



Using Essential Nutrition Actions (ENA) To Improve the Nutrition of Children and Women

Handout for Health Workers

Optimal Breastfeeding	Complementary Feeding with BF	Nutritional Care of the sick & Malnourished child	Women's Nutrition
Control of Vitamin A deficiency	Control of Anemia	Control of Iodine Deficiency Disorders	

Liberia

APRIL 2010

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INTRODUCTION

This reference module is intended to equip health providers with the basic information on implementing the Essential Nutrition Actions (ENA) framework in Liberia, using multi channels (health centers, health clinics and community) and multi-contacts (critical health contacts)

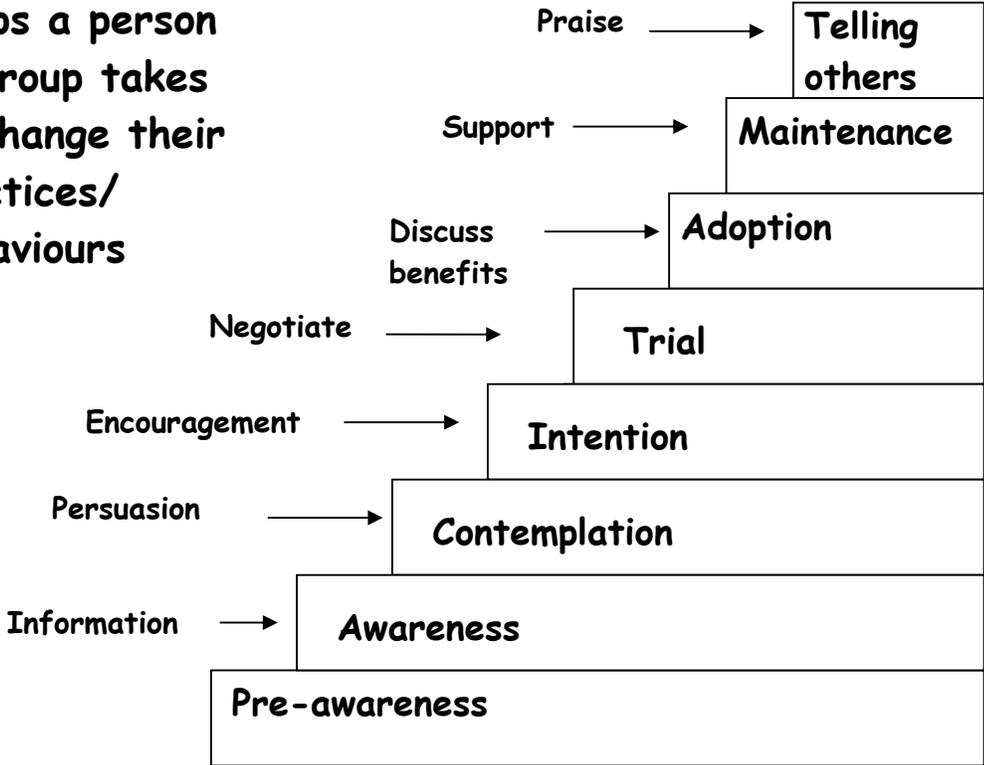
Learning Objectives

The readers will be able to:

1. Outline the different activities and places when health providers can support the improvement of women and their children's nutrition practices
2. Recite the key messages on optimal breastfeeding practices and explain the importance of each practice
3. Explain how a health provider can support optimal breastfeeding practices and other essential nutrition actions (from pregnancy until the baby is 6 months old)
4. Recite the benefits of breastfeeding for the infant, the mother, the family, and the community/nation.
5. Explain proper positioning and attachment
6. Explain the difficulties of breastfeeding, how to prevent and treat them
7. Describe the three LAM criteria and explain who can use LAM
8. Recite key feeding practices pertaining to child feeding from 6 to 24 months and explain the importance of each practice
9. Explain how a health provider can support complementary feeding practices and other health and essential nutrition actions (from 6 to 24 months old)
10. Recite key messages for feeding during and after illnesses and explain the importance of each practice
11. Explain what is active/responsive feeding
12. Describe the techniques to assess acute malnutrition and how to identify and refer children with severe acute malnutrition (SAM)
13. State the method to conduct an appetite test and when to refer malnourished children.
14. Discuss how to manage SAM in Outpatient Therapeutic Program (OTP).
15. Recite key messages and practices for adequate women's nutrition key messages and explain the importance of each practice
16. Recite protocols used for Vitamin A supplementation for children and women
17. Recite protocols used for Iron/Folic Acid supplementation and treatment for children and women

Stages of Change Model

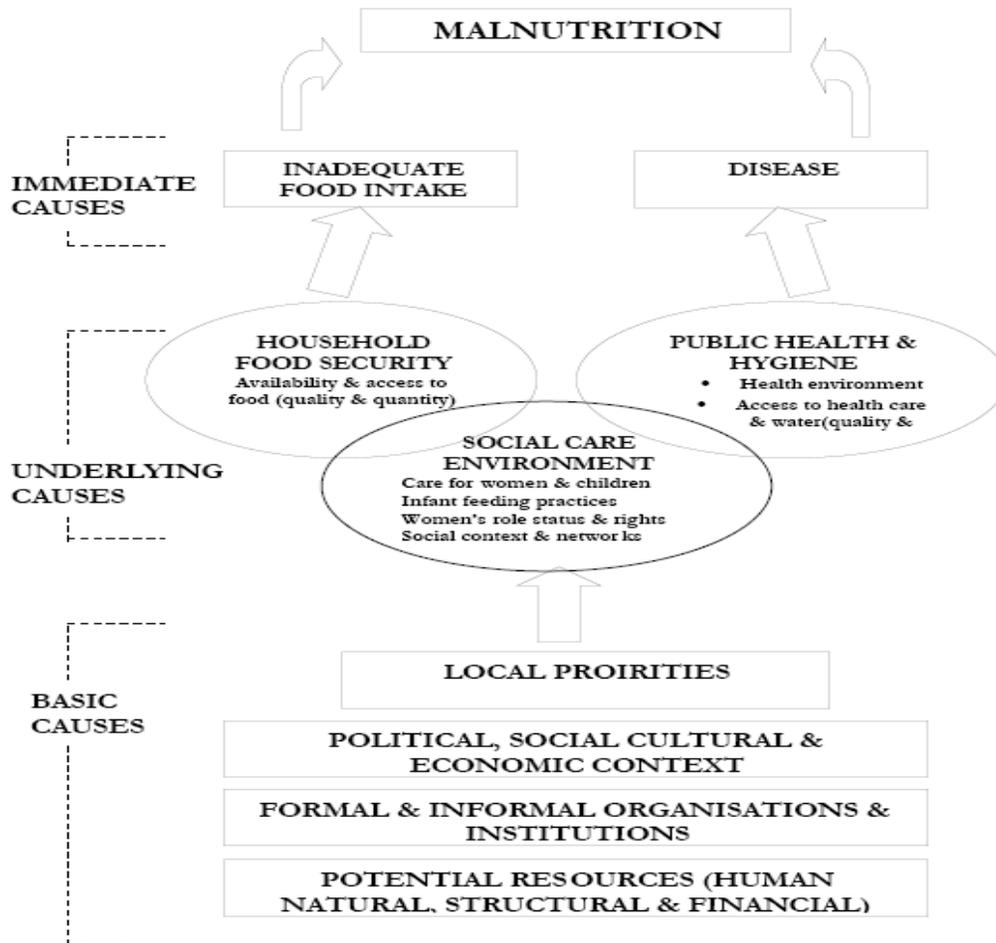
Steps a person or group takes to change their practices/ behaviours



Stages of Change and Interventions

Steps	Appropriate interventions to encourage the target audience to try a new practice - to provide support for the mother's choice and change community norms
Never heard about the behaviour	Build awareness/provide information <ul style="list-style-type: none"> • Drama, fairs • Community groups • Radio • Individual counselling • Breastfeeding and Young Child Feeding Support Groups
Heard about the new behaviour or knowing what it is	Encourage/discuss benefits <ul style="list-style-type: none"> • Group discussions or talks • Oral and printed word • Counselling cards • Breastfeeding and Young Child Feeding Support Groups
Thinking about new behaviour	Negotiate and help to overcome obstacles <ul style="list-style-type: none"> • Home visits, use of visuals • Groups of activities for family and the community • Negotiate with the husband and mother-in-law (or other influential family members) to support the mother
Trying new behaviour out	Praise/reinforce the benefits <ul style="list-style-type: none"> • Congratulate mother and other family members as appropriate • Suggest support groups to visit or join to provide encouragement • Encourage community members to provide support (radio programmes)
Continuing to do new behaviour or maintaining it	Provide support at all levels <ul style="list-style-type: none"> • Reinforce the benefits • Praise • Tell others

Conceptual framework for Malnutrition



Adapted from UNICEF, Conceptual Framework of Malnutrition, 1997.

THE ROLE OF THE HEALTH PROVIDERS IN IMPLEMENTING THE ESSENTIAL NUTRITION ACTIONS TO PREVENT MALNUTRITION

WHAT: The 7 Essential Nutrition Actions:

- Optimal breastfeeding practices
- Appropriate complementary feeding with breastfeeding
- Nutritional care of sick and/or malnourished children
- Women's nutrition
- Control of Vitamin A deficiency
- Control of Anaemia
- Control of Iodine Deficiency Disorders

WHEN: The 7 health contact Points

- At every contact with a pregnant woman at health clinic and in the community
- At delivery in hospital or at home
- During postpartum/family planning sessions at health clinic and in the community
- During immunization sessions
- During well baby clinic sessions
- Sick child visits (IMCI and CCM)
- Community Management of Acute Malnutrition (Stabilization centers, Outpatient Therapeutic Care (OTP), Food supplementation

Also at:

- Community level
- Credit meetings
- Farmers schools
- Literacy groups
- PTA meetings/school gardens
- Religious leaders
- Others

How to explain the benefits of breastfeeding?

For the infant and young child, breastmilk:

- Saves infants' lives.
- Is a complete food for the infant because it, contains balanced proportions and sufficient quantity of all the needed nutrients needed during the first 6 months.
- Contains antibodies that protect against diseases, especially against diarrhoea and respiratory infections.
- The infant benefits from the colostrum, which protects him/her from diseases. The colostrum acts as a laxative cleaning the infant's stomach.
- Promotes adequate growth and development, thus preventing stunting.
- Is always clean.
- Is always ready and at the right temperature.
- Is easy to digest. Nutrients are well absorbed.
- Protects against allergies. Breastmilk antibodies protect the baby's gut, preventing harmful substances from passing into the blood.
- Contains the right amount of water to meet the baby's needs. (up to 80%)
- Helps jaw and teeth development; suckling develops facial muscles.
- Frequent skin-to-skin contact between mother and infant leads to better psychomotor, affective, and social development of the infant.

For the mother

- Putting the baby to the breast immediately after birth facilitates the expulsion of placenta because the baby's suckling stimulates uterine contractions.
- Reduces risks of bleeding after delivery.
- When the baby is immediately breastfed after birth, breastmilk production is stimulated.
- Immediate and frequent suckling prevents engorgement.
- Breastmilk is available at anytime and anywhere, is always clean, nutritious and at the right temperature.
- It is economical.
- Stimulates the bond between mother and baby.
- Reduces the mother's workload (no time is involved in boiling water, gathering fuel, or preparing milk).
- Reduces risks of pre-menopausal breast and ovarian cancer.
- Breastfeeding is more than 98% effective as a contraceptive method during the first 6 months provided that breastfeeding is exclusive and amenorrhoea persists.

For the family

- No expenses in buying formula, firewood or other fuel to boil water, milk or utensils. The money saved can be used to meet the family's other needs.

- No medical expenses due to sickness that formula could cause. The mothers and their children are healthier.
- As illness episodes are reduced in number; the family encounters fewer emotional difficulties associated with the baby's illness.
- Births are spaced thanks to the contraceptive effect.
- Time is saved.
- Feeding the baby reduces work because the milk is always available and ready.

For the community

- Not importing formula and utensils necessary for its preparation saves hard currency that could be used for something else.
- Healthy babies make a healthy nation.
- Savings are made in the health area. A decrease in the number of child illnesses leads to decreased national expenses of treatments.
- Improves child survival. Reduces child morbidity and mortality.
- Protects the environment (trees are not used for firewood to boil water, milk and utensils, thus protecting the environment). Breastmilk is a natural renewable resource.

Risks of Formula Feeding

There are a number of health hazards associated with the improper or unnecessary use of infant formula.

For the infant

Children who are formula fed:

- Have increased risk of mortality
- Have increased risk of gastrointestinal infections and acute respiratory disease
- Have increased risk of infection from contaminated formula. Infant formula can become contaminated at factory level with heat resistant, pathogenic and highly contagious bacteria such as *Enterobacter sakazakii*
- Are more likely to suffer from asthma
- Have an increased risk of allergy
- Have reduced cognitive development and educational attainment
- Have increased risk of childhood cancers such as leukaemia and chronic diseases
- Have increased risk of obesity, type 1 and 2 diabetes and cardiovascular disease

Mothers who formula feed lose some of the benefits of breastfeeding:

- Have reduced natural child spacing
- Have increased of breast cancer
- Have increased risk of maternal diabetes and overweight
- Have increased risk of ovarian cancer and endometrial cancer
- Have increased risk of osteoporosis and rheumatoid arthritis

**MESSAGES ON
OPTIMAL BREASTFEEDING PRACTICES
FOR INFANT 0-6 MONTHS**

HO 6

Early initiation of breastfeeding

MESSAGES

Baby ma, baby grandma, give tay tay as soon as the baby is born to make it healthy and not cry too much

Baby ma, baby gran ma, make sure to give only the yellow tay tay water to stop baby from getting sick

- Giving immediately tay tay helps the tay tay water come in more rapidly.
- Before the tay tay water comes, do not give to the baby water, herbal preparation, sugar water, or pepper as this will stop the tay tay water to come
- If you think that the baby is thirsty, give the water to the Baby Ma, and the baby will get it through the tay tay
- The yellow tay tay water is God's way of welcoming the child into the world.
- Welcoming the baby is important; put "*thrash medicine*", pepper water, palm oil on the fore head of the baby, rather than giving it to the baby to drink
- Putting the baby immediately to the tay tay after birth helps the Baby Ma to expel the placenta, reduce the bleeding and prevent swollen tay tay
- The yellow tay tay water (colostrums) helps open the baby's throat, clean the baby's stomach and get rid of the first black stools.
- The yellow tay tay water is the first vaccination for the child. It helps protect the child from infection.
- The yellow tay tay water is full of vitamins, and makes the baby strong

Exclusive breastfeeding to 6 months of age

MESSAGE

Baby ma, - Give only tay tay water to the baby for the first 6 months, nothing else to drink or eat, for it to grow strong, health and clever

- Tay tay water has all of the food, water, that your baby needs for the first six months. It is clean and safe for the growing baby.
- Giving only tay tay water makes the baby have good blood
- Giving only tay tay makes the baby big and shinny
- Giving only tay tay water for the first six months of your baby's life means giving absolutely no other liquids, teas, herbal preparations, foods, or water—only tay tay water
- When you give only tay tay water, the baby is healthier and have less sickness, like running stomach, cough and colds.
- Babies who get tay tay water often also get plenty of water because most of the tay tay water is water.
- If a baby ma thinks that her baby is thirsty, she must give tay tay water to the baby more often to quench the baby's thirst.
- Encourage the baby ma to drink plenty of water which she will pass through the tay tay
- Do not give water, sugar water, country medicine, infant formula, milk powder or other liquids or foods as these can make your baby sick

Frequency of breastfeeding

MESSAGES

Baby ma, give tay tay water to your baby anytime the baby wants it (at least 10 times) to produce enough tay tay water and provide your baby enough food to grow healthy and be shinny.

Baby ma, empty one taytay before offering the second tay tay to get the rich tay tay water for the baby to be satisfied, grow big and strong

- The tay tay is like God's well. The more the baby suckles the more tay tay water is made.
- Give tay tay water anytime the baby wants at least 10 times day and night when the baby is small.
- Do not worry about not having enough tay tay water as long as the baby is allowed to suckle frequently whenever it wants, at least 10 times day and night.
- At around three months of age, a baby is likely to grow very quickly (experience a growth spurt). It may cry more or want to feed more often. This is normal and temporary. Feeding more often increases the baby ma's tay tay water supply to keep up with the infant's needs.
- Each time the baby takes tay tay, the tay tay water at the beginning is full of water and helps to quench the baby's thirst. Toward the end of a feed, the tay tay water becomes richer and thicker as it is full of food. This helps to satisfy the baby's hunger.
- Lactation Amenorrhoea Method (LAM) is an effective family planning method:
 1. if the baby ma is not seeing her period
 2. if the baby sucks **only** tay tay water
 3. if the baby is less than 6 months

How health providers can support optimal breastfeeding practices?

1. How can health providers assist to achieve optimal breastfeeding practices?

- Discuss the benefits of breastfeeding and birth spacing with the mother, her husband, and family (if possible)
- Help the mother to **breastfeed immediately after delivery** at hospital, at home, or when assisting delivery. This will
 - Helps expel the placenta more rapidly and reduce blood loss
 - Helps expel meconium, the infant's first stool
 - Stimulates breastmilk production
 - Keeps newborn warm through skin-to-skin contact
 - **The baby will receive the colostrum** that will protect her/him from diseases by providing the infant's first vaccine
- Promote **exclusive breastfeeding from 0 - < 6 months** because:
 - Breastmilk contains all the water and nutrients that an infant needs to satisfy hunger, thirst, and growth.
 - No other foods for liquids should be given during the first six months.
 - Infants are likely to have fewer diarrhoea, respiratory, and ear infections.
 - Exclusive breastfeeding helps space births by delaying the return of fertility (lactation Amenorrhoea method - LAM).
- Demonstrate the proper positions and attachments

2. Which questions must health providers ask pregnant mothers?

- How will you feed your baby?
- If the mother does not plan to breastfeed her baby, ask why.
- Have you heard of exclusively breastfed? Reinforce the key points about exclusive breastfeeding (0 - < 6 months).
- Did you encounter and difficulties breastfeeding with other children? What?
- Have you already been to a health clinic for ANC and for Iron/Folic Acid supplementation? Do you take the supplements every day?
- Did you get your de-worming medicine?
- Did you get your tetanus vaccination?
- Do you sleep under a Impregnated Treated Net?
- If HIV Testing and Counselling is available: have you thought of taking an HIV test?

3. Why must the mother take a vitamin A capsule within 6 weeks after delivery?

- Mothers need to increase her vitamin A stores for her's and the baby's health (vitamin A passes into breastmilk)

How to explain proper positioning and attachment?

1. Preparation and how to breastfeed (Proper positioning)

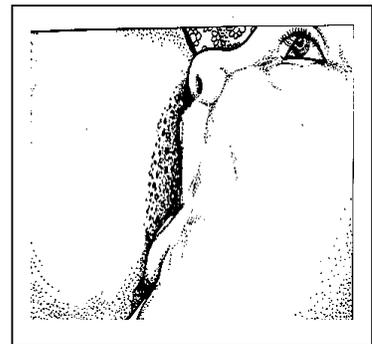
- The mother must be comfortable.
- Hold the infant in such a way as to have his/her face at the mother's breast level (The infant should be able to look up at the mother's face, not flat to her chest or abdomen).
- The infant's stomach should be against the mother's stomach.
- The infant's head, back, and buttocks are in a straight line.
- The infant needs to be close to the mother.
- The infant is brought to the breast; the baby's whole body should be supported, not just the head and shoulders.
- The mother should hold her breast with her fingers in a C shape, the thumb being above the areola and the other fingers below. Fingers should not be in scissor hold because this method tends to put pressure on the milk ducts and can take the nipple out of the infant's mouth.

2. Signs of proper attachment

Good attachment is important to enable the infant to suckle effectively, to remove the milk efficiently, and stimulate an adequate supply.

- Tease the infant's lower lip with the nipple, in order for the infant to open wide his/her mouth.
- The infant's mouth covers a large part of the areola (there is more areola showing above rather than below the nipple).
- The areola and the nipple will stretch and become longer in the infant's mouth.
- The infant's chin touches the breast.
- Both lips are turned outwards

Poor attachment results in incomplete removal of milk, which can lead to sore nipples, inflammation of the breast and mastitis.



3. Signs of efficient suckling

- Slow and regular sucking at the following rhythm:
2 suctions and 1 swallowing.
- The infant takes slow deep sucks, sometimes pausing.
- Suckling is comfortable and pain free.
- The mother hears her baby swallowing.
- The breast is softer after the feed.

How to demonstration of different breastfeeding positions?

1. *Sitting position*

- Usual position of most mothers
- Make sure infant's and mother's stomachs are facing each other

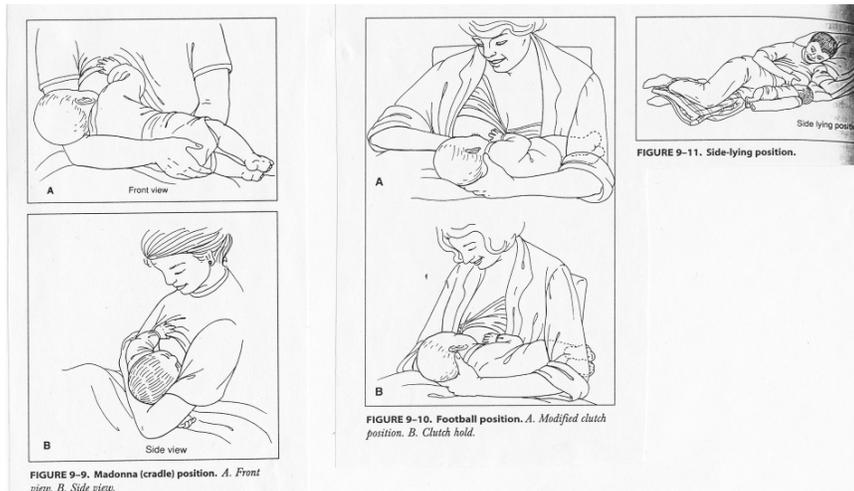
2. *Side-Lying*

- This position is more comfortable for the mother after delivery and it helps her to rest while breastfeeding.
- The mother and infant are both lying on their side and facing each other.

3. *American Football*

- This position is best used:
 - after a Caesarean section,
 - when the nipples are painful, or
 - to breastfeed twins.
- The mother is comfortably seated with the infant under her arm. The infant's body passes by the mother's side and his/her head is at breast level.
- The mother supports the infant's head and body with her hand and forearm.
- Ask one or two participants to demonstrate this position with a doll and a breast model.

Regardless of the position chosen, the mother must be comfortable. She should not lean toward the infant but rather draw him/her towards herself. For example, sitting position: back resting on the chair's back or cushion, feet crossed or raised on a stool.



How to counsel on family planning during lactation?

Lactational Amenorrhea method - LAM

- Breastfeeding is essential to child survival. It has many benefits for the child as well as for the mother, including birth spacing. The method using breastfeeding to space births is called LAM (Lactational Amenorrhoea Method).
- Birth spacing is essential for maternal health and child survival. Spacing births to 3 years or more:
 - Helps to save lives.
 - Helps to reduce child mortality and morbidity.
 - Gives the mother time to replenish her body stores.
- LAM is more than 98% effective if the 3 following criteria are met:
 1. Amenorrhoea (no menses)
 2. Exclusive breastfeeding (For LAM to be effective, mother must breastfeed at least every 4 hours with an interval of no longer than 6 hours at night)
 3. The infant is less than 6 months of age
- When a woman no longer meets one of the 3 criteria, she needs to begin another family planning method to prevent pregnancy.
- **Who can use LAM**
 - All breastfeeding women, in their postpartum period, who plan to continue to breastfeed
 - **What other family planning methods can be used while breastfeeding?**
 - **Before 6 months:** minipills, progesterone only injectables, implants
 - **After 6 months:** combined oral contraceptives
 - **Any time:** Barrier methods, IUD, sterilization (man or woman), natural family planning methods (for those women whose menses has returned)

1. Mother and father	Use LAM as a family planning method: 1. if the mother does not have her menses, 2. if the baby is exclusively breastfed, and 3. if the baby is less than 6 months
Complementary Information	- LAM is a modern family planning method, more than 98% effective if the 3 criteria are met
2. Mother and father	When your baby is older than 6 months, or if one of the criteria of LAM does not exist, visit the health facility or Community Based Reproductive Health Agent to obtain another Family Planning method
Supporting Information	- Don't wait until the baby is 6 months to decide on which family planning method you want to have.

How to prevent and treat common breastfeeding difficulties?

Difficulty or Condition	Prevention	Solutions
Engorgement	<ul style="list-style-type: none"> • Correct positioning and attachment • Breastfeed immediately after birth • Breastfeed on demand (as often and as long as baby wants) day and night: 10 - 12 times per 24 hours • Allow baby to finish first breast before switching to the second breast 	<ol style="list-style-type: none"> 1. Apply cold compresses to breasts to reduce swelling; apply warm compresses to "get milk flowing." 2. Breastfeed more frequently or longer periods of time 3. Improve infant positioning and attachment 4. Massage breasts 5. Express some milk 6. Apply a warm bottle (demonstrate use of warm bottle)
Sore or Cracked Nipples	<ul style="list-style-type: none"> • Correct positioning of baby • Correct latch-on • Do not use bottles, dummies or pacifiers • Do not use soap on nipples 	<ol style="list-style-type: none"> 1. Make sure baby is positioned well at the breast 2. Make sure baby latches on to the breast correctly 3. Apply drops of breastmilk to nipples and allow to air dry 4. Remove the baby from the breast by breaking suction first with your small finger 5. Begin to breastfeed on the side that hurts less 6. Do not stop breastfeeding 7. Do not use bottles, dummies or pacifiers 8. Do not use soap or cream on nipples 9. Do not wait until the breast is full to breastfeed. If full, express some milk first
Plugged Ducts and Mastitis	<ul style="list-style-type: none"> • Get support from the family to perform non-infant care chores • Ensure correct attachment • Breastfeed on demand • Avoid holding the breast in scissors hold • Avoid sleeping on stomach (mother) 	<ol style="list-style-type: none"> 1. Apply heat before the start of breastfeeding 2. Massage the breasts before breastfeeding 3. Increase mother's fluid intake 4. Rest (mother) 5. Breastfeed more frequently 6. Seek medical treatment; as mastitis antibiotics may be necessary 7. If mother is HIV-positive: express milk

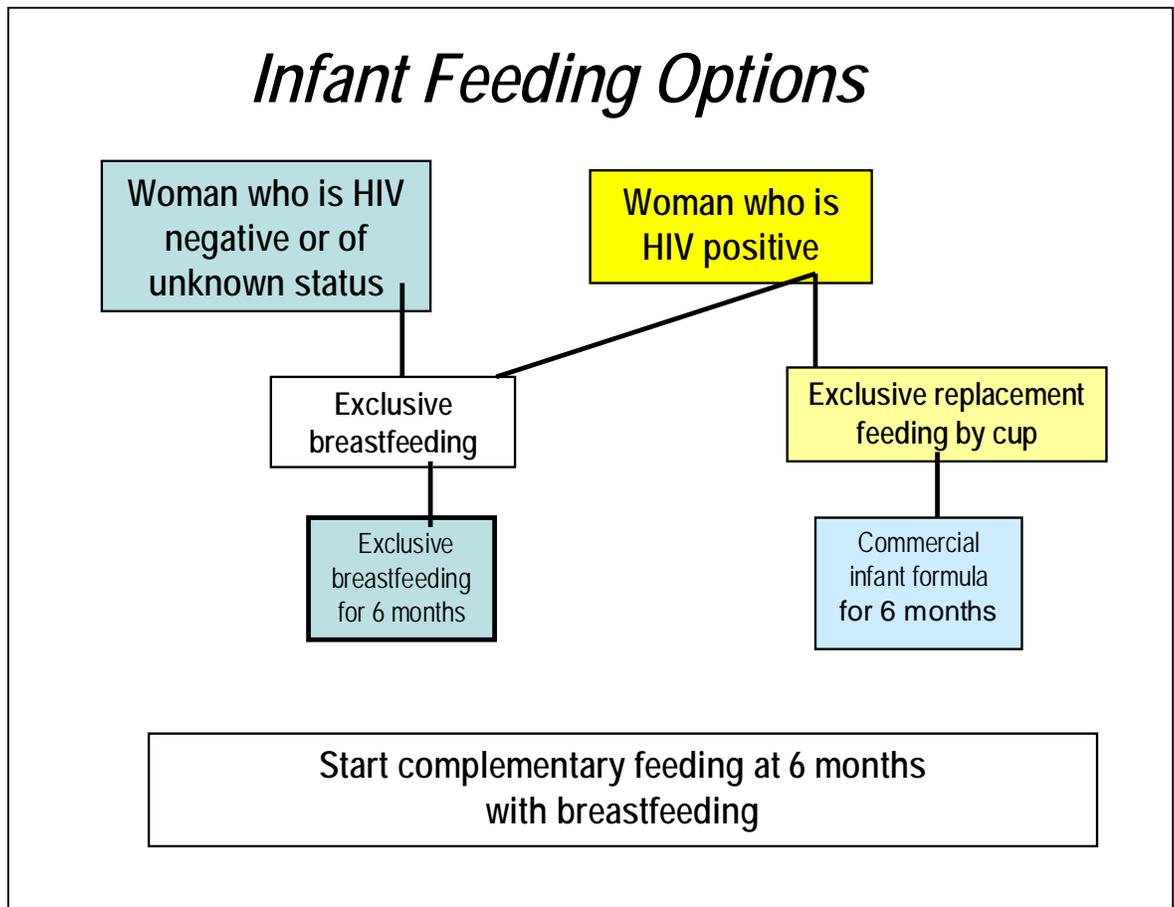
Difficulty or Condition	Prevention	Solutions
	<ul style="list-style-type: none"> • Avoid tight clothing • Use a variety of positions to rotate pressure points on breasts 	<p>and heat treat or discard</p> <p>8. Position baby properly</p>
<p>Insufficient Breastmilk</p> <p>Mother "thinking" she does not have enough milk</p> <p>Insufficient Breastmilk</p> <p>Insufficient weight gain</p> <p>Fewer than 6 wet diapers/day</p> <p>Dissatisfied (frustrated and crying) baby</p>	<ul style="list-style-type: none"> • Breastfeed more frequently • Exclusively breastfeed day and night • Breastfeed on demand at least 10-12 times during the day and night • Correct positioning of baby • Encourage support from the family to perform non-infant care chores • Avoid bottles and pacifiers 	<ol style="list-style-type: none"> 1. Stop use of any supplement, water, formulas, tea, or liquids 2. Feed baby on demand, day and night 3. Choose a quiet place and comfortable position to breastfeed. Do not rush. 4. Increase frequency of feeds 5. Wake the baby up if baby sleeps throughout the night or longer than three hours during the day 6. Make sure baby latches-on to the breast correctly 7. Reassure mother that she is able to produce sufficient milk 8. Ensure that the baby empties one breast before taking the other to get the fore and hind milk 9. Explain that around 3-4 months, the baby is growing faster. The mother needs to increase frequency of breastfeeding and make sure she empties her breasts when feeding the baby

How to answer some special situations?

Special Situations	Solutions
Sick baby	<ul style="list-style-type: none"> • Baby under 6 months: If the baby has diarrhoea or fever the mother should breastfeed exclusively and frequently to avoid dehydration or malnutrition. • Breastmilk contains water, sugar and salts in adequate quantities, which will help the baby recover quickly from diarrhoea. • If the baby has severe diarrhoea and shows any signs of dehydration, the mother should continue to breastfeed and provide ORS either with a spoon or cup. • Baby older than 6 months: If the baby has diarrhoea or fever, the mother should breastfeed frequently to avoid dehydration or malnutrition. She should also offer the baby bland food (even if the baby is not hungry). • If the baby has severe diarrhoea and shows any signs of dehydration, the mother should continue to breastfeed and add ORS.
Sick mother	<ul style="list-style-type: none"> • When the mother is suffering from headaches, backaches, colds, diarrhoea, or any other common illness, she SHOULD CONTINUE TO BREASTFEED HER BABY. • The mother needs to rest and drink a large amount of fluids to help her recover. • If mother does not get better, she should consult a doctor and tell the doctor that she is breastfeeding.
Premature baby	<ul style="list-style-type: none"> • Mother needs support for correct latch-on. • Breastfeeding is advantageous for pre-term infants; supportive holds may be required. • Direct breastfeeding may not be possible for several weeks, but expressed breastmilk may be stored for use by infant. • If the baby sleeps for long periods of time, he/she should be unwrapped to encourage waking and held vertically to awaken. • Mother should watch baby's sleep and wake cycle and feed during quiet-alert states. • <i>Note: Crying is the last sign of hunger. Cues of hunger include rooting, licking movements, flexing arms, clenching fists, tensing body, and kicking legs.</i>
Malnourished mothers	<ul style="list-style-type: none"> • Mothers need to eat extra food at meals ("feed the mothers, nurse the baby"), and take extra meals and snacks. • Mothers need to take micronutrients •
Mother who is separated daily from her infant	<ul style="list-style-type: none"> • Mother should express or pump milk and store it for use while separated from the baby; the baby should be fed this milk at times when he/she would normally feed. • Mother should frequently feed her baby when she is at home.

Special Situations	Solutions
	<ul style="list-style-type: none"> • Mother who is able to keep her infant with her at the work site should take her baby to work and feed her infant frequently.
Twins	<ul style="list-style-type: none"> • The mother can exclusively breastfeed both babies. • THE MORE THE BABY NURSES, THE MORE MILK IS PRODUCED.
Inverted nipples	<ul style="list-style-type: none"> • Examine breasts during pregnancy to detect the problem • Try to pull nipple out and rotate (like turning the knob on a radio). • Make a hole in the nipple area of a bra. When pregnant the woman wears this bra, the nipple protrudes through the opening. • If acceptable, ask someone to suckle the nipple.
Baby who refuses the breast	<ul style="list-style-type: none"> • Position the baby properly. • Treat engorgement (if present). • Avoid giving the baby teats, bottles, and pacifiers. • Wait for the baby to be wide awake and hungry (but not crying) before offering the breast. • Gently tease the baby's bottom lip with the nipple until he/she opens his/her mouth wide. • Do not limit duration of feeds. • Do not insist more than a few minutes if baby refuses to suckle • Avoid pressure to potential sensitive spots (pain due to forceps, vacuum extractor, and clavicle fracture). • Express breastmilk, and give by cup.
Medications	<p>Three things are known about drugs and human milk:</p> <ol style="list-style-type: none"> 1. Most drugs pass into breastmilk. 2. Almost all medication appears in only small amounts in human milk, usually less than 1% of the maternal dosage. 3. Very few drugs are contraindicated for breastfeeding women.
Cleft lip and/or palate	<ul style="list-style-type: none"> • Let mother know how important breastmilk is for her baby. • Try to fill the space made by the cleft lip with the mother's finger or breast. • Breastfeed infant in a sitting position. • Express milk and give to the infant using a cup or a teaspoon.
Mother who will be away from her infant for an extended period expresses her breastmilk. Caregiver feeds expressed	<ul style="list-style-type: none"> • Mother expresses breastmilk by following these steps: <ol style="list-style-type: none"> 1. Washes hands. 2. Prepares a clean container. 3. Gently massages breasts in a circular motion. 4. Positions her thumb on the upper edge of the areola and the first two fingers on the underside of the breast behind the areola. 5. Pushes straight into the chest wall. 6. For large breasts, first lifts and then pushes into the chest wall. 7. Presses the areola behind the nipple between the finger & thumb.

Special Situations	Solutions
breastmilk from a cup.	<p>8. Presses from the sides to express milk from the other segments of the breast.</p> <p>9. Repeats rhythmically: position, push, press; position, push, press.</p> <p>10. Rotates the thumb and finger positions.</p> <ul style="list-style-type: none"> • Mother stores breastmilk in a clean, covered container. Milk can be stored 8-10 hours at room temperature in a cool place and 72 hours in the refrigerator. • Mother or caregiver gives infant expressed breastmilk from a cup. Bottles are unsafe to use because they are difficult to wash and can be easily contaminated.
HIV-positive mother who chooses to breastfeed	<ul style="list-style-type: none"> • Mother should practice exclusive breastfeeding for 6 months. At 6 months mother should introduce appropriate complementary foods. • At 6 months the mother should consider shifting to replacement feeding and if selected should not mix- feed. (Only formula or milk, not breastfeeding) • Mother who experiences breast difficulties such as mastitis, cracked nipples, or breast abscess should breastfeed with the unaffected breast and express and discard milk from the affected breast. • Mother should seek immediate care for a baby with thrush or oral lesions. • Mother who presents with AIDS-related conditions (prolonged fever, severe cough or diarrhoea, or pneumonia) should visit a health centre immediately. <p>Note: Lactating woman should use condoms to protect herself from exposure to infected semen.</p>
HIV-positive mother who chooses to replacement feed	<ul style="list-style-type: none"> • Mother should practice safe and appropriate use of infant formula exclusively for the first 6 months. • Mother should use a cup, not a bottle. • Mother should NOT mix-feed - "give only breastmilk substitutes, do not breastfeed".



NB. At 6 months, the mother continues breastfeeding, except if she can replace it by milk and/or baby formula

How to assess if a mother/family could implement without risk “replacement feeding”?

Will Replacement Feeding be ACCEPTABLE?

- The mother perceives no barrier to choosing the option for social and cultural reasons or for fear of stigma and discrimination
- The mother has adequate support to cope with family, community and social pressures
 - e.g: What do you think people might say if you choose not to breastfeed?

Will Replacement Feeding be FEASIBLE?

- The mother (and family) has adequate time, knowledge, skills, and other resources to prepare and feed the infant
 - e.g: Can a mother prepare fresh infant formula every three hours, day and night?

Will Replacement Feeding be AFFORDABLE?

- The mother and family (with available community and/or health system support), can pay for the costs for the purchase/production, preparation, and use of the infant formula, including all ingredients, equipments, fuel, and clean water
 - e.g: Can the mother afford to pay about 500 Birr the first month to feed the baby (or 750-1000 Birr from the second month onwards)?
 - e.g: Will the purchase of infant formula change the food available for other family members in a way that would put their health at risk?

Will Replacement Feeding be SUSTAINABLE?

- Replacement Feeding option must be practiced exclusively during six months, and day & night
- Supply and distribution of all ingredients is continuous, uninterrupted and dependable for as long as infants need it
 - e.g: Can the mother /family buy infant formula and equipments for six months and more?
 - e.g: Can the mother accept, even under family pressure, NEVER to put the baby on the breast?

Will Replacement Feeding be SAFE?

- Replacement foods must be correctly and hygienically prepared in the correct amount for each feeding
 - e.g: Does mother have easy access to clean water?
 - e.g: Does mother have easy access to electricity or other source of energy?

e.g: Does mother have the knowledge and skills to correctly wash her hands and use clean utensils for preparation of formula? Does she have a cup for feeding the infant?

Advantages and Disadvantages of Infant Feeding Options under HIV & AIDS

OPTION: Exclusive Breastfeeding

Advantages/Motivations:

- Breast milk is the perfect food for babies. It gives babies all of the nutrition and water they need. They do not need any other liquid or food.
- Exclusive breastfeeding protects infants from diseases, particularly diarrhoea and pneumonia.
- Exclusive breastfeeding may also reduce the risk of HIV transmission.
- Exclusive breastfeeding has a protective effect for HIV positive children.
- Many women breastfeed, and exclusive breastfeeding is recommended for HIV-negative women. People may be less likely to become suspicious about this feeding practice (compared with the other options).
- Breast milk is free, it is always available and it does not need any special preparation.
- Exclusive breastfeeding delays ovulation, preventing sexually active women from becoming pregnant during the first 6 months.

Disadvantages/Constraints:

- The risk of HIV transmission exists for as long as the HIV-infected mother breastfeeds. This is particularly true during the first few months after birth..
- This risk of HIV transmission increases if the mother has a breast infection (e.g., mastitis) or cracked and bleeding nipples.
- The risk of transmission increases if the mother is doing mixed feeding. Family, friends, and neighbours may pressure mothers to give water, other liquids, or foods to the baby.
- Many mothers are concerned that they do not have enough milk to breastfeed exclusively.

NB. Mothers who breastfeed have increased nutritional requirements. They require an additional 650 kcal/day to support exclusive breastfeeding in the first 6 months.

OPTION: Replacement Feeding with Commercial Infant Formula

Advantages/Motivations:

- There is no risk of transmitting HIV through formula.
- Commercial infant formula is made especially for infants.
- Most of the nutrients that a baby needs have already been added to the formula.
- Other adult family members can help to feed the baby.

Disadvantages/Constraints:

- If the formula is not prepared correctly, an infant is more likely to get sick from diarrhoea and pneumonia, and develop malnutrition.
- Formula is expensive. An infant needs a total of forty 500g tins for the first six months. This will cost between about 5000 Birr. A continuous/reliable supply of formula will be needed to prevent malnutrition.
- From 6-24 months, a suitable breast milk substitute (formula or animal's milk) will still be required. .
- Formula takes time to prepare, and it must be made fresh for each feeding.
- The mother must stop breastfeeding the baby completely, or the risk of giving HIV to her baby will be greater.
- The baby needs to drink from a cup. Babies can learn how to do this even when they are very young, but it takes time to learn.
- Safe preparation requires clean water (boiled for 5 minutes), fuel, and soap for cleaning utensils.
- Formula does not contain antibodies, which protect infants from infection.
- If a mother does not breastfeed, it may arouse suspicion and even anger among family, neighbours, and friends.
- Formula feeding does not provide protection from pregnancy.

TO BE DONE FOR EACH FEEDING

Commercial infant formula

1. Wash hands with soap and water;
2. Wash all utensils, containers, and cups with soap and water;
3. Read or have someone read instructions on the formula tin;
4. Boil water for 5 minutes and let it cool;
5. Measure the amount of milk powder needed for one feed and mix it with the correct amount of cooled boiled water;
6. Feed the infant by cup the appropriate amount based on the infant's age

Commercial infant formula requirements in first 6 months

Month	No. 500 g tins per month	No. 450 g tins per month
First month	4 tins	5 tins
Second month	6 tins	6 tins
Third month	7 tins	8 tins
Fourth month	7 tins	8 tins
Fifth month	8 tins	8 tins
Sixth month	8 tins	9 tins

Daily Formula Amounts in the First 6 Months

Age (months)	Number of feeds and daily milk requirements	
0-< 1	8 feeds/day x 60 ml/feed	Total: 480 ml/day
1-< 2	7 feeds/day x 90 ml/feed	Total: 630 ml/day
2-< 3	6 feeds/day x 120 ml/feed	Total: 720 ml/day
3-< 4	6 feeds/day x 120 ml/feed	Total: 720 ml/day
4-< 5	6 feeds/day x 150 ml/feed	Total: 900 ml/day
5-< 6	6 feeds/day x 150 ml/feed	Total: 900 l/day

How to Transition to Replacement Feeding at 6 months

HO 12

If the mother cannot replace the breast milk by other milks, she can continue breastfeeding to ensure that her child is getting enough food to grow and be healthy.

It may take between 2 days and 3 weeks to fully transition the infant.

Advantages/Motivations:

- The infant is no longer exposed to HIV through breastfeeding.

Disadvantages/Constraints:

- The infant may become malnourished if suitable breast milk substitutes are not available and provided appropriately.
- The infant may be at increased risk of diarrhoea if breast milk substitutes are not prepared safely.
- If breastfeeding cessation is too rapid and infants are not prepared for the transition, they can become dehydrated, anxious, disoriented, and unhappy. They may cry excessively or refuse food, making the transition more difficult for themselves and their families.
- Infants should learn to cup feed before breastfeeding cessation. Cup feeding requires the caregiver's patience and time.
 - While breastfeeding teach the baby to drink from a cup.
 - Start by replacing one breast feeding with one cup feed with formula and then increase the frequency every few days.
 - Stop breast feeding completely once the baby can drink from a cup.
 - Gradually replace the breast milk with formula or milk (after 6 months).
- Mothers need to avoid breast engorgement by expressing and discarding milk whenever breasts feel too full.
- Early breastfeeding cessation is not recommended for infants who are already infected with HIV.

Breast milk substitute requirements after 6 months

Animal milks do not require dilution or the addition of sugar after 6 months. However, special preparation is still required for fresh and powdered milk:

- Fresh animal's milk: Boil the milk to kill any bacteria.
- Powdered or evaporated milk: Add clean, boiled water according to the directions on the tin in order to make full strength milk.

Age	Average amount of milk per day
6-8 months	600 ml
9-11 months	550 ml
12-23 months	500 ml

Follow-up counselling of HIV positive mothers with infants 0-6 months

AT EACH VISIT:

- Ask the mother how she is feeding her baby.
- Check on the baby's growth and health.
- Ask how the mother is coping with her health and if she has any difficulties.

Note: These questions are focused on getting at actual behaviours. They are not leading nor do they promote the desired behaviours. However, after asking all of the questions related to the mother's feeding method the HW should address the inappropriate behaviours and promote the desired behaviours.

IF THE MOTHER IS BREASTFEEDING:

- Ask what other foods, milk or water she is giving the baby.
- Ask how often she feeds the baby during the day and then during the night.
- Ask does she use both breasts at each feeding
- Ask about the baby's frequency of urination each day.
- Observe the mother breastfeeding and check the mother's breasts and suggest improvements, if needed.
- When the baby is almost 6 months discuss the possibility of stopping breastfeeding and transitioning to replacement feeding.

IF SHE IS USING REPLACEMENT FEEDING:

- Ask what kind of milk she is feeding her baby.
- Ask to see the tin she is using to see if it is a commercial formula or canned milk.
- Ask how many tins she buys of formula/milk each month.
Ask how much it costs for a month and if she has money for the next month's tin or supply of milk.
- Ask her to show you how she prepares one serving of formula/milk.
 - Observe the quantity used.
 - Observe the cleanliness
- Ask how often she feeds during the day and then during the night.
- Ask her what she puts the replacement feeding in to feed her baby.
- Ask her if she is breastfeeding also and how much.
- Demonstrate infant formula preparation if she is doing it incorrectly.

General Case Study of Baby 0 - < 6 months

Visit #1: Initial Visit

Checklist of GALIDRAA

- Greet the mother and be friendly
- Ask about feeding practices, age of the child and status
- Listen to the mother
- Identify feeding difficulties and causes of the difficulties
- Discuss different feasible options with the mother
- Recommend and negotiate doable actions
- Agree on which practice the mother will try; mother repeats agreed upon practice
- Appointment for follow-up

General Case Study of Baby 0 - < 6 months

Visit # 2: Follow up

Checklist of Visit #2

Ask the mother if she has tried the practice she was willing to try (example: exclusively breastfeeding for one week)

- Congratulate her for trying the new practice
- If she tried, what does she think of it?
- If she didn't try the new practice, why not?
- What changes did she make to the recommended practice and why?
- What did she like about the practice?
- Which difficulties did she encounter?
- Discuss the same recommendations or other ones with the mother
- Inform the mother on the nearest place where she can find support
- Agree on which practice the mother will try; mother repeats agreed upon practice
- Plan with mother a follow up visit

General Case Study of Baby 0 - < 6 months (continued)

Visit #3: Maintain the practice and/or negotiate new practice

Before making the visit, check the child's age. According to the child's age, should the mother keep the current practice or should she begin a new one?

Checklist of Visit #3: Maintain the practice

- Ask the mother if she has continued with the new practice
- Congratulate her if she has
- If she has not, why?
- Which changes did she make and why?
- What were the difficulties?
- How did she solve them?
- Listen to the mother's questions, concerns, and doubts
- Discuss the same recommendations or new ones with the mother. For example, if the new practice was exclusive breastfeeding, remind the mother that when her baby reaches the age of 6 months, she must give other foods besides breastmilk to her baby.

Checklist of Visit #3: Negotiate a new practice

- Encourage the mother to try a new practice
- Ask her which recommendation she thinks she can carry out
- Does she think she can practice it every day?
- If she thinks she can do it twice a week and do another practice for the rest of the week, encourage her to try it
- Inform the mother on the nearest place where she can find support

Negotiation Record

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Initial Visit	
Name	
Age	
Feeding difficulty(ies) identified	
Options suggested	
What mother agreed to try	

Observation Checklist (GALIDRAA)

- Greets** the mother and establishes confidence
- Asks** the mother about current breastfeeding practices
- Listens** to what the mother says
- Identifies** key difficulties, if any, and selects the most important one to work on
- Discusses** different feasible options to overcome the difficulties
- Recommends**: Presents options and **NEGOTIATES** with mother to help select one(s) that she can try
- Helps the mother to **Agree** to try one or more of the options
- Reminds the mother of the behaviour(s) and help her to overcome obstacles.
- Makes an **Appointment** for a follow-up visit.

Name one or more things the health worker did well:

What do you recommend the health worker tries to improve the next time (Name one important thing):

MESSAGES ON ADEQUATE COMPLEMENTARY FEEDING PRACTICES FOR CHILDREN 6 TO 24 MONTHS)

Introducing complementary feeding

MESSAGE

Baby ma, at six months of age in addition to tay tay water give your baby foods such as soft porridge with other foods added to make sure it continues to grow strong, healthy and shinny.

- At six months of age, the tay tay water alone is not enough for the baby to continue to grow well.
- Help your baby learn how to eat by taking time and feeding you baby patiently, encourage it to eat all the food offered. Force feeding or stuffing discourages baby from eating and can be harmful.
- Do not add pepper to baby's food as this discourages the baby from eating and kills its appetite

MESSAGE

Baby ma, make sure that the porridge you give to your baby is not too thick nor watery as your baby will not get enough food. The food has to slowly fall off the spoon

- Porridge is just right and good for the baby when it slowly falls off the spoon.
- Make porridge from rice, plantain, cassava, sweet potatoes, eddo and yam
- A watery or thin porridge is not healthy for your baby as it do not provide enough of the nutrients the baby needs to grow strong and healthy.
- A sticky porridge is not healthy as it is difficult for the baby to swallow.
- Thicken the porridge as the baby grows older, but making sure that it is still able to easily swallow it without choking. To thicken porridge add more flour or paste.

Continue breastfeeding until 2 years and beyond

MESSAGE

Baby ma, continue to give tay tay water to your baby until two years of age along with other foods to make sure the baby grows strong and stay healthy

- From 6 to 24 months of age, give tay tay water as much as your baby wants (at least 8 times) during the day and night.
- Having sex does not spoil the tay tay water. A big belly woman can continue to breastfeed safely.
- Wait until the child is 24 months before taking a new belly to maintain the health of the baby ma and child.

MESSAGE

Baby ma, when your baby is older than 6 months, visit the health facility to obtain another Family Planning method than LAM

Don't wait until the baby is 6 months to decide on which family planning method you want to have.

Feed a variety of foods

MESSAGE

Baby Ma, each day feed your baby porridge made from different types of food to make sure the baby gets vitamins and grows strong and shiny

- Always add two or more of the following foods to your baby's porridge: palm oil, argo oil, benne seed or peanut paste, beans dust, milk, fish (bony), meat
- Give your baby fruit every day such as banana, butter pear, mango/plum or watermelon. Make sure fruits are washed, and for younger babies fed well mashed or squeezed into juice.
- Foods good for Vitamin A include liver, ripe mango/plum, and dark green leafy vegetables, pumpkins, red/orange sweet potato.
- Foods rich in iron include liver, red (bush) meat, fish (bony), chicken, peanuts, beans, and dark green leafy vegetables.

MESSAGES

Baby ma, serve food to your baby in a separate bowl to know how much it is eating

Baby ma, encourage the child during feeding to make sure it eats all it needs

- It is important to feed your baby to make sure it eats all the food prepared for it.
- Play and sing to encourage the child to eat. Force feeding or stuffing discourages baby from eating and can be harmful.
- A baby, older from 12 months onwards may start to feed themselves. However, it is important that you help them to eat all the food served to them.

Frequency of feeding for 6-11 months old children

MESSAGE

Baby Ma, from 6 to 11 months, feed your baby at least 3 times a day different types of foods so that your baby grows healthy.

- The baby has a small stomach and needs to be fed often.
- The foods should be mashed so the baby is able to swallow without choking
- Every day feed a variety of different foods to your baby along with the porridge to make sure it gets all the nutrients to grow well.
- Begin to introduce 'finger foods' that the baby can feed itself. These finger foods can include bread, biscuits, doughnuts, soft fruits such as bananas, pawpaw, ripe mango/plum, and butter pear.

MESSAGE

Baby ma, wash your hands with soap and water before cooking, handling food, eating and feeding your family to keep you and your family healthy

- Good hygiene and sanitation is important to prevent sickness, runny stomach and worms and should include:
- Wash your hands with soap before cooking, eating and handling food
- Wash your hands with soap after visiting the toilet and after cleaning a child
- Keep your surroundings clean
- Wear slippers or shoes to prevent worms

Use a cup to feed your baby, never use a bottle as this may cause it runny stomach.

- Using a bottle to feed the porridge is dangerous as it is difficult to clean properly. A cup is easier to keep clean and cheaper to buy than a bottle.

Amount of food for a child 6 to 11 month old

MESSAGE

Baby ma, at each meal give:

- If your child is 6 to 8 months: 2 table spoons of porridge mixed with 1 table spoon of other foods
- **If your child is 9 to 11 months: 4 table spoons of porridge mixed with 2 table spoon of other foods**

<u>Morning: rice porridge</u>	Add 1 egg oil, 1 little piece of butter pear or pawpaw if available
<u>Morning snack</u>	<u>Give mashed pawpaw, banana or mango/plum</u>
<u>Mid day - yam porridge</u>	Add 1 table spoon argo oil, 1 table spoon of bean dust, $\frac{1}{2}$ table spoon of green leafy vegetables
<u>Afternoon snack</u>	Give $\frac{1}{2}$ mashed ripe mango/plum <u>or</u> 1 piece of cooked sweet potato, roasted soft plantain
<u>Evening- cassava porridge</u>	Add 1 table spoon of palm oil, 1 table spoon of bony dust or mashed chicken, mashed vegetables e.g carrots, pumpkins, okra etc)

MESSAGE

Baby ma, give your baby snacks 1 to 2 times every day between main meals to keep it strong

Snacks can include doughnuts, bread, biscuits, banana, roasted or fried plantain or yam.

Frequency of feeding for a child 12-24 months old

MESSAGE

Baby ma, from 12 months to 2 years, feed your baby at least 4 times a day different types of foods so that your baby grows healthy.

- Give a total of at least 5 times each day including 2 snacks; the baby is growing and need more foods.
-
- At 12 months begin to give family foods such as rice, yam, plantain, cassava, sweet potato.
- From the family bowl, keep a portion for the baby and add 1 or two additional food for example cassava leaves or other dark leave begetable, benne seeds, as well as milk, meat, fish (Bony), egg, beans dust, peanuts, or other nuts

MESSAGE

Baby ma, wash your hands with soap and water before handling food, eating and feeding your family to keep you and your family healthy

- Good hygiene and sanitation is important to prevent sickness, runny stomach and worms and should include:
- Wash your hands with soap before eating and handling food
- Wash your hands with soap after visiting the toilet and after cleaning a child
- Keep your surroundings clean
- Wear slippers or shoes to prevent worms

Amount of food for a child aged 12 to 24 months old

MESSAGE

At each meal give:

6 table spoons of porridge mixed with 3 table spoon of other foods added

Morning- rice porridge	Add $\frac{1}{2}$ small butter pear, and 1 banana
Morning - snack	Give $\frac{1}{2}$ a mango/plum or fried plantain
Mid day - family meal	Add to family food , 1 table spoon of palm oil and bony dust
Afternoon - Snack	Give 1 doughnut
Evening - family meal	Add to family food 1 egg and small piece of pumkin

- Increase the amount of food given to the baby if it asks for additional food to have growth
- Add iodized salt after the cooking in all food preparation.

MESSAGE

Baby ma, give to your baby snacks at least 2 times every day between main meals to keep it strong

Snacks can include doughnuts, bread, biscuits, banana, roasted or fried plantain or yam.

Vitamin A, Malaria and worm medicine

MESSAGE

Parents, when your baby is 6 months old, make sure it gets Vitamin A supplementation every six months to make the baby healthy.

Vitamin A is important for your child's eyesight and also helps your child fight illness. Make sure your child 6-59 months gets Vitamin A supplementation two times a year.

MESSAGE

All members of the family, sleep under an insecticide treated mosquito net (ITN), especially big belly women and young children to prevent getting malaria.

- Malaria causes low blood (anemia) which will make members of your family sick and very weak
- All family members with fever need to be taken to a health facility for immediate treatment

MESSAGE

Baby ma, when your child is one year old, it has to receive worm medicine every six months to maintain healthy growth and prevent low blood.

- Worms cause young children to become anemic which will make your child sick and tired.
- Make sure that your child receives worm medicine two times a year to your child between the ages of 1 to 5 years

Feeding of the sick child during illness

MESSAGE

Baby ma, parents, during illness, give tay tay water more often, and for children older than 6 months, give extra food to help it to get vitamins and to get better faster

Baby and young child 0 to 24 months:

- Give more tay tay water during illness to help the baby to fight the sickness and not loose weight.
- Tay tay water contains water, nutrients, and salts in adequate quantities, which will help the baby get better quicker.
- Giving tay tay water also provides comfort to a sick baby.

Baby older than 6 months:

- Take time to patiently encourage your sick child to eat as it may lose appetite because of the illness.
- It is easier for a sick child to eat small frequent meals; feed your child foods it likes in small quantities throughout the day.
- It is important to keep giving tay tay water and feeding complementary foods to your child during illness to maintain its strength and reduce the weight loss.

Feeding of the sick child after illness

MESSAGES

Baby ma, baby pa, after each illness,

- Give tay tay water more often for up to two weeks for your baby to regain health and weight.
- If the baby is older than 6 months, after illness, give one extra bowl of food each day for up to two weeks to help it regains its weight and strength.

Baby and young child 0 to 24 months:

- Each time a baby is sick, it loses weight so it is important to give tay tay water as often as possible following each illness.
- Your tay tay water is the safest and most important food you can offer your baby to regain its health and weight.
- Continue to give only tay tay water and more often for at least two weeks after illness.

Baby older than 6 months:

- Take time to patiently encourage your sick child to eat as it may lose appetite because of the illness.
- It is easier for a sick child to eat small frequent meals; feed your child foods it likes in small quantities throughout the day.
- A children who has been sick need extra food and tay tay water more often to regain the strength and weight lost during the illness.

Nutritional Care of Infants and Children with Diarrhea

MESSAGE

Baby ma, baby pa, if your child is suffering from runny stomach, give it water, rice water to replace the water lost and continue breastfeeding

If the runny stomach gets severe, take the child to the nearest health center to get treatment

Baby and young child 0 to 24 months:

- Continue to give tay tay water during runny stomach, and give more often to replace the water lost.
- If the baby has severe **runny stomach** and shows any signs of dehydration, continue breastfeeding the baby and go the health centre for advice and ORS treatment.

Baby older than 6 months:

- Take time to patiently encourage your sick child to eat as it may lose appetite because of the illness.
- It is easier for a sick child to eat small frequent meals; feed your child foods it likes in small quantities throughout the day.
- Make sure that the child does not get dehydrated and give it water, rice water or oral rehydration solution (ORS).
- if the health worker give zinc medicine, follow the instructions given and continue the treatment during 10 to 14 days, even after the runny stomach stops

Feeding a child who has moderate acute malnutrition

MESSAGE

Baby ma, when your child older than 6 months has been identified with moderate acute malnutrition, in addition to the supplementary food that it receives, give it 1 additional bowl of foods each day to help your child to recover quickly and become strong and shinny again. Give tay tay water more often.

Baby and young child 0 to 24 months:

- Give tay tay water more often to make sure that your child gets foods and vitamins from the tay tay; it will get better quickly

Baby older than 6 months:

- If the baby is older than 6 months, after illness, give one extra bowl of food each day for up to two weeks to help it regains its weight and strength.
- Take time to patiently encourage your sick child to eat as it may lose appetite because of the illness.
- It is easier for a sick child to eat small frequent meals; feed your child foods it likes in small quantities throughout the day.

How health providers can support complementary feeding practices?

1. *Which questions should be asked to mothers whose baby will soon be 6 months old?*

- Do you know why it is important to wait until 6 months before you feeding your child anything besides breastmilk?
- How often will you need to feed your 6- 8 month old child?
- What should you feed your child?
- What consistency should the food be?
- What amount should you feed your 6-8 month old child?
- Do you know where to get Vitamin A supplements when your child is 6 months old?
- What immunization has your child received?

2. *Why should Vitamin A be administered to children every 6 months from the age 6 months to 5 years?*

- Vitamin A supplementation ensures the child's growth.
- Reinforces the child's health.
- Protects the child from severe forms of infections such as diarrhoea and respiratory diseases, thus reducing the risk of death.
- Improves the child's sight and prevents night blindness that can lead to childhood blindness.

Which foods are rich in Vitamin A in your community?

- Colostrum and breastmilk are important sources of Vitamin A.
- Ripe orange/yellow fruits (papaya, mangos).
- Orange/yellow vegetables (carrots, pumpkins).
- Liver and green leafy vegetables.

3. *Why should a baby eat foods rich in iron?*

- To gain more strength.
- To reinforce a child's health, physical and intellectual development.

Which foods are rich in iron?

- Breastmilk, green leafy vegetables, liver, meat, fish, and lentils.

Why should children be de-wormed every 6 months starting at 2 years?

- Some worms exclusively feed on blood and if the child has them s/he then becomes thin and weak.

Why should children sleep under a ITN?

- Sleeping under a ITN protects the child from getting Malaria, which is also a cause of anemia

4. *Why encourage mothers/caregivers, and parents, to use iodized salt for the whole family, including children who start complementary feeding?*

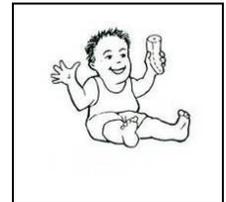
- To ensure the child's and the whole family's physical and intellectual development.
- To prevent goitres and its complications.
- To prevent poor work performance in adults.
- For pregnant women, to prevent miscarriage, stillbirth, low birth weight, and cretinism in the baby.

5. *How could health provider help mothers/care givers/ parents to make sure their children are properly fed?*

- Discuss the feeding recommendations with the mother, the father, the grandmother, according to the child's age.
- Congratulate and encourage the mothers/caregivers to continue breastfeeding for two years.
- Encourage parents to give many different types of food including foods rich in Vitamin A and iron to their children.
- Encourage parents to bring their children to the health centre in case of malnutrition, weight loss or oedema.
- Encourage parents to have a garden with different green leafy vegetables, and orange/yellow vegetables and fruits.
- Raise awareness among population to use only iodized salt.
- Encourage parents to go to the health centres or community out-reach for immunization (measles at 9 months), for Vitamin A at 6 months and de-worming starting from 2 years.
- Explain that LAM is not effective after 6 months and parents must go to health centre for other family planning methods.
- Encourage sleeping under a long lasting insecticide treated mosquito net every night to protect child/mother/families against malaria.

6. How do mothers/caregivers actively feed a young child?

- Active/responsive feeding is a method that encourages the child to eat and to finish his/her meals.
- When feeding him/herself, a child may not eat enough. S/he is easily distracted. Therefore s/he needs help. When a child does not eat enough, s/he will become malnourished.
- Let the child eat from his/her own plate (the caregiver will then know how much the child is eating)
- Sit down with the child and encourage her/him if needed.
- Offer food the child can take and hold; the young child often wants to feed him/herself. Encourage him/her to, but make sure most of the food goes into his/her mouth.
- Mother/caregiver can use her fingers (after washing with soap) to feed child.
- Feed the child as soon as s/he starts to get hungry.
 - The child eats in his/her usual setting.
 - As much as possible, the child eats with the family in order to create an atmosphere promoting his/her psycho-affective development.
 - Do not insist if the child does not want to eat.
- If the child refuses to eat, wait or put it off until later.
- Talk or play with the child while s/he eats.
- Congratulate the child when s/he eats.
- Parents, family members (older children), child caretakers can participate in active feeding.



7. How to counsel on child feeding during and after illness.

- A sick child usually does not feel like eating. But s/he needs even more strength to fight sickness. Strength comes from the food s/he eats. If the child does not eat or does not breastfeed during sickness, s/he will take more time to recover.
- The child will be in a chronic state of sickness and malnutrition, and may end up with a physical or intellectual disability related to malnutrition. The child takes more time to recover, sometimes the child's condition worsens and s/he may even die.
- Therefore, it is very important to encourage the sick child to eat during sickness, and to eat even more during recuperation in order to quickly regain strength.

8. How to assist mothers/caregivers in appropriate Home Care Management

In prevention of diarrhoea

- Exclusive breastfeeding 0 - < 6 months
- Timely initiation of complementary feeding with FADUA
- Hand washing with soap before preparing food
- Hand washing with soap before feeding infants and young children
- Hand washing with soap after using the toilet
- Appropriate disposal of wastes
- Personal and environmental hygiene
- Adequate and safe water supply
- Vaccinations
- Vitamin A supplementation
- Avoid bottle feeding

In management of child with diarrhoea

- Continue exclusive breastfeeding if less than 6 months
- Increase liquids and foods if greater than 6 months, and increase frequency of breastfeeding
- Increase frequency of feedings
- Never use bottle feeding
- Identify and treat underlying cause

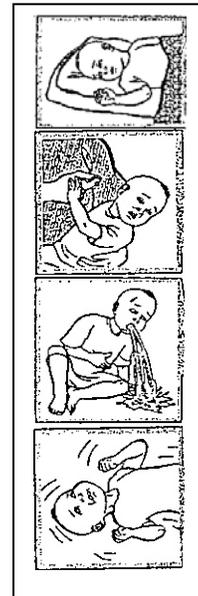
In identifying signs of severe dehydration

- Sunken eyes, dryness of eyes
- Skin pinch goes back very slowly
- Lethargic or unconscious
- Failure to suckle, drink or feed

In identifying general danger signs of illnesses

- Inability to drink and eat
- Loss of consciousness or lethargy
- Vomits everything
- Convulsions

Go to the nearest health clinic



COMMUNITY-BASED MANAGEMENT OF ACUTE MALNUTRITION (CMAM)

Four core principles of CMAM

- High coverage and good access to services.
- Timeliness: because mortality often occurs before TFC intervention are up & running.
- Appropriate Medical and Nutrition Care: follow the IMNCI protocols and appetite test determines the care needed.
- Care for as long as needed.

CMAM consists of

1. **Community outreach.**

- The community element of CMAM program must be strong in order to mobilize mothers/caretakers to bring their children to the Outpatient Therapeutic Program (OTP) or Supplementary Feeding Program (SFP) for screening before SAM becomes serious and medical complications arise.
- The outreach workers will also provide tracing of absent children and the follow up care that needs a home visit.
- The health workers and volunteer community health workers should do this in their own communities.

2. **An Outpatient Therapeutic Program (OTP).**

- There will be an OTP in as many MOH or NGO health facilities as capacity allows.
- This is where the majority of severely malnourished children will be assessed and treated.
- The OTP will be run by staff given specific CMAM training and support.

3. **Stabilization Centre (SC) or Phase I.**

- This will be only for malnourished children with medical complications who are not well enough to be treated on an outpatient basis.
- They are treated as inpatient until their condition is stable enough for them to be discharged home and to treat as outpatient (OTP) (Average 5-7 days).

4. **A Supplementary Feeding Program (SFP)**

- This program treats and supports all the moderately malnourished children, lactating mothers who have infants less than 6 months of age with MUAC less than 21cm and pregnant mothers MUAC less than 21cm.
- SFP use Corn Soy Blend and oil for all moderately malnourished children.

What is acute malnutrition: Marasmus and Kwashiorkor?

A small percentage of children may suffer from acute malnutrition (moderate or severe), also known as Marasmus and Kwashiorkor. During times of severe food shortages, it can be expected that a larger percentage of young children develop Marasmus and Kwashiorkor, but also high rates are found during non-crisis times due to feeding-related behaviours, disease and other factors. .

Marasmic children have specific clinical manifestations including:

- Wasting of subcutaneous fat and muscles (flabby muscles), ribs and bones are easily seen, wrinkled buttocks;
- "old man" face;
- Sunken eyes; and
- Very quiet and apathetic.



Kwashiorkor children have specific clinical manifestations including:

- Bilateral pitting edema on the lower limbs (but can be located on the child's feet, hands, eyelids, belly or it can spread to the whole body);
- Difficulty to begin walking;
- Moon face due to hanging cheeks;
- Loss of appetite;
- Lack of interest in surroundings, little energy;
- Skin changes; and
- Hair changes (straightening of hair and presence of different colour bands of the hair indicating periods of malnourishment and well nourishment (flag sign).

Straightening of hair at the bottom and curling on the top giving an impression of a forest (forest sign) and easily pluck able hair.



Marasmic Kwashiorkor

- Bilateral pitting edema; and
- Severe wasting

Note: One should not wait for these signs to appear before acting because when the signs of do SAM become apparent, it means the child is in great danger. At this stage, the child may require intensive care. However, the signs of the onset of malnutrition, as well as the signs of malnutrition often remain unrecognized. Possible conditions/early signs that could result in malnutrition are:

- Recurrent or prolonged illness or diarrhoea;
- Growth or weight levelling off or decreasing; and/or
- Feeding issues - fussy baby, breastfeeding problems.
-

Refer the mother to the health clinic, supplemental feeding centres, or therapeutic feeding centres for diagnosis.

How to assess malnutrition at community level

Checking for bilateral Oedema

- Bilateral pitting oedema is the sign of Kwashiorkor. Kwashiorkor is always a severe form of malnutrition.
- There is no need to take another anthropometric measurement for children with bilateral Oedema as they are directly identified to be severely malnourished with complications.
- Those children are at high risk of mortality and need to be treated in a Stabilization Centre urgently.

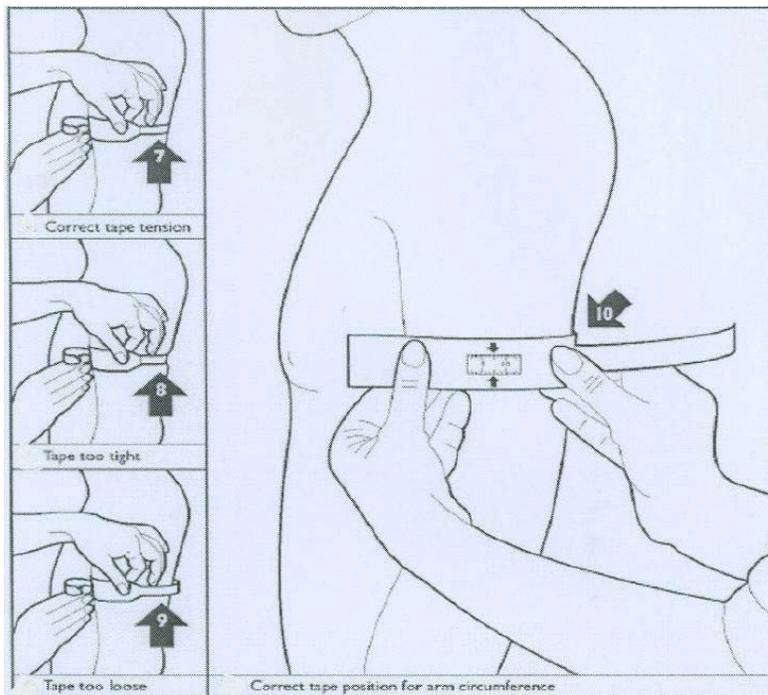
In order to determine the presence of Oedema, normal thumb pressure is applied to the both feet for three seconds. If a shallow print persists on both feet, then the child recorded as having nutritional Oedema.



Measuring the MUAC

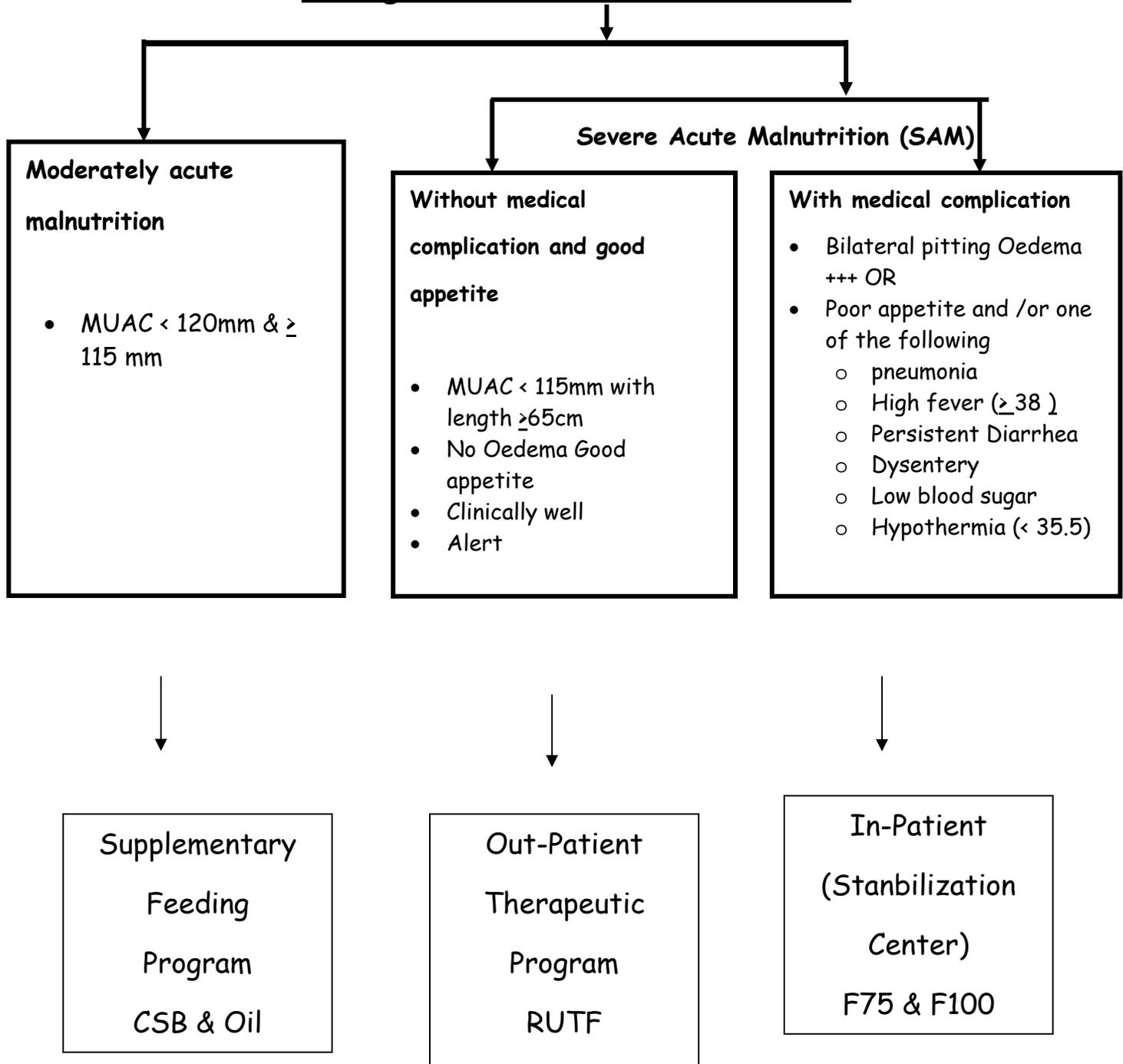
MUAC is used to measure "thinness". It is the preferred method for screening and admission (WHO 2007).

- A) Ask the mother or the care taker to remove clothing that may cover the child's left arm.
- B) Find the midpoint of the child's left upper arm.
 - Locate the tip of the child's shoulder with your finger tips.
 - Bend the child's elbow to make a right angle.
 - Measure from the tip of the shoulder to the tip of the elbow and divide this number by two to get the midpoint.
- C) Straighten the child's arm and wrap the tape around the arm at the midpoint.
- D) Inspect the tension of the tape on the child's arm. Make sure the tape has the proper tension and is not too tight or too loose.
- E) Read the number between the two arrows to the nearest 0.1 cm.
- F) Immediately record the measurement.



What are the admission criteria of admission?

Management of Acute Malnutrition



What food and counselling messages are offered at OTP ?

Management of Severe Acute Malnutrition (without complication)

- A one week supply of RUTF based on the child's weight. The following are the different types of RUTF offered in Liberia: Plumpy Nut and BP100.
- Key messages for caretakers of OTP children are:
 - Follow the BF + FADDUA recommendations
 - RUTF is a food and medicine for malnourished children only. It should not be shared.
 - RUTF should be given before other foods. Give small regular meals of RUTF and encourage the child to eat often,
 - RUTF is the only food these children need to recover during their time in OTP.
 - For breastfed children, always give breast milk before the RUTF and breastfeed on demand.
 - Always offer plenty of clean water to drink while eating RUTF.
 - Use soap for washing a child's hand and face before feeding, if possible.
 - Keep food clean and covered.
 - Sick children get cold quickly, always keep the child covered and warm.
 - With diarrhoea, never stop feeding. Give extra food and clean water (or breastmilk).

Management of moderate acute malnutrition (diet, treatment and care)

- Refer the child to Supplementary feeding Program when/if near by
- Give nutritional counselling as if the child was a sick child
- Assess current feeding practices
- Emphasize optimal breastfeeding and complementary feeding.
- Encourage the mother/caregiver to actively feed her child so that child finishes his/her food.
- Refer the child identified with moderate malnutrition to a supplementary feeding program for food, counselling and follow up.
- Assist the mother/caregiver to appropriately use the food received
- Encourage her to take the child to monthly weight visits if available.
- Encourage her to make sure the child is immunized and receive Vitamin A and de-worming

WOMAN'S NUTRITION DURING PREGNANCY AND LACTATION

HO 24

Nutrition of big belly ma

MESSAGES

Big belly ma, eat one extra bowl of food every day to be healthy, active and happy, and to born a strong baby.

When you have a big belly eat different types of food every day to be strong and get vitamins.

When you have a big belly, try to rest and avoid to carry heavy loads.

Husband, make sure that your wife with a big belly has one extra bowl of food every day to be healthy, active, and happy, and to born a strong baby.

Make sure she eats different types of food every day to be strong and get vitamins.

- A big belly ma needs to eat more food than usual to have a healthy and shiny baby.
- A big belly ma needs to eat many different types of colorful foods such as crayfish, meat, chicken, snails, fish, potato greens, cassava leaf and other green leafy vegetables, argo oil, palm oil, rice, plantains, yams, corn, eddoes, eggs, peanuts, and oranges vegetables, etc...
- The husband needs to support a big belly ma to rest and not carry heavy loads to ensure that the baby is healthy and strong

Iron/Folic Acid and worm medicines, and TT vaccines during pregnancy

MESSAGES

Big belly ma, when you know you got big belly, go to the big belly clinic to get iron/folic acid medicine to keep you strong & healthy and prevent low blood.

Husband, make sure your wife with a big belly gets iron/folic acid medicine as soon as possible to keep her healthy & strong and have a strong baby.

- A big belly ma needs more blood. Not enough iron intake will lead to low blood (anemia) which will make her and the baby weak, sick and tired.
- Iron/folic acid medicine is important to keep her and the new baby healthy and strong.
- Iron/folic acid medicine should be given throughout when you have big belly and after delivery
- Take your medicine with food to reduce vomiting, stomach pain and constipation. Black stools are normal when taking iron medicine.

MESSAGES

Big belly ma, go to the big belly clinic to get worm medicine to prevent you from getting low blood.

Husband, make sure your wife with a big belly gets worm medicine from a health worker.

- Worms can cause low blood which leads to tiredness and poor health.
- From six months up ask the health worker for worm medicines.

**Big belly ma, make sure you receive your tetanus shots from the big belly clinic
Husband, make sure your big belly ma receives her tetanus shots by going to the big belly clinic**

Prevention of Malaria and Anemia

MESSAGE

All members of the family, sleep under an insecticide treated mosquito net (ITN), especially big belly mas and young children to prevent getting malaria.

- If you have a big belly, be sure that you sleep under an ITN to protect yourself and the baby from malaria.
- Malaria causes low blood (anemia) which will make members of your family sick and very weak

MESSAGES

Big belly ma, when you have a big belly make sure you go to the big belly clinic to get IPT (malaria medicine) to keep you from getting malaria and keep your unborn baby healthy

Husband, make sure your wife with a big belly gets IPT from a the big belly clinic to keep her from getting malaria and keep your unborn baby healthy

- Malaria can be bad for you and the baby and cause low blood. Make sure that you take IPT (malaria medicine) when you have a big belly
- If a big belly ma or a family member has fever, go to a health facility for immediate treatment

Iodized Salt

MESSAGE

Baby ma, baby pa, make sure that all family food is cooked using iodized salt so that family members remain healthy.

- A big belly woman needs to use iodized salt to make sure her new baby is healthy and can learn
- Add the iodized salt at the end of the cooking
- Keep iodized salt in a covered container or jar and away from heat

Nutrition of tay tay baby ma

MESSAGES

Baby ma, when you are giving tay tay, eat two extra bowls of food a day to maintain your health and the health of your baby. Eat different types of food every day to be strong and get vitamins.

Baby pa, ensure that your wife who gives tay tay has two extra meals a day to maintain her health and the health of the baby

- To maintain the health, of a tay tay woman, she needs to eat more than usually to stay strong and healthy.

- A tay tay woman needs to eat many different types of colorful foods such as crayfish, meat, chicken, snails, fish, potato greens, cassava leaf and other green leafy argo oil, palm oil, rice, plantains, yams, corn, eddoes, eggs, peanuts, and oranges vegetables, etc..

Baby Ma, within 8 weeks after giving birth, go to the well baby clinic and take Vitamin A supplementation to make the baby healthy and strong.

- Taking a Vitamin A capsule will enrich the baby ma's tay tay with important nutrients and vitamins to prevent sickness in the baby

Baby Ma, after delivery, continue to take iron and folic acid medicine to have good blood and keep your baby strong.

- If the baby ma has not taken iron and folic acid medicine for six months during the big belly period, she has to continue after delivery.
-

General Case Study of baby 6 - 24 months

Visit #1: Initial Visit

With the mother/caregiver recommend and negotiate doable actions, according to the child's health status, age, and the different feeding difficulties:

Checklist of GALIDRAA:

- Ask about feeding practices, age of the child and status
- Listen to the mother
- Identify difficulties related to breastfeeding and/or complementary feeding that need to be resolved (one of the components of FADDUA).
- Identify the possible causes of the difficulties
- Ask the mother/caregiver to suggest ways of improving her child's feeding using posters or other visuals if available
- Ask the mother/caregiver whether she is willing to try a new practice of FADDUA, which you will explain to her and whose advantages you will emphasize
- Discuss specific recommendations with the mother/caregiver
- Negotiate with the mother/caregiver so that she tries a new practice.

Plan with mother/caregiver a follow-up visit

General Case Study of baby 6 - 24 months (continued)

Visit #2: Follow-up visit after 1 - 2 weeks, aiming to check how the mother/caregiver is doing with the new practice, congratulate and encourage the mother/caregiver to continue.

Checklist of Visit #2

- Ask the mother/caregiver if she has been able to carry out the practice she was willing to try.
- If she has tried, congratulate her for trying the practice.
- If she has tried, what does she think of it?
- If she has not, why not?
- Which changes did she make to the new practice and why?
- What did she like about this practice?
- What difficulties did the mother/caregiver encounter?
- Discuss FADUA recommendations and other practices that would improve complementary feeding.
- Inform the mother/caregiver on the nearest place where she can get support.

Plan with mother/caregiver another follow-up visit

General Case Study of baby 6 - 24 months (continued)

Visit #3: 1 - 2 months later

Make a follow up visit to check if the mother/caregiver still uses the new practice and negotiate new recommendations according to the child's age or any other difficulty.

Ask the mother/caregiver to share the practice with other mothers.

Checklist Visit #3:

- Ask the mother/caregiver if she still uses the new practice.
- Congratulate the mother/caregiver if she does.
- If she does not, why not?
- Did she make some changes to the recommended practice and why?
- In which way did she change the recommended practice and why?
- What were the difficulties?
- How did she resolve them?
- Listen to the mother/caregiver's questions, concerns, and doubts.
- Discuss with the mother/caregiver the same recommendations or new specific ones based on the child's age.
- Encourage the mother/caregiver to try out the new practice: ask her which practice she thinks she can carry out. Can she practice it every day?
- Inform the mother/caregiver on the nearest place where she can get support.

How to Negotiate using visuals: Poster, Counselling Card, a Booklet on key ENA messages, Child Health Record, etc.

1. OBSERVE

- Ask the mother/caregiver:
 - What is happening in the picture?
 - What are the characters in the picture doing?
 - How does the character feel about what s/he was doing? Why did s/he do that?

2. REFLECT

- Whom do you agree with? Why?
- Whom do you disagree with? Why?
- What is the advantage of adopting the practice described in the picture?

3. PERSONALIZE

- What would people in this community do in the same situation? Why? What would you do in the same situation? Why?
- What difficulties might you experience?
- Would you be able to overcome them? How?

4. ACT

- Repeat the key messages.
- If you were the mother (or another character), would you be willing to try the new practice?
- How would you overcome any barriers to trying the new practice?
- Together identify doable actions that the mother can try

Observation Checklist for Support Groups

Community: _____

Place: _____

Date: _____

Time: _____

Theme: _____

Group facilitator(s): -----

	✓	Comments
1. The facilitator(s) introduce themselves to the group.		
2. The facilitator(s) clearly explain the day's theme.		
3. The facilitator(s) ask questions that generate participation.		
4. The facilitator(s) motivate the quiet women to participate.		
5. The facilitator(s) apply communication skills.		
6. The facilitator(s) adequately manage content.		
7. The facilitator(s) adequately distribute the tasks between themselves.		
8. Mothers share their own experiences.		
9. The participants sit in a circle.		
10. The facilitator(s) fill out the information sheet on their group.		
11. The facilitator(s) invite women to attend the next mother-to-mother support group (provides place, date and theme for next meeting).		
12. The facilitator(s) thank the women for attending the mother-to-mother support group.		
13. The facilitator(s) ask women to talk to a pregnant woman or breastfeeding mother before the next meeting, share what they have learned, and report back.		

Number of women attending the mother-to-mother support group: _____

GROUP SUPERVISION GUIDELINES

Frequency.

- 1 month after the training of community agents
- Then, every 2-3 months as needed
- For community groups functioning well, every 3-4 months
-

Activity 1: *Identification of problems related to breastfeeding, complementary feeding/sick child, nutrition of women, and/or micronutrients. Discussion of solutions (45min)*

Group work:

- Each participant writes (or thinks of) 2 questions
- Form 3 groups and in each group:
 - Put the common questions together
 - Answer the questions in the group
 - Answer the questions in plenary (the facilitators help the groups to answer)

Activity 2: **Assessment of the field practice on negotiation. Discussion on solution (1h30mn)**

Group work:

- Divide the participants into pairs
- Have field practice sessions with mothers (4 to 6 mothers per team)
- Divide the tasks for each team as follows:
 - one participant negotiates with the mother whilst the other participants observes with the help of the negotiation observation checklist and provides feedback.
 - Reverse the roles until you have 4 to 6 mothers per team
 - When all the teams have had a chance to practice their negotiation skills return to review the feedback in plenary.
- Each team presents the strong points and the points to be improved
- The facilitators will mention the various points and reinforce different points.

Activity 3: Share experiences (45 min)

Group work:

- Divide participants into 3 groups
- Each group will share the work that they do in their community
- Share the strong points, the problems encountered in the organization and the solutions undertaken to solve the problems
- For each unsolved problem, find appropriate solutions with the group
- Each group will see how to improve their way of working or what activities to maintain and identify what should be their next activities.

For the closing of the session the facilitator will:

- Give a summary
- Set a date for the next meeting

VITAMIN A ADMINISTRATION PROTOCOL IN LIBERIA (Draft September 2009)

TARGETS	AGE GROUP	DOSE	FREQUENCY AND OPPORTUNITIES
Preventive supplementation → Children under 5 years of age	Infants 6-11 months	100,000 IU	Administer with measles vaccine. Repeat dose every 6 months during campaigns or MCH contacts.
	Children 12-59 months	200,000 IU	
Post partum women on delivery or within 8 weeks of delivery		200,000 IU	During BCG vaccine for newborn, family planning or post-natal visits

Treatment → With moderate or severe malnutrition	Infants 6-11 months	100,00 IU on diagnosis Repeat same dose on day 2 and 14 if there are clinical signs of VAD	EPI, IMNCI, MCH, and other contacts. Repeat preventive dose every 4-6 months
	Children 12-59 months	200,00 IU on diagnosis Repeat same dose on day 2 and 14 if there are clinical signs of VAD	
→ Children with symptomatic HIV Infection	Children 6-59 months	Every 6 months	
→ With persistent diarrhea	Infants 6-11 months	100,00 IU once	
	Children 12-59 months	200,00 IU once	
→ With measles	Infants 6-11 months	100,000 IU on day 1, day 2 and day 14	
	Children 12-59 months	200,000 IU on day 1, day 2 and day 14	
→ With xerophthalmia (VAD)	Infants below 6 months	50,000 IU on day 1, day 2 and day 14	
	Infants 6-11 months	100,000 IU on day 1, day 2 and day 14	
	Children 12-59 months	200,000 IU on day 1, day 2 and day 14	

ADMINISTRATION OF VITAMIN A CAPSULES

- Ask the caretaker if the child has received vitamin A capsule in the last one month. If the answer is yes, confirm and do not give additional dose during this visit.
- If the answer is no, ask the caretaker to hold the child firmly, make sure the child is calm.
- Check the expiry date on the label
- Cut the nipple of the capsule with scissors and immediately squeeze all the drops into the Child's mouth.
- Give the appropriate dose of vitamin A to the child (refer to protocols)
- Check if the child is comfortable after swallowing the drops
- Put all capsules that have been used into a plastic bag
- Keep hands free of oil (clean)

DO NOT DROP THE CAPSULE INTO THE CHILD'S MOUTH OR ALLOW THE CHILD TO SWALLOW THE CAPSULE.

IRON/FOLIC ACID SUPPLEMENTATION AND TREATMENT (Draft September 2009)

Iron and Folic Acid Doses For Supplementation for Pregnant and Lactating Women		
TARGETS	DOSAGES	Duration
Preventive supplementation → Pregnant and lactating women	Iron: 60 mg/day Folic acid: 400 mcg/day	<ul style="list-style-type: none"> ▪ During 6 months ▪ To take iron and folic acid for six months in pregnancy, and to be continued into the postpartum period to reach the 6 months

<ul style="list-style-type: none"> • DON'T give Iron/Folic supplementation for children under-five in Malaria endemic area • Identify if the child has anaemia (clinical or laboratory) • If anaemia treat the anaemia, simultaneously treat Malaria Amodiaquine 153 mg+Artesunate 50mg for 3 days 		
Treatment Children < 2 years old**	Iron: 25 mg/day Folic acid: 100-400 mcg/day	<ul style="list-style-type: none"> • During 3 months
Children 2-12 years old	Iron: 60 mg/day Folic acid: 400 mcg/day	<ul style="list-style-type: none"> • During 3 months
Adolescents and adults	Iron: 120 mg/day Folic acid: 400 mcg/day	<ul style="list-style-type: none"> • During 3 months

Hemoglobin Values Defining Anemia for Population Groups	
Age or Sex Group	Hemoglobin Value Defining Anemia (g/dL)
Children 6-59 mos	< 11.0
Children 5-11 yrs	<11.5
Children 12-14 yrs	<12.0
Nonpregnant women >15	<12.0
Pregnant women	<11.0
Men >15	<13.0

MALARIA CONTROL

HO 31

TARGETS	Prophylaxis	Treatment
Pregnant and Lactating Women	Sleep under an Insecticide Treated Net (ITN)	1 dose Fansidar (3 tablets) in the 2nd trimester and 1 dose Fansidar (3 tablets) in the 3rd trimester
Children		Immediate access to treatment - Amodiaquine 153 mg + Artesunate 50mg for 3 days

HELMINTHIASIS CONTROL

TARGETS	Treatment	When
Pregnant and Lactating Women	Mebendazole 500 mg	1 dose in the first trimester of pregnancy
Children older than 12 months	Mebendazole 500 mg	1 dose every 6 months

ZINC TREATMENT DURING DIARRHEA

TARGETS	DOSAGE	DURATION
Treatment Children < 6 months old	10 mg	10-14 days
Children > 6 months old	20 mg	10-14 days