



OKLAHOMA  
BREASTFEEDING  
RESOURCE CENTER

# STEP 6: EXCLUSIVE BREASTFEEDING – THE WHEN, WHAT AND HOW OF MEDICALLY INDICATED SUPPLEMENTATION

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- ▶ Mannel also serves as Executive Director of the nonprofit Oklahoma Mothers' Milk Bank



DISCLOSURE

# CONGRATULATIONS TO CHICKASAW NATION MEDICAL CENTER!!! OKLAHOMA'S 7<sup>TH</sup> BABY-FRIENDLY HOSPITAL



## The Chickasaw Nation Medical Center

A place where Native American traditional wisdom meets evidence-based practices.  
This facility upholds the World Health Organization/UNICEF "Ten Steps to Successful Breastfeeding" published in a joint statement entitled: "Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services"


### Ten Steps to Successful Breastfeeding

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

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in the skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within one hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants.
6. Give infants no food or drink other than breastmilk, unless medically indicated.
7. Practice rooming-in -- mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no pacifiers or artificial nipples to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center.

The Ten Steps to Successful Breastfeeding form the basis of the Baby-Friendly Hospital Initiative, a worldwide breastfeeding quality improvement project created by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF).

Baby-Friendly hospitals and birth centers also uphold the International Code of Marketing of Breast Milk Substitutes by offering parents support, education, and educational materials that promote the use of human milk rather than other infant food or drinks, and by refusing to accept or distribute free or subsidized supplies of breastmilk substitutes, nipples, and other feeding devices.



*the*  
**Chickasaw**  
Nation  
Department of Health



# CALL TO ACTION TO SUPPORT BREASTFEEDING, US SURGEON GENERAL, JANUARY 2011



*“One of the most highly effective preventive measures a mother can take to protect the health of her infant and herself is to breastfeed.”*

*Action 7: Ensure that maternity care practices throughout the U.S. are fully supportive of breastfeeding.*

*Action 9, 10, 11: Education, training, basic breastfeeding support, access to IBCLCs*

*Action 12: Identify and address obstacles to greater availability of safe banked donor milk for fragile infants.*

## The Surgeon General's Call to Action to Support Breastfeeding


2011



U.S. Department of Health and Human Services

## MEDICAL INDICATIONS FOR SUPPLEMENTATION

BFHI Step 6: Give infants no food or drink other than breast-milk, unless medically indicated.

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# RESOURCES ON MEDICAL INDICATIONS FOR SUPPLEMENTATION OF A BREASTFED BABY

- **American Academy of Family Physicians**
  - **American Academy of Pediatrics**
  - **Baby Friendly Hospital Initiative**
  - **The Joint Commission**
  - **Academy of Breastfeeding Medicine**
- 
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# AAFP: HOSPITAL USE OF INFANT FORMULA IN BREASTFEEDING INFANTS



*"RESPECT THE DECISION OF THE MOTHER WHO CHOOSES TO BREASTFEED EXCLUSIVELY BY NOT OFFERING FORMULA, WATER OR PACIFIERS TO AN INFANT UNLESS THERE IS A SPECIFIC PHYSICIAN ORDER."*

Main Breastfeeding Policy: Supplementation may be done with expressed mother's milk, pasteurized human milk from a donor, or infant formula.



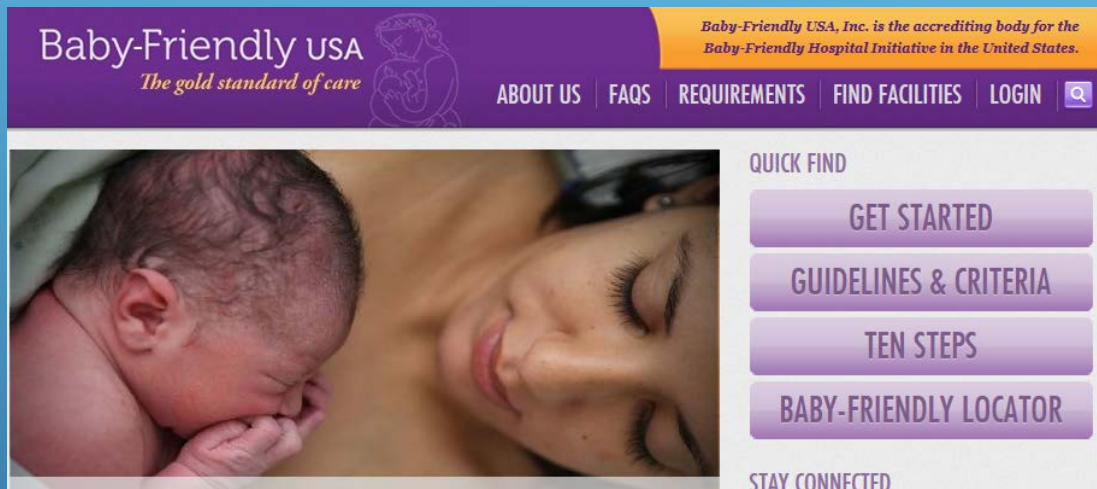
# AAP POLICY STATEMENT: BREASTFEEDING AND THE USE OF HUMAN MILK, 2012

- Ensure 8 to 12 feedings at the breast every 24 h
- Ensure formal evaluation and documentation of breastfeeding by trained caregivers (including position, latch, milk transfer, examination) at least for each nursing shift
- Give no supplements (water, glucose water, commercial infant formula, or other fluids) to breastfeeding newborn infants unless medically indicated using standard evidence-based guidelines for the management of hyperbilirubinemia and hypoglycemia
- Avoid routine pacifier use in the postpartum period

# THE JOINT COMMISSION PERINATAL CARE CORE MEASURE: EXCLUSIVE BREAST MILK FEEDING



- Exclusive breast milk feeding is defined as a newborn receiving only breast milk and no other liquids or solids except for drops or syrups consisting of vitamins, minerals, or medicines.
- Use of donor breast milk is allowable



## STEP 6

- ▶ Exclusive breast milk feeding shall be the feeding method expected from birth to discharge.
- ▶ A year-by-year reduction in non-medically indicated supplementation is expected in Baby-Friendly designated facilities.

...decisions to give breastfeeding infants food or drink other than breast milk should be for acceptable medical reasons and require a written order documenting when and why the supplement is indicated. (See Appendix B.)

6.1.6 Criterion for evaluation: **Observations in the postpartum unit/rooms and any well-baby observation areas show that at least 80% of breastfed infants are being fed only breast milk, or documentation indicates that there are acceptable medical reasons or fully informed choices for formula feeding.**





# APPENDIX B

## Acceptable medical reasons for use of breast milk substitutes:

- The facility should **develop a protocol/procedure** that describes the current, evidence-based medical indications for supplementation.
- Staff and care providers should be **trained to utilize the protocol/procedure** as guidance in the case of supplementation.
- A facility may utilize the recommendations of national and international authorities (WHO, CDC, ABM)
- The facility is responsible for ensuring that its medical indications for supplementation are **supported by current evidence**

ACADEMY OF BREASTFEEDING MEDICINE CLINICAL PROTOCOL #3:

*SUPPLEMENTARY FEEDINGS IN THE HEALTHY TERM  
BREASTFED NEONATE, REVISED 2017*

NOTE: ABM Clinical Protocols are now readily available through the National Guideline Clearinghouse website.

Visit [www.guideline.gov](http://www.guideline.gov)

Visit ABM website: [www.bfmed.org](http://www.bfmed.org)



# Academy of Breastfeeding Medicine

A worldwide organization of physicians dedicated to the promotion,  
protection and support of breastfeeding and human lactation

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## SAVE THE DATE



### ACADEMY OF BREASTFEEDING MEDICINE

The 22<sup>nd</sup> Annual International Meeting  
Atlanta, November 9–12, 2017

#### 12<sup>th</sup> Annual Founders' Lecture

The Effects of Marijuana on the Fetus  
and Breastfeeding Infants

**Thomas W. Hale, PhD**

Professor of Pediatrics at  
Texas Tech University School of Medicine  
Executive Director of the Infant Risk Center  
and Associate Dean of Research

#### Abstract Submissions

March 1–May 27, 2017

**Registration to open late May**

**Watch for details**



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## Statements

[ABM Position Statement on Breastfeeding](#)

[ABM Physician Education Statement](#)

[ABM Position Statement on Mothers in Workplace Employment or Educational Settings](#)

- [German](#)

## Clinical Protocols

These protocols serve only as guidelines for the care of breastfeeding mothers and infants and do not delineate an exclusive course of treatment or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient.

If you would like to use an *ABM* protocol, please fill out our request [form](#).

*Translated protocols that appear here [on the ABM website] have undergone a rigorous two-way translation to provide complete accuracy. Please be aware that translations that appear elsewhere, such as on other websites, are not "official" ABM translations and ABM cannot assure their accuracy.*

For information on how *ABM* Protocols are created click below:

[Instructions for Authors](#)

[Procedure for Protocol Development](#)

[Quality of Evidence](#)

For corrections to Protocols 3, 7 & 8, click below:

### 3. Supplementation

English

[PDF](#)

[HTML](#)

Spanish

[PDF](#)

Japanese

[PDF](#)

Korean

[PDF](#)

Chinese

[PDF](#)

### 4. Mastitis

English

[PDF](#)

[HTML](#)



- ▶ Exclusive breastfeeding: *Feeding only breastmilk (at the breast or own mothers' expressed breast milk), no food or water except vitamins, minerals, and medications.*
- ▶ Term infant: *In this protocol "term infant" also includes early-term infants (gestational age 37–38 6/7 weeks).*

## DEFINITIONS

**Supplementary feedings:** *Additional fluids provided to a breastfed infant **before 6 months** (recommended duration of exclusive breastfeeding). These fluids may include donor human milk, infant formula, or other breast milk substitutes (e.g., glucose water).*

**Complementary feedings:** *Solid or semisolid foods provided to an infant in addition to breastfeeding when breast milk alone is no longer sufficient to meet nutritional needs.*

## DEFINITIONS

# ABM: SUPPLEMENTATION IS NOT INDICATED

(EVALUATION AND BREASTFEEDING MANAGEMENT MAY BE NEEDED)

- Sleepy infant, <8 feedings in 1<sup>st</sup> 24-48 hrs, <7% weight loss, no s/s illness
- Healthy, term, AGA infant, bilirubin <18 mg/dl after 72 hrs, feeding/stooling/weight loss WNL
- Infant fussy at night
- Infant constantly feeding for several hours
- Tired/sleeping mother



# ABM: PREVENT THE NEED FOR SUPPLEMENTATION

- Prenatal education
- Train staff to assist and assess breastfeeding
- Educate all on risks of unnecessary supplementation
- Skin-to-skin contact immediately after birth
- Room-in 24 hours/day
- Feed expressed breast milk if separated or milk transfer inadequate





In a U.S. Baby-Friendly designated hospital with optimal support of infant feeding, the **mean weight loss of exclusively breastfed infants was 5.5%**; notably, greater than 20% of healthy breastfed infants lost more than 7% of their birthweight.

A study of over 160,000 healthy breastfed infants... almost 5% of vaginally born infants and >10% of those born by cesarean section had lost >10% of their birth weight by 48 hours after birth.

excess newborn weight loss is correlated with positive maternal intrapartum fluid balance (received through intravenous fluids) and may not be directly indicative of breastfeeding success or failure

Newborn Physiology

*Infants should be followed closely to identify those who lie outside the predicted pattern, but the majority of those breastfed infants will not require supplementation.*

**Monitor!  
Monitor!  
Monitor!**

Newborn Physiology



# ABM: POSSIBLE INDICATIONS FOR SUPPLEMENTATION IN TERM, HEALTHY INFANTS

- **INFANT:**

## Asymptomatic hypoglycemia:

- documented by lab glucose
- unresponsive to appropriate frequent breastfeeding
- 40% dextrose gel to infant's cheek is effective
- Breastfeeding should continue during IV glucose therapy

# ABM: POSSIBLE INDICATIONS FOR SUPPLEMENTATION IN TERM, HEALTHY INFANTS

- **INFANT:**

Signs or symptoms that may indicate inadequate milk intake:

- Clinical or laboratory evidence of **significant dehydration** (e.g., high sodium, poor feeding, lethargy, etc.) that is not improved after skilled assessment and proper management of breastfeeding
- Weight loss of >8–10% (day 5 [120 hours] or later), or weight loss greater than 75th percentile for age.
- Delayed bowel movements, fewer than four stools on day 4 of life, or continued meconium stools on day 5.



# ABM: POSSIBLE INDICATIONS FOR SUPPLEMENTATION IN TERM, HEALTHY INFANTS

- **INFANT:**

## Hyperbilirubinemia:


- **Suboptimal intake jaundice** of the newborn associated with poor breast milk intake despite appropriate intervention. This characteristically begins at 2–5 days and is marked by ongoing weight loss, limited stooling and voiding with uric acid crystals.
- **Breast milk jaundice** when levels reach 20–25 mg/dL in an otherwise thriving infant and where a diagnostic and/or therapeutic interruption of breastfeeding may be under consideration.

# ABM: POSSIBLE INDICATIONS FOR SUPPLEMENTATION IN TERM, HEALTHY INFANTS

- **MOTHER:**

- Delayed secretory activation (day 3-5 or later) AND inadequate intake
- Primary glandular insufficiency
- Breast pathology or prior breast surgery resulting in poor milk production.
- Temporary cessation of breastfeeding due to certain medications
- Intolerable pain during feedings unrelieved by interventions

## ABM: IDENTIFY EARLY INDICATORS

- Notify infant's medical provider if mother or infant meets any criteria for supplementation
  - Formally evaluate position, latch and milk transfer before the provision of supplemental feedings
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# ABM: DETERMINE WHETHER SUPPLEMENTATION IS REQUIRED AND SUPPLEMENT WITH CARE

- Decisions made on a case-by-case basis
- Hospitals should strongly consider formulating and instituting policies to:
  - Require a medical provider's order when medically indicated
  - informed consent of the mother when supplements are not medically indicated
- All supplemental feedings should be documented, including the content, volume, method, and medical indication or reason.

# ABM: DETERMINE WHETHER SUPPLEMENTATION IS REQUIRED AND SUPPLEMENT WITH CARE

- **Primary goals are to:**
  - feed the infant
  - optimize the maternal milk supply
  - while determining the cause of low milk supply, poor feeding, or inadequate milk transfer.
- **Supplementation should be performed in ways that help preserve breastfeeding such as:**
  - limiting the volume to what is necessary for the normal newborn physiology
  - avoiding teats/artificial nipples
  - stimulating the mother's breasts with hand expression or pumping
  - the infant to continue to practice at the breast.



# ABM: DETERMINE WHETHER SUPPLEMENTATION IS REQUIRED AND SUPPLEMENT WITH CARE

- Criteria for stopping supplementation should be considered
  - from the time of the decision to supplement and
  - should be discussed with the parents.
- *Stopping supplementation can be a source of anxiety for parents and providers.*

# AVERAGE REPORTED INTAKES OF COLOSTRUM BY HEALTHY BREASTFED INFANTS

Infants fed infant formula ad lib commonly have higher intakes than breastfed infants.

*As there is no definitive research available the amount of supplement given should reflect the normal amounts of colostrum available, the size of the infant's stomach (which changes over time), and the age and size of the infant.*

Feeding volumes should be by infant satiation cues.

1 <sup>st</sup> 24hrs	2-10mL/feed
24-48hrs	5-15mL/feed
48-72hrs	15-30mL/feed
72-96hrs	30-60mL/feed

# ABM: METHODS OF PROVIDING SUPPLEMENTARY FEEDINGS

- When selecting an alternative feeding method, clinicians should consider several criteria:
- a. cost and availability
- b. ease of use and cleaning
- c. stress to the infant
- d. whether adequate milk volume can be fed in 20–30 minutes
- e. whether anticipated use is short- or long-term
- f. maternal preference
- g. expertise of healthcare staff
- h. whether the method enhances development of breastfeeding skills.

# ABM: METHODS OF PROVIDING SUPPLEMENTARY FEEDINGS

- An optimal supplemental feeding device has not yet been identified, and may vary from one infant to another.
- No method is without potential risk or benefit.
- Cup feeding has been shown safe for both term and preterm infants and may help preserve breastfeeding duration among those who require multiple supplemental feedings



# Appendix

TABLE A1. INAPPROPRIATE REASONS FOR SUPPLEMENTATION IN THE CONTEXT OF A HEALTHY NEWBORN AND MOTHER, RESPONSES, AND RISKS

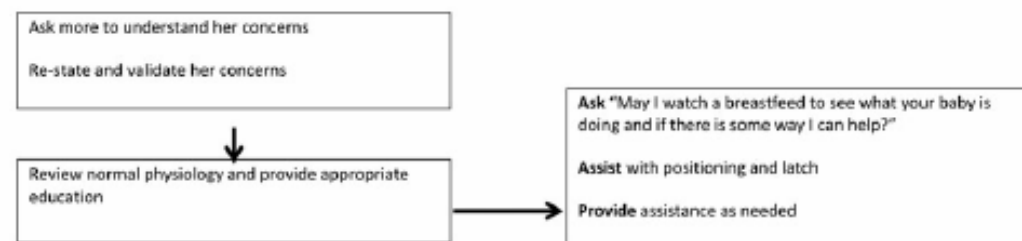
<i>Concerns/inappropriate reasons</i>	<i>Responses</i>	<i>Risks of supplementation</i>
There is “no milk,” <sup>5</sup> belief that colostrum is insufficient until the milk “comes in”	Mother and family should be educated about the benefits of colostrum including dispelling myths about the yellow color. Small amounts of colostrum are normal, physiologic, and appropriate for the term, healthy newborn.	Can alter infant bowel flora and microbiome. <sup>86,87</sup> Potentially sensitizes the infant to foreign proteins. <sup>88,89</sup> Increases the risk of diarrhea and other infections, especially where hygiene is poor. <sup>3</sup> Potentially disrupts the “supply-demand” cycle, leading to inadequate milk supply and long-term supplementation.
Supplementation is needed to prevent weight loss and dehydration in the postnatal period <sup>5</sup>	A certain amount of weight loss is normal in the first week of life and is due to diuresis of extracellular fluid and passage of meconium.	Supplementation in the first few days may interfere with the normal frequency of breastfeeding. Supplementation with water or glucose water, increases the risk of jaundice, <sup>90</sup> excessive weight loss, <sup>91</sup> and longer hospital stays. <sup>92</sup>
Infant could become hypoglycemic	Healthy, full-term infants do not develop symptomatic hypoglycemia as a result of suboptimal breastfeeding. <sup>15</sup>	Same risks as for weight loss/dehydration.
Breastfeeding is related to jaundice in the postnatal period	The more frequent the breastfeeding, the lower the bilirubin level. <sup>93,94</sup> Bilirubin is a potent antioxidant <sup>95</sup> and jaundice is normal in the newborn. Colostrum acts as a natural laxative helping to eliminate meconium that contains	Same risks as for weight loss/dehydration.



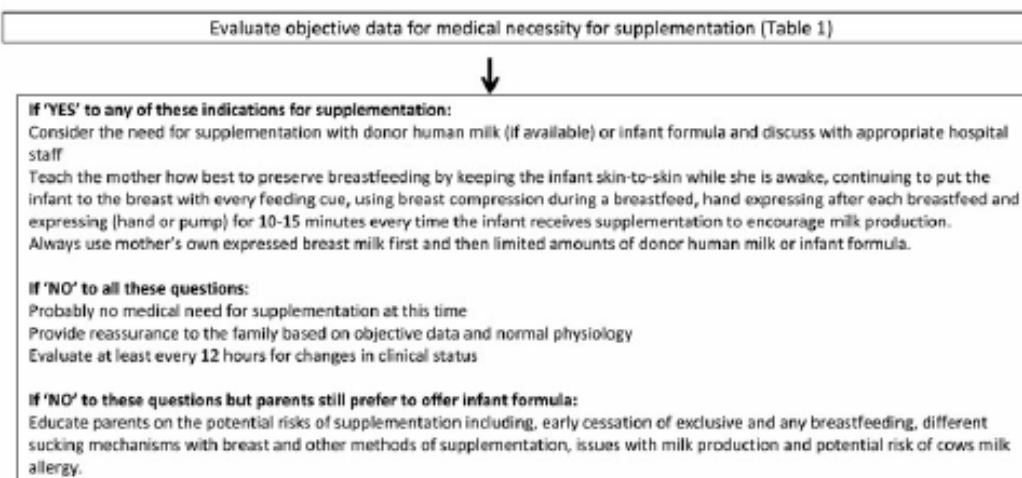
### Step 1: Prenatally and on admission to hospital



### Step 2: When a mother or the family requests formula supplementation

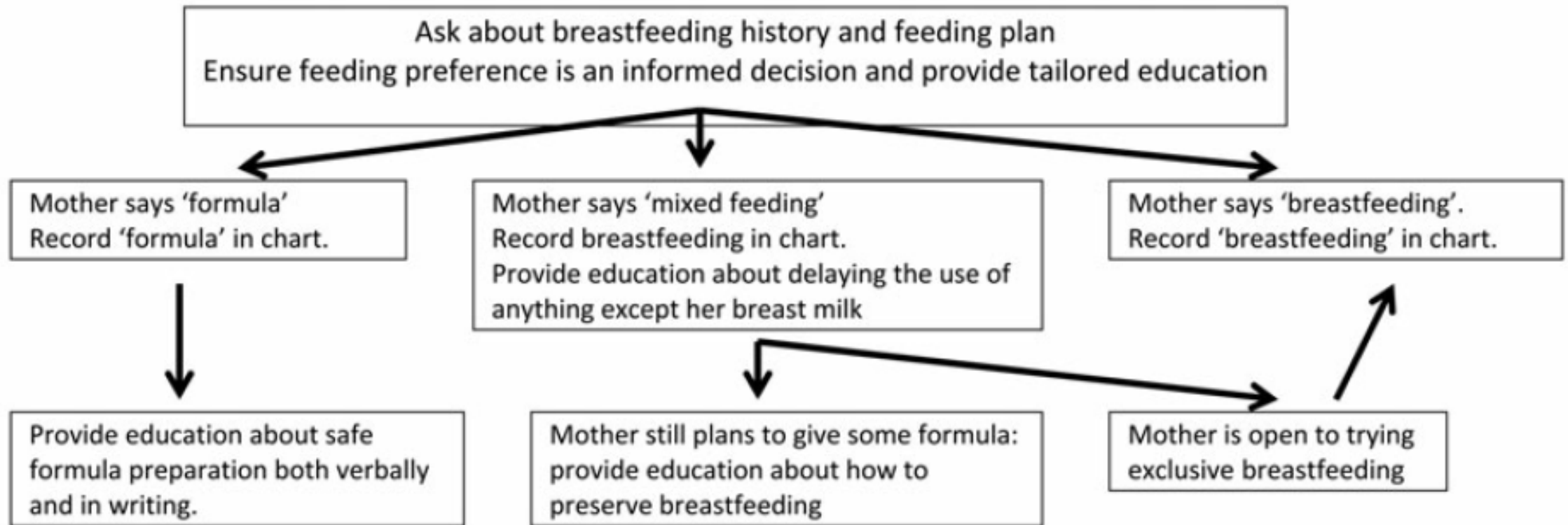


### Step 3: Determine medical necessity for and decide on supplementation



## Appendix A2: Sample Maternity Care Infant Nutrition Algorithm

### Step 1: Prenatally and on admission to hospital



## Step 2: When a mother or the family requests formula supplementation

Ask more to understand her concerns  
Re-state and validate her concerns



Review normal physiology and provide appropriate education



**Ask** "May I watch a breastfeed to see what your baby is doing and if there is some way I can help?"

**Assist** with positioning and latch

**Provide** assistance as needed

## Step 3: Determine medical necessity for and decide on supplementation

Evaluate objective data for medical necessity for supplementation (Table 1)



### **If 'YES' to any of these indications for supplementation:**

Consider the need for supplementation with donor human milk (if available) or infant formula and discuss with appropriate hospital staff

Teach the mother how best to preserve breastfeeding by keeping the infant skin-to-skin while she is awake, continuing to put the infant to the breast with every feeding cue, using breast compression during a breastfeed, hand expressing after each breastfeed and expressing (hand or pump) for 10-15 minutes every time the infant receives supplementation to encourage milk production.

Always use mother's own expressed breast milk first and then limited amounts of donor human milk or infant formula.

### **If 'NO' to all these questions:**

Probably no medical need for supplementation at this time

Provide reassurance to the family based on objective data and normal physiology

Evaluate at least every 12 hours for changes in clinical status

### **If 'NO' to these questions but parents still prefer to offer infant formula:**

Educate parents on the potential risks of supplementation including, early cessation of exclusive and any breastfeeding, different sucking mechanisms with breast and other methods of supplementation, issues with milk production and potential risk of cows milk allergy.





OKLAHOMA  
mothers' milk bank

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AND MEMBER OF  
THE HUMAN MILK  
BANKING  
ASSOCIATION OF  
NORTH AMERICA.





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HMBANA MILK BANKS FOLLOW STRICT SAFETY GUIDELINES BASED ON SCIENCE.  
DONOR HUMAN MILK IS DISPENSED BY PRIORITY, SERVING THE SICKEST BABIES FIRST.



- ▶ Store in a freezer separated from medications/foods
- ▶ Monitor temperature daily
- ▶ Can use a countertop refrigerator/freezer

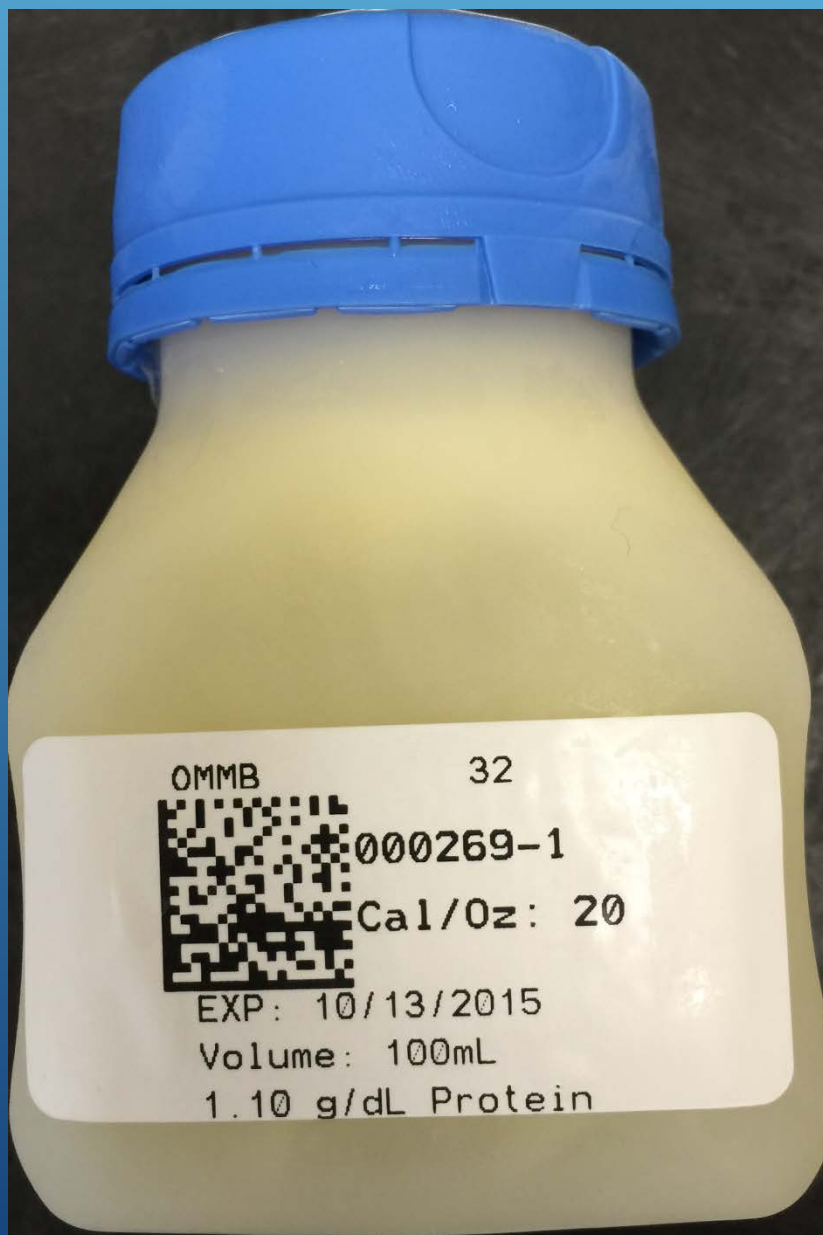


PASTEURIZED DONOR MILK ON A MOTHER/BABY UNIT

- ▶ Stock several bottles to have immediately available
- ▶ Milk bank can provide long expiration dates
- ▶ Document PDM in medical record
- ▶ Document "batch #" in medical record

## PASTEURIZED DONOR MILK ON A MOTHER/BABY UNIT





EACH BOTTLE OF PDM IS LABELED:

BATCH NUMBER

CALORIES/OUNCE

PROTEIN CONTENT

EXPIRATION DATE

- ▶ Can thaw just enough to draw off a small feeding (10 ml)
- ▶ Can use same bottle for more than one baby
- ▶ Can refreeze if still has ice crystals
- ▶ Thawed PDM can be refrigerated for at least 48 hours
  - ▶ *Pasteurized Donor Human Milk Maintains Microbiological Purity for 4 Days at 4°C, JHL 2015*

## HANDLING PDM ON A MOTHER/BABY UNIT







## OKLAHOMA BREASTFEEDING RESOURCE CENTER

### Updates:

- Making Breastfeeding Easier classes:
  - May 25, OUHSC
  - June 29, 2017 Duncan Regional Hospital
  - July 28, 2017 Cherokee Nation WW Hastings Hospital
  - August 24, 2017, OUHSC
  - October 19, 2017, OUHSC
- 2-Day Breastfeeding Training: May 31- Jun 1, Tulsa
- Online Breastfeeding Training for Healthcare Staff
  - <http://www.ouhsc.edu/breastfeeding/Training/HealthCareStaffClasses.aspx>
- 2018 BBFOK Summit: March 2, 2018



## Next BBFOK Webinars:

May 24:

- Step 2: Staff and Physician Training – Who Needs Training, What's Available and New Provider Requirements

July 12:

- Step 10: Oklahoma Breastfeeding Hotline – A Look at Why Mothers Call the Hotline