/postpartum hemorrhage/severe hypotensive episode (can lead to pituitary insufficiency syndrome)
- 4.3 Delay in first breastfeed experience
- 4.4 Mother has many other responsibilities
- 4.5 Infant illness
- 4.6 Maternal medication (oral contraceptives)
- 4.7 Early supplementation

5. Provide care to:

- 5.1 Support infant's nutrition and maternal milk supply through optimizing breastfeeding management (latch, position, breast compressions, switch nursing, increased feeding frequency).
- 5.2 Support family's efforts.

6. Support infant nutrition:

The goal of feeding plan is to maximize calories with minimal energy expenditure.

- 6.1 Assess ability to latch/breastfeed:
 - Calorie deprivation can lead to an infant who has insufficient energy to effectively breastfeed.
 - If the baby latches and breastfeeds well, increasing the frequency of effective breastfeeding may be adequate to support infant growth.
 - If breastfeeding is ineffective, the following strategies may be necessary.
- 6.2 If poor or no latch, discuss alternate feeding options with family (see **Supplementation of the Breastfed Baby**).
- 6.3 Family should choose method that they are comfortable with and can manage.
- 6.4 Baby may not effectively breastfeed until back to birth weight and/or gaining well (close follow up is important to monitor weight and continued need for supplements).

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- 6.5 Supplementation should be with either breast milk or iron fortified infant ABM, to ensure adequate calorie intake.
- 6.6 Volume of supplementation (see ***Supplementation of the Breastfed Baby or Dehydration***).
- 6.7 If the infant is supplemented and the mother is pumping, feeding every 3 hours (8 times a day) ensures infant nutrition, breast stimulation and rest.
- 6.8 Mom should be encouraged to pump with double electric pump every 3 hours if possible.
- 6.9 Family needs to waken infant to feed since hypocaloric babies in particular will sleep through hunger, awaken to feed q3h for first 48 hours.
- 6.10 Decision should be made regarding whether to offer breast before feeding or just supplement for 24 to 48 hours (depends on energy level of baby and mother).
- 6.11 Entire feeding session should take no longer than 1 hour, i.e. 40 minutes to feed (max), 10 minutes to settle, 10 minutes to pump. This will give mother and baby 2 hours to sleep before next feeding.
- 6.12 Encourage skin-to-skin contact before and/or after feedings.

7. Support maternal milk supply:

- 7.1 Assess maternal milk supply; hypocaloric baby may not stimulate maternal milk production.
- 7.2 If baby cannot breastfeed effectively, milk production should be stimulated, increased or maintained with a hospital grade electric breast pump.
- 7.3 Provide loaner pump from BRHC if available, if not encourage family to rent or purchase appropriate equipment and express breast milk in conjunction with infant's feeding times (goal is to provide enough breast milk to eliminate need for ABM).
- 7.4 Reassess milk supply after 24 to 48 hours of pumping.
- 7.5 Discuss use of galactagogue if milk supply less than baby's daily requirements.

8. Wean from supplementation:

- 8.1 Introduce infant back to breast when alert, demanding feedings, and showing positive weight gain.
- 8.2 Ensure position and latch optimal.
- 8.3 Assess intake at breast; audible swallows and nutritive sucking.
- 8.4 Infant may not have energy for entire feeding or consecutive feedings. Mother needs to know that baby may still require supplementation in addition to attempts at breast.
- 8.5 If baby fussy/impatient at breast while waiting for MER, try SNS or small amount of supplement by alternate feeding method prior to breastfeeding.
- 8.6 When baby breastfeeding for almost full oral requirements, encourage mother to offer frequent BF and slowly decrease supplementation.
- 8.7 Discuss weaning from galactagogue when supplementation no longer required.

9. Frequent follow up by the care provider:

- 9.1 Assess:
 - Infant weight gain
 - Infant energy level
 - Hydration status
 - Maternal milk supply
 - Volume of supplement
- 9.2 Support of mother's efforts

10. Consider discussing care plan and progress of mother and baby with physician or midwife.

NOTE: Utilize appropriate written resources as an adjunct to nurse teaching as required; ensure family understands both written and verbal information.

APPENDIX A

Summary of the World Health Organization (WHO) / UNICEF International Code of Marketing of Breast Milk Substitutes, World Health Assembly (WHA), 1981; Resolution WRA 34.22 and Subsequent WHA Resolutions 39.28, 47.5, 49.15, 54.2

1. **Aim:** The aim is to “contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding, and by ensuring the proper use of breast milk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution”.
2. **Scope:** The Code applies to breast milk substitutes, including infant formula; to other milk products, foods and beverages, when marketed or otherwise represented as a partial or total replacement for breast milk; to feeding bottles and nipples. It also applies to their quality and availability, and to information concerning their use.
3. **Advertising:** No advertising of above product to the public.
4. **Samples:** No free samples to mothers, their families or health care workers.
5. **Facilities of Health Care Systems:** No promotion of products, i.e. no product displays, posters, or distribution of promotional materials; no use of mother craft nurses or similar company-paid personnel. The “health care system” does not include pharmacies or other established sales outlets.
6. **Health Care Workers:** No gifts or samples to health care workers.
7. **Supplies:** No free or low-cost supplies of breast milk substitutes to maternity wards or hospitals.
8. **Information:** Informational and educational materials must explain the benefits of breastfeeding, the health hazards associated with bottle-feeding, and the costs of using infant formula. Product information must be factual and scientific.
9. **Labels:** Product labels must clearly state the superiority of breastfeeding, to use only on the advice of a health care worker, instructions for the appropriate preparation and a warning about the health hazards of inappropriate preparation; no pictures of infants, or other pictures or text idealizing the use of infant formula.
10. **Products:** Unsuitable products, such as sweetened condensed milk, should not be promoted for babies. All products should be of a high, recognized standard.
11. **Exclusive Breastfeeding:** Promote and support exclusive breastfeeding for six months as a global public health recommendation with continued breastfeeding for up to two years of age or beyond.

12. **Complimentary Feeding:** Foster appropriate complementary feeding from the age of six months recognizing that any food or drink given before complementary feeding is nutritionally required may interfere with initiation or maintenance of breastfeeding.

13. **Marketing:** Ensure that complementary foods are not marketed for use in ways that undermine exclusive and sustained breastfeeding.

14. **Sponsorship:** Financial assistance from the infant feeding industry may interfere with professionals' unequivocal support for breastfeeding.

**APPENDIX B
STANDARD OF CARE FOR CARE PROVIDER EDUCATION**

Orientation and continuing education should include the following principles and competencies:

- Benefits of breastfeeding
- Risks of ABM
- Current breastfeeding statistics
- UNICEF/WHO Baby Friendly Initiative
- Breastfeeding Assessment
- Brandon RHA Breastfeeding Policy and Practice Guidelines
- Overview of anatomy and physiology including:
 - The breast
 - Hormonal influence
 - Infant role
 - Deviations from normal anatomy and physiology
 - Initiation and maintenance of breastfeeding
 - Prevention of common problems
 - Maintenance of breastfeeding and lactation when complications arise
- Potential breastfeeding problems:
 - Maternal
 - Infant
 - Intervention strategies
 - Impact of hospitalization on the breastfeeding family

**APPENDIX C
ANTICIPATORY GUIDANCE FOR BREASTFEEDING**

PRENATAL EDUCATION CURRICULA – BREASTFEEDING

Learning Objectives

Upon completion of the Breastfeeding class, the participants will:

1. Experience a welcome and introduction to the class.
2. Have an opportunity to identify some of their learning needs and expectations.
3. Feel reassured by briefly overviewing the class.
4. Identify advantages of breastfeeding.
5. Have the information needed to make an informed decision related to infant feeding.
6. Increase confidence in babies' innate abilities which assist them with breastfeeding.
7. Explore common myths believed about breastfeeding.
8. Identify the anatomy, changes and functions of the pregnant and lactating breast.
9. Identify skills that lead to effective breastfeeding including the mother's position, positioning of the baby at the breast, supporting the breast, latching the baby and removing the baby from the breast.
10. Be aware of the baby's hunger and satiety cues, and of how to burp a baby.
11. Identify difficulties that could hinder breastfeeding.
12. Identify significant ways to provide support to a woman who is breastfeeding.
13. Identify community resources and equipment (including recommended breast pumps) that are available to support the breastfeeding woman.

ANTICIPATORY GUIDANCE FOR THE PARENTS OF A FULL TERM BREASTFED INFANT

Parents require breastfeeding information in a timely and appropriate manner. Ideally this information is given prenatally and reinforced as needed in the postpartum period. In keeping with the principles of adult education, information and teaching provided in hospital often warrants repetition in the home. Public Health Nurse contact is made the day after discharge.

Parents are taught:

1. To encourage frequent feedings and skin-to-skin contact. Parents are advised that feeds should be cue based and infant sleep patterns are such that the baby may want to sleep one 4-5 hour stretch in a 24-hour period but 8-12 feedings per 24 hours is required to maintain infant growth and maternal milk supply.
2. Feeding cues, the signs of satiation, principle of supply and demand, how and when to use breast compression and switch nursing.
3. Self-assessment of breastfeeding.
4. Soothers should not be used to delay a feeding as it may decrease the milk supply.
5. Breastfeeding patterns. Infants' sleep and wake period's change during the first days of life. During the first 24 hours, the infant may be alert for a few hours after birth, then go into a deep sleep. Thus, infants less than 24 hours may breastfeed less often, but for long periods. Later on, parents need to recognize cluster feeds.
6. Normal infant growth patterns (growth spurts).
7. Normal infant wake sleep patterns.
8. Signs of inadequate infant hydration.
9. Nutrition, exercise and rest.
10. Potential negative impact of early introduction of soothers, bottles and other technologies.
11. Potential breastfeeding problems and contributing factors (engorgement, sore nipples, mastitis, yeast).

Breastfeeding Practice Guidelines for the Healthy Term Infant

12. The importance of night feedings, in order to ensure unrestricted breastfeeding and optimal milk production. It is important to wake baby for these feedings especially when infant weight gain is inadequate or breastfeeding/hydration is not optimal.
13. The “sleepy baby” must be woken and fed as discussed above. The infant who is hard to wake for feeds or unresponsive requires careful assessment and may require medical attention.
14. To monitor infant output and evidence of milk transfer.
15. Common infant problems (jaundice).
16. Available breastfeeding supports/resources in their community.

Nurses must ALSO be prepared to discuss the following:

- Breast pumps (recommendations)
- Storage of expressed breast milk
- Proper preparation of artificial breast milk when warranted on an individual basis
- Breastfeeding as a student or working mother
- Weaning
- Breastfeeding and sex
- Use of medications and alcohol
- Breastfeeding in public
- Returning to school/work
- Impact of social support on breastfeeding duration
- Proper use and care of pumps and other technologies when warranted (preferably on an individual basis)
- Supplementation when medically warranted (preferably on an individual basis)

**APPENDIX D
IMPACT OF BIRTHING PRACTICES/CHOICES ON BREASTFEEDING INITIATION**

The long-term success of breastfeeding is affected by many variables. Practices, education and choices made antenatally, during labour and in the immediate postpartum period can have substantial impact on the mother-infant breastfeeding dyad.

Protecting, supporting and promoting breastfeeding reflect the guiding principles of family-centred maternity and newborn care. According to the *Family Centred Maternity and Newborn Care National Guidelines*, it is essential that:

- Care is based on research evidence.
- Women are cared for within the context of their families; mothers, babies and families are not separated unless absolutely necessary.
- Women and their families need knowledge to make informed choices; women are empowered through respect and informed choice to take responsibility; and health care providers have powerful effect on women and families.
- Technology is used appropriately.
- The importance of language is recognized.

The importance for both parents and caregivers to be informed about how birthing choices and practices influence breastfeeding cannot be underestimated.

Hydration/IV Therapy

It is common practice in hospital birth settings to restrict oral intake in labour. Clear fluids and/or ice chips are commonly all that is allowed once the woman is labouring. The work of labour, however consumes large amounts of calories and fluids. The administration of IV fluids is not routine for every woman, although many situations either require or warrant the initiation of an IV. Examples include epidural analgesia, induction/augmentation of labour, antibiotic administration, or a non-reassuring fetal status.

Although institutional policies require that the caregiver restrict the woman's intake of food, maintaining a fluid balance within the context of labour is of utmost importance. Ketones occur when carbohydrate stores are used up. The tendency towards ketosis in pregnancy is accentuated by increased muscular activity and by the starvation that is imposed by the limit on oral intake. Physiologic dehydration is not uncommon in labour and the assistance of the woman to maintain an adequately hydrated state should be a priority of nurses/midwives caring for women in labour. Additional oral fluids in early labour will afford her the needed nourishment and hydration she requires when the labour becomes more active.

IV intake not monitored diligently can contribute to fluid overload, which in turn can contribute to different problems. Severe cases of breast, nipple and areolar edema on the second or third postpartum day have been associated with induction of labour (oxytocin acts as an antidiuretic) and IV fluid overhydration. Edema in the breast can present difficulty in latching on and may contribute to nipple pain and poor milk transfer. The mother may be reluctant to put her baby to breast if it causes pain.

Fluid overload can also have an effect on the process of lactogenesis, the mother's production of milk. There is also some evidence to suggest that IV therapy in labour contributes to edematous newborns whose subsequent diuresis and weight loss can lead to unnecessary supplementation. There have been reports of larger amounts of weight loss and electrolyte imbalances in infants whose mothers had IV fluid as opposed to oral fluids only.

Labour Pain Medications

Vast amounts of literature on analgesia and anesthesia suggest that **routine** use of labour medications can negatively impact the normalcy of labour. Increased rates of labour augmentation and decreased ability to fully utilize the range of labour positions and options can lead to the necessity of instrumental or surgical deliveries. This “cascade of interventions” is well known to health care providers caring for women in labour. These interventions can have effects on the mother’s alertness and well-being as well as the newborn’s readiness to see, smell, root and attach to the mother’s breast.

It is well known that narcotic analgesics have a central nervous system depressive impact on newborns, resulting in decreased alertness, disorganization and delayed rooting, sucking and latching on. Metabolism and excretion of narcotics is slower in newborns than in the mother and results in CNS depression in the baby well beyond the first few hours of life.

The use of epidural analgesia in labour has become increasingly popular. Since their early use, epidurals have changed significantly. Earlier use of epidurals found women completely “frozen” from the waist down and confined to their bed with continuous fetal monitoring. Despite recent improvements in their effects such as decreased motor block, epidurals continue to impact the process of birth, hence the breastfeeding experience. Recent studies that have compared the use of epidurals with breastfeeding success have come to different conclusions. There can be no doubt however, that an epidural and its unavoidable associations (requires an IV, decreases ease of ambulation, and necessitates close if not continuous fetal monitoring) affect the labour and birth process. Although recent studies show neuro-behavioral effects on the newborn’s activity, the effects of epidural analgesia on breastfeeding are still inconclusive.

It must also be recognized that inadequate coping with the extreme pain of labour contributes to increased fear/anxiety in the mother and an increase in the level of circulating adrenalin. With poor pain control and increased fear and anxiety, adrenalin works as an antagonist to oxytocin by weakening uterine contractions and possibly prolonging labour. The delay of analgesics until active labour is well established seems to have less effect on the labour process and need for interventions than their early administration.

In response to extended physical stress, the human brain’s response is to release endogenous opiates into the bloodstream. These are called endorphins. Natural endorphins appear to help to reduce the perception of uterine pain, provide a sense of well-being and may have an amnesic effect. Unmedicated, a woman with good social supports and who feels safe in her environment can cope well even during the hardest and strongest part of labour. It is believed that labour pain medications can block the woman’s natural endorphins. The caregiver must inform the woman and be willing to provide non-pharmacologic methods of labour pain relief. Informed choice is imperative!

Immediate Skin-to-Skin Contact After Birth/Non-Separation of Mother and Infant

Immediate mother-baby contact after birth is firmly established as an evidence-based practice that supports breastfeeding. The Baby Friendly Hospital Initiative lists it as a recommended standard of immediate post-delivery care.

Healthy full-term infants demonstrate a very specific set of behaviors immediately following delivery when placed in skin-to-skin contact with their mother. When left undisturbed on the mother’s abdomen, the newborn will display behaviors such as fist clenching, hand to mouth movements, rooting, sucking and latching on. The baby’s senses are cued in to the smell of amniotic fluid and the smell of the mother’s breasts before washing. This “sensitive” period allows mothers and infants to develop a synchronous interaction pattern provided they are together and in intimate contact.

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A 2003 review of 17 published studies involving over 800 participants (mothers and babies) found statistically significant and positive effects of early skin-to-skin contact. These studies showed that:

- More mother-baby pairs with early skin-to-skin contact were successfully breastfeeding at day 3.
- More mother-baby pairs with early skin-to-skin contact were still breastfeeding one to three months and at one year than those who did not have early skin-to-skin contact.
- Infants with early skin-to-skin contact were more likely to maintain temperature in the neutral thermal range.
- Infants with early skin-to-skin contact were less likely to cry when left in direct contact with their mothers.
- Infants with early skin-to-skin contact had higher blood glucose levels and lower respiratory rates.
- Mothers with early skin-to-skin contact displayed more affectionate behaviors to their infants in 8 studies that examined maternal attachment behaviors.
- Mothers with early skin-to-skin contact with their newborns had decreased breast engorgement pain on day 3 postpartum.

Hospital routines that promote early skin-to-skin contact and minimize postpartum mother-infant disturbances should lead to improved rates and duration of breastfeeding and enhanced mother-infant attachment.

The importance of caregivers' support of non-separation of the mother-baby unit in both the immediate postpartum period and beyond cannot be overestimated.

Labour Interventions and Readiness to Breastfeed

It is a known fact that the long-term success of breastfeeding is affected by the events of labour and the birth process. Infant feeding ability requires three things to be in place:

- A patent, uncompromised airway.
- Oropharyngeal muscle strength and coordination to allow infant to obtain milk from mother's breast.
- The ability to signal the need to feed.

A baby who is compromised in any of these systems is at risk for feeding problems. Instrumental deliveries, despite being necessary at times to expedite delivery and prevent oxygenation compromise, are not benign interventions. Mechanical forces during birth can disrupt the alignment of bony structures and therefore affect nerve and muscle function. The development of hematomas, caput succedaneum (localized scalp edema), bruising, and nerve damage that result after an instrumental delivery all have the potential to interrupt the normal suck-swallow-breathe pattern, hence the infant's ability to "coordinate" their actions for breastfeeding.

Instrument-assisted birth and Cesarean birth both exert additional mechanical forces on the infant's bony structures above the levels of force during spontaneous vaginal birth. As well, babies born by Cesarean usually require more suctioning after birth, further affecting infant oral motor function. Postpartum, the mother delivered by Cesarean starts off her relationship with her infant in a less than ideal fashion. Pain management and energy conservation, important for the healing process of the mother, often result in a not fully alert mother, a baby that may be cared for in the nursery for a period of time, and the increased chance of a postpartum infection or other complication. Studies show that breastfeeding mothers delivered by Cesarean may have a later onset of full lactation and may have an increased risk to discontinue breastfeeding sooner.

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If a baby cannot feed effectively as a result of trauma from an instrumental delivery, dehydration and reduced caloric intake further compromise the sucking response. The compromised baby cannot feed well, and muscle function is further compromised and less effective, and the infant becomes more disorganized and even less able to feed. Hypoglycemia and hyperbilirubinemia then become a threat. Also, if the baby cannot feed effectively, the balance between milk production and milk transfer is compromised. Ineffective emptying of the breast can lead to milk stasis and the sending of the erroneous message for her breasts to slow down production. As production is slowed, milk transfer is further compromised and supplementation may be utilized to provide necessary nourishment to the infant.

Caregivers must be fully aware of the potential effects that labour interventions can have on breastfeeding success. Extra physical and emotional support as well as anticipatory guidance is necessary to assist mom and baby to get off to the best start possible.

**APPENDIX E
CONTRAINDICATIONS TO BREASTFEEDING**

MATERNAL CONTRAINDICATIONS

1. Infection:

1.1 HIV Positive Status

1.2 Herpetic Lesions on the Breast

Mothers with active lesions **on the breast** should **not** breastfeed. Lesions on other areas should be covered. Breastfeeding is permissible. *Scrupulous hand washing is necessary.

1.3 Chicken Pox

If mother develops chicken pox in the days prior to delivery, and baby is born **without** the disease, mother and infant should be isolated separately until mother is no longer contagious, regardless of feeding method. (Mother considered not being contagious when all existing lesions have crusted and there have been no new lesions in the past 72 hours, usually 6-10 days from the onset of the rash.) Varicella zoster immunoglobulin (VZIG) should be given to the infant. If breast is free of lesions, expressed breast milk can be given as soon as infant has received VZIG.

If baby has lesions, isolate mother and baby together. Breastfeeding is permissible.

1.4 Active TB

Respiratory contact is contraindicated regardless of feeding method, when mother in contagious state. Expressed milk is safe for baby (tubercle bacillus is **not** passed through milk) provided there are no active TB breast lesions. If an active TB lesion exists, pumped milk must be discarded until lesion is fully healed. After mother has received effective anti-TB therapy, has shown clinical improvement, and has a negative sputum smear (usually takes about 2 weeks), direct breastfeeding may begin.

1.5 Invasive Group A Streptococcus Infection

Breastfeeding should continue **after** a temporary suspension during the first 24 hours of maternal therapy. Prophylactic or empiric therapy may be indicated for the infant.

NOTE: Breastfeeding is **not contraindicated** for mothers with **Hepatitis A, B, or C.**

2. Medications:

2.1 Breastfeeding is **contraindicated for mothers taking medications listed below:**

Amiodarone	Heroin
Amphetamines	Isotretinoin
Bromocriptine	Lithium
Cocaine	Marijuana
Cyclophosphamide	Methotrexate
Cyclosporine	Phencyclidine (PCP)
Doxorubicin	Phenindione
Ergotamine	

Consult reference material (Hale, 2004) for all medications not listed.

2.2 Radioactive Agents

Breastfeeding will need to be interrupted until milk is clear. Consult Hale (2004): Clinical Therapy in Breastfeeding Patients for time period during which mother's milk must not be used.

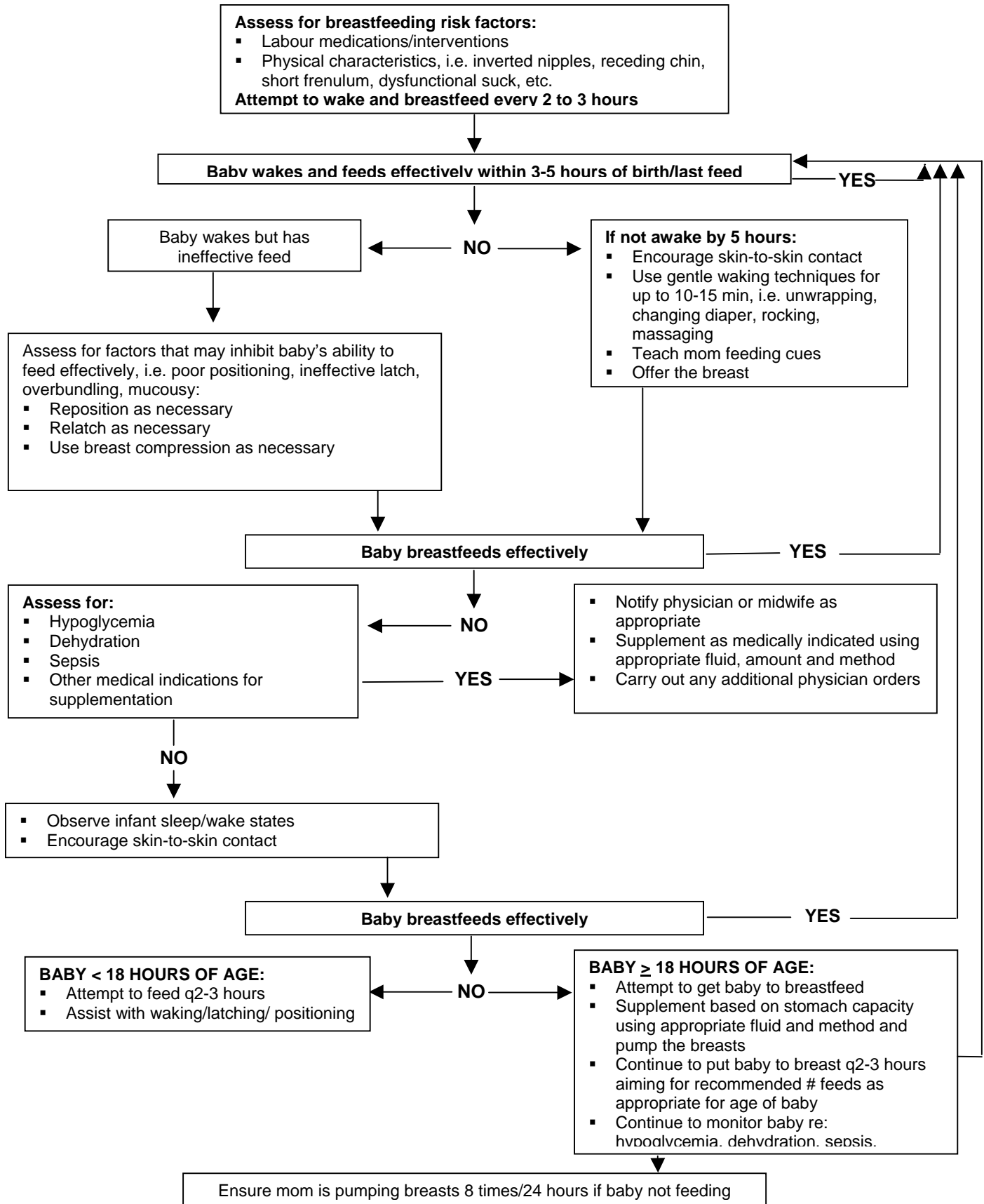
2.3 Radio Opaque Agents

Breastfeeding may, in most instances, continue when mother has received radio-opaque contrast agents. Consult Hale (2004): Clinical Therapy in Breastfeeding Patients for current recommendations.

NEONATAL CONTRAINDICATIONS

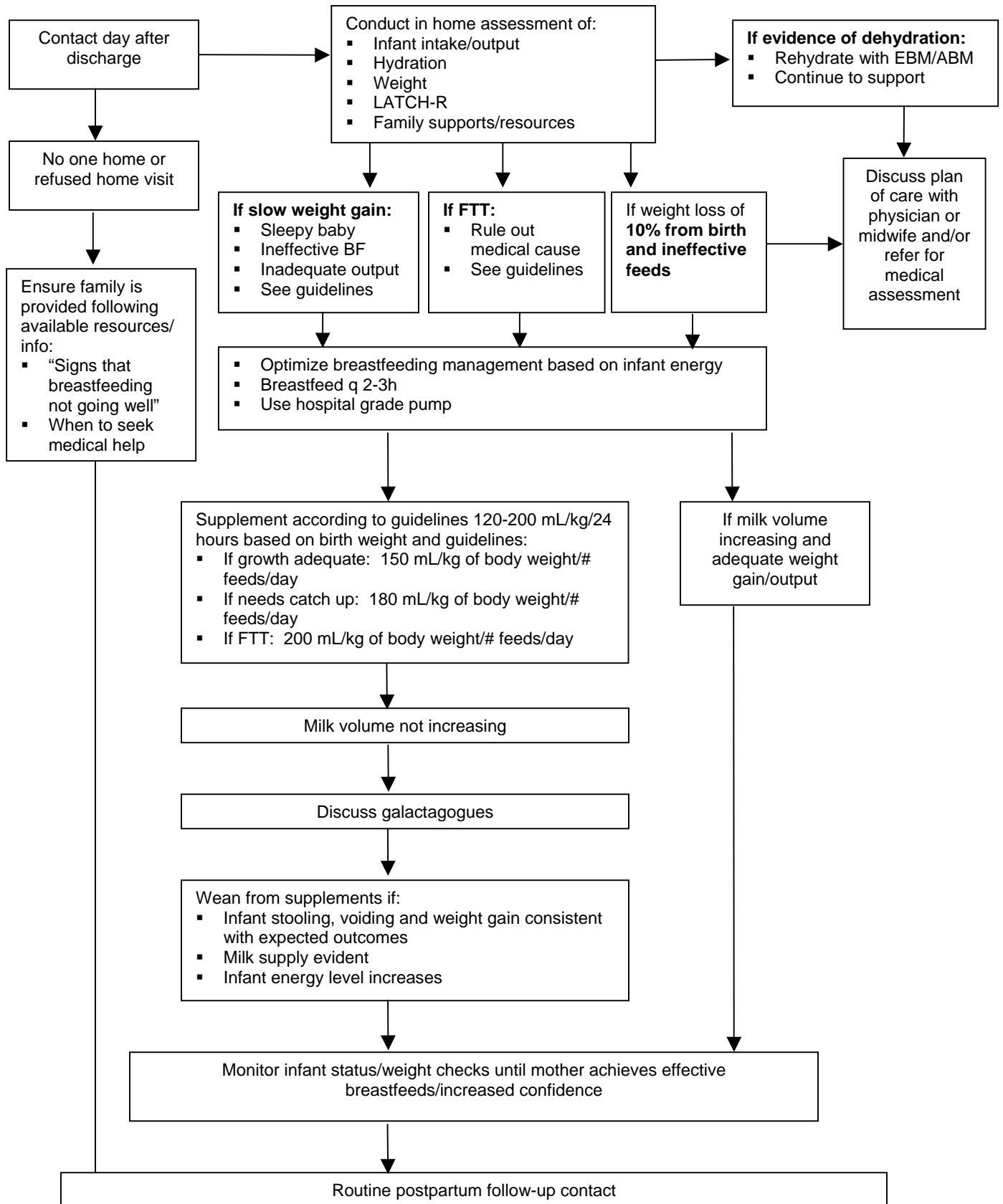
1. Galactosemia.
2. Phenylketonuria: Partial breastfeeding only, in combination with phenylalanine free milk (Lofenalac).

**APPENDIX F
DECISION TREE: BREASTFEEDING INITIATION FOR THE HEALTHY TERM INFANT**



APPENDIX G

DECISION TREE: BREASTFEEDING ASSESSMENT AND SUPPORT IN THE COMMUNITY



**APPENDIX H
BREASTFEEDING SUPPORT: ALL PURPOSE NIPPLE CREAM**

POLICY:

Mothers may be offered all purpose nipple cream if they have sore cracked nipples.

An International Board Certified Lactation Consultant (IBCLC) in the following positions may provide a mother with a prescription for this cream following a full assessment of breastfeeding and latch:

- Brandon RHA Lactation Consultant
- Community Post Partum Program
- Maternal-Child Program Educator
- SRMC Clinical Resource Nurse

The prescription will be signed by Dr. J. Sutter, Department Head, Obstetrics, Brandon Regional Health Centre.

To facilitate the process of obtaining a prescription for All Purpose Nipple Cream. All Purpose Nipple Cream contains:

- Mupirocin 2% ointment 7.5 g
- Betamethasone 0.1% ointment 7.5 g
- Miconazole 4% cream 15 g

All Purpose Nipple Cream can help many causes of nipple pain including:

- Candida
- Dermatologic conditions
- Infections of the nipple with bacteria

IMPLEMENTATION:

1. The Lactation Consultant will identify mothers requiring All Purpose Nipple Cream.
2. Presigned prescriptions for All Purpose Nipple Cream will be available from the NICU cupboard. The prescriptions will be locked for safety.
3. Mothers will be provided with verbal and written information about All Purpose Nipple Cream and its usage.

How to use:

1. Apply ointment sparingly, rubbing in well after each feeding.
2. Use until all symptoms/soreness have passed.
3. Continue to use for another week and then gradually decrease the number of times used each day until no longer needed.

DOCUMENTATION:

1. Document on the Lactation Consultant Referral Form or Post Partum Care Map.

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