

Breastfeeding Manual

for Health Workers







Government of Belize

Ministry of Health

National Committee for Families and Children

United Nations Children Fund

Director of Health Services Office

Breastfeeding Manual for Health Workers

Protecting, promoting and supporting breastfeeding

Presentation

The Ministry of Health in collaboration with key partners has re-introduced the Baby Friendly Hospital Initiative. In the late 90's there was a first attempt to certify hospitals as Baby friendly. The last revision of this Initiative is now recommending an expansion to have all health facilities certified as Mother-Baby Friendly.

The re-activation of the initiative began in late 2006, as a collaborative effort between the National Committee for Families and Children in response to international commitments to reduce child mortality such as the Convention on the Rights of the Child, the Millennium Development Goals, and the National Plan of Action for Children and Adolescents and the National Health Agenda for the period 2007-2011.

This Breastfeeding Manual for Health Workers is a compilation of evidence based information made available by UNICEF. This manual was developed so each health worker can have on hand a resource guide for the day to day provision of services.

Population based studies done by the Central Statistical Office showed that the breastfeeding rate in the last five years has decreased significantly. In the last five to six years the child mortality -under five mortality rates- has ups and downs, with a trend to maintain invariable the rates throughout the years. It is proven the great contribution that high breastfeeding rate does to reducing child morbidity and mortality.

Sustainability of this initiative has been a challenge, hence the need for strong intersectorial collaboration, community participation and empowerment, for the implementation of the initiative at community level. Each head of unit at the different health facilities are responsible for the implementation, monitoring and evaluation of the promotion, protection and support of the breastfeeding policy.

Dr. Jorge Polanco
Director of Health Services

Mrs. Sandra Hall Chairperson NCFC

Lake the s

Why do we use The Golden Bow as the symbol for breastfeeding protection, promotion and support?

It's Meaning and Purpose:

Many social change efforts have used ribbons and pins to create a sense of belonging to a social movement. While the Golden Bow serves this purpose, but it is unique in that it is not simply a symbol for social change, but carries many meanings within its own design. The Golden Bow is, in and of itself, a lesson in the protection, promotion and support of breastfeeding.

Gold: The use of the gold color for the bow symbolizes that breastfeeding is the gold standard for infant feeding, against which any other alternative should be compared and judged.

A Bow: Why do we use a bow, rather than the looped ribbon of most campaigns? Each part of the bow carries a special message:

One loop represents the mother.

The other loop represents the child.

The ribbon is symmetrical, telling us the mother and child are both vital to successful breastfeeding - neither is to the left nor to the right, signifying neither is precedent, both are needed.

The knot is the father, the family and the society. Without the knot, there would be no bow; without the support, breastfeeding cannot succeed. The ribbons are the future: the exclusive breastfeeding for six months, and continued breastfeeding for 2 years or more with appropriate complimentary feeding and the delay of the next birth, preferably for 3 years or more, to give the mother and child time together to recover and to grow, respectively, and to give the mother the time she needs to provide active care for the health, growth and development of this child.

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I Introduction

The Baby-Friendly Hospital Initiative (BFHI) was launched in 1991 through collaborative efforts of the United Nations Children Fund (UNICEF) and the World Health Organization (WHO) to ensure that every facility providing maternity services fully practice all Ten Steps to Successful Breastfeeding. Healthcare facilities who demonstrate compliance with breastfeeding standards can receive the designation of being Baby- Friendly.

The Mother Friendly Childbirth Initiative was initially developed in 1996 by the Coalition for Improving Maternity Services. The mission is to promote a wellness model of maternity care that will improve birth outcomes and substantially reduce costs. This evidence based model focuses on prevention and wellness as the alternatives to high cost screening, diagnosis and treatment programs. The principles of this approach are respect for the normalcy (i.e. non medical) of the birthing process, the autonomy and empowerment of the woman, caregiver responsibility and doing "no harm".

The principles of mother-child centered care, protection of optimal mother and child conditions, and the recognition that maternal-child dyad deserves respect and support, are the underlying principles of the Mother-Baby Friendly Initiative.

Legal Framework:

a. Convention on the Rights of the Child (CRC)

The Convention on the Rights of the Child, Article 24 include the following:

- 1. States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health....
- 2. States Parties shall ... take appropriate measures to:

States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health....

- ...diminish infant and child mortality;
- ...combat disease and malnutrition,
- ...ensure appropriate pre-natal and post-natal health care for mothers;
- ...ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition, the advantages of breastfeeding, hygiene and environmental sanitation and the prevention of accidents;

b. The Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding (1990):

- All women should be enabled to practice exclusive breastfeeding
- All infants should be fed exclusively on breast milk from birth to six months of age.

- Children should continue to be breastfed while receiving appropriate and adequate complementary foods for up to two years of age or beyond.
- This child-feeding ideal is to be achieved by creating an appropriate environment of awareness and support so that women can breastfeed in this manner

c. National Breastfeeding Policy, Ministry of Health (1996):

- Breastfeeding is a basic right of the child as it is the best means of providing nutrition, protection, and emotional stimulation for the child's healthy growth and development.
- Breastfeeding is a basic right of the mother as it confers physical, psychological and emotional benefits for herself and her relationship with her child.

Ten Steps to Successful Breastfeeding

- a) Hospital level. Every facility providing maternity services and care for newborn infants should:
 - 1. Have a breastfeeding policy that is routinely communicated to all health care staff.
 - 2. Train all healthcare 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 half hour of birth
 - 5. Show mothers how to breastfeed and how to maintain lactation if they are separated from their infants.
 - 6. Give newborn no food or drink other than breast milk unless medically indicated
 - 7. Practice rooming-in and allow mothers and infants to stay together twentyfour hours a day.
 - 8. Encourage breastfeeding on demand
 - 9. Give no artificial teats or pacifiers to breastfeeding infants
 - 10. Foster the establishment of breastfeeding support groups and refer others tothem on discharge from the hospital or clinic.
- b) Seven Steps to Successful Breastfeeding (Non-Hospital facilities):
 - Have a written policy that is routinely communicated to all healthcare staff.
 - 2. Train all healthcare staff involved in the care of mothers and babies in the skills necessary to implement the policy.
 - 3. Inform all pregnant women about the benefits and management of breastfeeding.
 - 4. Support mothers to initiate and maintain breastfeeding.
 - 5. Encourage exclusive and continued breastfeeding with appropriately-timed introduction of complementary foods.
 - 6. Provide a welcoming atmosphere for breastfeeding families.

7. Promote co-operation between healthcare staff, breastfeeding support groups and the local community.

c) Mother-Baby-friendly Ten Steps

1. Provides or refers for antenatal care, including vitamin/iron/folate supplementation, malaria prophylaxis, HlV-testing, monitoring for danger signs, and referral where appropriate.

2. Offers all birthing mothers:

- a. Unrestricted access to the birth companions of her choice including fathers, partners, children, family members, and friends.
- b. Unrestricted access to continuous emotional and physical support from a skilled woman-for example, a doula or labor-support professional.
- c. Access to the best available care, preferably skilled assistance and access to timely referral as needed.
- d. The freedom to walk, move about, and assume the position of her choice during labor and birth (unless restriction is specifically required to correct a complication), and discourages the use of the lythotomy position.
- 3. Maintain records to allow for external and self-assessment and reporting purposes.
- 4. Provides culturally competent care- that is, care that is sensitive and responsive to the specific beliefs, values, and customs of the mother's ethnicity and religion.
- 5. Has clearly defined policies and procedures for:
 - Clean birthing techniques
 - Cord clamping
 - Placenta removal and disposal
 - Collaboration, consultation and referral with other maternity services, including maintaining communication with all caregivers when referral or transfers are necessary;
 - Linking the mother and baby to appropriate community resources including prenatal and post-discharge follow-up and breastfeeding support.
- 6. Does not routinely employ practices and procedures that are unsupported and has no scientific evidence, including but not limited to the following: shaving; enemas; IVs (intravenous drip); withholding nourishment, early rupture of membranes; electronic fetal monitoring. Other interventions are limited as follows:
 - has an induction rate of l0% or less;
 - has an episiotomy rate of 20% or less with a goal of 5% or less;
 - has a total cesarean rate of 10% or less in community hospitals and 15% or less in tertiary care (high-risk) hospitals;

- has a VBAC (vaginal birth after cesarean) rate of 60% or more with a goal of 75% or more.
- 7. Educates staff in non-drug methods of pain relief and does not promote the use of analgesic or anesthetic drugs not specifically required to correct complication.
- 8. Encourages all mothers and families, including those with sick or premature newborns or infants with congenital problems to touch, hold, breastfeed, and care for their babies to the extent compatible with their conditions.
- 9. Has training in hemorrhage control, both manual and medical.
- 10. Strives to achieve the WHO-UNICEF Ten steps of the Baby-Friendly Hospital Initiative to promote successful breastfeeding.

II. The International Code of Marketing of Breast Milk Substitutes

The main points of the Code are:

- No advertising of breast milk substitute and other products are to be directed at the general public.
- No free samples of breast milk substitutes are to be given to mothers.
- No promotion of breast milk substitutes are to be done in health facilities.
- No donation of fee or subsidized supplies of breast milk substitutes or other products should be done in any part of the healthcare system.
- Company personnel promoting artificial milk, are not to contact or advise mothers on infant feeding.
- Gifts or samples of milk products are not to be given to health workers or health facilities.
- No pictures of infants, or other pictures or text promoting artificial feeding should be visible on labels of artificial milk products.
- Information on artificial formula that is given to health workers should only be factual and scientific.
- Information on artificial feeding should explain the benefits of breastfeeding and the costs and dangers associated with artificial feeding.
- Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.

Note: Review Articles of the International Code of Marketing of Breast milk Substitutes. Appendix V p. 59.

Article 7. Health workers

- 7.1 Health workers should encourage and protect breastfeeding; and those who are concerned in particular with maternal and infant nutrition should make themselves familiar with their responsibilities under this Code, including the information specified in Article 4.2.
- 7.2 Information provided by manufacturers and distributors to health professionals regarding products within the scope of this Code should be restricted to scientific and factual matters, and such information should not imply or create a belief that bottle feeding is equivalent or superior to breastfeeding. It should also include the information specified in Article 4.2.

- 7.3 No financial or material inducements to promote products within the scope of this Code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families.
- 7.4 Samples of infant formula or other products within the scope of this Code or of equipment or utensils for their preparation or use, should not be provided to health workers except when necessary for the purpose of professional evaluation or research at the institutional level. Health workers should not give samples of infant formula to pregnant women, mothers of infants and young children, or members of their families.
- 7.5 Manufacturers and distributors of products within the scope of this Code should disclose to the institution to which a recipient health worker is affiliated any contribution made to him or on his behalf for fellowships, study tours, research grants, attendance at professional conferences, or the like. Similar disclosures should be made by the recipient.

III. Early Initiation of Breastfeeding

Recommended Best Practices for successful breastfeeding:

a. Exclusive Breastfeeding (EB): EB is defined as feeding the infant from birth up to 6 months ONLY breastmilk. NO other liquid or solid from any other source enters the infant 's mouth, except for medical indication.

b. NO Prelacteal feeds:

DO NOT GIVE DEXTROSE or SUGAR and WATER MIXTURES (There is no scientific evidence to support this practice)

DO NOT GIVE PRELACTEAL FEEDS (Artificial feeds or drinks given to baby before breastfeeding is initiated)

c. Skin to Skin Contact

- a. Skin to skin uninterrupted contact after delivery plays a key role in successful initiation of breastfeeding. (Fig. 1)
- b. Skin to skin contact helps to overcome breastfeeding difficulties at any stage.
- c. Babies maintain body temperature better if kept in skin to skin contact with their mothers. If there are concerns that baby will become cold, baby can be dried and a blanket wrapped around mother and baby.



d. Give a warm drink and/or have her take a warm bath.

(Fig. 1)

- e. She could also apply a warm compress to her breast.
- f. Gently massage breasts -pull or roll nipples-.
- g. Massage both sides of mother's spine for two to three minutes: Have her sit, leaning forward with her head on a table, with her breasts hanging loosely.

d. First 60 minutes of LIFE:

- a. After providing immediate newborn care, put baby at the breast, even whilst placenta hasn't been expelled.
- b. Maintain skin to skin contact between mother and baby for the next 60 minutes.
- c. Teach mother how to identify baby's feeding cues
- d. Assess a breastfeed and help mother to have proper positioning of herself and baby
- e. Re-assess as needed during first 60 minutes

e. Colostrum

 Colostrum is thick, yellowish or clear milk that is secreted by a woman's breast in the first several days after delivery.

- it has increased concentration of calcium, potassium, proteins, fat-soluble vitamins, minerals and antibodies.
- the volume is approximately 100 cc's (3 oz.) in a 24-hour period.
- Due to its high concentration of antibodies, this milk is particularly valuable for infants in preventing infection. • Colostrum is produced before baby is born

Fig. 2

- It has duration of three days
- It is considered the first vaccine as it offers protection from diseases
- Colostrum is produced in the exact quantity to satisfy baby's need and gradual expansion of the stomach
- The first 24 hours of life, the baby stomach has the size of a marble
- The size increases gradually until it reaches the size of a table tennis ball at seven days of age (Fig. 2) Artificial feed or drinks are contraindicated due to interruption of breastfeeding and increase the risk of infections.

f. Rooming -In and Feeding on Demand

Rooming-In:

- Rooming -in is keeping mother and baby together always (Fig. 3)
- Mother can respond to baby which helps with bonding.
- Babies cry less
- Mothers become more confident about breastfeeding.
- Mothers' breastfeed for a longer period.



Feeding -on- Demand:

Feeding a baby on demand (sometimes referred to as "on cue"), which may mean nursing many times more than the recommended minimum, (DAY AND NIGHT) is the best way to maintain milk production and ensure the baby's needs for milk and comfort are being met satisfactorily. Feeding on demand:

- Increases breast milk production.
- Baby gains weight faster.
- Fewer difficulties (like engorgement of the breasts)
- Facilitate the easy establishment and maintenance of breastfeeding.

Types of Breast Milk g.

Colostrum: described above



- b. **Transitional milk** is secreted between about four days and ten days postpartum. It is intermediate in composition in between Colostrum and mature milk. The volume increases during this time.
- c. **Mature milk** is produced from approximately ten days after delivery up until the termination of the breastfeeding.

h. Mature milk contains on average:

- 1. Energy (750 kcal/liter)
- 2. Lipids (38 g / liter) The main lipids found in human breast milk are the triacylglycerols, phospholipids, and fatty acids including essential fatty acids. Maternal diet does not affect the amount of fat in milk but does affect the types of fat. Cholesterol is present in breast milk.
- 3. Casein (2.5 g / liter) protein Casein or curds are proteins with low solubility which complex with calcium. These are present in breast milk in much lower concentration than in cow's milk.
- 4. Whey (6.4 g / liter) protein the whey proteins are located in the clear liquid left behind when clotted milk stands. The largest components are alphalactalbumen, lactoferrin, lyzozyme, albumen and immunoglobulins.
- 5. Nonprotein Nitrogen is used in amino acid synthesis and includes the nitrogen in urea, creatine, creatinine, uric acid and ammonia. Peptides, such as epidermal growth factor, somatomedin C and insulin are also present in this fraction. Nucleotides such as cytidine monophosphate are derived from nucleic acids and play an important role in the immune system and protein synthesis.
- 6. Lactose (70 g / liter) carbohydrate Lactose is the major carbohydrate in breast milk. It is composed of galactose and glucose. Lactose concentration in breast milk increases over the duration of breastfeeding.
 - The amount of all of these substances (except lactose) varies with the time of day of the breast milk production, the woman producing the breast milk, and whether it is at the beginning or the end of the feeding. Fats and lipids are particularly high at the end of the feeding (hind milk) (Lawrence, 2005 p105-170, Hamosh, 1992, Slusser, 1997).
- i. Foremilk, the milk released at the beginning of a feed, is watery, low in fat and high in carbohydrates compared with the creamier hind milk which is increasingly released as the feed progresses.

j. Breastmilk also contains minerals:

- 1. Sodium, potassium, calcium and magnesium are the major cations in human milk. Breastfeeding women mobilize bone to supply calcium to their infants. This may be mediated by parathyroid hormone-related protein (Strewler, 2000). The bone is replenished during and after weaning (Specker, 1991). Breast milk sodium and potassium are regulated by corticosteroids.
- 2. Iron is necessary for hemoglobin formation. Iron in breast milk is present in low amounts but the percentage of iron absorbed is very high. Infants older than 6 months of age need another source of iron besides breastmilk in their diet such

as meats, iron-fortified cereals, or green vegetables (AAP Breastfeeding, 2005, Slusser, 1997).

A study of iron supplementation of breastfed infants in Sweden and Honduras showed that iron supplementation at a dose of 1 mg of elemental iron/kg/day from 6-9 months of age significantly reduced iron deficiency anemia in the Honduran breast fed infants. However, there was no effect on the Swedish infants. This was probably due to the low baseline prevalence of iron deficiency anemia in the Swedish infants and to the increased growth rates of the Honduran infants in the first 4 months of life compared to the growth rates of the Swedish infants (Domellof, 2001).

- 3. Zinc is found in human milk and is necessary for enzyme production and activation.
- 4. Copper, selenium, chromium, manganese, molybdenum and nickel are present in small amounts in breast milk.

IV. CORRECT LATCHING-ON

In breastfeeding, 'latch' refers to the baby's orientation with respect to the woman

a. Breast Anatomy

- Nipples and areola contains smooth muscles and elastic tissue.
- At the touch of baby's mouth, the nipples become erect and serve as a feeding teat.

Internal Structure

of the Breast

Breast lobule

(milk) duct

Nipple

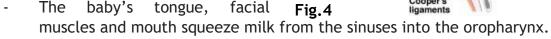
Areola

Lactiferous sinus Clavicle (collar bone)

Muscle

Rib

- The areola contains 15 to 20 milk ducts.
- Milk is produced in the alveolar glands
- Milk are emptied into the ducts
- The milk ducts widen into the lactiferous sinuses found in the areola.
- The areola is dark and serves as a visual cue for the infant who needs to latch-on.



- The montgomery's glands provides lubrication to the areola - The milk flows from mother to baby through the nipples

b. Milk Production and expression

Two hormones are involved in breastfeeding: Prolactin and oxytocin (Table 1)

(Table 1)

HORMONES INVOLVED IN BREAST DEVELOPMENT DURING PREGNANCY AND MILK PRODUCTION FOLLOWING BIRTH

HORMONE	ORIGIN	FUNCTION
During Pregn	ancy	
Prolactin	Pituitary gland	Stimulates development of milk glands
Estrogen	Ovary and placenta	Stimulates development of milk ducts; stimulates prolactin release but helps block milk production
Progesterone	Ovary and placenta	Stimulates development of milk glands; blocks stimulation of milk production by prolactin
After Childbin	th	
Prolactin	Pituitary gland	Stimulates milk production
Oxytocin	Pituitary gland	Stimulates milk ejection

A. Prolactin

- Prolactin promotes the secretion of milk from the milk secreting cells. (Fig. 5)
- Oxytocin facilitates the contraction of muscle for milk expression (Fig. 6).
- The alveolar cell is the principal site for milk production.
- Breast milk contains antibodies to fight infections.
- Breast milk meets the **nutritional needs** of the child with adequate portions of fat, protein and carbohydrates
- Breast milk provide adequate fluids to **quench the thirst** at every feed.

B. Signs and Symptoms of Oxytocin Reflex include:

- A squeezing or tingling sensation in breasts, before or during a feed.
- Milk flowing from her breasts when she thinks of her baby, or hears baby cry
- Milk dripping from her other breast, when baby is suckling
- Pain from uterine contractions, sometimes with a rush of blood, during feeds in the first week

Fig. 5 Fig. 6 Oxytocin - delivers milk Prolactin - makes milk Prolactin activated by Oxytocin released Acts on muscles stimulation by thinking surrounding milk breast to produce about baby and cells, releasing milk Acts on milkmore stimulation of producing cells milk for breast next feed. Baby suckling stimulates bree Baby suckling stimulates breast

Stimulating Oxytocin Reflex when initiating breastfeeding

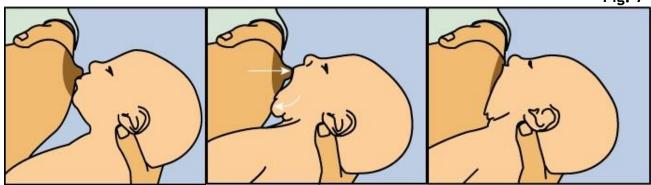
- Reduce mother's anxiety and build her confidence.
- Have her sit with family member or friend who is supporting her. Have her hold baby (skin to skin).

C. Situations that can reduce Breast milk production:

- Suckling stimulates the production of milk
- If a lot of milk is left in a breast, milk secretion is reduced.
- Lack of suckling or expression, reduces milk production.
- If a baby cannot suckle from one or both breasts, the breastmilk must be expressed to enable production to continue.

- Decrease feeding at night.
- D. Infants who may need other nutrition in addition to breastmilk
 - 1. Very Low birth weight babies (less than 1500g or 32 weeks gestational age).
 - 2. Infants who are at risk for hypoglycemia because of medical conditions.
 - 3. Infants who are dehydrated or malnourished when breastmilk alone cannot restore deficiencies.
 - 4. When sufficient breastmilk are not immediately available.
- E. Help Mother to Position Her Baby and latching-on technique Greet the mother and ask how breastfeeding is going.
 - Assess a breastfeed.
 - Explain what might help, and ask if she would like you to show her.
 - Make sure that she is comfortable and relaxed.
 - Sit in a comfortable, convenient position.
 - Explain how to hold her baby, and show her if necessary.
- F. Show her how to hold baby:
 - o Head and body are straight.
 - o Face is towards breast and his nose is opposite her nipple. o Body is close to mother's body. o Support his bottom if baby is a newborn o Baby's abdomen must be touching mother's abdomen
- G. Show her latching-on technique: (Fig. 7)
 - 1. Her fingers are against her chest wall below her breast.
 - 2. Her hand is supporting the breast with the thumb above.
 - 3. Mother's fingers should not be too near the nipple.
 - 4. Explain or show her how to help baby to latch-on or attach.
 - 5. Let her touch baby's lips with her nipple **or** have her stroke baby's cheek with one finger and wait until mouth is wide open,
- H. Reasons for Poor Attachment
 - Using formula and bottles before breastfeeding is established.
 - An inexperienced mother
 - Lack of good breastfeeding support from health personnel and the community.
 - Late initiation of breastfeeding.
 - Breast engorgement or inadequate latching-on



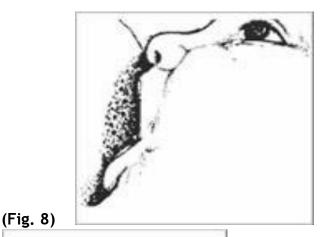


- Poor Attachment can result in the following: (Fig. 9) o pain and damage to nipples which results in sore nipples.
 - o breast engorgement because breasts are not fully emptied.

J. Reduced milk production

- o If baby does not have access to hind milk the caloric density of the milk is lowered and infant may show signs of continued hunger, frustration and demand to be fed frequently in shorter periods.
- o Frequent feeds results in more milk being produced. Despite good milk transfer, baby continues to show signs of hunger.
- o Ensure proper latching-on technique for adequate transfer of calories and rich hind milk.
 - o Move baby quickly to the breast while mouth is wide open
 - o Make sure baby's mouth cover the areola
 - o Observe her response and ask her about the suckling sensation.
 - o Look for good signs of attachment and repeat the process if first attempt was unsuccessful.
 - o **Signs of good attachment:** baby's mouth over wide area of areola, upper and lower lips are curled out, maintain a clear airway by pressing a finger against breast near to baby's nose. **(Fig. 8)**
 - o In the first five minutes of nursing most of the milk (approx. 90%) is transferred to the infant.

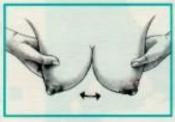
Good AttachmentPoor Attachment



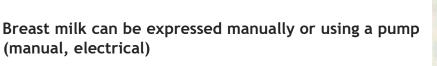
9) (Fig.











- Manually express milk: a. Fig. 10
 - gently rolled forward. (Fig. 10)
 - massaging, sliding, pulling may injure breasts.
 - three to five minutes.
 - · Express milk in a wide-mouth container that has been washed in soapy water and rinsed well. Pour milk into a sterile bottle and store.

Ь. Express Breast Milk with Pump:

- Instruct mother to hold the pump over each breast for about 10-15 minutes, every three hours.
- The breastmilk can be given to the baby with a cup or syringe
- Store milk according to protocol.

Storage of Breastmilk: C.



- Store milk in the back of the freezer for up to six months. Store at a temperature of minus four degrees Fahrenheit or -20 degrees Celsius.
- Defrosted milk may be kept for 24 hours in refrigerator.
- Defrost in warm water before using or defrost in refrigerator for eight hours.
- Store breastmilk in plastic bottles, glass containers or plastic bags.
- Ensure that sterilized bottles have secure caps.
- Bags should be open and rolled down several times before starting to express milk
- After milk is expressed rolled up and sealed with freezer tape or other. Double bag plastic bags or bottle liners to prevent tear and milk contamination
- Mark the date and amount on each container.

Use oldest milk first.

- Store in the refrigerator immediately after being expressed.
- Breastmilk can be kept at room temperature for four to eight hours at 66 to 72 degrees Fahrenheit.
- **DO NOT** refreeze left-over milk. Discard unused milk.
- Freeze milk in two to four ounce portions and leave a space at the top of container. Milk expands during freezing.

Cup Feeding

The World Health Organization (WHO) and UNICEF, through The Baby Friendly Hospital Initiative (BFHI), have focused attention on cup feeding again as an adjunct to breastfeeding in Step 9: "Give no artificial teats or pacifiers to breastfeeding infants."

Cup feeding, when done correctly, appears to be a safe and less physiologically stressful alternative to the use of bottles with breastfeeding babies. It may prevent nipple preference, encourage correct tongue placement for breastfeeding, costs very little and appears easy to learn.

Experience has indicated that cup feeding is a skill easily learned by pre-term infants before efficient breast or bottle feeding is possible, and at a stage in development when it has been previously assumed that NG tubes are a necessity.

Why cup feed? To provide an alternative when mother is not available to breastfeed; To reduce the need for nasal and oral gastric tubes;

Possible Advantages of cup feeding: It enables parents to assume feeding of their baby at the earliest possible time; The baby paces his own intake both in time and quantity; It seems to require little energy expenditure for the infant; It stimulates appropriate tongue and jaw movements; It stimulates olfactory and oral sensory receptors; It stimulates the production of saliva and lingual lipases resulting in more efficient digestion; Antibacterial factors in breastmilk may have a protective effect, even in the infant's mouth (e.g. otitis media); It provides good eye contact, social stimulation and is comforting to the infant; Less fat is lost with a cup than via gastric tubes; There is nothing besides milk inside the infant's mouth for him to cope with. Disadvantages of cup feeding: Term babies, and to some extent pre-term infants, tend to dribble; Term healthy babies may become "addicted" to the cup if they do not have the opportunity to breastfeed regularly; The nurses must watch what they are doing. There appears to be no aspiration unless milk is poured into the mouth, which is not the technique for cup feeding; It does not fulfill the infant's need to suck.

Indications For Cup Feeding: A baby who is near discharge who is breastfeeding but whose mother cannot be present for all feedings; A baby whose mother is ill after delivery and who could not breastfeed; A cleft lip/cleft

palate infant whose mother wishes to breastfeed; A baby who has a uncoordinated suck and swallow; A term baby, when complimentary feedings are needed due to hypoglycemia, jaundice or dehydration, or to give drugs orally; Babies with neurologic problems are often able to sip or lap milk from a cup. Cup feeding encourages the movement of the tongue and muscles of the mouth, allows the baby to enjoy its feedings, and strengthens the relationship between parent and child.

Contraindications to Cup Feeding: Any newborn who is likely to aspirate (poor gag reflex, generally lethargic, marked neurologic deficits)

When to introduce cup feedings: after the infant is tolerating q 2-3 hour bolus feedings by gavage. Remove the indwelling NG tube after the infant is tolerating 3 cup feedings in a row; Teach all family members to cup feed. This is not difficult; Cup feeding infants take varying amounts. Look at the totals, not single feeding amounts; Developmentally, infants tend to lap milk from the cup initially and then sip milk as their suck, swallow, breathing coordination is more mature.

Procedure for Cup Feeding

- · Wrap the baby so the cup will not be knocked.
- Support the baby in an upright sitting position.
- · Fill the 30 cc medicine cup at least half full with breastmilk or formula.
- Place the brim of the cup at the outer corners of the upper lip, resting gently on the lower lip with the tongue inside the cup. (Some term infants may prefer their tongue under the lip of the cup.)
- Tip the cup so the milk is just touching the baby's lips. Do not pour the milk into the baby's mouth.
- · The infant usually laps the milk, or may sip it.
- · Allow time for the infant to swallow.
- Let the infant pace the feedings, but limit the length of the feeding to approximately 30 minutes to minimize fatigue.
- Stop to burp from time to time.
- Leave the cup in position during the feed; that is, while the baby rests, do not move the cup from this position.
- · Do not attempt to cup feed an infant who is not alert or who is excessively sleepy.

V. Breastfeeding Positions

a. Cradle hold

- Position baby in mother's lap, with baby's head in crook of arm. (Fig. 11)
- The babies chest should be against her chest so that the baby does not have to turn head towards breast.
- Be sure the arm of the chair is at the right height to support arm. Use pillows to support back arm and the baby's head if necessary.
- Elevating feet slightly would be helpful and promote comfort.
- Most common breastfeeding position.

b. Cross-cradle hold

Cross cradle hold is like the cradle hold except baby is lying in the opposite direction with his head in mother's hand, rather than the crook of her arm. This position is useful when first learning to breast-feed because it allows for good control of the baby's head while helping the baby to latch-on.

c. Football hold

- a. Hold baby like a football along forearm, with baby's body on your arm and face toward your breast and position legs under mother's arm. Patient uses the other hand to support breast.
- b. This hold is useful if patient has engorged breasts or sore nipples. It is also a good position if patient has had a cesarean section and cannot place baby on stomach.
- c. It is a good position for nursing twins. Fig. 11
- d. Football hold helps to prevent plugged ducts because baby helps to empty the bottom ducts.

d. Lying down breastfeeding

- a. Patient lies on her side and place baby on side facing her with head at the breast.
- b. Support back with pillows and ensure that baby's nose is unobstructed. Remember babies are obligatory nose breathers. Place baby on back for sleeping and create safe sleeping environment.



VII. "Breastfeeding" an informed decision

- Use simple language
- Make suggestions rather than give directives.

a. Interviewing skills

Non-verbal communication:

- Keep your head at level with patient
- Pay attention to what patient says and does.
- Remove barriers to breastfeeding
- Provide information and support that is timely and unhurried. -Touch appropriately

- Listening and learning skills
- Use verbal and non-verbal communication.
- Ask open ended questions
- Verify what mother is saying through verbal reflection.
- Show empathy and use appropriate gestures. Avoid using judgmental word

b. Counseling skills

- Accept what a mother thinks and feels
- Recognize and praise what a mother and baby are doing right.
- Give practical help.
- Give concise and relevant information (Too much information can confuse mother).
- Identify and clarify breastfeeding myths (see appendix):



C. Benefits for the Baby

- Breast milk, when fed directly from the breast, is immediately available with no wait and is at body temperature.
- Breast-fed babies have a decreased risk for several infant conditions including sudden infant death syndrome (SIDS). The sucking technique required of the infant encourages the proper development of both the teeth and other speech organs. Sucking also has a beneficial role in the prevention of obstructive sleep apnea.
- The many health benefits of breastfeeding have been well documented. According to the American Academy of Pediatrics policy statement, "Extensive research, especially in recent years documents diverse and compelling advantages to infants, mothers, families, and society from breastfeeding and the use of human milk for infant feeding. These include health, nutritional, immunologic, developmental, psychological, social, economic, and environmental benefits."

D. Breastfeeding is associated with lower risk of the following diseases:

Allergies Eczema
Asthma Gastroenteritis
Autoimmune thyroid diseases Hodgkin's lymphoma

Bacterial meningitis

Necrotizing enterocolitis

Breast cancer Multiple sclerosis

Celiac disease Obesity

Crohn's disease Otitis media (ear infection)

Diabetes Respiratory Infection and wheezing

Diarrhea Rheumatoid arthritis Urinary

Tract Infection

Breast milk also has various anti-infective factors. These include the anti-malarial factor para amino benzoic acid (PABA), the anti-amoebic factor BSSL, and lactoferrin (which is the second most abundant protein in human milk and binds to iron, inhibiting the growth of intestinal bacteria like E. Coli and Salmonella) and IgA which protects breastfeeding infants from microbial infection.

- Unlike human milk, the predominant protein in cow's milk is lactoglobulin. This is an important factor in allergy to cow's milk.
- Breast milk also contains, adequate amounts of various amino acids which are essential for neuronal development like cystine, methionine and taurine.
- Breastfeeding is nutritious, easy to digest and absorb.
- It is readily available at the right time and right temperature.
- Breastfed infants have faster linear growth and are less prone to being overweight.
- Human milk enhances the development of the brain. They perform better on test for intellectual development than formula fed infants.
- Breastfed preterm infant demonstrates marked intellectual development than those fed with artificial formula.
- Breastfed preterm infants have shorter hospital stays and lower rates of infections.
- Breastfeeding protects babies from diarrhea and acute respiratory infections.
- Breastfeeding stimulates the immune system.

E. Benefits for the Mother

- It releases hormones including oxytocin and prolactin that have been found to relax the mother and cause her to experience nurturing feelings toward her infant.
- Breastfeeding as soon as possible after giving birth increases levels of oxytocin which encourages the uterus to contract more quickly. This helps to decrease bleeding after the birth.
- Mothers can find breastfeeding helps them return to their previous weight as the fat accumulated during pregnancy is used in milk production.
- Frequent and exclusive breastfeeding delays the return of menstruation and fertility known as lactation amenorrhea method.

F. Breastfeeding mothers are at reduced risk of many diseases:

- a. Reduced risk of breast cancer
- b. Reduced risk of ovarian cancer
- c. Decreased insulin requirements in diabetic Mothers
- d. Stabilization of maternal endometriosis

- e. Reduced risk of post-partum hemorrhage
- f. Reduced risk of endometrial cancer
- g. Reduced risk of osteoporosis
- h. Beneficial effects on insulin levels of mothers
- i. Mothers who breastfeed experience improved bone re-mineralization after the birth, and a reduced risk for both ovarian and breast cancer both before and after menopause.

G. Breastfeeding enhances self-esteem, bonding and attachment process

- a. Bonding and attachment occurs through skin to skin contact and facilitates initiation and maintenance of breastfeeding.
- b. Mother and baby form loving relationship and babies cry less.
- c. Exclusive breastfeeding can delay ovulation and facilitate child spacing.
- d. Breastfeeding may reduce chronic diseases and obesity.
- e. Breastfeeding allows the uterus to return to normal size in a shorter period.
- f. Breastfed babies are healthy and require less medical visits
- g. Families save money when mother breastfeeds
- h. Money is saved because there is no need to purchase formula, bottles, fuel, and other supplies
- i. Women who breastfeed are less likely to miss work because their babies have fewer episodes of illness

H. Informed Decision on Method of Infant Feeding

- Give Mothers and their families' information on the benefits of breastfeeding This will allow them to make informed decisions on breastfeeding.
- Breastfeeding rates increase when nurses and physicians encourage and educate mothers.

The following topics must be discussed with mother/partner/family/friends for **informed decisions**:

- a. Importance of breastfeeding
- b. Importance of skin to skin contact
- c. Early initiation of breastfeeding
- d. Rooming-in on a 24-hour basis
- e. Feeding on demand
- f. Frequent feeding to help ensure sufficient milk supply

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- g. Good positioning and attachment
- h. Exclusive breastfeeding for the first six months
- i. The importance of breastfeeding after six months and complementary feedings.

j. Importance of the support from partner/family/friends

Hunger Cues

Early Hunger Cues Active Hunger Cues Late Hunger Cues

Licking top of the mouth Rooting (moving the ehad Crying

in search of breast

Licking lips Fidgeting Fussing

Sucking on lip, tongue,

finger or fists

Signs of Satiety

What does satiety mean? Satiety means feeling full, no longer hungry, satisfied with the amount of food eaten. Explain or demonstrate what signs indicate a baby has had enough food.

- Falls asleep.
- Is calm.
- Has relaxed hands and body.
- May have the hiccups but is calm and relaxed.
- Is peaceful.

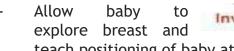
VIII. Management of special situations in mothers

a. Flat or inverted Nipples

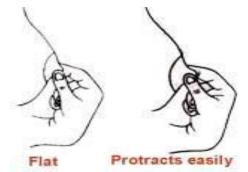
- Teach the mother that having inverted nipple will not prevent her from breastfeeding (Fig. 13)
- Immediately after delivery encourage mother to have confidence that

women with inverted nipples can breastfeed.

Explain that all babies suckle from the areola and not from the nipples.



Inverted



teach positioning of baby at breast.

Teach proper position

Fig. 13

for correct attachment

- See other technique that can aid flat and inverted nipples

b. Breast and Nipple Pain

Lactating mothers frequently complain about breast or nipple pain which is related to the mechanics of breastfeeding

- late first feed
- decreased frequency of feedings
- poor nipple grasp and/or poor positioning

If nipple soreness persists, candida infections should be suspected. Confirmatory cultures can be obtained and treatment with nystatin cream is recommended.

- Nipple pain prevents the let-down reflex which occurs just after the first few minutes of sucking. Lasts for two minutes as the suckling of the infant relieves ductal swelling.
- Management of pain is directed at prevention and correction of poor positioning and other practices.
- Proper breast elevation, wearing of a nursing bra that fits well and a warm shower help to alleviate breast pain.

- Acetaminophen or codeine 15-30 mg. half hour before feeding can promote comfort.

c. Breast Engorgement

- Breast engorgement occurs when too much breast milk is contained within breast.
- Breast engorgement interfere in the flow of milk from mother to baby
- It is caused by insufficient breastfeeding and/or block milk ducts
- Breast engorgement may lead to infections (mastitis, abscess) and breastfeeding failure (Fig. 15)
- To prevent breast engorgement, teach mother the importance of early initiation, correct latching-on, postiionign of mother and baby and feeding on demand
 - Management of breast engorgement:
- Allow 24 hour demand feeding to facilitate emptying of breast
- Apply hot compresses before nursing to facilitate let-down, and cold compresses between feeds.
- Engorgement require inmediate management by health personnel who will assess, diagnose and treat as needed

towards the worst-affected area can also help clear it up



d. Sore Ripples

e nipples can be prevented by proper latching-on procedure.

Prevent sore nipples by:

- Begin feeding on the less sore nipple to trigger the let-down reflex and start the milk flow.
- Move to other breast when milk starts flowing because baby will suck less vigorously.
- If one nipple is extremely sore, limit feedings to ten minutes temporarily.
 Frequent shorter feedings are recommended.

e. Breast & Nipple Concerns

Correct poor latching-on and perform manual expression.

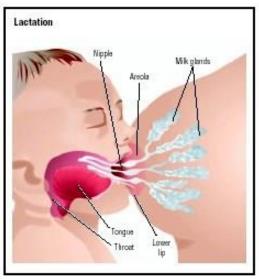


Fig. 15 - Nursing with baby's chin pointed

Fig. 15



Pain and cracks in the skin may occur if the baby only latches onto the nipple. Get help to improve the latch.



- Wash nipples with water at bath time, change breast pads frequently, and prevent excess drying of nipples.
- Gently dry nipples with natural air.
- Use a soothing emollient (including breast milk) on cracked breasts to reduce discomfort and promote healing. Use a breast pump to express milk if pain is severe and breastfeeding baby is not possible.

f. Plugged Ducts

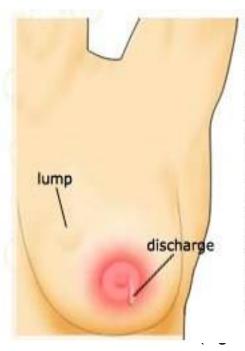
- A plugged duct is when one or more of the milk ducts become blocked usually caused by incomplete emptying of the breasts.
- A hard tender lump is felt on palpation. Serious attention must be given to patients with plugged ducts because of the high risk of infections.
- First Nurse baby on the tender side of the breast when the baby is hungry.
- Massage the breast where lump is located, express extra milk and try to unplug duct. Apply moist heat to breasts and persist with massages, and expression of milk.
- Sleep on your side to allow the flow of milk down to the ducts in breasts Avoid poorly fitting bras and get plenty of rest.
- When ducts become unplugged, a feeling of burning or pinching will be felt.

g. Mastitis

- Mastitis is characterized by chills, fever, headache, pain or redness, shooting pains in breast especially after nursing. (Fig. 16)
- Occurs before the end of the second week of breastfeeding but may also occur around the sixth

postpartum week.

- Treatment with antibiotics (penicillin, ampicillin or dicloxacillin) can prevent abscess development.
- Breastfeeding can continue during treatment of mothers for mastitis.



The main symptoms of mastitis are: breast pain, swelling, redness, fever, enlargement, changed nipple sensation, discharge, itching, tenderness, and/or a breast lump.

h. Breast Milk Safety

- Information for all women in the childbearing period should include the following.
- Avoid smoking and alcohol; these factors can harm the unborn fetus.
- Eat foods low in animal fat to reduce the potential of fat-soluble contaminants. - Wash and peel fruits and vegetables to eliminate pesticide residue.
- Avoid eating types of fish that may have high levels of mercury and be aware of advisories on mercury levels in rivers and sea.
- Limit exposure to solvents found in paint, glues, and nail polish and gasoline fumes.
- Wait two hours after working with solvents in the workplace before breastfeeding.
- Persons working with pesticide should shower and change clothing before leaving work.

i. Breastfeeding and the use of Medication

- Most medications are safe and mothers can continue to breastfeed.
- Most medications are found in low doses in the milk.
- Toxic medications to treat cancer and psychotic conditions (and others) are dangerous to the health of the infant.

Table 2: Safe Drugs during Breastfeeding

Acetaminophen	Well tolerated by infants
Ibuprofen	Safe for breastfeeding with normal dosing.
Opioids	Choices available that provides analgesia with minimal effect on infant.
Morphine	Enters milk at low levels. Response may vary in ill or premature infants because of decreased clearance of drug.

Source: Emerg. Med. Clin. N. Am. (2003)

- Clinicians should determine whether medicine is necessary and choose a drug that is safe for breastfeeding.
- Contraceptives with estrogen/progesterone used during breastfeeding can cause a decrease of milk.
- A progestin-only agent is safe, it does not affect milk volume nor infant's weight gain.
- Barrier methods (condom, IUD) do not affect milk production and volume.

j. Breastfeeding and adequate spacing of pregnancy

- Exclusive breastfeeding can naturally space pregnancy by the increase of Oxytocin.
- Oxytocin suppresses the release of the ovum which prevents fertilization
- <u>Unrestricted</u>, exclusive breastfeeding is required day and night to delay ovulation.
- Exclusive breastfeeding to delay pregnancy is reliable ONLY when carried out correctly.
- If there is difficulty with Exclusive Breastfeeding it is advisable to use an alternative contraceptive method.
- Contraceptive methods that may be used include: condoms, progestinonly pills and injections and diaphragms.
- Progestin-only pills or injections are recommended to start at six weeks postpartum.

k. C-Section & Breastfeeding

C-Section mothers and their babies should have skin to skin contact as soon as mother is alert and comfortable.

When Mother is alert, is the best time to be assisted in the initiating of breastfeeding

Reassure mother and family members that opioids and other analgesics are safe to use during breastfeeding.

Assessment of mothers' comfort level and babies' physiological status must be conducted and recorded.

l. Breast pain is also associated with the following:

- latching-on: Created by anxious infant who sucks strongly against empty ducts until the let-down occurs.
- engorged breasts: Causes dull generalized discomfort on the entire breast which worsens before a feed and relieved by it.
- nipple trauma: when infant is confused about nipple and chews on injure the tip with the tongue.
- mastitis: May cause localized, unilateral, and continuous pain in breast.

m. Other Conditions (UNICEF/WHO, 2006).

- Herpes Simple (HSV-1) Women should refrain from breastfeeding until all lesions on the breast have been resolved.
- Hepatitis B: Infected mothers should continue breastfeeding as usual. Infants should be given hepatitis B vaccine within the first 48 hours.
- Tuberculosis: Breastfeeding by TB positive mothers should be continued. Mother and baby should be managed according to Ministry of Health treatment protocol.

IX. Management of special situations in infants

The preterm (premature) infant is one who is born at less than 37 weeks gestation. Mothers who deliver preterm infants make breast milk that is different from normal (term) milk. This difference lasts approximately 4 weeks. By the time the preterm infant is 4 weeks old the composition of the maternal breast milk approaches that of normal milk.

Preterm milk has more of the following:

- 1. Total nitrogen
- 2. Protein nitrogen
- 3. Immunologic factors
- 4. Medium chain fatty acids
- 5. Sodium
- 6. Chloride
- 7. Iron
- The Preterm Infant Mother must be instructed on milk expression collection, preservation, storage and transportation of breast milk.
- Some preterm infants can be put to breast depending on their maturity and sucking ability.
- Promote skin to skin contact.
- To maintain adequate milk supply, advise mothers to express milk with a minimum of five expressions per day for at least 100 minutes per day.
- Encourage kangaroo method when caring for ill babies.

These differences are important in the extra nutrition that preterm infants need. Preterm infants can be divided into two groups:

- 1. Low Birth Weight (LBW) infants who are born at 32 to 34 weeks gestation weighing greater than 1500 grams.
- 2. Very low birth weight (VLBW) infants born earlier than this and weighing less than 1500 grams.

Table 3

Breastfeeding guidelines and HIV infection

- All pregnant women at the moment of delivery must have an HIV test done @34 or more weeks gestation
- If HIV status @34 plus weeks pregnancy not available, have a rapid HIV test done upon admission





Situation	Guidelines	
Mother's HIV Status is not known upon admission for delivery	Have a rapid HIV testing done upon admission If result is negative, communicate immediately and delay post test counseling after delivery If result is positive, ensure mother receives post test counseling prior to delivery of results	
Mother's HIV status is negative	Encourage exclusive breastfeeding -ONLY breastmilk from birth to six months-After immediate newborn care, put baby to breast, even if placenta is not expelled	
Mother's HIV status is positive	Provide ARV to mother and baby as per protocol. Find out mothers decision on feeding pattern for her baby upon admission. Provide counseling if no decision has been made. Help mothers to make the best choice, based on her particular situation. Provide ARV treatment for her baby upon discharge Explain when and where to go for follow up (indicate appointments): a) Pediatrician (booked appointment prior to discharge) b) Medical Officer / Specialist in charge of HIV patients c) Public Health Clinic (3 days after hospital discharge) for postnatal care and child growth promotion including vaccines.	
Mother is HIV positive and chooses to formula feed her baby	Discuss the AFASS conditions for safe formula feeding Exclusive Breastfeeding cessation should be when conditions for AFASS formula is met Exclusive breastfeeding is from birth to six months At six months of age breastfeeding should be nil Encourage optimal complementary feeding practices At six months formulas can be given in cup	

General recommendations	Assess AFASS conditions if formula feeding is chosen If formula feed is not AFASS, encourage exclusive breastfeeding until Formula feeding AFASS is achieved Explain the importance of exclusive breastfeeding to reduce the risk of transmission Support the mother in planning and carrying out a safe transition from exclusive to NON breastfeeding option Prevent and treat breast conditions of mothers. Treat thrush in infants. Ensure that mother knows where to seek skilled care if any
	problems arise.

Source: UNICEF/WHO (2006) (Condon, 2005).

VI. How can I support Breastfeeding and non-breastfeeding women:

a. Assess a Breastfeed

a.1 Signs of Sufficient Feeds

Is baby gaining weight? Steady weight gain is the most reliable sign of sufficient feeds. The usual weight loss of 10 percent of birth weight is recovered within two weeks of birth. Baby's age average weight gain

- 0-4 months: 170 grams per week †

- 4-6 months: 113-142 grams per week

- 6-12 months: ‡ 57-113 grams per week

It is acceptable for some babies to gain 113-142 grams (4-5 ounces) per week.

The average breastfed baby doubles birth weight in 5-6 months. By one year, the typical breastfed baby will weigh about $2\frac{1}{2}$ times birth weight. By two years, differences in weight gain and growth between breastfed and formula-fed babies are no longer evident.

Babies 0-36 months should have height for age measurements (at health facilities and / or community level) taken and recorded monthly.

Is baby breastfeeding regularly? Newborns breastfeed eight to twelve times daily, at two to three hours intervals or on demand.

Can I hear baby swallowing? Observe the strong motion of your baby's cheek and a pause to indicate swallowing.

Are my breasts softer and emptier after feeds? Remind women when breastfeeding to empty one breast completely before offering the second breast. Start on alternate breast at the next feed.

Does my baby have six to eight wet diapers per day? Minimum expected number of wet diapers / day. If in doubt wet diapers should weigh two to four tablespoons of water (20-40 gr) heavier than a dry diaper.

a.2 Signs of Insufficient Feeds

Poor weight gain: less than 500 g a month less than

birth weight at two weeks

Passing small amount of concentrated urine: less than

six times a day, yellow and strong smellng

Other signs: Baby not satisfied after breastfeeds

Baby cries often

Very frequent breastfeeds Very long breastfeeds

Baby refuses to breastfeed

Baby has hard, dry or green stools

No milk comes when mother tries to express Breasts did not enlarge (during pregnancy)

Milk did not "come in" (after delivery)

b. How to support non-breastfeeding mothers

- Counsel on risks and benefits of various feeding options
- Helping the mother choose what is acceptable, feasible, affordable, sustainable and safe (AFASS) in her circumsntances
- The sfe and hygienic preparation, feeding and storage of breast milk substitutes
- How to teach the preparation of various feeding options
- How to minimize the likelihood that breastfeeding mothers will be influenced to use formula

Table 4 Composition of Breast Milk

Factors	Breast Milk	Animal Milk	Formula
Bacterial contaminant	none	likely	likely when mixed
Anti-infective factors	present	not present	not present
Growth factors	present	not present	not present

Protein	correct amount easy to digest	too much difficult to digest	partly corrected
Fat	enough essential	lacks essential	lacks essential
	fatty acids	fatty acids	fatty acids
	lipase to digest	no lipase	no lipase
Iron	small amount	small amount	extra added
	well absorbed	not well absorbed	not well absorbed
Vitamins	enough	not enough A & C	Vitamins added
Water	enough	extra needed	may need extra

VIII. Complementary feeding

a. Complementary Feeding (Guiding Principles)

- Practice breastfeeding exclusively from birth to six months. At six months continue to breastfeed but introduce complementary foods.
- Feed infants slowly. Give encouragement and introduce one new food at any given time.
- Practice good hygiene and proper food handling. Store foods safely and use clean cups and bowls.

b. Average kcal. per day:

- 6-8 months 200 kcal. 9-11 months 300 kcal.
- 12-23 months 550 kcal
- Give small amounts of food and increase quantity and consistency gradually, while continuing to breastfeed.
- Feed children a variety of food to include meat, fish, eggs, poultry, vitamin A rich fruits and vegetables.
- Give vitamin and mineral rich foods or supplements.
 Along with breastmilk children by age group should receive the following interval feeding:
- 6-8 months: 2-3 times daily
- 9-24 months: 3-4 times daily. Give nutritious snacks several times per day.

c. Baby-Friendly Complementary Feeding

- Breastfeeding and complementary feeding are a continuum; consideration of one must include consideration of the other.
- As the name indicates "complementary" feeding is a complement to breastfeeding.
- Complementary feeding is essential for continued growth after 6 months of age.
- New recommendations for the addition of first foods into the diet emphasize protein and micronutrients in addition to energy needs.
- The ten guiding principles of complementary feeding serve as a guide for feeding behaviors.

d. Duration of exclusive breastfeeding and age of introduction of complementary foods.

Practice exclusive breastfeeding from birth to 6 months of age, introduce complementary foods at 6 months of age (180 days) while continuing to breastfeed.

Maintenance of breastfeeding. Continue frequent, on-demand breastfeeding until 2 years of age or beyond.

e. Responsive feeding.

- Feed infants directly and assist older children when they feed themselves, being sensitive to their hunger and satiety cues.
- Feed slowly and patiently, and encourage children to eat, but do not force them.
- If children refuse many foods, experiment with different food combinations, tastes, textures and methods of encouragement.
- Minimize distractions during meals if the child loses interest easily. **Remember** that feeding times are periods of learning and love -talk to children during feeding, with eye to eye contact.

f. Safe preparation and storage of complementary foods. Practice good hygiene and proper food handling by:

- Washing caregivers and children's hands before food preparation and eating.
- Storing foods safely and serving foods immediately after preparation.
- Using clean utensils to prepare and serve food.
- Using clean cups and bowls when feeding children.
- Avoiding the use of feeding bottles, which are difficult to keep clean.

g. Amount of complementary food needed.

- Start at 6 months of age with small amounts of food and increase the quantity as the child gets older, while maintaining frequent breastfeeding.

- the energy needs from complementary foods for infants with "average" breast milk intake in developing countries are approximately:
- 200 kcal per day at 6-8 months of age.
- 300 kcal per day at 9-11 months.
- 550 kcal per day at 12-23 months.

h. Food consistency

- Gradually increase food consistency and variety as the infant gets older, adapting to the infant's requirement and abilities.
- Infants can eat pureed, mashed and semisolid foods beginning at six months.
- 8 months: most infants can also eat "finger foods" (snacks that can be eaten by children alone).
- 12 months: children can eat the same types of foods as consumed by the rest of the family (keeping in mind the need for nutrient-dense foods).
- Avoid foods that may cause choking (items that have a shape and/or consistency that may cause them to become lodged in the trachea, such as nuts, grape, raw carrots)

i. Meal frequency and energy density

- Increase the number of times that the child is fed complementary foods as he/she gets older.
- The appropriate number of feedings depends on the energy density of the local foods and the usual amounts consumed at each feeding
- For the average healthy breastfed infant, meals of complementary foods should be provided:
- 6-8 months 2-3 times per day
- 9-11 months 3-4 times
- 12-24 months additional nutritious snacks (such as a piece of fruit or others), offered 1-2 times per day, as desired
- snacks are defined as food eaten between meals-usually self-fed, convenient an easy to prepare
- if energy density or amount of food per meal is low, or the child is no longer breastfed, more frequent meals may be required

j. Nutrient content of complementary foods

- Feed a variety of foods to ensure that nutrient needs are met.
- meat, poultry, fish or eggs should be eaten daily, or as often as possible.
- vegetarian diets cannot meet nutrient needs at this age unless nutrient supplements of fortified products are used.
- vitamin A rich fruits and vegetables should be eaten daily.
- provide diets with adequate fat content.

- avoid giving drinks with low nutrient value, such as tea, coffee and sugary drinks such as soda.
- limit the amount of juice offered to avoid displacing more nutrient rich foods.

k. Use of vitamin-mineral supplements of fortified products for infant and mother

- use fortified complementary foods or vitamin-mineral supplements for the infant as needed.
- in some populations, breastfeeding mothers may also need vitamin/mineral supplements or fortified products, both for their own health and to ensure normal concentrations of certain nutrients (particularly vitamins) in their breast milk (such products may also be beneficial for pre-pregnant and pregnant women).

l. Feeding during and after illness

Increase fluid intake during illness, including more frequent breastfeeding, and encourage the child to eat soft, varied, appetizing, favorite foods. After illness, give food more often than usual and encourage the child to eat more.

VIII. Breastfeeding Support Groups

a. Rationale for the creation of Breastfeeding Counselors / Breastfeeding support groups

- Because women's social networks are highly influential in their decisionmaking processes, they can be either barriers or points of encouragement for breastfeeding. These groups may influence a woman's feelings of success and satisfaction with breastfeeding.
- New mothers' preferred resource for concerns about child rearing is other mothers.
- Peer support may represent a cost-effective, individually tailored approach and culturally competent way to promote and support breastfeeding for women of varying socioeconomic backgrounds, especially where professional breastfeeding support is not widely available. Chapman et al.
- Fairbank et al. found peer support programs to be effective by themselves in increasing the initiation and duration of breastfeeding.
- Chapman et al. who completed a randomized controlled trial of peer support among low-income Latina women, found that women receiving individual peer counseling were more likely to breastfeed at 1 and 3 months postpartum than those who received only routine breastfeeding support. In addition, more women in the intervention group initiated breastfeeding.

b. Description and characteristics

- Ideally, peer mothers have the same or a similar sociocultural background as those whom they support.
- Peer mothers provide support and counseling to help women address their barriers to breastfeeding and assist them in preventing and managing breastfeeding problems
- Volunteer breastfeeding counselors should have access to training and follow up sessions
- Breastfeeding counselors can contact pregnant women to help them make informed infant feeding decisions and prepare them for the breastfeeding experience
- Peer counselors can, with training, identify risk factors and make referrals as needed to the nearest health facility.
- Breastfeeding counselors or Breastfeeding Support groups may be based in the community, but can have their meetings at a home or institutional facility, and or provide services at clinics or hospitals.

- Past research has found that women commonly rely on health care professionals to provide informational support while friends and family members are looked to for emotional and informational support.
- The child's father and relatives are the main providers of tangible support.
- Breastfeeding support groups contributes to increase duration of breastfeeding, breastfeeding beyond 6 months, attaining breastfeeding goals,

c. Who can be a member of the Breastfeeding Support Groups

- Women who are pregnant or breastfeeding can get together to share experiences, and give mutual support.
- Medical and Nursing staff including midwives.
- Community Nurses' Aides.
- Traditional Birth Attendants.
- Other community members who volunteered to provide counseling and support to lactating mothers.

d. How to organize Breastfeeding Support Groups

- a. Each Health Center in Urban and Rural area (Director of Medical Services and PHN) is responsible for the identification, training, organization, support and follow up of Breastfeeding Counselors and/or Breastfeeding Support Groups. Includes Breast is Best League members.
- Each Hospital is responsible to coordinate with health centers in their catchments area for the updating of breastfeeding counselors monthly. (List of names and addresses)
- c. Encourage the active participation of community based organizations to formed and follow up breastfeeding support groups in the areas where they have presence. They too should provide a list of their counselors and have a list of other counselors to be shared to women in need of the service.
- d. Identify key persons that are willing to provide counseling and support in breastfeeding to women in their communities, village, neighborhood, street e. Develop a list of breastfeeding counselors with name and address -street name and number-
- f. Provide a list to each hospital providing childbirth attendance
- g. Have the list of breastfeeding counselors visible always at the Maternity Ward. This will facilitate rapid identification and referral of postnatal mother to nearest breastfeeding counselor
- h. Provide training to breastfeeding counselors on counseling and support to lactating mothers at the community level. Training should be conducted every 6 months. Training should include basic breastfeeding

- management, complementary feeding, nutrition, infant growth and development, counseling techniques and criteria for referring patients.
- i. Help organize breastfeeding counselors by areas, and provide assistance in organizing meetings at community level.
- j. Provide a list of key points to be discussed at the meetings.
- k. Provide each breastfeeding counselor with a Breastfeeding manual, to be used as a resource guide.
- I. Another source of breastfeeding counselors can be women who are currently breastfeeding or who have done so in the past and are willing to provide peer-to-peer support in an informal group or one-to-one through telephone calls or visits in the home, clinic, hospital. Peer support includes psycho emotional support, encouragement, education about breastfeeding, and help with solving problems.
- Breastfeeding support groups can organize fundraising activities for local interventions.

e. Conducting a group session on Breastfeeding

- Meetings can be scheduled at an easily accessible location with venue and time defined by beneficiaries. Conduct one-to-one counseling and support based on women preferences, at counselor or beneficiary home.
- Make sure meetings feel supportive and relaxed, to facilitate the sharing of experiences and to make it easy to ask questions and obtain answers
- Date, day and time should be discussed with each group of breastfeeding counselors
- Once trained, Breastfeeding Counselors can facilitate the group sessions.
- Support Groups provide the opportunity to strengthen good practices and correct or modify wrong information, practices and attitudes.
- Support Groups are not lectures or classes and do not include scolding for incorrect breastfeeding practices.
- This setting provides an opportunity for mother to mother contact which will help mothers to maintain breastfeeding.
- Pregnant women and lactating mothers can be invited to attend breastfeeding group sessions.
- Each counselor or responsible for group of counselors should take note of the date, time, number of beneficiaries and concerns of women regarding breastfeeding and others. Notes should include topics of interest or unanswered questions that needs to be addressed at the next session. Make sure to summarize previous meeting and respond to these questions as first on the agenda.

- It is much easier to have scheduled days and time for meetings. Encourage breastfeeding counselors to have a set day and time to provide this service.

f. Breastfeeding support groups meetings can cover a wide range of breastfeeding related topics including:

- Why breastfeeding is good for mother and baby
- Preparation and expectations
- Overcoming or avoiding challenges and difficulties
- Family life with a baby
- Night-time parenting
- Infant sleep
- Returning to work
- Complementary feeding and maintenance of breastfeeding until 2 years of age
- Beneficiaries should be given the opportunity to conduct other sessions with toddlers, couple's meetings, antenatal classes, luncheon, etc.

g. Hospital Discharge Instructions

- Give written information of nearest contact person/breastfeeding support group that can give support to mother in their homes -name and address-.
- Establish a method to record whether breastfeeding mothers have been informed of the breastfeeding support available to them after discharge from hospital
- The hospital or clinic will establish and coordinate the breastfeeding support group.
- During the external evaluation to be certified as Mother-Baby friendly the following will be assessed:
- Mothers are given written instruction to visit the postnatal clinic at three days, then monthly. In these visits assess breastfeeding success and monitoring of growth and development.
- All breastfeeding mothers to be informed of both professional and voluntary support available to them in the community, including contact details of community midwives, voluntary counselors and any breastfeeding support groups in the local area.
- Breastfeeding mothers to confirm that they have been informed of how to contact both professional and voluntary help with breastfeeding after discharge from hospital.

References

Bahl, Rajiv; Frost, Chris et. al.(2005). Infant feeding patterns and risks of death and Hospitalization in the firsthalf of infancy: multicenter cohort study. Bulletin Of the World Health Organization 83 (6). 418-424.

Braun, Maria Luiza G.; Soares, M. et.al. (2003). Evaluation of the Impact of theBaby-Friendly Hospital Initiative on Rates of Breastfeeding. American Journal of Public Health 93 (8).

Breastfeeding Committee for Canada, 2004. Breastfeeding Definitions and Data Collection Periods.

Condon, Marian (2005). Breast is Best, But It Could Be Better: What is in Breast MilkThat Should Not Be? Pediatrics Nursing July-August 31 (4). 333-338

Crenshaw, Jeannette et.al. (2005). Breastfeeding in Non-maternity Settings. American American Journal of Nursing 105 (1). 40-50. USA: Lippincott Williams & Wilkens, Inc.

DiGirolamo, Ann et.al. (2003). Do Perceived Attitudes of Physicians and Hospital Staff Affect Breastfeeding Decisions? BIRTH 30 (2).

Gabbe (2002) Obstetrics - Normal and Problem Pregnancies, (4). USA: Churchill Livingstone.

Guistina, K; Chow, G. (2003). Medications in pregnancy and lactation. Emergency Medicine Clinics of North America 21, 285-613.

Lawrence, Robert; Lawrence, Ruth. (2004) Breast milk and infection. Clinics in Perinatology 31. 501-528.

Liu, Jihong; Rosenberg, Kenneth. (2006). Breastfeeding Duration and Perinatial Cigarrette Smoking in a Population-Based Cohort 96 (2). 309-314.

Loiselle, C. et.al. (2004). Sharing Empirical Knowledge to Improve Breastfeeding Promotion and Support: Description of Research Dessimination Project. WorldViews on Evidence-Based Nursing. First Quarter 25-32.

Ministry of Health, Belize (1997). National Breastfeeding Policy.

Ministry of Health, Belize (2002) Sexual and Reproductive Health Policy.

National Breastfeeding Committee (1996) Breastfeeding in Belize: An Evaluation of Policy, Hospital Practices and Community Support.

Newton, Edward, (2002). Physiology of Lactation and Breast-Feeding. In Gabbe: Obstetrics - Normal and Problem Pregnancies (4th ed) 105-120. USA: Churchill Livingstone, Inc.

Palda, Valerie; Guise, J; Wathen, C. (2004). Interventions to promote breast-feeding: Applying the evidence in clinical practice. Commentary. Canadian Medical Association Journal 170 (6).

Philipp, B.; Merewood, A. (2004). The Baby-Friendly way: the best breastfeeding Start. Pediatric Clinic of North America. 51. 761-783.

Sisk, Jane; Greer, Ann et.al. (2004). Implementing evidence -based practice: Evaluation Of an opinion leader strategy to improve breastfeeding rates. American Journal of Obstetrics and Gynecology 190. 413-421.

World Health Organization (2003). Global Strategy for infant and young child feeding. Geneva, Switzerland.

Read, Jennifer (2003). Human Milk, Breastfeeding, and Transmission of Human Immunodeficiency Virus Type 1 in the United States. The Committee on Pediatric AIDS. American Academy of Pediatrics 112 (5).

The International Code of Marketing of Breastmilk Substitutes. Retrieved September 3, 2006. www. lbfan.org/English/resource/who/fullcode

UNICEF (2003). Implementing the Baby Friendly best practice standards: A guide to implementing the Ten Steps to Sucessful Breastfeeding and the Seven Point Plan for the Protection, Promotion, and Support of Breastfeeding in Community Health Care Settings. Retrieved September 3, 2006. www.babyfriendly.org.uk/pdf.

UNICEF; World Health Organization (2006) Baby Friendly Hospital Initiative: Revised, Updated and Expanded for Integrated Care. Section One. Preliminary Version for Country Implementation.

UNICEF/WHO (2006). Hospital Self-Appraisal and Monitoring. Section 4. UNICEF; World Health Organization (2006).

Baby Friendly Hospital Initiative: Revised, Updated and Expanded for Integrated Care. Section Three. Breastfeeding Promotion and Support in a Baby-Friendly Hospital: A 20-Hour Course for Maternity Staff. Preliminary Version for Country Implementation.

WHO (2003). Community-Based Strategies for Breastfeeding Promotion and SupportIn Developing Countries.

WHO/UNICEF 93.5. Breastfeeding Counselling: A Training Course. Participants Manual.

WHO 93.4 & UNICEF 93.2. Breastfeeding Counselling: A Training Course. Trainers' Guide.

Appendix 1

Definition of Terms

Artificial infant feeding: Baby is not breast fed and is given only artificial feeds.

Bottle feeding: A bottle is used to feed baby regardless of whether expressed breast milk or other liquid food is used.

Breastmilk: This term includes direct breastfeeding, expressed breastmilk, and donated breastmilk. Vitamins and mineral supplements or medicines are allowed.

Colostrum is breastmilk that women produce in the first few days after delivery. It is thick and yellowish or clear in color.

Exclusive breastfeeding: The infant receives only breast milk. No food, water or other liquid is given by mother, family, babysitters or healthcare providers. Medicines, vitamin drops and expressed milk is permitted.

Foremilk comes in earlier, has a bluish tinge and is produced in large amounts. It provides plenty of protein, lactose, and other nutrients. Because a baby gets large amounts of foremilk, he gets all the water that he needs from it. Babies do not need other drinks of water before they are four to six months old, even in a hot climate. If they satisfy their thirst on water, they may take less breastmilk.

Full breastfeeding: Breastfeeding is done either exclusively or predominantly

Hindmilk is produced later and looks whiter than foremilk, because it contains more fat. This fat provides much of the energy and is an important reason not to take a baby off the breast too quickly. He should be allowed to continue until he has had all that he wants.

Mature milk is breastmilk that is produced after a few days. The quantity becomes larger, and the breasts feel full, hard and heavy as the milk "comes-in."

Predominant breastfeeding: Breastmilk is given by the mother, health care provider, or family member/supporter, along with a maximum of two foods or liquid including nonhuman milk.

Partial breastfeeding: Breast milk is given with three or more foods or liquid including non-human milk, cereal or other food.

Prelacteal feeds: Artificial feeds or drinks given to baby before breastfeeding is initiated are called prelacteal feeds. Prelacteal feeds threatens breastfeeding because they replace colostrums as the baby's earliest feed. Baby becomes susceptible to infections and allergies. Prelacteal feeds interfere with suckling, resulting in less breast stimulation and milk production. Babies who are given prelacteal feeds via bottles and teats may

experience sucking and/or nipple confusion and have difficulty in latching-on to nipple. Milk may take longer to "comein" with delay in establishing breastfeeding.

Suckling is the extension and pulling-in pattern of the tongue. The lips clamp the areola as the mandible and tongue thrust forward to grasp nipple and areola.

Timely complementary: Baby receives other food in addition to breastfeeding at the appropriate time, at six months.

Appendix II

List of Breastfeeding myths

- 1. Many women do not produce enough milk.
- 2. It is normal for breastfeeding to hurt.
- 3. There is no (not enough) milk during the first 3 or 4 days after birth.
- 4. A baby should be on the breast 20 (10, 15, 7.6) minutes on each side.
- 5. A breastfeeding baby needs extra water in hot weather.
- 6. Breastfeeding babies need extra vitamin D.
- 7. A mother should wash her nipples each time before feeding the baby.
- 8. Pumping is a good way of knowing how much milk the mother has.
- 9. Breastmilk does not contain enough iron for the baby's needs.
- 10. It is easier to bottle feed than to breastfeed.
- 11. Breastfeeding ties the mother down.
- 12. There is no way to know how much breastmilk the baby is getting.
- 13. Modern formulas are almost the same as breastmilk.
- 14. If the mother has an infection she should stop breastfeeding.
- 15. If the baby has diarrhea or vomiting, the mother should stop breastfeeding.
- 16. If the mother is taking medicine she should not breastfeed.
- 17. Women with flat or inverted nipples cannot breastfeed.
- 18. A woman who becomes pregnant must stop breastfeeding.
- 19. A baby with diarrhea should not breastfeed.
- 20. Babies will stay on the breast for 2 hours because they like to suck.
- 21. Babies need to know how to take a bottle. Therefore a bottle should always be introduced before the baby refuses to take one.
- 22. If a mother has surgery, she has to wait a day before restarting nursing.
- 23. Breastfeeding twins is too difficult to manage.
- 24. Women whose breasts do not enlarge or enlarge only a little during pregnancy, will not produce enough milk.
- 25. A mother whose breasts do not seem full has little milk in the breast.
- 26. Breastfeeding in public is not decent.

- 27. Breastfeeding a child until 3 or 4 years of age is abnormal and bad for the child, causing an overdependent relationship between mother and child.
- 28. If the baby is off the breast for a few days (weeks), the mother should not restartbreastfeeding because the milk sours.
- 29. After exercise a mother should not breastfeed.
- 30. A breastfeeding mother cannot get a permanent or dye her hair.
- 31. Breastfeeding is blamed for everything.
- 32. A breastfeeding mother has to be obsessive about what she eats.
- 33. A breastfeeding mother has to eat more in order to make enough milk.
- 34. A breastfeeding mother has to drink lots of fluids.
- 35. A mother who smokes is better not to breastfeed.
- 36. A mother should not drink alcohol while breastfeeding.
- 37. A mother who bleeds from her nipples should not breastfeed.
- 38. A woman who has had breast augmentation surgery cannot breastfeed.
- 39. A woman who has had breast reduction surgery cannot breastfeed.
- 40. Premature babies need to learn to take bottles before they can start breastfeeding.
- 41. Babies with cleft lip and/or palate cannot breastfeed.
- 42. Women with small breasts produce less milk than those with large breasts.
- 43. Breastfeeding does not provide any protection against becoming pregnant.
- 44. Breastfeeding women cannot take the birth control pill.
- 45. Breastfeeding babies need other types of milk after 6 months.

Breastfeeding Myths

1. Many women do not produce enough milk.

<u>Not true!</u> The vast majority of women produce more than enough milk. Indeed, an overabundance of milk is common. Most babies that gain too slowly, or lose weight, do so not because the mother does not have enough milk, but because the baby does not get the milk that the mother has. The usual reason that the baby does not get the milk that is available is that he is poorly latched onto the breast. This is why it is so important that the mother be shown, on the first day, how to latch a baby on properly, by someone who knows what they are doing.

2. It is normal for breastfeeding to hurt.

<u>Not true!</u> Though some tenderness during the first few days is relatively common, this should be a temporary situation which lasts only a few days and should never be so bad that the mother dreads nursing. Any pain that is more than mild is abnormal and is almost always due to the baby latching on poorly. Any nipple pain that is not getting better by day 3 or 4 or lasts beyond 5 or 6 days should not be ignored. A new onset of pain when things have been going well for a while may be due to a yeast infection of the nipples. Limiting feeding time does not prevent soreness.

3. There is no (not enough) milk during the first 3 or 4 days after birth.

Not true! It often seems like that because the baby is not latched on properly and therefore is unable to get the milk. Once the mother's milk is abundant, a baby can latch on poorly and still may get plenty of milk. However, during the first few days, the baby who is latched on poorly cannot get milk. This accounts for "but he's been on the breast for 2 hours and is still hungry when I take him off". By not latching on well, the baby is unable to get the mother's first milk, called colostrum. Anyone who suggests you pump your milk to know how much colostrum there is, does not understand breastfeeding, and should be politely ignored.

4. A baby should be on the breast 20 (10, 15, 7.6) minutes on each side.

<u>Not true!</u> However, a distinction needs to be made between "being on the breast" and "breastfeeding". If a baby is actually drinking for most of 15-20 minutes on the first side, he may not want to take the second side at all. If he drinks only a minute on the first side, and then nibbles or sleeps, and does the same on the other, no amount of time will be enough. The baby will breastfeed better and longer if he is latched on properly. He can also be helped to breastfeed longer if the mother compresses the breast to keep the flow of milk going, once he no longer swallows on his own.

5. A breastfeeding baby needs extra water in hot weather.

Not true! Breastmilk contains all the water a baby needs.

6. Breastfeeding babies need extra vitamin D.

<u>Not true!</u> Except in extraordinary circumstances (for example, if the mother herself was vitamin D deficient during the pregnancy). The baby stores vitamin D during the pregnancy, and a little outside exposure, on a regular basis, gives the baby all the vitamin D he needs.

7. A mother should wash her nipples each time before feeding the baby.

<u>Not true!</u> Formula feeding requires careful attention to cleanliness because formula not only does not protect the baby against infection, but also is actually a good breeding ground for bacteria and can also be easily contaminated. On the other hand, breastmilk protects the baby against infection. Washing nipples before each feeding makes breastfeeding unnecessarily complicated and washes away protective oils from the nipple.

8. Pumping is a good way of knowing how much milk the mother has.

<u>Not true!</u> How much milk can be pumped depends on many factors, including the mother's stress level. The baby who nurses well can get much more milk than his mother can pump.

Pumping only tells you have much you can pump.

9. Breastmilk does not contain enough iron for the baby's needs.

<u>Not true!</u> Breastmilk contains just enough iron for the baby's needs. If the baby is full term he will get enough iron from breastmilk to last him at least the first 6 months. Formulas contain too much iron, but this quantity may be necessary to ensure the baby absorbs enough to prevent iron deficiency. The iron in formula is poorly absorbed, and most of it, the baby poops out. Generally, there is no need to add other foods to breastmilk before about 6 months of age.

10. It is easier to bottle feed than to breastfeed.

<u>Not true!</u> Or, this should not be true. However, breastfeeding is made difficult because women often do not receive the help they should to get started properly. A poor start can indeed make breastfeeding difficult. But a poor start can also be overcome. Breastfeeding is often more difficult at first, due to a poor start, but usually becomes easier later.

11. Breastfeeding ties the mother down.

<u>Not true!</u> But it depends how you look at it. A baby can be nursed anywhere, anytime, and thus breastfeeding is liberating for the mother. No need to drag around bottles or formula. No need to worry about where to warm up the milk. No need to worry about sterility. No need to worry about how your baby is, because he is with you.

12. There is no way to know how much breastmilk the baby is getting.

<u>Not true!</u> There is no easy way to measure how much the baby is getting, but this does not mean that you cannot know if the baby is getting enough. The best way to know is that the baby actually drinks at the breast for several minutes at each feeding (open-pause—close type of suck). Other ways also help show that the baby is getting plenty.

13. Modern formulas are almost the same as breastmilk.

Not true! The same claim was made in 1900 and before. Modern formulas are only superficially similar to breastmilk. Every correction of a deficiency in formulas is advertised as an advance. Fundamentally they are inexact copies based on outdated and incomplete knowledge of what breastmilk is. Formulas contain no antibodies, no living cells, no enzymes, no hormones. They contain much more aluminum, manganese, cadmium and iron than breastmilk. They contain significantly more protein than breastmilk. The proteins and fats are fundamentally different from those in breastmilk. Formulas do not vary from the beginning of the feed to the end of the feed, or from day 1 to day 7 to day 30, or from woman to woman, or from baby to baby... Your breastmilk is made as required to suit your baby. Formulas are made to suit every baby, and thus no baby. Formulas succeed only at making babies grow well, usually, but there is more to breastfeeding than getting the baby to grow quickly.

14. If the mother has an infection she should stop breastfeeding.

Not true! With very, very few exceptions, the baby will be protected by the mother's continuing to breastfeed. By the time the mother has fever (or cough, vomiting, diarrhea, rash, etc) she has already given the baby the infection, since she has been infectious for several days before she even knew she was sick. The baby's best protection against getting the infection is for the mother to continue breastfeeding. If the baby does get sick, he will be less sick if the mother continues breastfeeding. Besides, maybe it was the baby who gave the infection to the mother, but the baby did not show signs of illness because he was breastfeeding. Also, breast infections, including breast abscess, though painful, are not reasons to stop breastfeeding. Indeed, the infection is likely to settle more quickly if the mother continues breastfeeding on the affected side.

15. If the baby has diarrhea or vomiting, the mother should stop breastfeeding. Not true! The best medicine for a baby's gut infection is breastfeeding. Stop other foods for a short time, but continue breastfeeding. Breastmilk is the only fluid your baby requires when he has diarrhea and/or vomiting, except under exceptional circumstances. The push to use "oral rehydrating solutions" is mainly a push by the formula (and oral rehydrating solutions)manufacturers to make even more money. The baby is comforted by the breastfeeding, and the mother is comforted by the baby's breastfeeding.

16. If the mother is taking medicine she should not breastfeed.

<u>Not true!</u> There are very very few medicines that a mother cannot take safely while breastfeeding. A very small amount of most medicines appears in the milk, but usually in such small quantities that there is no concern. If a medicine is truly of concern, there are usually equally effective, alternative medicines which are safe. The loss of benefit of breastfeeding for both the mother and the baby must be taken into account when weighing if breastfeeding should be continued.

17. Women with flat or inverted nipples cannot breastfeed.

Not true! Babies do not breastfeed on nipples, they breastfeed on the breast. Though it may be easier for a baby to latch on to a breast with a prominent nipple, it is not necessary for nipples to stick out. A proper start will usually prevent problems and mothers with any shaped nipples can breastfeed perfectly adequately. In the past, a nipple shield was frequently suggested to get the baby to take the breast. This gadget should not be used, especially in the first few days! Though it may seem a solution, its use often result in poor feeding and severe weight loss, and makes it even more difficult to get the baby to take the breast. If the baby does not take the breast at first, with proper help, he will often take the breast later. Breasts also change in the first few weeks, and as long as the mother maintains a good milk supply, the baby will usually latch on, sooner or later.

18. A woman who becomes pregnant must stop breastfeeding.

<u>Not true!</u> If the mother and child desire, breastfeeding can continue. There are women who continue nursing the older child even after delivery of the new baby. Many women

do decide to stop nursing when they become pregnant because their nipples are sore, or for other reasons, but there is no rush nor medical necessity to do so. In fact, there are often good reasons to continue. The milk supply may decrease during pregnancy, but if the baby is taking other foods, this is not a problem.

19. A baby with diarrhea should not breastfeed.

<u>Not true!</u> The best treatment for a gut infection (gastroenteritis) is breastfeeding. Furthermore, it is very unusual for the baby to require fluids other than breastmilk. If lactose intolerance is a problem, the baby can receive lactase drops, available without prescription, just before or after the feeding, but this is rarely necessary in breastfeeding babies. Get information on its use from the clinic. In any case, lactose intolerance due to gastroenteritis will disappear with time. Lactose free formula is not better than breastfeeding.

Breastfeeding is better than any formula.

20. Babies will stay on the breast for 2 hours because they like to suck.

<u>Not true!</u> Babies need and like to suck, but how much do they need? Most babies who stay at the breast for such a long time are probably hungry, even though they may be gaining well. Being at the breast is not the same as drinking at the breast. Latching the baby better onto the breast allows the baby to nurse more effectively, and thus spend more time actually drinking. You can also help the baby to drink more by expressing milk into his mouth when he is no longer swallows on his own. Babies younger than 5-6 weeks often fall asleep at the breast because the flow of milk is slow, not necessarily because they have had enough to eat.

21. Babies need to know how to take a bottle. Therefore a bottle should always beintroduced before the baby refuses to take one.

Not true! Though many mothers decide to introduce a bottle for various reasons, there is no reason a baby must learn how to use one. Indeed, there is no great advantage in a baby's taking a bottle. The baby can even take fluids or solids that are quite liquidy off a spoon. At about 6 months of age, the baby can start learning how to drink from a cup, and though it may take several weeks for him to learn to use it efficiently, he will learn. Sometimes, babies refuse getting bottles (smart babies). Do not worry, and proceed as above with solids and spoon. Giving a bottle when breastfeeding is going badly is not a good idea and usually makes the breastfeeding even more difficult. For your sake and the baby's do not try to "starve the baby into submission". Get help.

22. If a mother has surgery, she has to wait a day before restarting nursing.

<u>Not true!</u> The mother can breastfeed immediately after surgery, as soon as she is up to it. Neither the medications used during anaesthesia, nor pain medications nor antibiotics used after surgery require the mother to avoid breastfeeding, except under exceptional circumstances. Enlightened hospitals will accommodate breastfeeding mothers and babies when either the mother or the baby needs to be admitted to the hospital, so that breastfeeding can continue. Many rules that restrict breastfeeding are more for the convenience of staff than for the benefit of mothers and babies.

23. Breastfeeding twins is too difficult to manage.

<u>Not true!</u> Breastfeeding twins is easier than bottle feeding twins, if breastfeeding is going well. This is why it is so important that a special effort should be made to get breastfeeding started right when the mother has had twins. Many women have breastfed triplets exclusively. This obviously takes a lot of work and time, but twins and triplets take a lot of work and time no matter how the infants are fed.

24. Women whose breasts do not enlarge or enlarge only a little during pregnancy, willnot produce enough milk.

<u>Not true!</u> There are a very few women who cannot produce enough milk (though they can continue to breastfeed by supplementing with a lactation aid). Some of these women say that their breasts did not enlarge during pregnancy. However, the vast majority of women whose breasts do not seem to enlarge during pregnancy produce more than enough milk.

25. A mother whose breasts do not seem full has little milk in the breast.

<u>Not true!</u> Breasts do not have to feel full to produce plenty of milk. It is normal that a breastfeeding woman's breasts feel less full as her body adjusts to her baby's milk intake.

This can happen suddenly and may occur as early as two weeks after birth or even earlier. The breast is never "empty" and also produces milk as the baby nurses.

26. Breastfeeding in public is not decent.

Not true! It is the humiliation and harassment of mothers who are nursing their babies that is not decent. Women who are trying to do the best for their babies should not be forced by other people's lack of understanding to stay home or feed their babies in public washrooms. Those who are offended need only avert their eyes. Children will not be damaged psychologically by seeing a womon breastfeeding. On the contrary, they might learn something important, beautiful and fascinating. They might even learn that breasts are not only for selling beer. Other women who have left their babies at home to be bottle fed when they went out might be encouraged to bring the baby with them the next time.

27. Breastfeeding a child until 3 or 4 years of age is abnormal and bad for the child, causing an over dependent relationship between mother and child.

<u>Not true!</u> Breastfeeding for 2-4 years was the rule in most cultures since the beginning of human time on this planet. Only in the last 100 years or so has breastfeeding been seen as something to be limited. Children nursed into the third year are not overly dependent. On the contrary, they tend to be very secure and thus more independent. They themselves will make the step to stop breastfeeding (with gentle encouragement from the mother), and thus will be secure in their accomplishment.

28. If the baby is off the breast for a few days (weeks), the mother should not restartbreastfeeding because the milk sours.

<u>Not true!</u> The milk is as good as it ever was. Breast milk in the breast is not milk or formula in a bottle.

29. After exercise a mother should not breastfeed.

<u>Not true!</u> There is absolutely no reason why a mother would not be able to breastfeed after exercising. The study that purported to show that babies were fussy feeding after mother exercising was poorly done and contradicts the everyday experience of millions of mothers.

30. A breastfeeding mother cannot get a permanent or dye her hair. Not true!

31. Breastfeeding is blamed for everything.

<u>True!</u> Family, health professionals, neighbors, friends and taxi drivers will blame breastfeeding if the mother is tired, nervous, weepy, sick, has pain in her knees, has difficulty sleeping, is always sleepy, feels dizzy, is anemic, has a relapse of her arthritis (migraines, or any chronic problem) complains of hair loss, change of vision, ringing in the ears or itchy skin. Breastfeeding will be blamed as the cause of marriage problems and the other children acting up. Breastfeeding is to blame when the mortgage rates go up and the economy is faltering. And whenever there is something that does not fit the "picture book" life, the mother will be advised by everyone that it will be better if she stops breastfeeding.

32. A breastfeeding mother has to be obsessive about what she eats.

<u>Not true!</u> A breastfeeding mother should try to eat a balanced diet, but neither needs to eat any special foods nor avoid certain foods. A breastfeeding mother does not need to drink milk in order to make milk. A breastfeeding mother does not need to avoid spicy foods, garlic, cabbage or alcohol. A breastfeeding mother should eat a normal healthful diet. Although there are situations when something the mother eats may affect the baby, this is unusual. Most commonly, "colic", "gassiness" and crying can be improved by changing breastfeeding techniques, rather than changing the mother's diet.

33. A breastfeeding mother has to eat more in order to make enough milk.

<u>Not true!</u> Women on even very low-calorie diets usually make enough milk, at least until the mother's calorie intake becomes critically low for a prolonged period of time. Generally, the baby will get what he needs. Some women worry that if they eat poorly for a few days this also will affect their milk. There is no need for concern. Such variations will not affect milk supply or quality. It is commonly said that women need to eat 500 extra calories a day in order to breastfeed. This is not true. Some women do eat more when they breastfeed, but others do not, and some even eat less, without any harm done to the mother or baby or the milk supply. The mother should eat a balanced diet dictated by her appetite. Rules about eating just make breastfeeding unnecessarily complicated.

34. A breastfeeding mother must drink lots of fluids.

<u>Not true!</u> The mother should drink according to her thirst. Some mothers feel they are thirsty all the time, but many others do not drink more than usual. The mother's body knows if she needs more fluids, and tells her by making her feel thirsty. Do not believe that you have to drink at least a certain number of glasses a day. Rules about drinking just make breastfeeding unnecessarily complicated.

35. A mother who smokes is better not to breastfeed.

<u>Not true!</u> A mother who cannot stop smoking should breastfeed. Breastfeeding has been shown to decrease the negative effects of cigarette smoke on the baby's lungs, for example. Breastfeeding confers great health benefits on both mother and baby. It would be better if the mother not smoke, but if she cannot stop or cut down, then it is better she smokes and breastfeed than smoke and formula feed.

36. A mother should not drink alcohol while breastfeeding.

<u>Not true!</u> Reasonable alcohol intake should not be discouraged at all. As is the case with most drugs, very little alcohol comes out in the milk. The mother can take some alcohol and continue breastfeeding as she normally does. Prohibiting alcohol is another way we make life unnecessarily restrictive for nursing mothers.

37. A mother who bleeds from her nipples should not breastfeed.

Not true! Though blood makes the baby spit up more, and the blood may even show up in his bowel movements, this is not a reason to stop breastfeeding the baby. Nipples that are painful and bleeding are not worse than nipples that are painful and not bleeding. It is the pain the mother is having that is the problem. This nipple pain can often be helped considerably. Get help. Sometimes mothers have bleeding from the nipples that is obviously coming from inside the breast and is not usually associated with pain. This often occurs in the first few days after birth and settles within a few days. The mother should breastfeed! If bleeding does not stop soon, the source of the problem needs to be investigated, but the mother should keep breastfeeding.

38. A woman who has had breast augmentation surgery cannot breastfeed.

Not true! Most do very well. There is no evidence that breastfeeding with silicone implants is harmful to the baby. Occasionally this operation is done through the areola. These women do have problems with milk supply, as does any woman who has an incision around the areolar line.

39. A woman who has had breast reduction surgery cannot breastfeed.

Not true! Breast reduction surgery does decrease the mother's capacity to produce milk, but since many mothers produce more than enough milk, mothers who have had breast reduction surgery sometimes manage very well to breastfeed exclusively. In such a situation, the establishment of breastfeeding should be done with special care. However, if the mother seems not to produce enough, she can still breastfeed, supplementing with a lactation aid (so that artificial nipples do not interfere with breastfeeding).

40. Premature babies need to learn to take bottles before they can start breastfeeding.

Not true! Premature babies are less stressed by breastfeeding than by bottle feeding. A baby as small as 1200 grams and even smaller can start at the breast as soon as he is stable, though he may not latch on for several weeks. Still, he is learning and he is being held which is important for his wellbeing and his mother's. Actually, weight or gestational age do not matter as much as the baby's readiness to suck, as determined by his making sucking movements. There is no more reason to give bottles to premature

babies than to full term babies. When supplementation is truly required there are ways to supplement without using artificial nipples.

41. Babies with cleft lip and/or palate cannot breastfeed.

Not true! Some do very well. Babies with a cleft lip only usually manage fine. But many babies do indeed find it impossible to latch on. There is no doubt, however, that if breastfeeding is not tried, it will not work. The baby's ability to breastfeed does not always seem to depend on the severity of the cleft. Breastfeeding should be started, as much as possible, using the principles of proper establishment of breastfeeding. If bottles are given, they will undermine the baby's ability to breastfeed. If the baby needs to be fed, but is not latching on, a cup can and should be used in preference to a bottle. Finger feeding occasionally is successful in babies with cleft lip/palate, but not usually.

42. Women with small breasts produce less milk than those with large breasts. Nonsense!

43. Breastfeeding does not provide any protection against becoming pregnant.

<u>Not true!</u> It is not a foolproof method, but no method is. In fact breastfeeding is not a bad method of child spacing, and gives reliable protection especially during the first 6 months after birth. But it is reliable only when breastfeeding is exclusive, when feedings are fairly frequent (at least 6-8 times in 24 hours), there are no long periods during which the baby does not feed, and the mother has not yet had a normal menstrual period after giving birth. After the first six months, the protection is less, but still present, and on average women breastfeeding into the second year of life will have a baby every 2 to 3 years even without any artificial method of contraception.

44. Breastfeeding women cannot take the birth control pill.

Not true! The question is not exposure to female hormones, to which the baby is exposed anyway through breastfeeding. The baby gets only a tiny bit more from the pill. However, some women who take the pill, even the mini-pill, find that their milk supply decreases. Œstrogen in the pill decrease the milk supply. Because so many women produce more than enough, this often does not matter, but sometimes it does and the baby becomes fussy and is not satisfied by nursing. Babies respond to rate of flow of milk, not what's "in the breast", so that even a very good milk supply may seem to cause the baby who is used to faster flow to be fussy. Stopping the pill often brings things back to normal. If possible, women who are breastfeeding should avoid the pill until the baby is taking other foods (usually 6 months of age). Even if the baby is older, the milk supply may decrease significantly. If the pill must be used, it is preferable to use the progestin only pill (without œstrogen).

45. Breastfeeding babies need other types of milk after 6 months.

<u>Not true!</u> Breastmilk gives the baby everything there is in other milks *and more*. Babies older than 6 months should be started on solids mainly so that they learn how to eat and so that they begin to get another source of iron, which by 7-9 months, is not supplied in sufficient quantities from breastmilk alone. Thus cow's milk or formula will not be necessary as long as the baby is breastfeeding. However, if the mother wishes to give

milk after 6 months, there is no reason that the baby cannot get cow's milk, as long as the baby is still breastfeeding a few times a day, and is also getting a wide variety of solid foods in more than minimal amounts. Most babies older than 6 months who have never had formula will not accept it, because of the taste.

Appendix III

TEN STEPS to optimal breastfeeding in Pediatric Ward

- 1. Have a written breastfeeding policy and train staff in necessary skills
- 2. When an infant is seen for either a well visit or due to illness, ascertain the mother's infant feeding practices and assist in establishment or management of breastfeeding as needed
- 3. Provide parents with written and verbal information about breastfeeding
- 4. Facilitate unrestricted breastfeeding or, if necessary, milk expression for mothers regardless of the child's age
- 5. Give breastfed children other food or drink only when age appropriate or when medically indicated, and if medically indicated, use only alternative feeding methods most conducive to return to breastfeeding
- 6. If hospitalization is needed, ensure facility allows 24-hour mother-child rooming in
- 7. Administer medications and schedule procedures so as to cause the least possible disturbance of feeding
- 8. Maintain a human milk bank, according to standards
- 9. Provide information and contacts concerning community support available
- 10. Maintain appropriate monitoring and records/data collection procedures to permit quality assurance assessment, progress rounds or staff meetings, and feedback.

Appendix IV

Baby-Friendly Physician's Office Optimizing care for infants and children

- 1. Establish a written breastfeeding friendly office policy and inform all new staff about the policy
- 2. Encourage breastfeeding mothers to exclusively breastfeed. Instruct mother not to offer bottles or a pacifier.
- 3. Offer culturally in ethnically competent care
- 4. Offer a prenatal visit and show your commitment to breastfeeding during this visit
- 5. Collaborate with local hospitals and maternity care professionals in the community. Convey to delivery rooms and newborn units your office policies on breastfeeding initiation
- 6. Schedule a first follow up visit 48-72 hours after hospital discharge or earlier if breastfeeding related problems, such as excessive weight loss >7% or jaundice is present at the time of hospital discharge
- 7. Ensure availability of appropriate educational resources for parents. Educational materials should be non-commercial and not advertise breast milk substitutes, bottles and nipples.
- 8. Do not interrupt or discourage breastfeeding in the office. Allow and encourage breastfeeding in the waiting room. Ensure an office environment that demonstrates breastfeeding promotion and support.
- 9. Develop and follow triage protocols to address breastfeeding concerns and problems
- 10. Commend breastfeeding mothers during each visit for choosing and continuing breastfeeding
- 11. Encourage mothers to exclusively breastfeed for 6 months and continue breastfeeding with complementary foods until at least 24 months and thereafter as long as mutually desired. Discuss introduction of solid food at 6 months of age, emphasizing the need for high -iron solids and assess for need for Vitamin D supplementation
- 12. Have a written breastfeeding policy and provide lactation room with supplies for your employees who breastfeed or express breast milk at work. Encourage community employers and day care providers to support breastfeeding
- 13. Acquire or maintain a list of community resources and support local breastfeeding support groups.
- 14. All clinicians and physicians should receive education regarding breastfeeding.
- 15. Monitor breastfeeding initiation and duration rates in your practice, and analyze what additional changes can be made to enhance your support for optimal infant and young child feeding.

Appendix V

The International Code of Marketing of Breastmilk Substitutes

- Art. 1. Aim of the Code
- Art. 2. Scope of the Code
- Art. 3. Definitions
- Art. 4. Information and education
- Art. 5. The public and mothers
- Art. 6. Health care systems
- Art. 7. Health workers
- Art. 8. Persons employed by manufacturers and distributors
- Art. 9. Labeling
- Art. 10. Quality
- Art. 11. Implementation and monitoring

The Member States of the World Health Organization:

Affirming the right of every child and every pregnant and lactating woman to be adequately nourished as a means of attaining and maintaining health; Recognizing that infant malnutrition is part of the wider problems of lack of education, poverty, and social injustice;

Recognizing that the health of infants and young children cannot be isolated from the health and nutrition of women, their socio-economic status and their roles as mothers; Conscious that breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants; that it forms a unique biological and emotional basis for the health of both mother and child; that the anti-infective properties of breast milk help to protect infants against disease; and that there is an important relationship between breastfeeding and child spacing;

Recognizing that the encouragement and protection of breastfeeding is an important part of the health, nutrition and other social measures required to promote healthy growth and development of infants and young children; and that breastfeeding is an important aspect of primary health care;

Considering that when mothers do not breastfeed, or only do so partially, there is a legitimate market for infant formula and for suitable ingredients from which to prepare it; that all these products should accordingly be made accessible to those who need them through commercial or noncommercial distribution systems; and that they should

not be marketed or distributed in ways that may interfere with the protection and promotion of breastfeeding;

Recognizing further that inappropriate feeding practices lead to infant malnutrition, morbidity and mortality in all countries, and that improper practices in the marketing of breastmilk substitutes and related products can contribute to these major public health problems;

Convinced that it is important for infants to receive appropriate complementary foods, usually when the infant reaches four to six months of age, and that every effort should be made to use locally available foods; and convinced, nevertheless, that such complementary foods should not be used as breastmilk substitutes;

Appreciating that there are a number of social and economic factors affecting breastfeeding, and that, accordingly, governments should develop social support systems to protect, facilitate and encourage it, and that they should create an environment that fosters breastfeeding, provides appropriate family and community support, and protects mothers from factors that inhibit breastfeeding;

Affirming that health care systems, and the health professionals and other health workers serving in them, have an essential role to play in guiding infant feeding practices, encouraging and facilitating breastfeeding, and providing objective and consistent advice to mothers and families about the superior value of breastfeeding, or, where needed, on the proper use of infant formula, whether manufactured industrially or home prepared;

Affirming further that educational systems and other social services should be involved in the protection and promotion of breastfeeding, and in the appropriate use of complementary foods;

Aware that families, communities, women's organizations and other nongovernmental organizations have a special role to play in the protection and promotion of breastfeeding and in ensuring the support needed by pregnant women and mothers of infants and young children, whether breastfeeding or not;

Affirming the need for governments, organizations of the United Nations system, nongovernmental organizations, experts in various related disciplines, consumer groups and industry to cooperate in activities aimed at the improvement of maternal, infant and young child health and nutrition;

Recognizing that governments should undertake a variety of health, nutrition and other social measures to promote healthy growth and development of infants and young children, and that this Code concerns only one aspect of these measures;

Considering that manufacturers and distributors of breastmilk substitutes have an important and constructive role to play in relation to infant feeding, and in the promotion of the aim of this Code and its proper implementation;

Affirming that governments are called upon to take action appropriate to their social and legislative framework and their overall development objectives to give effect to the principles and aim of this Code, including the enactment of legislation, regulations or other suitable measures;

Believing that, in the light of the foregoing considerations, and in view of the vulnerability of infants in the early months of life and the risks involved in inappropriate feeding practices, including the unnecessary and improper use of breastmilk substitutes, the marketing of breastmilk substitutes requires special treatment, which makes usual marketing practices unsuitable for these products;

THEREFORE:

The Member States hereby agree the following articles which are recommended as a basis for action.

Article 1. Aim of the Code

The aim of this Code 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 breastmilk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution.

Article 2. Scope of the Code

The Code applies to the marketing, and practices related thereto, of the following products: breastmilk substitutes, including infant formula; other milk products, foods and beverages, including bottle-fed complementary foods, when marketed or otherwise represented to be suitable, with or without modification, for use as a partial or total replacement of breastmilk; feeding bottles and teats. It also applies to their quality and availability, and to information concerning their use.

Article 3. Definitions

For the purposes of this Code:

"Breastmilk substitute" means any food being marketed or otherwise represented as a partial or total replacement for breast milk, whether or not suitable for that purpose.

"Complementary food" means any food, whether manufactured or locally prepared, suitable as a complement to breast milk or to infant formula, when either becomes insufficient to satisfy the nutritional requirements of the infant. Such food is also commonly called "weaning food" or "breastmilk supplement".

"Container" means any form of packaging of products for sale as a normal retail unit, including wrappers.

"Distributor" means a person, corporation or any other entity in the public or private sector engaged in the business (whether directly or indirectly) of marketing at the wholesale or retail level a product within the scope of this Code. A "primary distributor" is a manufacturer's sales agent, representative, national distributor or broker.

"Health care system" means governmental, nongovernmental or private institutions or organizations engaged, directly or indirectly, in health care for mothers, infants and pregnant women; and nurseries or childcare institutions. It also includes health workers in private practice. For the purposes of this Code, the health care system does not include pharmacies or other established sales outlets.

"Health worker" means a person working in a component of such a health care system, whether professional or nonprofessional, including voluntary, unpaid workers.

"Infant formula" means a breastmilk substitute formulated industrially in accordance with applicable Codex Alimentarius standards, to satisfy the normal nutritional requirements of infants up to between four and six months of age, and adapted to their physiological characteristics. Infant formula may also be prepared at home, in which case it is described as "home prepared".

"Label" means any tag, brand, mark, pictorial or other descriptive matter, written, printed, stenciled, marked, embossed or impressed on, or attached to, a container (see above) of any products within the scope of this Code.

"Manufacturer" means a corporation or other entity in the public or private sector engaged in the business or function (whether directly or through an agent or through an entity controlled by or under contract with it) of manufacturing a product within the scope of this Code.

"Marketing" means product promotion, distribution, selling, advertising, product public relations, and information services.

"Marketing personnel" means any person whose functions involve the marketing of a product or products coming within the scope of this Code.

"Samples" means single or small quantities of a product provided without cost.

"Supplies" means quantities of a product provided for use over an extended period, free or at a low price, for social purposes, including those provided to families in need.

Article 4. Information and education

4.1 Governments should have the responsibility to ensure that objective and consistent information is provided on infant and young child feeding for use by families and those involved in the field of infant and young child nutrition. This responsibility should cover the planning, provision, design and dissemination of information, or their control.

- 4.2 Informational and educational materials, whether written, audio, or visual, dealing with the feeding of infants and intended to reach pregnant women and mothers of infants and young children, should include clear information on all the following points:
 - 1. the benefits and superiority of breastfeeding;
 - 2. maternal nutrition, and the preparation for and maintenance of breastfeeding;
 - 3. the negative effect on breastfeeding of introducing partial bottle feeding;
 - 4. the difficulty of reversing the decision not to breastfeed; and
 - 5. Where needed, the proper use of infant formula, whether manufactured industrially or home prepared.

When such materials contain information about the use of infant formula, they should include the social and financial implications of its use; the health hazards of inappropriate foods or feeding methods; and, in particular, the health hazards of unnecessary or improper use of infant formula and other breast milk substitutes. Such materials should not use any pictures or text which may idealize the use of breast milk substitutes.

4.3 Donations of informational or educational equipment or materials by manufacturers or distributors should be made only at the request and with the written approval of the appropriate government authority or within guidelines given by governments for this purpose. Such equipment or materials may bear the donating company's name or logo, but should not refer to a proprietary product that is within the scope of this Code, and should be distributed only through the health care system.

Article 5. The general public and mothers

- 5.1 There should be no advertising or other form of promotion to the general public of products within the scope of this Code.
- 5.2 Manufacturers and distributors should not provide, directly or indirectly, to pregnant women, mothers or members of their families, samples of products within the scope of this Code.
- 5.3 In conformity with paragraphs 1 and 2 of this Article, there should be no point-of-sale advertising, giving of samples, or any other promotion device to induce sales directly to the consumer at the retail level, such as special displays, discount coupons, premiums, special sales, loss leaders and tie-in sales, for products within the scope of this Code. This provision should not restrict the establishment of pricing policies and practices intended to provide products at lower prices on a long-term basis.
- 5.4 Manufacturers and distributors should not distribute to pregnant women or mothers of infants and young children any gifts of articles or utensils which may promote the use of breastmilk substitutes or bottle feeding.

5.5 Marketing personnel, in their business capacity, should not seek direct or indirect contact of any kind with pregnant women or with mothers of infants and young children.

Article 6. Health care systems

- 6.1 The health authorities in Member States should take appropriate measures to encourage and protect breastfeeding and promote the principles of this Code, and should give appropriate information and advice to health workers in regard to their responsibilities, including the information specified in Article 4.2.
- 6.2 No facility of a health care system should be used for the purpose of promoting infant formula or other products within the scope of this Code. This Code does not, however, preclude the dissemination of information to health professionals as provided in Article 7.2.
- 6.3 Facilities of health care systems should not be used for the display of products within the scope of this Code, for placards or posters concerning such products, or for the distribution of material provided by a manufacturer or distributor other than that specified in Article 4.
- 6.4 The use by the health care system of "professional service representatives", "mother craft nurses" or similar personnel, provided or paid for by manufacturers or distributors, should not be permitted.
- 6.5 Feeding with infant formula, whether manufactured or home prepared, should be demonstrated only by health workers, or other community workers if necessary; and only to the mothers or family members who need to use it; and the information given should include a clear explanation of the hazards of improper use.
- 6.6 Donations or low-price sales to institutions or organizations of supplies of infant formula or other products within the scope of this Code, whether for use in the institutions or for distribution outside them, may be made. Such supplies should only be used or distributed for infants who have to be fed on breastmilk substitutes. If these supplies are distributed for use outside the institutions, this should be done only by the institutions or organizations concerned. Such donations or low-price sales should not be used by manufacturers or distributors as a sales inducement.
- 6.7 Where donated supplies of infant formula or other products within the scope of this Code are distributed outside an institution, the institution or organization should take steps to ensure that supplies can be continued as long as the infants concerned need them. Donors, as well as institutions or organizations concerned, should bear in mind this responsibility.

6.8 Equipment and materials, in addition to those referred to in Article 4.3, donated to health care system may bear a company's name or logo, but should not refer to any proprietary product within the scope of this Code.

Article 7. Health workers

- 7.1 Health workers should encourage and protect breastfeeding; and those who are concerned in particular with maternal and infant nutrition should make themselves familiar with their responsibilities under this Code, including the information specified in Article 4.2.
- 7.2 Information provided by manufacturers and distributors to health professionals regarding products within the scope of this Code should be restricted to scientific and factual matters, and such information should not imply or create a belief that bottle feeding is equivalent or superior to breastfeeding. It should also include the information specified in Article 4.2.
- 7.3 No financial or material inducements to promote products within the scope of this Code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families.
- 7.4 Samples of infant formula or other products within the scope of this Code or of equipment or utensils for their preparation or use, should not be provided to health workers except when necessary for the purpose of professional evaluation or research at the institutional level. Health workers should not give samples of infant formula to pregnant women, mothers of infants and young children, or members of their families.
- 7.5 Manufacturers and distributors of products within the scope of this Code should disclose to the institution to which a recipient health worker is affiliated any contribution made to him or on his behalf for fellowships, study tours, research grants, attendance at professional conferences, or the like. Similar disclosures should be made by the recipient.

Article 8. Persons employed by manufacturers and distributors

- 8.1 In systems of sales incentives for marketing personnel, the volume of sales of products within the scope of this Code should not be included in the calculation of bonuses, nor should quotas be set specifically for sales of these products. This should not be understood to prevent the payment of bonuses based on the overall sales by a company of other products marketed by it.
- 8.2 Personnel employed in marketing products within the scope of this Code should not, as part of their job responsibilities, perform educational functions in relation to pregnant women or mothers of infants and young children. This should not be understood as preventing such personnel from being used for other functions by the health care

system at the request and with the written approval of the appropriate authority of the government concerned. **Article 9. Labeling**

- 9.1 Labels should be designed to provide the necessary information about the appropriate use of the product, and so as not to discourage breastfeeding.
- 9.2 Manufacturers and distributors of infant formula should ensure that each container has a clear, conspicuous, and easily readable and understandable message printed on it, or on a label which cannot readily become separated from it, in an appropriate language, which includes all the following points:
 - 1. the words "Important Notice" or their equivalent;
 - 2. a statement of the superiority of breastfeeding;
 - 3. a statement that the product should be used only on the advice of a health worker as to the need for its use and the proper method of use;
 - 4. Instructions for appropriate preparation, and a warning against the health hazards of inappropriate preparation.

Neither the container nor the label should have pictures of infants, nor should they have other pictures or text which may idealize the use of infant formula. They may, however, have graphics for easy identification of the product as a breastmilk substitute and for illustrating methods of preparation. The terms "humanized", "maternalised" or similar terms should not be used. Inserts giving additional information about the product and its proper use, subject to the above conditions, may be included in the package or retail unit. When labels give instructions for modifying a product into infant formula, the above should apply.

- 9.3 Food products within the scope of this Code, marketed for infant feeding, which do not meet all the requirements of an infant formula, but which can be modified to do so, Should carry on the label a warning that the unmodified product should not be the sole source of nourishment of an infant. Since sweetened condensed milk is not Suitable for infant feeding, nor for use as a main ingredient of infant formula, its label should not contain purported instructions on how to modify it for that purpose.
- 9.4 The label of food products within the scope of this Code should also state all the following points:
 - 1. the ingredients used;
 - 2. The composition/analysis of the product;
 - 2. The storage conditions required; and
 - 3. The batch number and the date before which the product is to be consumed, considering the climatic and storage conditions of the country concerned.

Article 10. Quality

10.1 The quality of products is an essential element for the protection of the health of infants and therefore should be of a high recognized standard.

10.2 Food products within the scope of this Code should, when sold or otherwise distributed, meet applicable standards recommended by the Codex Alimentarius Commission and also the Codex Code of Hygienic Practice for Foods for Infants and Children.

Article 11. Implementation and monitoring

- 11.1 Governments should act to give effect to the principles and aim of this Code, as appropriate to their social and legislative framework, including the adoption of national legislation, regulations or other suitable measures. For this purpose, governments should seek, when necessary, the cooperation of WHO, UNICEF and other agencies of the United Nations system. National policies and measures, including laws and regulations, which are adopted to give effect to the principles and aim of this Code should be publicly stated, and should apply on the same basis to all those involved in the manufacture and marketing of products within the scope of this Code.
- 11.2 Monitoring the application of this Code lies with governments acting individually and collectively through the World Health Organization as provided in paragraphs 6 and 7 of this Article. The manufacturers and distributors of products within the scope of this Code, and appropriate nongovernmental organizations, professional groups, and consumer organizations should collaborate with governments to this end.
- 11.3 Independently of any other measures taken for implementation of this Code, manufacturers and distributors of products within the scope of this Code should regard themselves as responsible for monitoring their marketing practices according to the principles and aim of this Code, and for taking steps to ensure that their conduct at every level conforms to them.
- 11.4 Nongovernmental organizations, professional groups, institutions, and individuals concerned should have the responsibility of drawing the attention of manufacturers or distributors to activities which are incompatible with the principles and aim of this Code, so that appropriate action can be taken. The appropriate governmental authority should also be informed.
- 11.5 Manufacturers and primary distributors of products within the scope of this Code should apprise each member of their marketing personnel of the Code and of their responsibilities under it.
- 11.6 In accordance with Article 62 of the Constitution of the World Health Organization, Member States shall communicate annually to the Director General information on action taken to give effect to the principles and aim of this Code.
- 11.7 The Director General shall report in even years to the World Health Assembly on the status of implementation of the Code; and shall, on request, provide technical support to Member States preparing national legislation or regulations, or taking other appropriate measures in implementation and furtherance of the principles and aim of this Code.

Appendix VI

Infant Feeding Cues: A Feeding Guide

Ways to nurse discreetly:

- Put a blanket over the shoulder.

 Wear big loose blouses or t-shirts.

It is normal for a newborn's skin to peel and seem dry?

- Newborn skin is exposed to a different environment than when they were in the womb.
- ☐ It is normal for the skin to become dry, flaky, and cracked especially on hands and feet.
- △ Lotion is not necessary, this will go away after a week or two.

A small newborn is able to latch-on and nurse even when the breast seems so much bigger.

- Small babies can open their mouths very wide. Watch them yawn. You'll see $\overline{\ }$ how big a newborn's mouth can get.
- It is rare for a baby-mother pair not to be able to nurse successfully. $\overline{\ }$

Any size breast and shape of nipple can work for breastfeeding.

- Size of breast is determined by amount of fat not the "milk-making" cells. Most babies will get used to whatever type of nipple a mom has.
- Introducing bottles before 3-4 weeks of age might make a baby prefer a bottle nipple over mom's nipple.

Hunger Cues

Early Hunger Cues	Active Hunger Cues	Late Hunger Cues	
Licking top of the mouth	Rooting (moving the head in search of breast	Crying	
Licking lips	Fidgeting Sucking on lip, tongue, finger or fists	Fussing	

Remember there is no one "right" position. If the position is comfortable for mother and baby, and baby is getting enough milk, then that is all that matters.

What will help you and your baby nurse comfortably?

- $ilde{\square}$ Comfortable chair or couch $ilde{\square}$ Pillows
- ☐ Baby is in a comfortable outfit without being all bundled and constricted

Why is it important for an infant's head to be in the right position when at the breast? Try these movements to demonstrate importance of right positioning. △ Turn your head so you are looking over one of your shoulders, now try swallowing. △ Now tuck your chin into your chest and try swallowing. △ This time, look up at the ceiling and swallow.

Finally, keep your head straight, looking forward and swallow. In this position your ears, shoulders, and hips are in a straight line. Which way was the easiest for you to swallow?

Waiting for a Wide Mouth

- a. By using your hand or mouth, show how wide a baby's mouth should open before mom latches him or her on. The angle of the mouth or hand should be about a 130 degree angle. Utilizing a breast model:
- **b.** Point to the location where a baby's mouth would latch-on if the baby's mouth was wide open.
- c. Point to the location where a baby's mouth would latch-on if the baby's mouth was not wide open.
- **d.** If the mouth is not wide open the baby will suck on the nipple only and not have enough areola (dark part around the nipple) in his or her mouth. The baby needs to get the entire nipple and about 1 inch of the areola in the mouth.

If the mouth is not wide open, the baby isn't able to "milk" the breast, i.e. drain the breast of milk. Not waiting for a wide mouth makes the baby suck on the nipple, causing sore nipples.

Correct Attachment

△ Baby's nose and chin should touch mom's breast. △ Mom's hand should never hold baby's head, instead hold the back of baby's neck. △ Baby's nose and mouth should be directly opposite the nipple. The ear, shoulder and hip should be in a straight line.

Cues letting you know baby is getting milk: △ Cheeks are

- full. They are not being sucked inward.
- ☐ Baby sucks, rests, and then starts to suck again. ☐ Ears wiggle because jaw is moving. ☐ Sounds of swallowing are heard.
- ☐ Milk seen in the corners of baby's mouth. ☐ Milk leaks from the other breast.

Coming Off: what baby does to tell mom he or she has had enough food. Babies will usually fall asleep, come off the breast by themselves, or push the nipple out of their mouths.

Mom pressed on her breast close to the baby's mouth to break suction.

When a baby comes off the breast, the nipple may touch the top of baby's mouth. When this happens the baby's reflex is to suck a couple more times. To know if baby is truly done with a feeding, mom can look for signs of satiety or satisfaction.

Signs of Satiety

What does satiety mean? Satiety means feeling full, no longer hungry, satisfied with the amount of food eaten. Explain or demonstrate what signs indicate a baby has had enough food.

- Falls asleep.
- Is calm.
- Has relaxed hands and body.
- May have the hiccups but is calm and relaxed.
- Is peaceful.

Appendix VII

Hospital Self-Appraisal Criteria

- 1. Global Criteria Step One: Have a breastfeeding policy that is routinely communicated to all health care staff.
 - The health facility has a written breastfeeding or infant feeding policy that addresses all 10 Steps and protects breastfeeding by adhering to the International Code of Marketing of Breast-milk Substitutes.
 - The policy requires that HIV-positive mothers receive counselling on infant feeding and guidance on selecting options likely to be suitable for their situations.
 - The policy is available so that all staff, who takes care of mothers and babies can refer to it.
 - Summaries of the policy covering, at minimum, the Ten Steps, the Code and subsequent

WHA Resolutions, and support for HIV-positive mothers, are visibly posted in all areas of the health care facility which serve pregnant women, mothers, infants, and/or children.

These areas include the antenatal care, labour and delivery areas, maternity wards and rooms, all infant care areas, including well baby observation areas (if there are any), and any infant special care units. The summaries are displayed in the language(s) and written with wording most commonly understood by mothers and staff.

- 2. Global Criteria Step Two: Train all health care staff in skills necessary to implement the policy.
 - The head of maternity services reports that all health care staff members who have any contact with pregnant women, mothers, and/or infants, have received orientation on the breastfeeding/infant feeding policy. The orientation that is provided is sufficient.
 - A copy of the curricula or course session outlines for training in breastfeeding promotion and support for various types of staff is available for review, and a training schedule for new employees is available.
 - Documentation of training indicates that 80% or more of the clinical staff members who have contact with mothers and/or infants and have been on the staff 6 months or more have received training, either at the hospital or prior to arrival that covers all 10 Steps, and the Code and subsequent WHA resolutions. It is likely that at least 20 hours of targeted training will be needed to develop the knowledge and skills necessary to adequately

- support mothers. Three hours of supervised clinical experience are required.
- Documentation of training also indicates that non-clinical staff members have received training that is adequate, given their roles, to provide them with the skills and knowledge needed to support mothers in successfully feeding their infants.
- Training on how to provide support for non-breastfeeding mothers is also provided to staff.
- A copy of the course session outlines for training on supporting no breastfeeding mothers is also available for review. The training covers key topics such as:
- the risks and benefits of various feeding options;
- helping the mother choose what is acceptable, feasible, affordable, sustainable and safe (AFASS) in her circumstances;
- the safe and hygienic preparation, feeding and storage of breast-milk substitutes;
- how to teach the preparation of various feeding options, and how to minimize the likelihood that breastfeeding mothers will be influenced to use formula.

The type and percentage of staff receiving this training is adequate, given the facility's needs. • Out of the randomly selected clinical staff members:

- 1. at least 80% confirm that they have received the described training or, if they have been working in the maternity services less than 6 months, have, at minimum, received orientation on the policy and their roles in implementing it
- 2. at least 80% are able to answer 4 out of 5 questions on breastfeeding support and promotion correctly
- 3. at least 80% can describe two issues that should be discussed with a pregnant woman if she indicates that she is considering giving her baby something other than breastmilk

Out of the randomly selected non-clinical staff members:

4. at least 70% confirm that they have received orientation and/or training concerning breastfeeding since they started working at the facility

- 5. at least 70% can describe at least one reason why breastfeeding is important,
- 6. at least 70% can mention one possible practice in maternity services that would support breastfeeding.
- 7. at least 70% can mention at least one thing they can do to support women so they can feed their babies well.
- * These include staff members providing clinical care for pregnant women, mothers and their babies.
- ** These include staff members providing non-clinical care for pregnant women, mother and their babies or having contact with them in some aspect of their work.
- 3. Global Criteria Step Three: Inform all pregnant women about the benefits and management of breastfeeding.
 - The head of maternity or antenatal services reports that at least 80% of the pregnant women who are provided antenatal care receive information about breastfeeding.
 - A written description of the minimum content of the antenatal education is available.
 - The antenatal discussion covers the importance of breastfeeding, the importance early skin-to-skin contact, early initiation of breastfeeding, rooming-in on a 24-hour basis, feeding on demand or baby-led feeding, frequent feeding to help assure enough milk, good positioning and attachment, exclusive breastfeeding for the first 6 months, and the fact that breastfeeding continues to be important after 6 months when other foods are given.
 - Out of the randomly selected pregnant women in their third trimester who have come for at least two antenatal visits:
 - 1. at least 70% confirm that a staff member has talked with them or offered a group talk that includes information on breastfeeding
 - 2. at least 70% can adequately describe what was discussed about two of the following topics: importance of skin-to-skin contact, rooming in, and risks of supplements while breastfeeding in the first 6 months.
- 4. Global Criteria Step Four: Help mothers initiate breastfeeding within a half-hour of birth. (Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour and encourage mothers to recognize when their babies are ready to breastfeed, offering help if needed.)

- Out of the randomly selected mothers with vaginal births or caesarean sections without general anesthesia in the maternity wards:
 - 1. at least 80% confirm that their babies were placed in skin-to-skin contact with them immediately or within five minutes after birth and that this contact continued for at least an hour, unless there were medically justifiable reasons for delayed contact.
 - 2. at least 80% also confirm that they were encouraged to look for signs for when their babies were ready to breastfeed during this first period of contact and offered help, if needed. (The baby should not be forced to breastfeed but, rather, supported to do so when ready.)

(Note: Mothers may have difficulty estimating time immediately following birth. If time and length of skin-to-skin contact following birth is listed in the mothers' charts, this can be used as a crosscheck.)

- 3. If any of the randomly selected mothers have had caesarean deliveries with general anesthesia, at least 50% should report that their babies were placed in skin-to-skin contact with them as soon as the mothers were responsive and alert, with the same procedures followed.
- 4. At least 80% of the randomly selected mothers with babies in special care report that they have had a chance to hold their babies skin-to skin or, if not, the staff could provide justifiable reasons why they could not.
- 5. Observations of vaginal deliveries, if necessary to confirm adherence to Step 4, show that in at least 75% of the cases babies are placed with their mothers hold skin-to-skin within five minutes after birth for at least 60 minutes, and that the mothers are shown how to recognize the signs that their babies are ready to breastfeed and offered help, or there are justified reasons for not following these procedures. (Optional)
- 5. Global Criteria Step Five: Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants. The head of maternity services reports that mothers who have never breastfed or who have previously encountered problems with breastfeeding receive special attention and support both in the antenatal and postpartum periods. Observations of staff demonstrating how to safely prepare and feed breastmilk substitutes confirm that in 75% of the cases, the demonstrations were accurate and complete, and the mothers were asked to give "return demonstrations".
 - Out of the randomly selected clinical staff members:
 - 1. at least 80% report that they teach mothers how to position and attach their babies for breastfeeding and are able to describe or

- demonstrate correct techniques for both, or can describe to whom to refer mothers for this advice.
- 2. at least 80% report that they teach mothers how to hand expression and can describe or demonstrate an acceptable technique for this, or can describe to whom to refer mothers for this advice.
- 3. at least 80% can describe how non-breastfeeding mothers can be assisted to safely prepare their feeds, or to whom they can be referred for this advice.
- Out of the randomly selected mothers (including caesarean):
 - 1. at least 80% of those who are breastfeeding report that nursing staff offered further assistance with breastfeeding the next time they fed their babies or within six hours of birth (or of when they were able to respond).
 - 2. at least 80% of those who are breastfeeding are able to demonstrate or describe correct positioning, attachment and suckling at least 80% of those who are breastfeeding report that they were shown how to express their milk by hand or given written information and told where they could get help if needed.
 - 3. at least 80% of the mothers who have decided not to breastfeed report that they have been offered help in preparing and giving their babies feeds, can describe the advice they were given, and have been asked to prepare feeds themselves, after being shown how. • Out of the randomly selected mothers with babies in special care:
 - 1. at least 80% of those who are breastfeeding or intending to do so report that they have been offered help to start their breastmilk coming and to keep up the supply within 6 hours of their babies' births.
 - 2. at least 80% of those breastfeeding or intending to do so report that they have been shown how to express their breastmilk by hand
 - 3. at least 80% of those breastfeeding or intending to do so can adequately describe and demonstrate how they were shown to express their breastmilk by hand
 - 4. at least 80% of those breastfeeding or intending to do so report that they have been told they need to breastfeed or express their milk 6 times or more every 24 hours to keep up the supply.
- 6. Global Criteria Step Six: Give newborn infants no food or drink other than breastmilk, unless medically indicated.
 - Hospital data indicate that at least 75% of the full-term babies delivered in the last year have been exclusively breastfed or exclusively fed expressed breast milk from birth to discharge, or, if not, that there were documented medical reasons or fully informed choices.

- Review of all clinical protocols or standards related to breastfeeding and infant feeding used by the maternity services indicates that they are in line with BFHI standards and current evidence-based guidelines.
- No materials that recommend feeding breast milk substitutes, scheduled feeds or other inappropriate practices are distributed to mothers.
- The hospital has an adequate facility/space and the necessary equipment for giving demonstrations of how to prepare formula and other feeding options away from breastfeeding mothers.
- Observations in the postpartum wards/rooms and any well baby observation areas show that at least 80% of the babies are being fed only breastmilk or there are acceptable medical reasons or informed choices for receiving something else.
- At least 80% of the randomly selected clinical staff members can describe two types of information that should be discussed with mothers who indicate they are considering feeding breast milk substitutes.
- At least 80% of the randomly selected mothers report that their babies had received only breast milk or, if they had received anything else, it was either for acceptable medical reasons, described by the staff, or as a result of fully informed choices.
- At least 80 % of the randomly selected mothers who have decided not to breastfeed report that the staff discussed with them the various feeding options and helped them to decide what was suitable in their situations.
 At least 80% of the randomly selected mothers with babies in special care who have decided not to breastfeed report that staff has talked with them about risks and benefits of various feeding
- 7. Global Criteria Step Seven• Observations in the postpartum wards and any well-baby observation areas and discussions with mothers and staff confirm that at least 80% of the mothers and babies are rooming-in or, if not, have justifiable reasons for not being together.

At least 80% of the randomly selected mothers report that their babies have stayed with them in their rooms/beds since they were born, or, if not, there were justifiable reasons.

- 8. Global Criteria Step Eight Out of the randomly selected mothers:
 - (1) at least 80% report that they have been told how to recognize when their babies are hungry and can describe at least two feeding cues.
 - (2) at least 80% report that they have been advised to feed their babies as often and for as long as the babies want or something similar.

- 9. Global Criteria Step Nine Observations in the postpartum wards/rooms and any well baby observation areas indicate that at least 80% of the breastfeeding babies observed are not using bottles or teats or, if they are, their mothers have been informed of the risks.
 - At least 80% of the randomly selected breastfeeding mothers report that, to the best of their knowledge, their infants have not been fed using bottles with artificial teats (nipples).
 - At least 80% of the randomly selected mothers report that, to the best of their knowledge, their infants have not sucked on pacifiers.

10. Global Criteria - Step Ten

- The head/director of maternity services reports that:
 - mothers are given information on where they can get support if they need help with feeding their babies after returning home, and the head/director can also mention at least one source of information.
 - the facility fosters the establishment of and/or coordinates with mother support groups and other community services that provide breastfeeding/ infant feeding support to mothers, and this same staff member can describe at least one way this is done.
 - (3) the staff encourages mothers and their babies to be seen soon after discharge (preferably 2-4 days after birth and again the second week) at the facility or in the community by a skilled breastfeeding support person who can assess feeding and give any support needed and can describe an appropriate referral system and adequate timing for the visits.
 - A review of documents indicates that printed information is distributed to mothers before discharge, if appropriate, on how and where mothers can find help on feeding their infants after returning home and includes information on at least one type of help available.
 - Out of the randomly selected mothers at least 80% report that they have been given information on how to get help from the facility or how to contact support groups, peer counsellors or other community health services if they have questions about feeding their babies after return home and can describe at least one type of help that is available.
- 11. Global Criteria Code compliance. The head/director of maternity services

reports that:

- (1) No employees of manufacturers or distributors of breast milk substitutes, bottles, teats or pacifiers have any direct or indirect contact with pregnant women or mothers.
- (2) The hospital does not receive free gifts, non-scientific literature, materials or equipment, money, or support for in-service education or events from manufacturers or distributors of breast milk substitutes, bottles, teats or pacifiers.
- (3) No pregnant women, mothers or their families are given marketing materials or samples or gift packs by the facility that include breast milk substitutes, bottles/teats, pacifiers, other infant feeding equipment or coupons.
- A review of records and receipts indicates that any breast milk substitutes, including special formulas and other supplies, are purchased by the health care facility for the wholesale price or more.
- Observations in the antenatal and maternity services and other areas where nutritionists and dieticians work indicate that no materials that promote breast milk substitutes, bottles, teats or dummies, or other designated products as per national laws, are displayed or distributed to mothers, pregnant women, or staff.
- Infant formula cans and prepared bottles are kept out of view.
- At least 80% of the randomly selected clinical staff members can give two reasons why it is important not to give free samples from formula companies to mothers.

12. Global Criteria - HIV and infant feeding• The head/director of maternity services reports that:

- (1) The hospital has policies and procedures that seem adequate concerning providing or referring pregnant women for testing and counselling for HIV, counselling women concerning PMTCT of HIV, providing individual, private counselling for pregnant women and mothers who are HIV positive on infant feeding options, and insuring confidentiality.
- (2) mothers who are HIV positive or concerned that they are at risk are referred to community support services for HIV testing and infant feeding counselling, if they exist.
- A review of the infant feeding policy indicates that it requires that HIV
 positive mothers receive counselling, including information about the risks
 and benefits of various infant feeding options and specific guidance in
 selecting the options for their situations, supporting them in their choices.

- A review of the curriculum on HIV and infant feeding and training records indicates that training is provided for appropriate and is sufficient, given the percentage of HIV positive women and the staff needed to provide support for pregnant women and mothers related to HIV and infant feeding. The training covers basic facts on: -
 - (1) basic facts of the risks of HIV transmission during pregnancy, labor and delivery and breastfeeding and its prevention;
 - (2) importance of testing and counselling for HIV;
 - (3) local availability of feeding options;
 - (4) facilities/provision for counselling HIV positive women on advantages and disadvantages of different feeding options; assisting them in formula feeding (Note: may involve referrals to infant feeding counsellors);
 - (5) how to assist HIV positive mothers who have decided to breastfeed; including how to transition to replacement feeds at the appropriate time the dangers of mixed feeding;
 - (6) how to minimize the likelihood that a mother whose status is unknown or HIV negative will be influenced to replacement feed.
- A review of the antenatal information indicates that it covers the important topics on this issue. (These include the routes by which HIV-infected women can pass the infection to their infants, the approximate proportion of infants that will (and will not) be infected by breastfeeding; the importance of counselling and testing for HIV and where to get it; and the importance of HIV positive women making informed infant feeding choices and where they can get the needed counselling).
- A review of documents indicates that printed material is available, if appropriate, on how to implement various feeding options and is distributed to or discussed with HIV positive mothers before discharge. It includes information on how to exclusively replacement feed, how to exclusively breastfeed, how to stop breastfeeding when appropriate, and the dangers of mixed feeding.
- Out of the randomly selected clinical staff members:
 - (1) at least 80% can describe at least one measure that can be taken to maintain confidentiality and privacy of HIV positive pregnant women and mothers
 - (2) at least 80% are able to mention at least two policies or procedures that help prevent transmission of HIV from an HIV positive mother to her infant during feeding within the first six months.
 - (3) at least 80% are able to describe two issues that should be discussed when counseling an HIV positive mother who is deciding how to feed her baby

- Out of the randomly selected pregnant women who are in their third trimester and have had at least two antenatal visits or are in the antenatal in-patient unit:
 - (1) at least 70% report that a staff member has talked with them or given a talk about HIV/AIDS and pregnancy;
 - (2) at least 70% report that the staff has told them that a woman who is HIV-positive can pass the HIV infection to her baby;
 - (3) at least 70% can describe at least one thing the staff told them about why testing and counselling for HIV is important for pregnant women;
 - (4) at least 70% can describe at least one thing the staff told them about what a HIV positive mother needs to consider when deciding how to feed her baby.

Notes	