

# Step 6: Breastmilk Only

*(unless medically indicated)*

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NH's Ten Steps to Successful Breastfeeding: Step by (baby) Step



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# Step 6: Objectives

***At the end of this 25 minute session, the participant will be able to:***

- Describe risks associated with early formula supplementation on breastfeeding duration & exclusivity
- Strategize new ways to advocate for your hospital's paying fair market value for formula rather than receiving it at no- or low-cost from formula companies



# Step 6

***Give newborn infants no food or drink other than breastmilk, unless medically indicated.***

***BFHI guidelines:*** When a mother specifically states that she has no plans to breastfeed, or requests that her breastfeeding baby be given a breastmilk substitute, the health care staff should first explore the reasons for this request, address the concerns raised and educate her about the possible consequences to the health of her baby and/or the success of breastfeeding. If the mother still requests a substitute, her request should be granted and the process and the informed decision should be documented. Any other decisions to give breastfeeding babies food or drink other than breastmilk should be for acceptable medical reasons and require a written order documenting when and why the supplement is indicated.

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# Step 6: Formal Recommendations

- **Ensure that breastfeeding babies receive no food or drink (other than breastmilk) unless medically indicated**
- **Ensure that staff have a clear understanding of what the few acceptable reasons are for prescribing food or drink other than breastmilk for breastfeeding babies including:**
  - maternal or infant contraindication to breastfeeding or medical indication for supplementation\*
  - maternal request despite education about benefits of exclusive breastmilk feeding and risks of formula supplementation



# Potential Acceptable Medical Indications for Supplementation

## *When a Mother's Own Expressed Milk and/or Mother is Not Available*

- **Late Preterm Gestation with one of following complications:**
  - Hypoglycemia not responsive to skin-to-skin and breastfeeding
  - Signs of ineffective milk transfer at the breast (e.g., non-sustained suckling pattern)
  - Excessive weight loss (e.g., weight loss > 8% unless infant demonstrating active milk transfer at the breast and adequate hydration)
  - Jaundice requiring phototherapy
- **LBW < 2500 grams or SGA with one of following complications:**
  - Hypoglycemia not responsive to skin-to-skin and breastfeeding
  - Signs of ineffective milk transfer at the breast (e.g., non-sustained suckling pattern)
  - Excessive weight loss (e.g., weight loss > 8% unless demonstrating active milk transfer at the breast and adequate hydration)
- **Hypoglycemia not responsive to skin-to-skin and direct breastfeeding**
- **Inborn error of metabolism (Classic Galactosemia, MSUD, PKU)**
- **Weight loss > 10% in setting of one or more of the following:**
  - Decreased urine or stool output
  - Signs of infant excessive hunger or sleepiness
  - Jaundice requiring phototherapy

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# Potential Acceptable Medical Indications for Supplementation

*When a Mother's Own Expressed Milk and/or Mother is Not Available*

- **Severe maternal illness impacting mother's ability to directly breastfeed or significantly impacts her breastmilk production**
  - e.g., psychosis, eclampsia, sepsis, shock
- **Maternal illness requiring treatment with medication contraindicated in breastfeeding or that would pose significant potential for harm or concern in infant**
  - e.g., chemotherapeutic agent, radioactive isotopes, antimetabolites, antiretroviral medications
- **Maternal infection with HIV**
- **Maternal infection with Human T-cell Leukemia Virus type 1 (HTLV1)**
- **Maternal active, untreated Tuberculosis**
- **Mother with active Herpes (HSV) or Varicella lesion(s) of the breast**
- **Mother with active Hepatitis C infection and signs of open nipple trauma**
- **Mother is taking street drugs or illicit drugs of abuse**

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# Step 6: Formal Recommendations

- **In the setting of a mother who states her intent to feed her infant formula only, ensure that staff:**
  - explore reasons with mother for not breastfeeding and address concerns raised
  - review risks of not breastfeeding for both mother and infant
  - discuss various feeding options such as expressing and feeding breastmilk to infant
  - help mother decide what is suitable in her situation



# Step 6: Formal Recommendations

- **In the setting of a breastfeeding mother who requests supplementation with formula, ensure that staff:**
  - explore reasons for request
  - address concerns raised
  - provide education on potential risks of formula supplementation to her baby and her breastfeeding success (e.g., establishing an adequate milk supply)
  - help mother decide what is suitable in her situation
- **If mother still requests to feed infant formula after informed discussion, allow mother to do so and document maternal request & counseling provided in infant's medical record**



# Step 6: Formal Recommendations

- **Require a written order for formula supplementation including documentation of:**
  - evidence-based medical indication for supplementation *or*
  - maternal request after informed discussion
- **In event an infant receives medically indicated supplementation with breastmilk substitute, document:**
  - medical indication for supplementation
  - attempts made to obtain mother's milk through hand expression and/or electric breastpump expression prior to supplementation



# Step 6: Formal Recommendations

- Ensure that facility has adequate space away from breastfeeding mothers and necessary equipment & supplies for teaching mothers who are formula feeding their babies how to properly prepare the formula
- Ensure that all clinical protocols related to infant feeding are current and evidence-based



# Step 6: Formal Recommendations

- **Track exclusive breastmilk feeding according to Joint Commission's definition of exclusive breastmilk feeding**
  - **JC Definition** = newborn receives only breastmilk and no other liquids or solids except for drops or syrups consisting of vitamins, minerals, or medicines
    - Breastmilk feeding includes expressed mother's milk and/or donor human milk - both of which may be fed to infant by means other than suckling at breast
  - **JC Perinatal Core Measure #PC-05:** Determine proportion of all term infants exclusively breastmilk-fed during their entire newborn hospitalization
    - **Improvement:** Increase in the annual rate of exclusive breastmilk feeding

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# Joint Commission #PC-05

- **Numerator:** # of term infants fed breastmilk only since birth
- **Denominator:** Single term liveborn newborns discharged from the hospital with exclusion of those meeting criteria below:
  - Admitted to the NICU/ICN or transferred to another hospital during newborn hospitalization
  - 35-36 weeks completed gestation or younger
  - Galactosemia
  - Parenteral infusion
  - Length of Stay > 120 days
  - Enrolled in clinical trials
  - Death
  - Documented acceptable maternal medical reason for not exclusively feeding breast milk as per Joint Commission Criteria

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# Joint Commission #PC-05

- **Documented acceptable maternal medical reasons for not exclusively feeding breast milk as per Joint Commission**
  - HIV infection
  - Human t-lymphotrophic virus type I or II
  - Substance abuse and/or alcohol abuse
  - Active, untreated tuberculosis
  - Taking certain medications, i.e., prescribed cancer chemotherapy, radioactive isotopes, antimetabolites, antiretroviral medications and other medications where the risk of morbidity outweighs the benefits of breast milk feeding
  - Undergoing radiation therapy
  - Active, untreated varicella
  - Active herpes simplex virus with breast lesions
  - Admission to Intensive Care Unit (ICU) post-partum

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# Step 6: Formal Recommendations

- Compare facility's annual rate of supplementation of breastfed babies to rate reported by the CDC's National Immunization Survey data for facility's geographic region

Provisional Geographic-specific Formula Supplementation Rates among Children born in 2007		
Location	n	Formula supplementation before 2 days of age*
US	12900	25.4 ± 1.4
NH	184	11.9 ± 4.8

\*Percent ± % Confidence Interval

[http://www.cdc.gov/breastfeeding/data/NIS\\_data/2007/state\\_formula.htm](http://www.cdc.gov/breastfeeding/data/NIS_data/2007/state_formula.htm)

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# Step 6: Original Evidence Presented

## Routine supplementation associated with:

- Fewer breastfeeds each day
- ↓milk production
- Earlier breastfeeding cessation
- Risks of not breastfeeding
- No significant ↓in jaundice

DeCarvalho, *et al. Arch Dis Child.* 1981.

Herrera. *Perinatol/Neonatal.* 1984.

Nylander, *et al. Acta Ob/Gyn Scand.* 1991.

DiGirolamo, *et al. Pediatrics.* 2008.

Seminic, *et al. Res Nurs Health.* 2008.

McNiel ME, Labbok MH, Abrahams SW. *Birth.* 2010.

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# Step 6: Evidence Update

## Factors Associated with ↑Odds of In-Hospital Formula Supplementation

Maternal Factors	Infant Factors	Other Factors
Primiparity	< 2500 grams	Delivery in non-BFHI facility
Age > 35 years	≥ 4000 grams	Operative vaginal delivery
Born abroad & non-English speaking	Admitted to SCN	C-section delivery
Smoked during pregnancy		
BMI < 20 or > 25		

Of 4,085 eligible mother-baby dyads, 23% reported their baby received formula while in-hospital

Biro, et al. *Birth*. 2011.

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# Impact of Exclusive BF in Hospital on BF Outcomes

- **In-hospital exclusive BF is protective against BF cessation  $\leq 8$  wk** OR: 0.61 (95% CI: 0.42 to 0.88)

Tarrant, et al. *Birth*. 2011.

- **Mothers  $> 2x$  more likely to meet personal EBF goals if they exclusively BF in hospital**

Perrine, et al. *Pediatrics*. 2012.

No food/ drink other than breastmilk	% Met Goal	aOR (95% CI)
Yes	39.8	2.3 (1.8 to 3.1)
No	21.2	1.0

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# Cost-Comparison of US Baby-Friendly & Non-Baby-Friendly Hospitals

DelliFraine, et al. *Pediatrics*. 2011.

	Baby-Friendly Hospital	Similarly Matched Non-Baby-Friendly Hospital	Cost Variance \$ / %
<b>Average Nursery + L&amp;D Costs</b> (combining vaginal & c-section delivery)	<b>\$2,205/delivery</b>  Ave = 256 beds Ave = 4.75 births/day	<b>\$2,170/delivery</b>  Ave = 293 beds Ave = 6.2 births/day	<b>\$35 / 1.6% (P=.928)</b>
<b>Average Nursery + L&amp;D Costs</b> (comparing 6 L&D diagnosis- related codes)	<b>\$3688/delivery</b>	<b>\$3510/delivery</b>	<b>\$178 / 5% (P=.839)</b>

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