MaineGeneral Medical Center
Maternity & Pediatrics

Hospital Guidelines for the use of Supplementary Feedings in the Healthy Full-Term Breastfed Infant

I. PURPOSE

A. Supplementary Feedings are those provided in the place of breastfeeding and/or in addition to breastfeeding. This may include expressed mother's milk or PDHM (Pasteurized Donor Human Milk)

II. POLICY (Refer to Hospital Policy for PDHM)

A. Supplementation may be medically indicated for some infants. However, unnecessary supplementation may also have the following effects on breastfeeding outcome:
   1. May prevent the establishment of adequate milk supply.
   2. May result in delayed lactogenesis.
   3. May contribute to maternal engorgement.
   4. May alter the infant bowel flora with formula use
   5. May sensitize the infant to allergens with formula use
   6. May interfere with maternal-infant bonding.

B. To promote a successful latch and decrease the incidence for supplementation in the healthy, full term neonate, nursing should encourage parents to hold the baby skin-to-skin and create and maintain a quiet environment. If there is no latch for greater than 6 hours, instruct the mother in use of a breast pump, and teach hand expression. Continue pumping or hand expression 10-12 times per 24 hours until a successful latch is achieved.

C. Supplementation may be given to any infant when clinical evidence exists to support it. Whenever supplementation is indicated or requested, breast pumping and/or hand expression of breast milk will be attempted first, before supplementation is given. (Also see Collection, Storage & Transportation of Human Breast Milk Procedure).

D. When supplementation is ordered by the practitioner, the preferred choice for delivery of feeding, should be one of the following: syringe, cup, supplemental feeding device, dropper or finger feeding. Bottle feeding should be avoided to prevent nipple confusion/preference. The advantages and disadvantages of these methods should be first discussed with the mother.

E. Supplementation of term, healthy breastfed infants with formula is more often than not, contraindicated. Healthy newborns do not need supplemental feedings for poor feeding in the first 24 hours.

F. Supplemental feedings require a doctor's order. Whether medically indicated or not, informed consent for PDHM or formula, must be documented by the nursing and/or medical staff. The mother will be counseled regarding her individual concerns/reasons before supplementation is initiated, including an explanation regarding how it can affect breastfeeding (A. General Principles). All supplemental feedings will be documented: including content, volume, method and medical indication or reason, and informed consent.

G. Indications for Supplementation in term, healthy breastfed infants include: (Refer to Hospital Policy for PDHM)

Infant Indications:

1. Hypoglycemia per hospital/physician protocol.
2. Separation of mother and infant:
   a. Maternal illness resulting in separation of infant and mother (e.g. psychosis, Eclampsia, sepsis or shock).
   b. Infant not at same hospital.
   c. Infant with inborn metabolic disorder (ex. galactosemia)
3. Infant who is unable to feed at breast (ex. congenital malformation or illness).
4. Clinical and laboratory evidence of significant dehydration (high sodium, poor feeding, lethargy, etc) that is not imporoved after skilled assessment and proper management of breastfeeding.
5. Weight loss of ≥ 8-10 % accompanied by delayed lactogensis (day 5 or later) or weight loss greater than the 75th percentile for age.
6. Delayed bowel movement or continued meconium on day 5.
7. Insufficient intake despite an adequate milk supply.
8. Hyperbilirubinemia
   a. Suboptimal intake jaundice of the newborn associated with poor breast milk intake despite appropriate intervention
   b. Breastmilk jaundice when levels reach 20-25 mg/dL in an otherwise thriving infant and where diagnostic and/or therapeutic interruptions of breastfeeding may be helpful

Maternal Indications:

1. Delayed lactogenesis (day 3-5 or later) and inadequate intake by infant
   a. Retained placenta (lactogenesis probably will occur after placental fragments are removed).
   b. Sheehan syndrome (postpartum hemorrhage followed by absence of lactogenesis).
2. Severe maternal illness that prevents the mother from caring for her infant
3. Intolerable pain during feedings unrelieved by interventions.
4. 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 production.
5. Maternal medications: medications which are considered unsafe to use while breastfeeding according to Tom Hale's book: "Medications and Mothers' Milk"(2021). Available on line through Maine General's library.
6. Breast abscess – breastfeeding should continue on the unaffected breast, and feeding from the affected breast can resume once treatment has started
7. Adoption or foster home placement of the newborn
8. Intestinal lactase deficiency
9. In the mother is positive for Hepatitis B or C and has cracked or bleeding nipples

- CONTRAINDICATIONS TO BREASTFEEDING:
  - If the mother is taking medications or having diagnostic tests that are essential for her well-being, but may be harmful to her infant (Refer to Medications and Mother's Milk by Thomas Hale) NOTE: This may be accessed on the hospital library web site.
  - If the mother is a known user of cocaine, heroin or other street drugs.

- If the mother has active tuberculosis. Mothers should be counseled to express breastmilk to maintain production while separated from infant. Expressed breastmilk should be fed to infant by another care provider. (Mothers may resume breastfeeding after she has received adequate drug therapy and is no longer considered to be infectious).
- If the mother is HIV positive, human T-cell lymphoprophic virus types I or II positive, or untreated brucellosis she should not breastfeed or provide expressed breastmilk to her infant
- If there are active herpes lesions on mother's breasts, do not breastfeed on the affected breast(s). To protect milk supply, mothers will be counseled to express and discard her milk on the affected breast until all lesions have healed.
- If the infant has galactosemia.
- If the mother has varicella that has determined to be infectious to the infant. Mothers should be counseled to express breastmilk to maintain production while separated from infant. Expressed breastmilk should be fed to infant by another care provider.
- If the mother is identified with primary cytomegalovirus infections, she should not breastfeed during the acute phase of the infection.
- If the infant has maple syrup urine disease.
- If the infant has phenylketonuria.

H. Choice of Supplementation: Expressed breast milk is the first choice of supplemental feeding. If the mother's own colostrum does not meet the infant's feeding requirements other supplements may need to be offered. The provider must weigh the potential risks and benefits of other supplemental fluids and will order what is deemed as an appropriate breast milk substitute.

I. All infants must be formally evaluated for position, latch, and milk transfer prior to the provision of supplemental feedings by a LC or nurse who has previously completed lactation competencies under the supervision of the lactation consultant. Most babies who remain with their mothers and breastfeed adequately lose less than 7% of their birth weight. Weight loss in excess of 10% may be an indication of inadequate milk transfer or low milk production. While weight loss in the range of 8-10% may be within normal limits, if all else is going well and the physical exam is normal, it is an indication for careful assessment and possible breastfeeding assistance.

J. If mother-infant separation is unavoidable, establishment of mother's milk supply is paramount. Mothers will be given instruction and encouragement to hand express and/or breast pump every 2-3 hours or 10-12 times in 24 hours to stimulate milk production and provide expressed breast milk to infant.

K. The infant's physician should be notified if the infant exhibits other signs of illness in addition to poor feeding, the mother-infant dyad meets the clinical criteria outlined in this policy, and/or if the infant weight loss is greater than 10%.

L. When supplementation is warranted, consider the following guidelines to determine the volume of breast milk/supplement the infant will require:

Average Amount of Intake for the Breastfed Neonate	
TIME (Hours)	Intake (mL/feed)
First 24	2-10
24-48	5-15
48-72	15-30
72-96	30-60

Academy of Breastfeeding Medicine, ABM Protocols, ABM Clinical Protocol Number 3- Supplementary Feedings in the Healthy Term Breastfed Neonate, Revised 2017. http://bfmed.org
World Health Organization, "Acceptable Medical Reasons for use of Breast-milk Substitutes," 2009.

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