

SUBJECT/TITLE: BREASTFEEDING INFANT – SUPPLEMENTATION for the Well Infant	NUMBER 1-B-3	PAGE 1 of 6
AUTHORIZATION: Regional Lactation Consultants (2006 Mar 15) POPA: Postpartum Managers and Instructors (2006 March 14) Normal Newborn Care Committee (2006 April 21) Regional Infant Feeding Steering Committee (2006 May3) Women's Health Managers (2006 May 9)	DATE ESTABLISHED June 1, 1999	DATE REVISED May 23, 2006

PURPOSE

1. To identify the medical indications for supplemental feedings.
2. To provide guidelines for appropriate supplemental feedings.
3. To promote practices that will facilitate continued lactation and / or breastfeeding.

POLICY

1. Calgary Health Region supports the 2004 Health Canada, Canadian Pediatric Society, UNICEF and WHO recommendation:
 - o "Exclusive breastfeeding is recommended for the first six months of life for healthy term newborns as breast milk is the best food for optimal growth. Newborns should be introduced to nutrient-rich solid foods with particular attention to iron at six months with continued breastfeeding for up to two years and beyond." (Health Canada 2004)
2. Supplemental feeding of a breastfeeding infant is appropriate only in the following instances:
 - o Medically indicated¹
 - o Requested by mother, after teaching and referring to "From Here to Maternity".

The following are medical indications for use of commercially prepared infant formula when improved effectiveness of breastfeeding has not resolved the indicator and when expressed breastmilk is not available.

Medical Indications for Supplementation¹
Infant Indications:
• Hypoglycemia risk factors; refer to Policy 4-G-1
• Weight loss > 10%, have not regained birth weight by 2-3 weeks or weight gain is inadequate.
• Signs of dehydration
• Inadequate milk transfer
• Infant with an inborn error of metabolism and physician's orders for a special diet
• Hyperbilirubinemia

Maternal Indications:
• Delayed or absence of lactogenesis II (day 5 or later)
• Intolerable pain during feedings
• Unavailability of mother due to severe illness
• Primary glandular insufficiency (primary lactation failure) as evidenced by poor breast growth during pregnancy and minimal indications of lactogenesis, breast pathology or prior breast surgery resulting in poor milk transfer
• Mother on medications which are contraindicated when breastfeeding

¹ Adapted from the World Health Organization, the Breastfeeding Committee for Canada 's and the Academy of Breastfeeding Medicine's Protocol

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POINTS OF EMPHASIS

1. Low volume colostrum feedings in the first 48 hours are appropriate for the size of the newborn's stomach and are sufficient to prevent hypoglycemia in the healthy term appropriate for gestational age newborn.
2. Most breastfed infant will not require supplementary feedings.
3. Manual expression is the preferred method over electric pumping in the 1st 24 hours.
4. Inappropriate supplementation interferes with the establishment of breastfeeding.
5. Assessing the benefit versus the risk to the well being of the infant is included when determining the need for commercially prepared infant formula.
6. When parent(s) requests supplemental feedings:
 - Explore reasons for requesting supplementation.
 - Provide evidence based information.
 - Support the mother's informed decision.
 - Reinforce that breastfeeding support is available at any time.
 - Teach appropriate manual expression and/or pumping to prevent engorgement and to protect breast milk supply.
7. The following are not rationale for supplementing an infant able to effectively breastfeed:
 - To quiet a fussing newborn/infant when mother is available
 - To let the mother sleep or rest
 - To prevent weight loss/dehydration
 - To prevent hyperbilirubinemia in well infants without major risk factors
 - To prevent hypoglycemia in well full term infants without identified risks factors
 - To prevent sore nipples
 - To teach an infant to take a bottle "for later"
8. Informed Decision Making: Maternal/ infant health care professionals are responsible for providing evidence-based information to enable parents to make informed decisions regarding appropriate use of commercially prepared infant formula.

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PROCEDURE

Note: Throughout the Supplementation time, continue to encourage and enhance mother-infant closeness and encourage breastfeeding by KangarooMotherCare™

Once supplementation is determined to be appropriate

1. Appropriate Supplement For an Infant
 - Expressed breastmilk
 - Donor pasteurized breastmilk when provided by the family. (available with medical referral from the Vancouver Children's Hospital and Women's Health Centre Human Milk Bank)
 - Commercially prepared infant formula

2. Amounts for Supplementation of an Infant are Dependant On:
 - Assessment of the effectiveness of breastfeeding (refer to policy 4-F-1) Infant Feeding Assessment)
 - The age and weight of the newborn
 - Current growth and needs
 - Reason for supplementation
 - Newborn readiness and satiation cues
 - 2.1.1 In the first 48 hours if mother expresses colostrum within the ranges in Table 1 and the newborn is assessed to have appropriate hydration, vital signs, and output, then newborn intake is adequate.
 - 2.1.2 In the presence of medical indicators or a family makes an informed decision for the use of commercially prepared infant formula, Table 1 provides guidelines for appropriate volumes.

Table 1

Newborn Age	colostrum	OR commercially prepared infant formula
First 24 hours	2-10 mL colostrum/feed for a range of 10-120 mL/24 hours (average total intake of 37mL per 24 hour)	30mL/kg/24 hrs
24-48 hours	5-15ml of colostrum/feed for an average total intake of 60-120 mL/24 h	60mL/kg/24 hrs

- 2.1.3 After 48 hours the minimum volumes of expressed breastmilk and/or commercially prepared infant formula feedings if there is no intake at the breast are:
 - 48-72 hrs: 90 ml/kg total in 24 hrs.
 - 72-96 hrs: 120 ml/kg total in 24 hrs
 - 96-120 hrs: 150-180 ml/kg/24 hrs
 - Over 120 hrs: 180 ml/kg/24 hrs

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2.1.4 If supplements are required after partial feeding at the breast appropriate volume of supplement is determined by infant's satiation cues, frequency of feeding, output and weight.

3. Methods for Supplementing

- Decision making with the family is a priority – consider effectiveness and practicality of the method
- Cup, spoon or small syringe feedings are recommended initially
- Bottles: Parents informed decision and /or when larger volumes
Paced bottle feeding will be used to reduce compensatory tongue movements
- Other supplementation methods: finger feeding, tube and syringe at breast, and supplemental nursing system (with the guidance of a lactation consultant).

4. Documentation of Supplementation

- Mother's informed verbal consent obtained
- The reason for supplementation
- The type of supplement
- Amount taken, time and method of supplementation
- Parent's competence and confidence in feeding newborn
- Method and frequency of expressing breastmilk
- Written Temporary Feeding Plan is provided to parents.

5. Follow-up Plan

- 5.1 Follow-up is required by the appropriate health care provider within 24 hours of implementing a temporary feeding plan, either in acute care or in the community.
- 5.2 The follow-up contact is to include:
- Assessment of breastfeeding effectiveness and/or appropriate intake for age,
 - Assessment of mother's milk supply and progress with pumping,
 - Parent education,
 - Appropriate changes to plan,
 - Referral to further breastfeeding support services if necessary.

6. Reducing/Eliminating Supplements

- 6.1 Individualize the feeding plan based on the initial medical indication/ decision for supplementation, the current breastfeeding assessment, newborn's weight and age and mother's milk supply.
- 6.2 The reducing/eliminating of the supplement plan is to include education, support and follow-up of newborn's growth.

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CROSS REFERENCES

Subject/Title

Number Manual

- [Admission \(Newborn\) and Physician Notification of Birth](#)
- [Admission to Postpartum Unit and Care of Mother Following Vaginal Birth](#)
- [Admission to Postpartum Unit and Care of Mother Following Cesarean Birth](#)
- [Glucose \(Blood\) Monitoring and Feeding of the Term Newborn Infant at Risk for Hypoglycemia](#)
- [Breastfeeding Support](#)
- [Daily Care and Assessment of the Newborn](#)
- [Discharge: Postpartum Mothers and Newborns From Hospital](#)
- [Infant Feeding Assessment policy and guidelines](#)
- [Kangaroo Care](#)
- Accommodation of Well Individual Infant
- From Here Through Maternity, (2006)

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