



Specific Nutrition Intervention Package Guidelines







Specific Nutrition Intervention Package (SNIP) Guidelines

Ministry of Health, Timor-Leste

2016





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Foreword

The Timor-Leste Food and Nutrition Survey of 2013 (TLFNS 2013) showed that compared to the findings from the DHS 2009/10, undernutrition among children has improved, with stunting of children under five decreasing from 58% to 50%. However, in spite of this improvement, it still means that one in every two children under five years of age are chronically undernourished (stunted). These undernourished children face poor brain development and learning potential. As adults, this leads to diminished achievement in the workforce and reduced productivity of the country.

The Ministry of Health has been implementing high impact and evidence-based nutrition interventions as part of the service package under National Nutrition Strategy (2014-2019) to address undernutrition in Timor-Leste. While these interventions are embedded in our Primary Health Care service delivery, it is vitally important that the health care staff have the essential knowledge and skills to enable them to deliver services and effectively operate in their role as service providers. In order to do this, the capacity development needs to be effective and sustainable, and it needs to be applied at all levels of the health care system.

The Ministry of Health firmly believes that global recommendations and evidence-based interventions should be promoted and followed, and provide the foundation for national policies and guidelines for nutrition, while considering local context, innovation and appropriate application of interventions in response to identified needs.

The Specific Nutrition Intervention Package (SNIP) guidelines, training materials and job-aids are based on best practice as well as the most current available global guidance, and further tailored to the Timor-Leste context. The development has been led by the Ministry of Health, with technical support from NutritionWorks, the National Health Institute (INS) and the United Nations Children's Fund (UNICEF). We would like to also thank the European Union for the financial support which made this possible.

On behalf of the Government of Timor-Leste, I would like to thank all relevant stakeholders who contributed to these important SNIP nutrition guidelines and training materials, and urge all partners to align to these nutrition related actions, and work together to build the capacity of Timor-Leste health service providers for further improvement in the nutritional status of women and children of Timor-Leste.

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Timor-Leste SNIP Guidelines

MODULE 1:

Infant and Young Child Feeding and Care





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1. WHO recommendation

Babies should be placed in skin-to-skin contact with their mothers immediately following birth for at least an hour and mothers encouraged to recognize when their babies are ready to breastfeed, with help offered if needed.

As a global public health recommendation, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health.

Thereafter, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond

Guiding Principles for complementary feeding of the breastfed child THE BREASTFED

1. Practise exclusive breastfeeding from birth to 6 months of age, and introduce complementary foods at 6 months of age (180 days) while continuing to breastfeed.
2. Continue frequent, on-demand breastfeeding until two years of age or beyond.
3. Practise responsive feeding, applying the principles of psychosocial care.
4. Practise good hygiene and proper food handling.
5. Start at six months of age with small amounts of food and increase the quantity as the child gets older, while maintaining frequent breastfeeding.
6. Gradually increase food consistency and variety as the infant gets older, adapting to the infant's requirements and abilities.
7. Increase the number of times that the child is fed complementary foods as he/she gets older.
8. Feed a variety of foods to ensure that nutrient needs are met.
9. Use fortified complementary foods or vitamin-mineral supplements for the infant, as needed.
10. Increase fluid intake during illness, including more frequent breastfeeding, and encourage the child to eat soft, varied, appetizing, favourite foods. After illness, give food more often than usual and encourage the child to eat more.



Guiding principles for feeding non-breastfed children 6–24 months of age

1. Ensure that energy needs are met.
2. Gradually increase food consistency and variety as the infant gets older, adapting to the infant's requirements and abilities.
3. For the average healthy infant, meals should be provided four to five times per day, with additional nutritious snacks offered one or two times per day, as desired.
4. Feed a variety of foods to ensure that nutrient needs are met.
5. As needed, use fortified foods or vitamin–mineral supplements (preferably mixed with or fed with food) that contain iron.
6. Non-breastfed infants and young children need at least 400–600 mL/day of extra fluids in a temperate climate, and 800–1200 mL/day in a hot climate.
7. Practise good hygiene and proper food handling.
8. Practise responsive feeding, applying the principles of psychosocial care.
9. Increase fluid intake during illness and encourage the child to eat soft, varied, appetizing, favourite foods. After illness, give food more often than usual and encourage the child to eat more.

Counselling and support for appropriate feeding of low-birth-weight (LBW) infants

1. LBW infants (birthweight <2.5kg), including those with very low birth weight (VLBW), should be fed mother's own milk.
2. LBW infants, including those with VLBW, who cannot be fed mother's own milk should be fed donor human milk.
3. LBW infants, including those with VLBW, who cannot be fed mother's own milk or donor human milk, should be fed standard infant formula. VLBW infants who cannot be fed mother's own milk or donor human milk should be given preterm infant formula if they fail to gain weight despite adequate feeding with standard infant formula.
4. LBW infants, including those with VLBW, who cannot be fed mother's own milk or donor human milk should be fed standard infant formula from the time of discharge until six months of age
5. VLBW infants who are fed mother's own milk or donor human milk should not routinely be given bovine milk-based human-milk fortifier. VLBW infants who fail to gain weight despite adequate breast-milk feeding should be given human-milk fortifiers, preferably those that are human-milk based.





Infant feeding in the context of human immunodeficiency virus (HIV)

1. Mothers known to be HIV-infected should be provided with lifelong antiretroviral (ARV) therapy or ARV prophylaxis interventions to reduce HIV transmission through breastfeeding.

In settings where national authorities have decided that the maternal and child health services will principally promote and support breastfeeding and ARV interventions as the strategy that will most likely give infants born to mothers known to be HIV-infected the greatest chance of HIV-free survival:

2. Mothers known to be HIV infected (and whose infants are HIV uninfected or of unknown HIV status) should exclusively breastfeed their infants for the first 6 months of life, introducing appropriate complementary foods thereafter, and continue breastfeeding for the first 12 months of life. Breastfeeding should then only stop once a nutritionally adequate and safe diet without breast milk can be provided.
3. Mothers known to be HIV infected who decide to stop breastfeeding at any time should stop gradually within one month. Mothers or infants who have been receiving ARV prophylaxis should continue prophylaxis for one week after breastfeeding is fully stopped. Stopping breastfeeding abruptly is not advisable.
4. When mothers known to be HIV infected decide to stop breastfeeding at any time, infants should be provided with safe and adequate replacement feeds to enable normal growth and development.
5. Mothers known to be HIV infected should only give commercial infant formula milk as a replacement feed to their HIV-uninfected infants or infants who are of unknown HIV status when specific conditions are met.
6. Mothers known to be HIV infected may consider expressing and heat-treating breast milk as an interim feeding strategy.
7. If infants and young children are known to be HIV infected, mothers are strongly encouraged to exclusively breastfeed for the first six months of life and continue breastfeeding as per the recommendations for the general population, that is, up to two years or beyond.



2. Benefits of appropriate IYCF

The benefits of breast-feeding for the infant, mother, family and the nation:

1. The greatest and most obvious benefits are for the **health and survival of the infant**: Rates of diarrhoea, respiratory tract infections, and otitis media are all lower in breastfed babies compared with non-breastfed infants. In the first six months, the rates are also lower for exclusively breastfed than for partially breastfed babies.
2. **Initiation of breastfeeding** immediately after delivery stimulates the release of oxytocin, which helps the contraction of the uterus and expulsion of the placenta and **reduces postpartum bleeding**.
3. **Exclusive breastfeeding delays the return of fertility** and hence delays the risks to maternal health of having children spaced too closely together.
4. Many studies confirm that **children who are breastfed do better on tests of intellectual and motor development than children who are not breastfed**. This is thought to be associated with the long-chain polyunsaturated fatty acids, which are found in breastmilk, and which are known to be important for brain growth and development.
5. A number of studies suggest that **breastfed babies are less susceptible to chronic diseases** such as allergies, obesity, diabetes, hypertension, and cancer. Treating these diseases has an enormous cost for a national health budget. (1)
6. **The economic cost of using infant formulas is high - both for the family and the nation**. Two nations in the region that have calculated the economic costs of not breastfeeding are Papua New Guinea at Independence (2), and Indonesia in 1982 (3). Both nations examined the cost to the individual, especially poor families, the cost of the imports to the nation, the costs associated with lost work days with mothers looking after sick children, and the extra costs to the health system of caring for illnesses, which could be attributed to poor preparation of infant formula. The Indonesian study calculated that mothers produced a billion litres of breastmilk annually. If this was replaced by commercial milk the cost at that time would have been in excess of USD400 million. Additionally, saving in health costs and reduced fertility rates related to breastfeeding were estimated to be another USD120 million.
7. **The safety of breastmilk**: Infant formula can be contaminated by a bacterium called *Enterobacter sakazkii*. This bacterium has caused outbreaks of sepsis, meningitis or necrotizing enterocolitis, leading to severe on-going complications and sometimes death for newborns.





Technical Notes

Breastfeeding together with appropriate complementary feeding has the potential to reduce mortality among children under five by 19%. Six months of exclusive breastfeeding (EBF) is recommended for improved infant, child, and maternal health. EBF from birth is possible except for a few medical conditions, and unrestricted EBF results in ample milk production. A systematic review in 2001 on the effects of EBF for six (versus three to four) months on infant and maternal health found evidence of decreased gastrointestinal illnesses in infants who were exclusively breastfed for six months (compared to those who were mixed breastfed – receiving breast milk and other milk – at three to four months), and also that mothers who exclusively breastfed for six months experience prolonged lactational amenorrhea.

A 2007 review found a positive effect on both the likelihood of EBF for one to four months of life, and the overall duration of breastfeeding, when mothers put the infant to the breast soon after birth

Studies specifically looking at the impact of education or counselling on child weight showed that children whose mothers were exposed to breastfeeding education were on average heavier at four months of age than control children.

Breastfeeding continues to make an important nutritional contribution well beyond the first year of life. Breastfed children at 12–23 months of age receive on average 35% to 40% of total energy needs from breast milk with the remaining 60% to 65% covered by complementary foods. Breast milk is a key source of energy and essential fatty acids and provides substantial amounts of certain micronutrients. The nutritional impact of breastfeeding is most evident during periods of illness, when the child's appetite for other foods decreases but breast-milk intake is maintained.

Continued, frequent breastfeeding also protects child health by delaying maternal fertility postpartum and reducing the child's risk of morbidity and mortality in disadvantaged populations. Longitudinal studies demonstrate that in developing countries, a longer duration of breastfeeding is associated with greater linear growth. It is also linked to reduced risk of childhood chronic illnesses and obesity and to improved cognitive outcomes, although the causal relationship underlying these associations remains controversial.

Breastfeeding in the first 6 months of life provides greater protection against diarrhoea than against acute respiratory illness, but breastfeeding between 6–11 months shows "similar levels of protection" against both acute respiratory illness and diarrhea.

A critical window of opportunity to ensure optimal child growth and development covers the period of pregnancy up to the second year of life. Successful complementary feeding is critical for preventing malnutrition. Growth faltering is most evident during this time period, particularly between 6 and 12 months when foods of low nutrient density begin to replace breast milk and rates of diarrhoeal illness caused by food contamination are

at their highest. After about two years of age, it is very difficult to reverse stunting that occurred at earlier ages.

The Global strategy for infant and young child feeding, adopted by the World Health Assembly (WHA) and the UNICEF Executive Board in 2002, provides the framework for action to protect, promote and support breastfeeding. It builds on key global instruments including:

- the International Code of Marketing of Breast-milk Substitutes and subsequent relevant World Health Assembly Resolutions (referred to as the Code);
- the Baby-friendly Hospital Initiative (BFHI); and
- the International Labour Organization's (ILO) Maternity Protection Convention No. 183.

Technical Notes on Infant feeding in the context of human immunodeficiency virus (HIV)

ARV interventions to either the HIV-infected mother or the HIV-exposed infant significantly reduce the risk of postnatal transmission of HIV through breastfeeding. This evidence has had major implications for how women living with HIV should feed their infants and how health workers should counsel and support them.

Nine key principles underlie the seven evidence-based recommendations on HIV and infant feeding. The principles reflect a set of values that contextualize the provision of care in programmatic settings. The key principles are directed towards policy-makers, academics and health workers.

KEY PRINCIPLES ON HIV AND INFANT FEEDING

1. Balancing HIV prevention with protection from other causes of child mortality.
2. Integrating HIV interventions into maternal and child health services.
3. Setting national or sub-national recommendations for infant feeding in the context of HIV.
4. When ARVs are not (immediately) available, breastfeeding may still provide infants born to HIV-infected mothers with a greater chance of HIV-free survival.
5. Informing mothers known to be HIV infected about infant feeding alternatives.



6. Providing services to specifically support mothers to appropriately feed their infants.
7. Avoiding harm to infant feeding practices in the general population.
8. Advising mothers who are HIV uninfected or whose HIV status is unknown.
9. Investing in improvement in infant feeding practices in the context of HIV.

Recommendation 1 is based on the revised WHO recommendations for ARV therapy or prophylaxis to reduce HIV transmission, including through breastfeeding.

Recommendation 2 is based on a systematic review of the effect of different infant feeding practices, in the absence of ARVs, on HIV-free survival and other mortality. Decreased HIV transmission in the first six months of infant life was associated with EBF compared to mixed feeding. EBF in the first six months of life was also associated with reduced mortality over the first year of life in HIV-exposed infants. The risk of HIV transmission continues for as long as breastfeeding continues; despite this, HIV-free survival of HIV-exposed infants who breastfed beyond six months of age was better than of infants who were started on replacement feeds.

Recommendation 3 is based on research and programmatic experience reporting that rapid and abrupt cessation of breastfeeding was very difficult for mothers to achieve and was associated with adverse consequences for the infant; breast-milk viral load is also known to spike with rapid cessation of breastfeeding.

For Recommendation 4, the considerable evidence from non HIV-exposed populations informs how HIV-infected mothers should feed their infants in the absence of breast milk. Recommendation 5 indicates that HIV-infected mothers should only give commercial infant formula when all the following specific conditions are met: clean water and sanitation are assured; the mother or other caregiver can reliably provide sufficient infant formula milk; the mother or caregiver can prepare it cleanly and frequently enough; the mother or caregiver can exclusively give infant formula milk in the first six months; the family is supportive of this practice; and the mother or caregiver can access health care that offers comprehensive child health services.



3. Situation in Timor Leste

- Timor-Leste has a very high prevalence of malnutrition in children under-five years (11% wasting and 50% stunting in children 0-59 months and 63% anaemia and 8.1% vitamin A deficiency in children 6-59 months TLFNS 2013), which contributes to a high infant mortality rate.

IYCF Indicators in the TLFNS 2013 revealed that breastfeeding indicators are improving, but complementary feeding remains inadequate for the majority, largely due to a lack of adequate diversity of nutritious foods in the diet:

Infants breastfed within 1 hour after birth 93.4%
Infants who received colostrum 98%
Exclusively breastfed (0 - 5.99 months) 62.3%
Continued breastfeeding at 12 - 15 months 73.9%
Continued breastfeeding at 20 - 23 months 38.7%
Initiation of solid, semi-solid and soft foods (6 - 8 months) 96.5%
Initiation of solid, semi-solid and soft foods (6 - 8 months who were breastfed) 94.1%
Minimum meal frequency (6 -23 months) 79.2%
Minimum dietary diversity (6 - 23 months) 27.5%
Minimum acceptable diet (6 - 23 months) 17.6%

Urban areas had a higher prevalence of children meeting the minimum dietary diversity (40.3% urban; 22.5% rural) and meeting the minimum acceptable diet (24.8% urban; 14.9% rural).

- Timor-Leste has a high rate of malnutrition in women (25% underweight, (BMI<25) and 39.5% anaemia in non-pregnant mothers aged 14-60¹). This contributes to poor growth of the foetus during pregnancy and to maternal mortality. Breastfeeding women need to consume a diet adequate in quality and quantity to meet the extra energy requirements of milk production.
- In general, Timor-Leste's health personnel's ability to counsel women who are experiencing problems in breastfeeding is weak. Many health professionals think that some women will not be able to breastfeed when in fact it is only very few women who cannot successfully breastfeed. All health professionals require training and supervision on these subjects.

¹ TLFNS 2013





- It is not illegal to advertise breastmilk substitutes in Timor-Leste;
- Donors (small and large) have sometimes provided unsolicited infant formula to the MOH, to health facilities or individuals. This unasked for provision of infant formula has put infants at risk of diarrhoea.

To reduce child mortality and child malnutrition, improvements are needed in breastfeeding *and* complementary feeding practices *and* maternal nutrition.

A *Behaviour Change Communication Strategy for Improvement in Child Nutrition* has been implemented.

In Timor-Leste, with poor water supplies and sanitation, even in urban areas, the use of infant formulas poses a high risk to babies of contracting diarrhoea through unhygienic preparation and storage.

Additionally, as noted above, the use of infant formulas has a high cost for the individual family and the nation. In other countries this high cost has led to infant formula being diluted to make it last longer and hence resulting in the baby receiving less nutrients. It is likely that this also happens in Timor-Leste.

It is a common traditional practice in Timor-Leste not to give colostrum as it is believed to be unclean or harmful. Instead babies are often given water and sugar during the first week of life to cleanse the intestines, with the belief that this practice will prevent jaundice. This advice comes not just from relatives and friends but may also come from health workers. Apart from denying the infant the nutrients in colostrum, this practice exposes the baby to unsafe water.

There are other widespread beliefs and practices contributing to poor breastfeeding practices. These include lactating women feeling they do not have enough milk; that a woman should not continue breastfeeding if she has become pregnant as it will harm the foetus; the belief that infants need other fluids or solids before six months because the baby is growing fast and the breastmilk will not be sufficient.

Very often women who have cracked nipples, engorgement or mastitis report that there is no assistance available at community level to assist them with these problems.



4. Programme Objective

To improve the feeding and care practices for infants and young children in Timor-Leste and thereby improve their health and nutritional status.

Specific Objectives are to:

- 1) Maintain/increase the high percentage of babies receiving their first breastfeed as soon as possible after birth and preferably within one hour of delivery.
- 2) Maintain/increase the percentage of babies receiving colostrum during the first days
- 3) Increase the percentage of women practising exclusive breastfeeding for the first six months
- 4) Increase the percentage of 6–23 month olds who are receiving the minimum acceptable diet alongside breastfeeding, and
- 5) Increase the provision of appropriate and timely advice and support from health staff or trained community workers for
 - (i) lactating women experiencing problems with breastfeeding
 - (ii) mothers or carers of babies, 0–6 months old, who are in exceptionally difficult circumstances, such as:
 - a. a mother and infant who have been temporarily separated
 - b. an infant whose mother has died and there is no wet nurse available
 - c. an HIV-positive mother, or
 - d. where medical reasons related to mother or baby prevent breastfeeding





5. Pre-requisites for effective coverage

Health worker skills

- Knowledge of the key practices to support infant and young child nutrition:

6 key practices of breastfeeding:

1. *Initiate breastfeeding within 1 hour of birth*
2. *Breastfeed exclusively for the first 6 months – no teas, no water, no honey – nothing but breastmilk*
3. *Continue to breastfeed until 2 years and beyond*
4. *Breastfeed frequently, on demand, day and night*
5. *Continue to breastfeed when the child or mother has a common illness*
6. *Avoid artificial nipples, like pacifiers, dummies or bottles*

9 key practices of complementary feeding:

1. *Start to give foods when the baby is 6 months old and continue to breastfeed until the child is 2 years or older*
2. *Practise good hygiene and proper handling of food*
3. *Feed responsively – allow baby to lead feeding and respond to signs*
4. *Increase the amount of food as the child gets older, and continue to breastfeed*
5. *Change the texture and consistency to match the growing child's needs and abilities*
6. *In addition to breastmilk feed babies frequently increasing the number of times a day the baby is fed (babies aged 6-7 months should be fed at least 3 times a day, increasing to 5 times a day as the child reaches 1 year of age)*
7. *In addition to breastmilk feed babies a variety of foods*
8. *Give babies fortified foods, micronutrient supplements (vitamin A and deworming according to protocols – see guidelines), including MNPs from 6-23 months*
9. *Continue to breastfeed during illness and give extra food, more often after illness.*

Source: INS NFS IYCF training module

- Skills to counsel mothers and caregivers effectively to support optimal breastfeeding and complementary feeding practices; including active listening skills
- Communication skills to negotiate with other family members and community decision-makers to achieve appropriate behavioural change essential for improving feeding of children 6 to 23 months old, including care and hygiene practices
- Knowledge on nutritional value and practical experience of the preparation of locally produced foods in any given setting
- Skills to weigh children and measure MUAC as part of a growth monitoring and promotion programme.



- Understanding of growth charts and ability to use them as a tool with mothers/ caregivers
- Appropriate and consistent use of monitoring and reporting forms.

Job aids

IYCF job aids

How to weigh a child

Screening for acute malnutrition in children aged 6–59 months using MUAC and oedema

Supplies

MUAC tapes, weighing scales

MNPs

LISIO booklet





6. Interventions and process

Ratification of the legal framework in Timor-Leste should be ensured to protect infant and young child feeding, including:

1. ***International Code of Marketing of Breast-milk Substitutes (the Code)***

The draft Timor-Leste Code of Marketing of Breastmilk Substitutes, Breastmilk Supplements and Related Products aims 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

The main elements of the Code deal with information and education; advertising and promotions to mothers and health workers; labelling; quality; and implementation and monitoring.

To maximize the contribution that the Timor-Leste Code can make to improved breastfeeding, monitoring of its implementation should be carried out. Companies found to be committing violations should be sanctioned by the government entity charged with Code enforcement. See Annex 2 for a summary of the main provisions of the Timor-Leste Code.

2. ***Improving maternity protection and health through the workplace***

Maternity protection at work is essential for safeguarding the health and economic security of women and their children. This is reflected in the international labour standards of the ILO, which set out basic requirements for maternity protection at work.

Health professionals have an important role to play in advocating for good legislation on maternity protection, and hospitals and other health facilities should offer maternity leave and breastfeeding support for their own personnel. All working women should be supported to sustain breastfeeding when they return to work, and in the workplace they should be granted a minimum of one daily break with pay, to breastfeed their infant or express and store breast milk.

3. ***Institutionalisation of the Baby-friendly Hospital Initiative (BFHI) in all maternities across the country should also be assured:***

The BFHI is a global effort launched by WHO and UNICEF to implement practices that protect, promote and support breastfeeding. It was launched in 1991 and materials revised, updated and expanded for integrated care in 2009. It is based around the

Ten Steps for Successful Breastfeeding (see Annex 3). A WHO review found that BFHI has measurable and proven impact, increasing the likelihood of babies being exclusively breastfed for the first six months. The BFHI has a systematic recertification process to ensure that its rigorous standards are upheld. Implementation requires capacity building in breastfeeding counselling and clinical aspects of lactation management. To enforce the monitoring of the BFHI criteria on a routine basis, consideration should be given to making fulfilment of the criteria a part of the overall system of quality certification of hospitals. http://www.who.int/nutrition/publications/infantfeeding/bfhi_trainingcourse/en/

An evaluation of the nutritional status of children under five should take place prior to initiating a supplementation programme with MNPs, along with any other existing measures in place to control anaemia and VAD, such as the provision of other fortified complementary foods or deworming. In malaria-endemic areas, the provision of iron should be implemented in conjunction with adequate measures to prevent, diagnose and treat malaria, as it can increase severity and mortality from malaria.

Role of the Health Worker

3. *Protection and Promotion of appropriate IYCF in the Community*

- 1) Provision to individuals and communities of correct and consistent information on optimal IYCF practices; the advantages of breastfeeding for the child, mother, family, and nation, and the dangers of bottle-feeding
- 2) Promotion of optimal IYCF through the use of mass media and events, such as the annual breastfeeding week in August
- 3) Increase in the number of Mother Support Groups and greater use of these groups to support optimal IYCF practices
- 4) Trained breastfeeding and complementary feeding counsellors operating in all sub-districts providing direct counselling as well as technical back-up for the Mother Support Groups, other CBOs, NGOs, and health personnel
- 5) Provision of infant formula under supervision in particular cases of need
- 6) Regular and consistent Growth Monitoring and Promotion for children aged 0–59 months

Promotion of exclusive breastfeeding during the first six months

Exclusive breastfeeding means that the baby is given only breast milk and nothing else – no other milk, food, drinks and not even water except for a few drops of medicine, vitamins and minerals prescribed by a health worker.



Counselling for breastfeeding during pregnancy

Practically all mothers, including those with mild to moderate malnutrition, can successfully breastfeed even twins.

- **All pregnant mothers** should be motivated and prepared for early initiation of breastfeeding and exclusive breastfeeding. This should be achieved by educating them individually or as a group about the benefits and management of breastfeeding.
- Antenatal check-ups and any other contact points should be utilised for promoting early initiation of breastfeeding, feeding of colostrum, exclusive breastfeeding and discouraging pre-lacteal feeds.
- All mothers should be taught on how to express their breastmilk for use when they are away from their baby
- Advice regarding diet, rest, exercising and iron/folic acid supplementation should also be given. Refer to *Guidelines on Nutritional Care of pregnant and lactating women, and adolescent girls*.

This should be done through individual counselling as well as follow up through mother support groups. One-to-one breastfeeding counselling is particularly effective in promoting EBF. Maternal counselling during pregnancy, immediately after childbirth and at key moments in the postnatal period has large and significant effects on EBF rates. Health workers should discuss breastfeeding, any challenges or concerns of the mother at each contact opportunity.

Early Initiation of Breastfeeding

Early initiation of breastfeeding is important for establishing successful lactation as well as for providing 'Colostrum' (mother's first milk, which is sticky and yellow) to the baby. It is all the food and fluid needed at this time.

- Assist mothers to ensure the baby receives the first breastfeed as soon as possible and preferably within one hour of birth. Late initiation of breastfeeding also causes engorgement of breasts which further hampers establishment of successful lactation.
- The newborn baby is very active during the first half an hour and if the baby is kept with the mother and the mother is assisted to breastfeed, the infant learns to suckle very fast by starting the process of milk formation and secretion.
- In case of caesarean deliveries, newborn infants can be started with breastfeeding within 4–6 hours with support to the mother.
- Newborn babies should be kept close to their mothers to provide warmth and ensure frequent feeding. This also helps milk flow.
- Mothers and communities need to be taught about the value of colostrum so as to overcome any cultural beliefs and taboos and ensure it is fed to the child.



Positioning and attachment of the baby at the breast

The mother may need help in proper positioning and attachment for breastfeeding.

How breastfeeding works

Understanding how breastfeeding works can help staff to see why appropriate support is necessary and dispel common concerns and misconceptions. A breastfeeding counsellor's task is to build the mother's confidence, provide accurate information, help the mother to ensure adequate milk production and ensure that the mother has necessary support.

There are four key components to effective breastfeeding:

- Good attachment and positioning
- Milk flow and confidence
- Adequate milk production
- Age-appropriate feeding for the infant and young child

Check for good attachment

In order to ensure effective breastfeeding a baby needs to suckle effectively, by taking enough of the breast into his/her mouth: this is called ensuring good attachment. Signs of good attachment are:

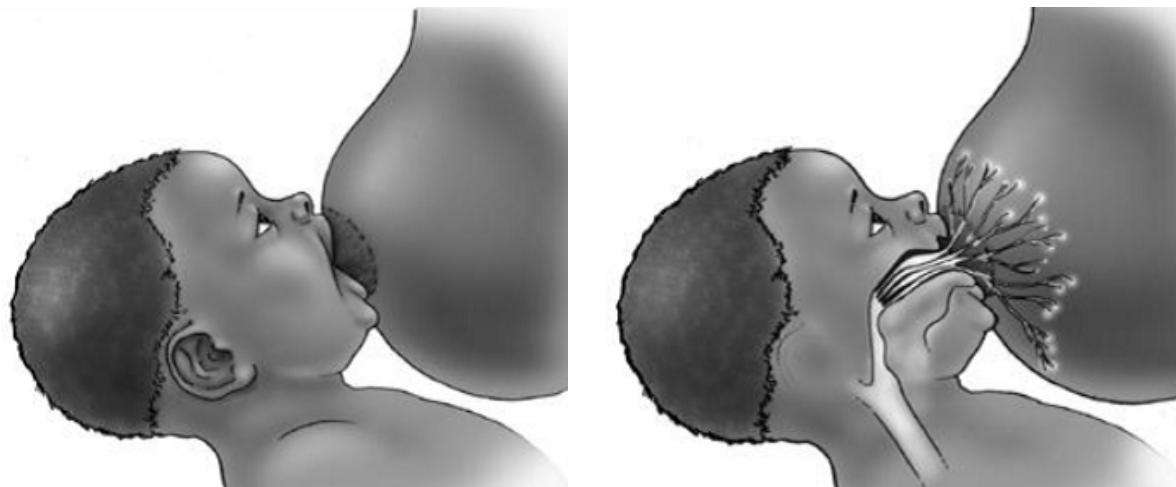
- more areola above the baby's mouth than below
- baby's mouth wide open
- lower lip turned out
- chin touching the breast (or nearly touching)



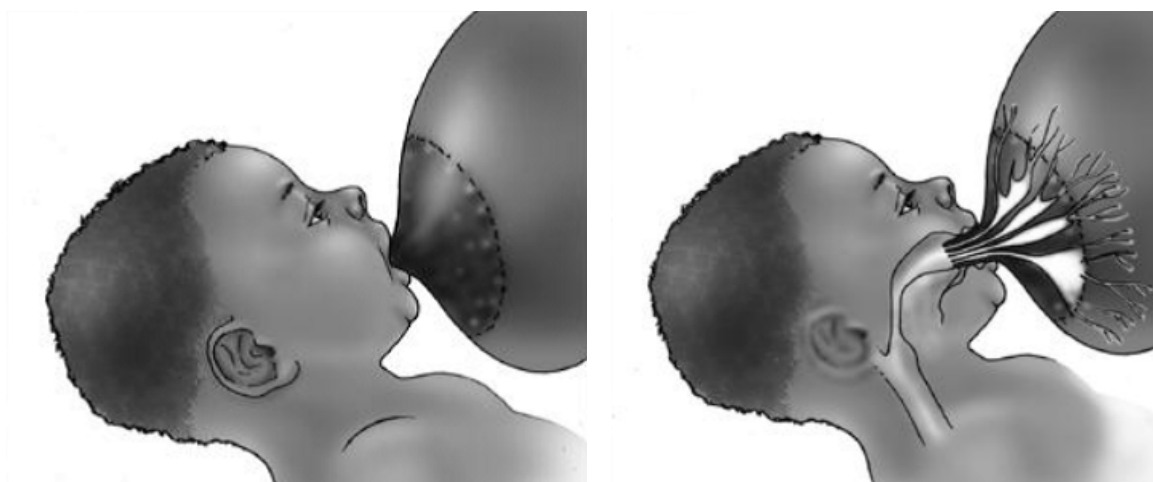


In addition, the baby is well attached if breastfeeding is comfortable and painless for the mother.

Good Attachment



Poor Attachment



Check for good positioning

How a mother holds her baby can help ensure good attachment and feeding. For good positioning, the baby's body must be:

- straight and in line with the head so that the neck is not twisted or bent forward or too far back
- facing the breast (baby's nose facing the nipple as s/he comes to the breast)
- close to the mother's body
- supported: a young infant needs the whole body supported, not just the head and neck; an older child may like to have his/her back supported even though s/he sits up to breastfeed





Assist mothers to be confident and achieve good milk flow

There are two things that affect milk flow: the baby's suckling (which also affects milk production) and the mother's feelings. The breasts of a breastfeeding mother are never completely empty. Milk is produced and stored in the breast all the time. When a baby suckles, a hormone called oxytocin is released. Oxytocin makes the stored breastmilk flow through ducts towards the nipple. Good feelings, such as pleasure in touching, seeing or hearing her baby, or feeling confident that her milk is good, help her milk to flow. Bad feelings, such as worries about her milk, or rejection by the baby, may interfere with the flow of milk.

The signs of effective suckling are:

- The baby takes slow deep suckles, sometimes pausing.
- You may be able to see or hear the baby swallowing after one or two suckles.
- Suckling is comfortable and pain free for the mother.
- The baby finishes the feed, releases the breast and looks contented and relaxed.
- The breast is softer after the feed.

After the baby releases one breast the mother should offer the baby the other breast. This will ensure that the baby stimulates milk production in both breasts, and also gets the most nutritious and satisfying milk ('hind' milk) as s/he empties the breast.

Extreme stress or disturbance, such as during emergencies sometimes seem to interfere with milk flow. Fortunately, any stopping of milk flow is usually temporary. Protection, shelter and a reassuring atmosphere around a woman can help her milk flow easily again. A mother does not need perfect calm or special conditions to breastfeed. Many women breastfeed without difficulty in extremely stressful situations. Some women find that breastfeeding soothes and helps them to cope with stress (please see *SNIP Nutrition in Emergencies guideline for further specifics on IYCF in emergencies*).

Adequate milk production

Breasts make milk in response to the suckling of an infant. There are two important processes:

- a) Suckling stimulates release in the mother's body of a hormone called prolactin. Prolactin makes the breasts produce milk. The milk is stored in the breast.
- b) Milk production slows down if a lot of milk is left in a breast at any time.

More suckling makes more milk

A breastfeeding mother does not have a fixed supply of breastmilk. She can always make more with the right technique, confidence and frequent feeding. A mother with twins can produce enough milk for both babies. A mother can also produce enough milk even if she





is moderately malnourished. Milk production is only likely to be reduced if a woman is severely malnourished; then the woman herself would need immediate feeding/extra food ('Feed the mother to feed the baby'). In such cases, the woman needs support to continue to offer her baby the breast in order to maintain the milk-making process while she recovers.

Recommended breastfeeding pattern

Frequent and unlimited breastfeeds throughout the first year of life ensures stimulation of the mother's breasts to make the milk that the baby needs to grow and develop healthily. The baby should:

- suckle as often as s/he wants, day and night, without long periods of separation
- suckle for as long as s/he wants at each feed (getting the rich milk that comes later in the feed).
- have the breast kept available if s/he pauses or lets go for some moments (pauses do not necessarily mean that s/he has finished the feed).
- finish the first breast and then be offered the second which s/he may or may not want – it is up to the infant to decide whether s/he wants one or two breasts at each feed (there is no rule).

Step 1: Ensure effective suckling

- Observe a breastfeed for the four points of good attachment (areola, mouth, lip, chin) and effective suckling.
- If attachment is not good, or suckling not effective, improve position (straight, facing, close, supported) and help attach the baby. If necessary, also improve the position by:
 - reducing baby's wrappings so s/he can reach the breast
 - showing the mother how to hold her breast well behind the nipple, without pinching
 - encouraging her to lie down and hold the baby under arm or across the body.
- Avoid distractions and let baby suckle at own speed.
- Avoid feeding bottles and pacifiers.

Step 2: Build the mother's confidence and help milk flow

- Help mother and infant until suckling is effective.
- Encourage her to enjoy skin-to-skin contact and to play with her baby face-to-face.
- Build her confidence:
 - recognise and praise what she is doing right – including signs of milk flow,
 - give relevant information in an encouraging way and correct misconceptions.
- Help her to breastfeed near trusted companions, which helps relaxation.



Step 3: Increase milk production

Encourage more frequent breastfeeds

- Ask mother to breastfeed very often, 12 times or more in 24 hours if the baby is willing.
- Tell her the value of keeping the baby with her day and night and breastfeeding at night.
- Encourage her to give the breast for comfort at any time.
- If baby is ill or unusually sleepy, encourage her to wake him/her up and offer her breast often.

Encourage longer breastfeeds

- Suggest that the mother continues each feed until baby stops him or herself and does not want more. It is best if she does not detach the baby or put her breast away quickly.
- Encourage her to offer the other breast, and let baby decide if s/he wants more or not

Ensure mother gets enough to drink (Supportive care has assured enough food).

- Help her to keep drinking water available for herself.

Remove interference

- Ask her to avoid separation from the baby, scheduled feeding, care of the baby by others, delaying feeds and giving bottles or pacifiers.
- Help her to prevent a new pregnancy with non-oestrogen family planning methods.

Step 4: Encourage age-appropriate feeding

- Help the mother to establish or re-establish exclusive breastfeeding until the baby is six months old.
- If supplements are needed in special circumstances, teach her to give them by cup, not bottle.
- Show her how to prepare and give adequate complementary foods from six months of age, as well as frequent breastfeeds.

Source and for more detailed technical information: *IFE Core Group (2007) IFE Module 2 Part 4 Resources*

If a mother may be parted from her infant during the day, advise and assist her to express breastmilk so that another carer can feed the infant following the steps:





How to express breastmilk

- Make sure your hands and utensils are clean.
- Wash your hands with soap and running water.
- Clean and boil the container you will use to collect your breast milk.
- Get comfortable.
- It is sometimes helpful to gently stroke your breasts. A warm cloth may help stimulate the flow of milk.
- Put your thumb on the breast above the dark area around the nipple (areola) and the other fingers on the underside of the breast behind the areola.
- With your thumb and first 2 fingers press a little bit in towards chest wall and then press gently towards the dark area (areola).
- Milk may start to flow in drops, or sometimes in fine streams. Collect the milk in the clean container.
- Avoid rubbing the skin, which can cause bruising, or squeezing the nipple, which stops the flow of milk.
- Rotate the thumb and finger positions and press/compress and release all around the areola.
- Express one breast for at least 3 to 5 minutes until the flow slows, then express the other breast, then repeat both sides again (20 to 30 minutes total).
- Store breast milk in a clean, covered container. Milk can be stored 6 to 8 hours in a cool place and up to 72 hours in the back of the refrigerator.
- Give baby expressed breast milk from a cup. Bring cup to the baby's lower lip and allow baby to take small amounts of milk, lapping the milk with his or her tongue. Do not pour the milk into baby's mouth.
- Pour just enough breast milk from the clean covered container into the feeding cup. Bottles are unsafe to use because they are difficult to wash and can be easily contaminated.

Source: UNICEF Key messages booklet. *The Community Infant and Young Child Feeding Counselling Package*. September 2012

Feeding Preterm or Low Birth Weight Infants

Breast milk is particularly important for preterm infants (born at less than 37 weeks' gestation) and babies with low birth weight (newborn with less than 2.5kg weight) as they are at increased risk of infection, malnutrition, hypertension, low blood sugar and death. Many low-birth weight babies can breastfeed without difficulty. If the baby is not able to suck, they need to be managed as an in-patient; expressed breast milk may be fed by cup or nasogastric tube until such a time that they are able to suckle. The unique composition of preterm milk with its high concentration of protective properties makes it particularly suited for preterm babies. Preterm baby should be fed every two hours during the day and night.



For low birth weight babies who cannot breastfeed, the amount of milk to give is as below:

What milk to give

Choice 1: expressed breastmilk (EBM)

Choice 2: Formula made up according to the instructions

Babies who weigh less than 2.5 kg

Start with 60ml/kg body weight/day

Increase the total volume by 20ml per kg per day, until the baby is taking a total of 200ml per kg per day

Divide the total into 8-12 feeds, to feed every 2-3 hours

Continue until the baby weighs 1800g or more, and is fully breastfeeding

Check the baby's 24 hour intake

See Annex 4 for the *Protocol for prescribing of infant formula in Timor-Leste* and special instruction on feeding infants in special circumstances where breastfeeding is not possible.

Promotion of optimal complementary feeding for children aged 6–23 months with continued breastfeeding to 2 years of age and beyond

Complementary feeding is essential from six months of age, while breastfeeding continues for up to 24 months. After six months of age, breast milk alone is not enough but still contributes to about 50% of nutritional requirements between the age of 6 and 12 months and 35% between 13 and 24 months.

An infant weighing around 3kg at birth doubles its weight by six months and by one year the weight triples and the body length increases to one and a half times than at birth. Most of the organs of the body grow rapidly, both structurally and functionally during the early years of life. As a result, the nutritional needs of the infant increase significantly at this age.

First food for the baby at 6 months

First foods are often made from the staple cereal of the family.

- Porridge can be made with mealie meal or rice and water or milk, if available. Any cereal can be mixed with boiled water, sugar and a little fat to make the first complementary food for the baby and this can be started on the day the child becomes six months old.
- Adding peanut butter, milk, or a little oil is important as it increases the energy and nutrient value of the food.
- The porridge consistency has to be thick enough to stay in the spoon, but smooth without any big lumps. A thick porridge is more nutritious than a thin one.
- Fruits like banana, pawpaw, mango, etc. could be given in a mashed form.



Once the child is eating the cereal porridge well, mixed foods including cooked cereal, pulses and vegetable(s) could be given to the child. They must be mashed to avoid choking.

Protective foods

Protective foods like milk, egg, fish and fruits and vegetables are also important to help in the healthy growth of the infants. Green leafy vegetables, carrots, pumpkin and seasonal fruits like pawpaw, mango, banana etc., are important to ensure good vitamin A and iron status of the child. The baby needs all foods from six months. A diversified diet for the infant along with breastfeeding will also improve the micronutrients' status of the child.

Frequency and amount of feeds

It is important to give small energy dense feeds at frequent intervals. Infants and young children need to be fed 5–6 times a day in addition to breastfeeding. For infants aged 6–12 months, breastfeeding should be offered first, followed by foods. The table below shows the amounts and frequency of feeds depending on age:

Table 1: AMOUNTS OF FOOD TO OFFER

Age	Texture	Frequency	Amount of food an average child will usually eat at each meal
6-8 months	Start with thick porridge, well mashed foods Continue with mashed family foods	2-3 meals per day plus frequent breastfeeds Depending on the child's appetite, 1-2 snacks may be offered	Start with 2-3 tablespoonsful per feed Increasing gradually to ½ of a 250ml cup
9-11 months	Finely chopped or mashed foods, and foods that baby can pick up	3-4 meals plus breastfeeds Depending on the child's appetite, 1-2 snacks may be offered	½ cup of a 250ml cup or bowl
12-23	Family foods, chopped or mashed if necessary	3-4 meals plus breastfeeds Depending on the child's appetite, 1-2 snacks may be offered	¾ to one 250 ml cup/ bowl
If baby is not breastfed, give in addition: 2 cups of milk per day, and 1-2 extra meals per day			



Snacks

Examples of snacks that can be given to children include: bread spread with peanut butter or margarine or avocado pear, mashed fruit, yoghurt. Snacks such as sweets, biscuits, sugary drinks are not recommended as some of them may cause dental carries and loss of appetite.

Active feeding

Interacting and playing with the baby while feeding stimulates appetite and development. Children from one to two years should be given food on a separate plate and encouraged to eat on their own with some assistance. Eating at the same time and at the same place also helps in improving appetite and avoids distractions.

Ensuring safety of complementary foods

Careful hygienic preparation and storage of complementary foods is crucial to prevent contamination, which results in disease. Personal hygiene plays an important role in feeding infants. Some of the considerations while preparing foods for infants are:

- Hands should be washed with water and soap before handling the food as germs can be passed on to the food.
- Utensils used should be scrubbed, washed well, dried and kept covered.
- Cooking kills most germs. The foods prepared for infants should be cooked properly so as to destroy harmful bacteria present, if any.
- After cooking, handle the food as little as possible and keep it in a covered container protected from dust and insects.
- Cooked foods should not be kept for more than one to two hours in hot climate unless there is a facility to store them at refrigeration temperature.
- The hands of both mother and child should be washed before feeding the child.

The **Essential Hygiene Actions** should also be promoted:

1. Promote the use of sanitary latrines, including by children.
2. Promote hand washing with soap and water after going to the bathroom and after cleaning baby's faeces.
3. Promote hand washing with soap and water before preparing food, before eating food, and before feeding young children.



**How to wash hands**

1. Wet hands with running water.
2. Rub with soap or ash for about 30 seconds.
3. Clean between fingers, under fingernails, up to wrists. Scrubbing and soap or ash dislodges and remove germs.
4. Rinse hands with water poured from jug or tippy tap. Then air-dry—don't pick up germs from a dirty towel!

4. Promote the installation of a hand washing station next to the cooking area and another next to the toilet.
5. Encourage keeping all cooking containers and utensils clean, as well as water and food containers clean and covered.
6. Encourage reheating and sufficient cooling of any stored foods to ensure safety.
7. Encourage families to keep animals away from homestead and child play areas clean and protected.

Monthly growth monitoring and Promotion (GMP) for children under-24 months and every trimester for children from 2-5 years

Weighing the child regularly and plotting the weight on the health card is an important tool to monitor the growth of the baby and educate caregivers. Infants and young children under-24 months should be weighed every month in the presence of their mothers and the growth status of the child should be explained to the mother. Thereafter GMP should be carried out every 4-months until the child reaches 5 years.

How to weigh a child

1. Use accurately calibrated scales (scales can be checked with a known weight)
2. Weigh the child naked and without wraps
3. Children/infants who are unable/unwilling to stand alone on a scale should be weighed in their carer's arms.

Child's weight = (child + carer weight) - carer weight
UNICEF electronic scales (UNISCALE) will calculate this automatically

It is recommended to weigh children using a scale with the following features:

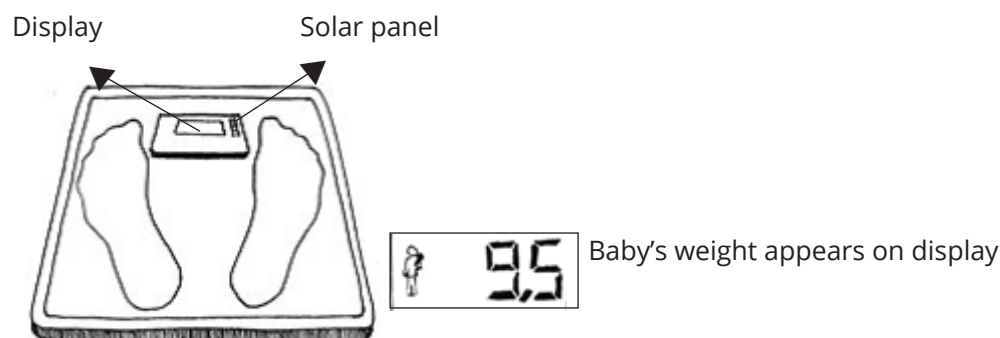
- Solidly built and durable
- Electronic (digital reading)
- Measures up to 150 kg
- Measures to a precision of 0.1 kg (100g)
- Allows tared weighing, if possible



“Tared weighing” means that the scale can be re-set to zero (“tared”) with the person just weighed still on it. Thus, a mother can stand on the scale, be weighed, and the scale tared. While remaining on the scale, if she is given her child to hold, the child’s weight alone appears on the scale. Tared weighing has two clear advantages:

- o There is no need to subtract weights to determine the child’s weight alone (reducing the risk of error).
- o The child is likely to remain calm when held in the mother’s arms for weighing.

UNISCALE (made by UNICEF) has the recommended features listed above



If the child is less than 2 years old or is unable to stand, you will need to do tared weighing. Stress that the mother must stay on the scale until her child has been weighed in her arms.

Explain the tared weighing procedure to the mother as follows.

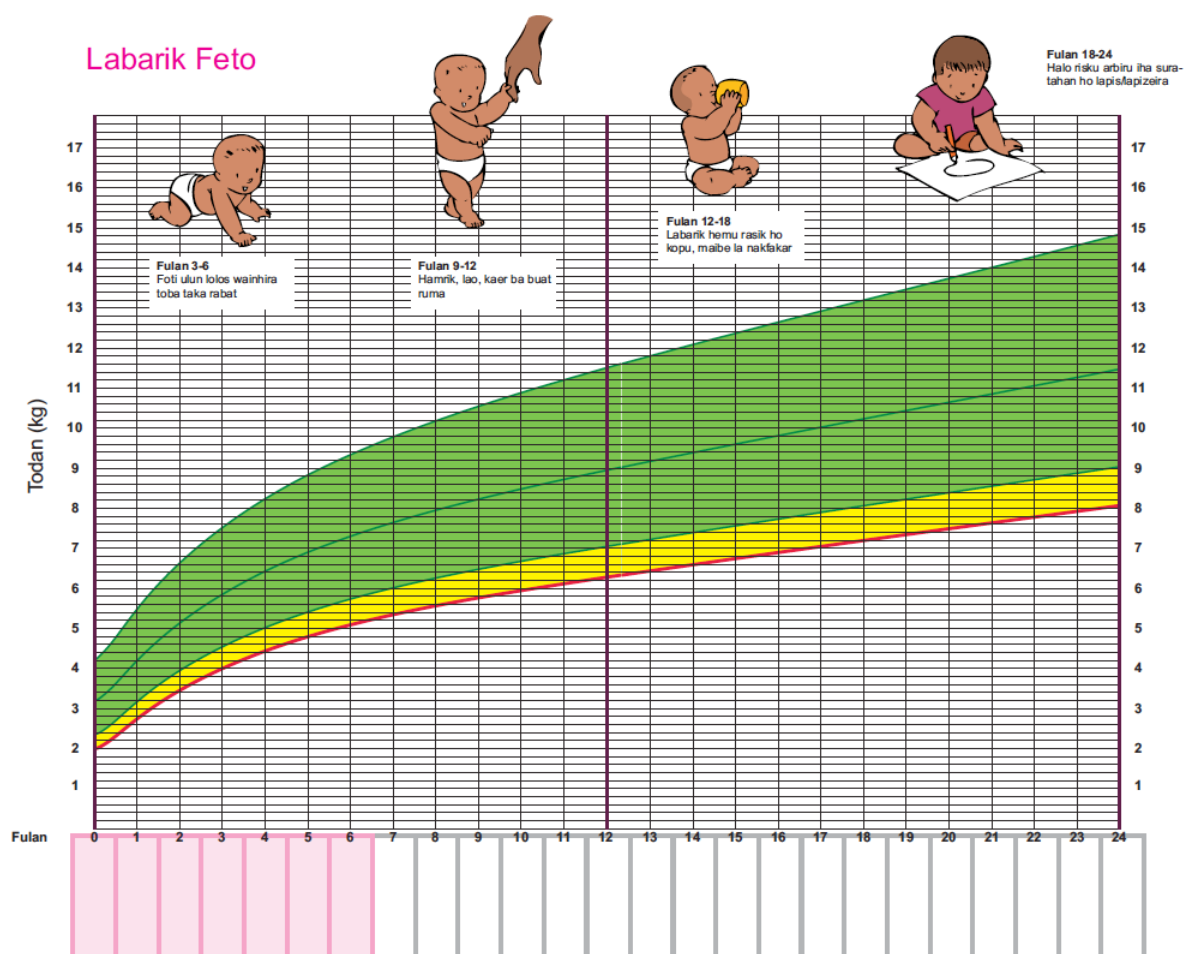
- The mother will remove her shoes and step on the scale to be weighed alone first. She may need to adjust any long garments that could cover the display and solar panel of the scale.
- After the mother’s weight appears on the display, tell her to remain standing on the scale.
- Re-set the reading to zero by covering the solar panel of the scale (thus blocking out the light).
- Then give the mother her child to hold. The child’s weight will appear on the scale.
- Record the child’s weight.

If the child is 2 years or older, you will need to weigh the child alone if the child will stand still. Explain that the child will need to step on the scale alone and stand very still.



How to interpret the weight and advise the caregiver

Monthly growth monitoring should be plotted accurately against the ages on the Child Health Card/LISIO:



When weight gain follows the green area and the child is increasing in weight and becoming taller, the child is growing well.

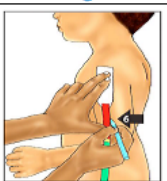
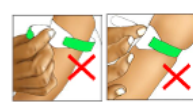
If the child does not increase in weight or decreases weight between visits, and the line flattens, goes down or moves below the red line, the child is not growing well and reasons should be investigated.

- Nutritional counselling should be given to all mothers/caretakers irrespective of the growth status of the child at every contact with a health worker
- If growth failure is detected, the mother/caretaker should be advised accordingly. Ask the mother/caretaker if there are any feeding problems or illnesses, and provide suitable intervention
- Children with poor growth according to the chart should be screened for acute malnutrition using MUAC.
- Malnourished children should be referred for treatment (refer to IMAM guidelines).

Checking a child's MUAC

The job aid below shows the process of checking MUAC and referral to IMAM programmes.


Screening acute malnutrition in infants and young children aged 6-59 months using
Mid-Upper Arm Circumference (MUAC) and Oedema

Measuring MUAC				
				
(1) Bend left arm 90°. (Note: Left arm is recommended, if left arm is not possible (e.g. injury) right arm can be measured.) (2) Locate tip of shoulder (3) Locate tip of elbow	(4) Place tape at 0 cm at tip of shoulder. (5) Pull the other end of tape past tip of bent elbow and read length of upper arm.	(6) Calculate the mid-point and mark with a pen.	(7) Straighten arm and place the MUAC tape around the mid-point. (8) Place tape through window of the MUAC tape. Correct the tape tension	
		Checking Oedema 		
If MUAC is RED, the child is with severe acute malnutrition (SAM). Admit for SAM treatment, give RUTF. If MUAC is YELLOW, the child is with moderate acute malnutrition (MAM). Admit for MAM treatment, give RUSF.		If MUAC is GREEN, the child is well nourished, encourage mother and counsel on good nutrition. 1. Press the back of both feet using thumb and hold it for 3 second and release the pressure. 2. If you see a shallow hole/pit on both feet as shown in the picture, the child is malnourished.		

Promotion of optimal nutritional care of sick children

Feeding during and after illness

With the introduction of complementary foods from six months, young children often suffer from diseases like diarrhoea, colds, cough, etc. If their diet is adequate, their symptoms are usually less severe than those in an undernourished child.

- A sick child needs more nourishment so that he/she can fight infections without using up the body's nutrient reserves. Even though the child may lose appetite and may refuse to eat, s/he needs adequate feeding to recover from illness.
- Appropriate feeding during and after illness is important to avoid weight loss and other nutrient deficiencies. The cycle of infection and malnutrition can be broken if appropriate feeding of the infant is ensured.
- Breastfed babies have less illness and are better nourished. A breastfed baby should be given breastmilk more frequently during and after illness.
- For infants older than six months, more frequent breastfeeding and complementary feeding should continue during and after illness.
- Restriction or dilution of food should be discouraged. Time and care must be taken to help an ill child eat enough food.



- The infant can be encouraged to eat small quantities of food but more frequently by offering nutritious foods the child likes to eat.
- Make sure that children with measles, diarrhoea and respiratory infections eat plenty of vitamin A rich foods. Give vitamin A supplementation according to SNIP guideline.

Malnourished infants

Management of both severe and moderate acute malnutrition should follow SNIP guidelines. Continued frequent breastfeeding and, when necessary, relactation are important steps since malnutrition is often associated with inadequate or disrupted breastfeeding.

Feeding HIV exposed infants

The absolute risk of HIV transmission through breastfeeding needs to be balanced against the increased risk of mortality and morbidity when infants are not breastfed.

Counselling for infant feeding decisions in maternal HIV

Infant feeding counselling and support is recommended for HIV-infected women during pregnancy, in the first days after delivery, and at various points throughout the first two years of the infant's life. It is recommended to simplify the counselling process by **promoting exclusive breastfeeding from 0-6 months** with nevirapine prophylaxis to the infant throughout the breastfeeding period or if the mother is already on ART.

Replacement feeding can only be recommended if home conditions are suitable to practice formula feeding in a safe way.

The following questions/criteria will help in assessing if home conditions are suitable to carry out exclusive formula feeding in the first 6 months:

1. Is safe water and sanitation assured at the household level and in the community?
2. Can the mother or other caregiver reliably provide sufficient infant formula milk to support normal growth and development of the infant?
3. Can the mother or caregiver prepare it cleanly and frequently enough so that it is safe and carries a low risk of diarrhoea and malnutrition?
4. Can the mother or caregiver, in the first six months, exclusively give infant formula milk?
5. Is the family supportive of this practice?
6. Can the mother or caregiver access health care that offers comprehensive child health services?

If any one of the questions is answered 'NO', then home conditions are not suitable for replacement feeding. It is recommended that the mother should be advised to breastfeed.



However, if the home conditions are suitable, then the mother can practice exclusive formula feeding for the first 6 months.

From 6 to 12 months

- Complementary feeding should commence at 6 months.
- Mothers should continue breastfeeding until the baby is 12 months old.
- At 12 months, the nutritional status of the baby should be assessed as well the availability of a nutritionally adequate diet without breastmilk.
- Once a nutritionally adequate diet (with milk feeds) is assured, all breastfeeding should be stopped gradually over a month and move completely to the family diet
- Remember, for infants **six months of age and older, undiluted, boiled animal milks can be added to the diet**. The recommended volumes 500mls are per day.
- Nevirapine prophylaxis continues through out the breastfeeding period and can only stop one week after the cessation of all breastfeeding.

Feeding HIV infected infants

- For Polymerase Chain Reaction (PCR) positive babies, it is recommended that they continue breastfeeding exclusively up to 6 months. At 6 months, complementary foods should be started while breastfeeding continues up to 24 months
- Every infant less than 24 months and HIV positive should be referred appropriately to be started on Highly Active Antiretroviral Therapy (HAART).





7. Monitoring/Tracking process

Record whether breastfeeding is established and whether child's weight is adequate or low on the Child's Health Card /LISIO at the postnatal visit for the newborn.

Thereafter, plot child's weight measured in GMP sessions and record any issues or interventions in the Child Health Card/LISIO.

Complete the health facility tracking tool for screening under-five for malnutrition (Annex 1).

Monthly data on growth monitoring conducted should also be recorded in the HMIS.

Monitoring and evaluation indicators

A small set of clearly articulated indicators helps keep community IYCF promotion and support focused on the essentials and provides data for assessing progress and informing programme strategies. These are:

Output/process indicators

- % children 6-59 months screened for acute malnutrition (using MUAC)
- % of children 0-23 months weighed this month (growth monitoring)

These 3 indicators are included in monthly HMIS reporting.

Outcome indicators

- % newborns who were initiated breast feeding within one hour
- % children 0-5 months exclusively breastfed
- % 6-23 months who met minimum acceptable diet

The 3 outcome indicators are collected during periodic surveys, including DHS or National Food and Nutrition Surveys, along with additional standard indicators.

The following process indicators may also be helpful for monitoring activities at health facility level:

- % of targeted pregnant and lactating women in the community who were counselled at least once.
- % of target mothers attending a mother support group meeting (per time period).
- % of group sessions conducted out of the target number planned.
- % of support groups created out of target number planned.

The responsibility for monitoring the implementation of the - lies jointly with the Bureau of Inspection and Vigilance of the Ministry of Tourism, Commerce and Trade and with the Ministry of Health, through the National Breastfeeding Promotion Committee.



REFERENCES

IFE Core Group (2007) Infant Feeding in Emergencies Module 2

The Global strategy for infant and young child feeding, adopted by the World Health Assembly (WHA) and the UNICEF Executive Board in 2002

UNICEF Key messages booklet. The Community Infant and Young Child Feeding Counselling Package. September 2012

UNICEF Programming Guide, IYCF, May 2011, Nutrition Section, Programmes, UNICEF New York.

Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition. WHO 2013

Timor-Leste Breastfeeding Promotion Policy. Ministry of Health, Timor-Leste, 10th April 2009.

Timor Leste Food and Nutrition Survey 2013. MOH, UNICEF, Australian Aid 2015





GLOSSARY OF TERMS

Source: UNICEF Programming Guide, IYCF, May 2011, Nutrition Section, Programmes, UNICEF New York.

Artificial feeding: Infant is fed only breastmilk substitute.

Breastmilk substitutes: Any food being marketed or otherwise represented as a partial or total replacement for breastmilk, whether or not it is suitable for that purpose.

Complementary feeding: The child receives both breastmilk or a breastmilk substitute and solid (semi-solid or soft) foods. The process starts at six months when breastmilk alone is no longer sufficient to meet the nutritional requirements of infants, and therefore other foods and liquids are needed, along with breastmilk. The target age range for complementary feeding is generally taken to be 6 to 24 months of age. It is not recommended to provide any complementary foods to children less than six months old.

Complementary food: Any food, whether manufactured or locally prepared, used as a complement to breastmilk or to a breastmilk substitute.

Demand feeding: Feeding a baby whenever he shows that he is ready, both day and night.

Expressed breastmilk: Milk that has been removed from the breasts manually or by using a pump.

Exclusive breastfeeding: Infant receives only breastmilk (including breastmilk that has been expressed or from a wet nurse) and nothing else, except for ORS, medicines and vitamins and minerals

Fortified foods: These are foods that have certain nutrients added to improve their nutritional quality.

Infant Formula: Artificial milk for babies made out of a variety of products, including sugar, animal milks, soybean, and vegetable oils. They are usually in powder form, to mix with water.

- *Commercial infant formula:* A breastmilk substitute formulated industrially in accordance with applicable Codex Alimentarius standards to satisfy the nutritional requirements of infants during the first months of life up to the introduction of complementary foods.

Low birth weight (LBW): An infant weighing less than 2.5 kg at birth.

Mother-support group: A community-based group of women providing support for optimal breastfeeding and complementary feeding.



Mixed feeding: Infant receives both breastmilk and any other food or liquid including water, non- human milk and formula before 6 months of age. Mixed feeding significantly increases the risk of mother to child transmission of HIV.

Relactation: Re-establishing breastfeeding after a mother has stopped, whether in the recent or distant past.

Replacement feeding: The process of feeding a child who is not receiving any breastmilk with a diet that provides all the nutrients the child needs until the child is fully fed on family foods. During the first six months this should be with a suitable breastmilk substitute. After six months it should be with a suitable breastmilk substitute, as well as complementary foods made from appropriately prepared and nutrient-enriched family foods.

Responsive feeding: Feeding infants directly and assisting older children when they feed themselves, being sensitive to their hunger and satiety cues.

Young child: A person from the age of more than 12 months up to the age of 36 months.



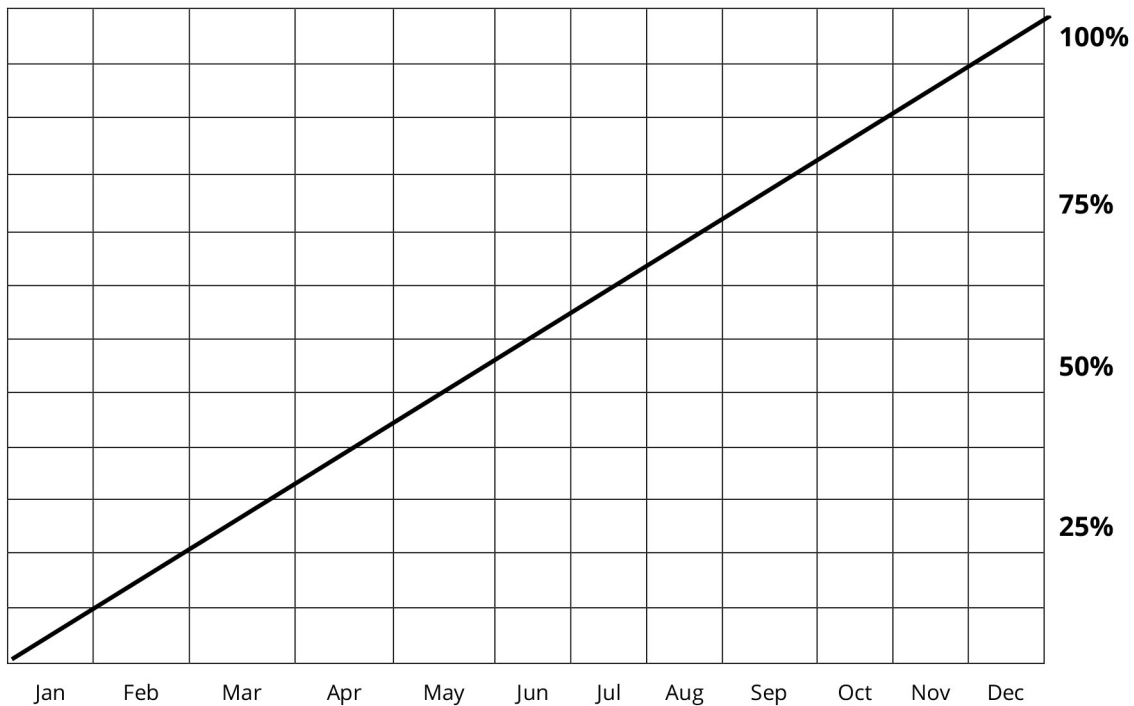


ANNEX 1: Health facility monitoring tracking tools

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Micronutrient Powder for children 6-23 months old
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Population
												Total received MNP
												Cumulative Total for the year

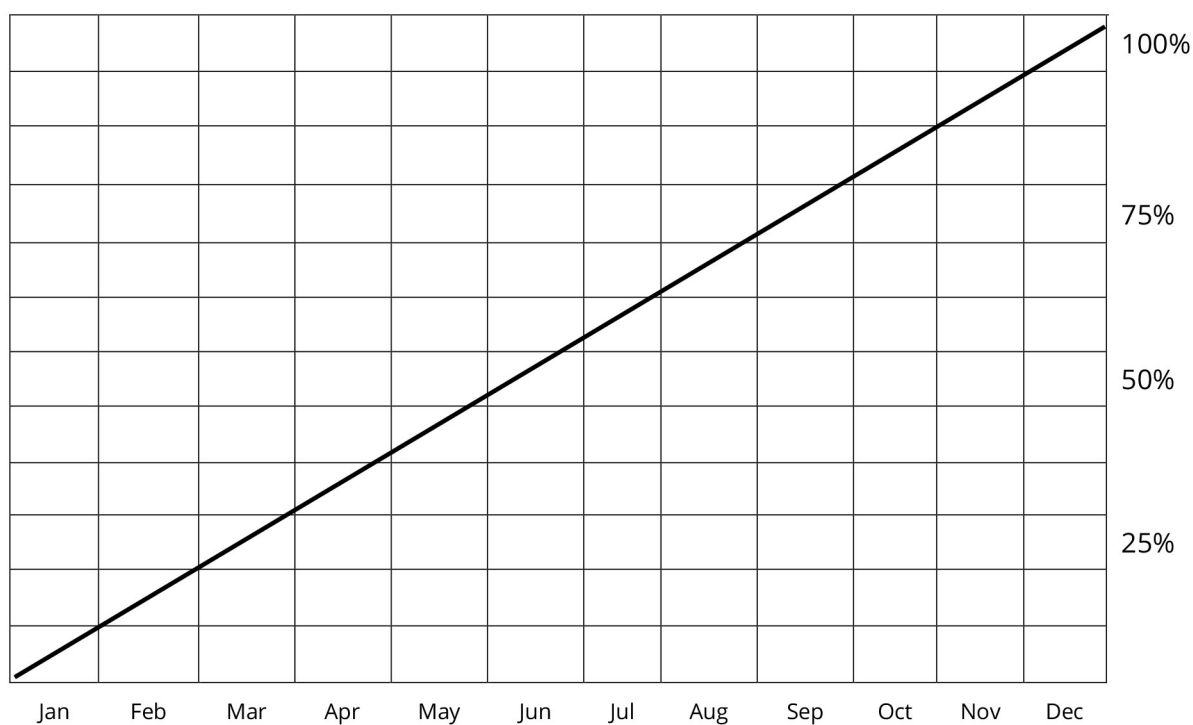


Tracking tool for screening under-fives for malnutrition (Severe Acute Malnutrition)

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	CMAM – Children under-five screened
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Population
												Total Screened
												Cumulative Total for the year



ANNEX 2: Summary of the main provisions of the Timor-Leste Code of Marketing of Infant Formula

PURSUANT TO Section 18, which guarantees to our children special protection by families, communities and by the State, and the enjoyment of universally recognised rights, as well as all those rights that are enshrined in international conventions, such as the Convention of the Rights of the Child, which has been ratified by the Government of Timor-Leste;

AND Section 53 which affirms that consumers have the right to truthful information and protection of their health, safety and economic interests; and that advertising shall be regulated by law, and indirect or misleading advertising are prohibited;

CONSCIOUS that breastfeeding is the best 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;

RECOGNISING the vulnerability of infants in the first months of life, that Timor-Leste has a high prevalence of malnutrition in infants and young children, that inappropriate feeding practices are an important contributor to infant malnutrition, morbidity and mortality in Timor-Leste; and that elsewhere in the world improper practices in the marketing of breastmilk substitutes and related products have contributed to infant malnutrition, and wanting to prevent that happening in Timor-Leste;

The Code seeks to encourage and protect breastfeeding and to control inappropriate marketing practices used to promote products for artificial feeding.

The Code applies to artificial milks for babies, other products used to feed babies, especially when they are marketed for use in a feeding bottle, and to feeding bottles and teats.

The Code includes these ten important provisions:

- 1) No advertising of any of these products to the public
- 2) No free samples to mothers
- 3) No promotion of products in health care facilities
- 4) No company nurses to advise mothers
- 5) No gifts or personal samples to health workers
- 6) No words or pictures idealizing artificial feeding, including pictures of infants on the labels of the products
- 7) Information to health workers should be scientific and factual
- 8) All information on artificial feeding, including the labels, should explain the benefits of breastfeeding, and the costs and dangers associated with artificial feeding
- 9) Unsuitable products such as sweetened condensed milk, should not be promoted for babies
- 10) All products should be of a high quality and take account of the climatic and storage conditions of the country where they are used.

ANNEX 3: Baby Friendly Hospital Initiative: *The ten steps to successful breastfeeding*

- Step 1: Have a written Policy that is routinely communicated to all healthcare staff
- Step 2: Train all healthcare staff in the skills necessary to implement the breastfeeding Policy
- Step 3: Inform all pregnant women about the benefits and management of breastfeeding
- Step 4: Help mothers initiate breastfeeding soon after birth
- Step 5: Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants
- Step 6: Give newborn infants no food or drink other than breast-milk, unless medically indicated
- Step 7: Practice rooming-in to allow mothers and infants to remain together 24 hours a day
- Step 8: Encourage breastfeeding on demand
- Step 9: Give no artificial teats or dummies to breastfeeding infants
- Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital



ANNEX 4: Protocol for the prescribing of infant formula in Timor-Leste

Introduction

Exclusive breastfeeding is a key child survival intervention. In resource-poor countries, feeding newborns and infants with breastmilk substitutes instead of breastmilk has been associated with greatly increased incidence of morbidity (diarrhoea and other infectious diseases) and increased infant mortality.

It is not uncommon for mothers to stop breastfeeding their infants for reasons that are not justified from a health perspective. Both mothers and health staff are sometimes misinformed. The decision to stop breastfeeding may have devastating consequences for the baby.

Almost all babies can be fully breastfed. A very small number require short-term feeding by other means, and fewer still require a longer-term feeding alternative. This protocol provides a list of situations when breastfeeding may not be possible or recommended. In most of these situations the indication is temporary, and exclusive breastfeeding should be re-commenced as soon as the condition or situation is resolved.

When infant formula substitute is prescribed, the health staff must give the mother clear instructions on safe preparation and feeding of the milk. She must be made aware of the dangers associated with incorrect preparation of the milk and also of the dangers of bottle feeding. She should be taught and encouraged to cup-feed her baby.

Definitions for the purposes of this protocol

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.

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 four to 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."

A wet nurse is a lactating woman, other than the mother, who is able to fully breastfeed the baby as if it were her own. A wet nurse may be currently feeding her own child or may have recently ceased breastfeeding her own child. As breastmilk is produced in proportion to demand (sucking), a woman can produce sufficient milk to fully feed two babies. It is best if a wet nurse is a family member or is known to the family. She must be healthy and well nourished. Encourage her to extra food and a variety of foods and to drink plenty of fluids.



REFERENCES

- 1) Annex 4 of the BFHI Hospital self-appraisal: Acceptable medical reasons for supplementation.
- 2) WHO Bulletin OMS Suppl. vol 67 1989 ch 3 p 41–54, *Health factors which may interfere with breast-feeding*.
- 3) Report of a Joint WHO/UNICEF consultation concerning *Infants who have to be fed on breast-milk substitutes*. WHO/MCH/NUT/86.1
- 4) WHO, 2002, *Breastfeeding and Maternal Medication: Recommendations for Drugs in the UNICEF/WHO Eleventh WHO Model List of Essential Drugs*. Geneva.
- 5) Australasian Society for Infectious Diseases. Management of Perinatal Infections, 2002.
- 6) WHO/UNICEF, 2009. Acceptable Medical Reasons for use of breast-milk substitutes. WHO/NMH/NHD/09.01



MATERNAL CIRCUMSTANCES THAT MAY INTERFERE WITH BREASTFEEDING	
Indication	Recommended action
Mother has died	1) Wet-nurse or 2) Heat treated donor breastmilk* (temporary solution) or 3) Infant formula fed by cup * Heat treated = HT
Mother is temporarily separated from infant due to illness or logistical reasons	1) Mother expresses milk and send the milk to the baby (refrigerate or freeze en route if possible) to feed by cup or 2) Mother expresses and discards milk to maintain production and baby is fed HT donor milk or infant formula by cup, or breastfed by a wet-nurse, until baby is reunited with mother.
Mother has severe malnutrition (BMI < 18.5)	1) Ensure mother receives correct nutritional supplementation and medical care. 2) Ensure baby's growth is assessed and treat malnutrition if present as per protocol. 3) CONTINUE TO BREASTFEED the baby 4) Baby may need additional milk supplementation (dilute F100, infant formula as per protocol) until the mother's nutritional status is normalized and her milk supply increased.
Mother is very ill - heart failure, serious kidney liver or lung disease, sepsis	1) If possible, assist the mother to express milk. 2) If sufficient expressed milk is unavailable for the baby then temporarily feed with formula or HT donor breast milk by cup, or wet-nurse. 3) The mother may need additional support to re-establish her milk supply when she is well again.
Mother is taking medications that may be transmitted through the milk with harmful consequences for the baby (eg. <i>psychotherapeutic drugs, anti-epileptics, opioids, radioactive iodine, excessive use of topical iodine or betadine, chemotherapy</i>)	1) Use an alternative medication that is non-toxic to the baby if possible#. 2) If there is no alternative medication i. Stop breastfeeding for the duration of treatment. ii. Express and discard mother's milk to maintain milk production. iii. Give HT donor milk or infant formula by cup or wet-nurse. 3) Restart breastfeeding as soon as it is safe to do so (need to wait for the medication metabolites to be cleared from the mother's body after the medication is ceased). # http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT
Mother has psychosis or severe post-natal depression	1) The safety of the baby must be assessed to determine if the baby needs to be separated from the mother or if the mother needs to be supervised when together with her baby.

MATERNAL CIRCUMSTANCES THAT MAY INTERFERE WITH BREASTFEEDING	
Indication	Recommended action
	2) Baby can be breastfed if mother not on medications that may affect the baby and if it is considered safe for her to do so. 3) If not safe for the baby to be together with its mother, mother to express milk if possible and feed by cup or otherwise temporarily give HT donor milk or formula by cup or wet-nurse.
Particular infectious diseases in the mother	
- HIV/AIDS	1) Mother and family must receive counselling for PMTCT. 2) Give replacement feeding ONLY if it is acceptable, affordable, feasible, sustainable and safe. 3) Otherwise support exclusive breastfeeding for the first 6 months. 4) Do not give mixed feeding as this increases the risk of mother-to-child transmission.
- Herpes simplex (HSV1) lesions on the breast	1) Do not feed from the affected breast until the lesions have completely cleared. 2) Continue to feed from other breast. 3) Cover breast lesions 4) Ensure the mother uses strict infection prevention to prevent contamination of the baby from the affected skin on the affected breast.
- Breast abscess	1) Do not feed from the affected breast but drain it by expressing. 2) Treat the mother by draining the abscess and administering antibiotics and analgesia. 3) Continue to feed the baby from the other breast. 4) Restart feeding from affected breast once the abscess is drained and it is comfortable to do so.
- Mastitis	1) If sucking from the affected breast is too painful, express from that side. 2) Treat the mother with simple analgesia, compresses and oral antibiotics. 3) Continue to feed the baby from the other breast. 4) Restart feeding from affected breast when it is comfortable to do so.

Note:

1. Maternal TB is not a contraindication to breastfeeding. General management principals include: - treat the mother, give the baby INH and BCG (following treatment with INH), monitor the baby's growth and health; breastfeed. See national TB protocol for details.
2. Neither Maternal Hepatitis B or C infections are contraindications to breastfeeding as breastfeeding does not increase the risk of transmission of the viruses.



CONDITIONS OF THE BABY THAT MAY INTERFERE WITH BREASTFEEDING – in these situations breastmilk is still the best feeding option but the baby may require other milk for a limited period of time.	
Baby is very sick	1) When babies are very sick feeds may need to be temporarily withheld while the baby receives iv fluids (eg bowel obstruction, necrotizing enterocolitis, shock, respiratory distress, neurological depression). 2) Mother should express milk to maintain supply 3) As soon as it is safe for the baby to restart milk give expressed milk by spoon, cup or tube until the baby is well enough to breastfeed.
Baby has had recent surgery	1) Mother should express milk whilst baby is unable to be fed. 2) As soon as feeds are to be started give expressed milk by tube or breastfeed the baby, depending on surgeon's instructions.
Baby has oral abnormalities (eg cleft lip and palate) that interfere with sucking	1) Carefully assess whether baby can safely feed at the breast (risk of aspiration). a. Cleft lip only: - Most babies can breastfeed – mothers may improve the seal on the breast by occluding the defect with their breast. b. Cleft palate (+/- lip): - Some babies can breastfeed. Babies with extensive defects can be fed expressed milk with spoon, cup or nasogastric tube. The technique is to safely deliver the milk to the back of the pharynx. Special teats or bottles (designed to close or cover the palatal defect) can also be used but using bottles requires extreme emphasis on sterility. 2) The baby must receive close follow-up to ensure weight gain is satisfactory as surgery will only be done if the baby's nutritional status is good. In Timor-Leste babies with cleft lip are usually repaired at ~ 3 months and with cleft palate at ~ 1 year. Regular breastfeeding can be commenced following surgery.
Very low birthweight (<1500g) or very preterm (<32weeks)	1) Sustain maternal milk production from birth by regular expressing 2) Give the expressed milk by tube or cup / spoon (depending on maturity) until the baby is mature enough and strong enough to breastfeed. 3) Provide additional nutrition with HT donor milk or infant formula if needed for growth. Fortification of the expressed milk with fat / carbohydrate is an alternative to using infant formula supplements. If the baby is preterm, using infant formula (<i>rather than breastmilk</i>) <i>increases the risk of necrotizing enterocolitis about five fold.</i>

CONDITIONS OF THE BABY THAT MAY INTERFERE WITH BREASTFEEDING – in these situations breastmilk is still the best feeding option but the baby may require other milk for a limited period of time.	
Risk of hypoglycaemia (small for gestational age, preterm, infant of diabetic mother, asphyxia, hypothermia) and enough breastmilk is not immediately available	1) Treat according to hypoglycaemia protocol – the blood sugar level and/or the presence of symptoms of hypoglycaemia determines whether the baby should receive intravenous dextrose or milk. 2) If insufficient breastmilk is available to prevent / treat the hypoglycaemia, use HT donor breastmilk, a wet-nurse or infant formula until the risk of hypoglycaemia is resolved and sufficient maternal milk is available.
Infants who have severe acute malnutrition and who still receive some breastmilk	1) Supplement with diluted F100 or infant formula (follow IMAM protocol) until their nutritional status is improving and breastmilk alone is sufficient to sustain adequate growth. 2) Breastfeeding must be continued throughout the rehabilitation and techniques such as 'supplemental sucking' may be needed to improve supply. Assess and correct breastfeeding technique. 3) Treat maternal malnutrition if present.
Breastmilk jaundice (BMJ) <i>(other causes of jaundice are not a contra-indication to breastfeeding or an indication for formula milk)</i>	1) It is extremely rare for BMJ to cause bilirubin to be near the harmful range so first rule out other more likely causes of jaundice (haemolysis, hypothyroidism, obstructive jaundice) 2) If you still seriously consider BMJ AND the bilirubin is near the harmful range, temporarily stop breastfeeding (mother continues to express) and substitute with milk formula to confirm the diagnosis. IF bilirubin drops significantly when the baby is not drinking breastmilk then this is proof of the diagnosis. If bilirubin does not drop significantly, restart breastfeeding and again consider alternative reasons for jaundice. 3) Breastmilk jaundice doesn't harm the baby. Recommence breastfeeding after the test period off milk and monitor the jaundice.
BABY REASONS WHERE BREASTMILK IS CONTRAINDICATED	
Rare metabolic diseases: - galactosaemia, phenylketonuria (PKU), maple syrup urine disease	BABY REASONS WHERE BREASTMILK IS CONTRAINDICATED 1) These babies require special milk formulas which are not currently available in Timor-Leste. Soy formula, which is available, may be considered for babies with galactosaemia. 2) If one of these conditions is seriously considered (tests to diagnose these conditions are not currently available in Timor-Leste) specialist consultation should be sought to determine whether an individual solution can be found (eg procure supplies from outside Timor-Leste).



SNIP GUIDELINE MODULE 1: INFANT AND YOUNG CHILD FEEDING AND CARE







Timor-Leste SNIP Guidelines

MODULE 2:

Nutritional Care of Adolescent Girls and Pregnant and Lactating Women





1. WHO Recommendations

Non-pregnant women of reproductive age

In populations where the prevalence of anaemia among non-pregnant women of reproductive age is 20% or higher, intermittent iron and folic acid supplementation is recommended as a public health intervention in menstruating women, to improve their haemoglobin concentrations and iron status and reduce the risk of anaemia.

Pregnant women

Daily oral iron and folic acid supplementation is recommended as part of the antenatal care to reduce the risk of low birth weight, maternal anaemia and iron deficiency.

(In settings where the prevalence of anaemia among pregnant women is lower than 20%, intermittent use of iron and folic acid supplements by non-anaemic pregnant women is recommended to prevent anaemia and improve gestational outcomes).

Postpartum

Iron and folic acid supplementation should be provided to women for at least three months after delivery.

In malaria-endemic areas, the provision of iron and folic acid supplements should be made in conjunction with public health measures to prevent, diagnose and treat malaria. A diet containing adequate amounts of bioavailable iron should underpin all efforts for prevention and control of anaemia. *(Global Nutrition Targets 2025, Anaemia policy brief. WHO 2014)*

It is recommended that the minimum age for pregnancy is 20 years.

In populations where calcium intake is low, calcium supplementation as part of antenatal care is recommended for the prevention of pre-eclampsia in pregnant women, particularly among those at higher risk of developing hypertension. (N.B not currently implemented in Timor-Leste)

Current evidence shows that giving multiple micronutrient supplements to pregnant women may reduce the risk of low birth weight and of small size for gestational age, compared with iron and folic acid supplementation alone. New WHO recommendations are due to be released in 2016.





Technical Notes

Anaemia is a condition in which the number and size of red blood cells, or the haemoglobin concentration, falls below an established cut-off value, consequently impairing the capacity of the blood to transport oxygen around the body. Anaemia is an indicator of both poor nutrition and poor health.

Anaemia has multiple causes that often coexist; it can result from parasitic infections, inflammatory disorders, inherited disorders of haemoglobin structure, or vitamin and mineral deficiencies, including iron and vitamins A, B12 and folate. At least half the burden of anaemia is associated with iron deficiency. Iron deficiency is the result of prolonged negative iron balance, which can be caused by inadequate iron intake (due to insufficient dietary iron content or absorption), increased iron requirements or chronic loss of iron due to bleeding. Women of reproductive age are at higher risk of developing iron deficiency because of losses during menstruation.

A diagnosis of iron deficiency anaemia is made when there is both anaemia and iron deficiency, the presence of which is established by measuring the concentration of ferritin or another indicator of iron status, such as serum soluble transferrin receptors.

Anaemia and iron deficiency reduce individuals' wellbeing, cause fatigue and lethargy, and impair physical capacity and work performance. Folate insufficiency in pregnancy increases the risk of having a baby with a neural tube defect

Maternal anaemia is associated with mortality and morbidity in the mother and baby, including risk of miscarriages, stillbirths, prematurity and low birth weight. Pregnant adolescents are particularly vulnerable to anaemia because they have dual iron requirements, for their own growth and the growth of the foetus, and are less likely to access antenatal care.

Anaemia is a particularly important complication of malaria in pregnant women. In moderate- and high- transmission settings, pregnant women, especially women who are pregnant for the first time, are susceptible to severe anaemia.

Evidence has shown that the use of iron and folic acid supplements is associated with a reduced risk of iron deficiency and anaemia in pregnant women, including in settings where malaria is endemic.

Intermittent iron supplementation is the provision of iron supplements once, twice or three times a week on non-consecutive days. The rationale behind the intervention is that there is a limit to the iron absorption capacity of the intestine. Intermittent supplementation has been shown to improve iron status more than no supplementation and, in many cases, it is as effective at improving iron status as daily supplementation.

Source: Global Nutrition Targets 2025, Anaemia policy brief. WHO 2014; and WHO guidelines (references at end of document).



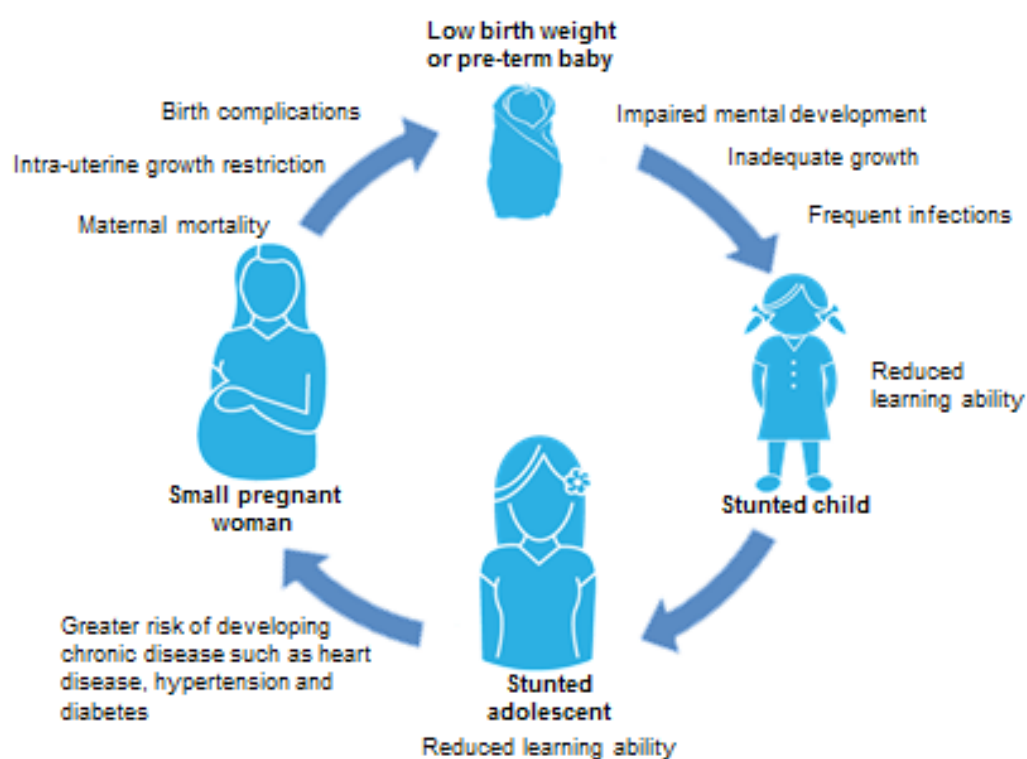
2. Importance of nutrition for adolescent girls, pregnant and breastfeeding women

The adolescent period (age 10–18 years) is a critical time to ensure women's nutritional status prior to conception. Girls at this age are still growing and need a variety of types of food to fully develop. They are at high risk of iron deficiency and anaemia due to accelerated increase in requirements for iron, poor dietary intake of iron, high rate of infection and worm infestation as well as exposure to early marriage and adolescent pregnancy.

The 1000 days, from conception until a child's second birthday is a critical time during which optimal nutrition can have a lasting impact on a child's growth, learning, and future productivity. Good nutrition for pregnant women promotes healthy birth outcomes and can reduce the risk of maternal illness and death, as well as illness, death and stunting in the child.

The intergenerational cycle of undernutrition illustrates how undernutrition at one stage of life affects future stages, such that generations can be caught up in a cycle of poor nutrition and health outcomes.

The intergenerational cycle of undernutrition





Iron deficiency and anaemia are a particular focus as women of reproductive age are at increased risk of anaemia because of chronic iron depletion during the menstrual cycle. Anaemia in women of reproductive age is diagnosed when the haemoglobin concentration in the blood is below 120g/l at sea level¹, or below 110 g/l for pregnant women during the first and third trimester of gestation.

Pregnant women require additional iron and folic acid to meet their own nutritional needs as well as those of the developing foetus. It is estimated that 41.8% of pregnant women worldwide are anaemic. Deficiencies in iron and folic acid during pregnancy can potentially negatively impact the health of the mother, her pregnancy, as well as foetal development.

Iron is an essential mineral critical for motor and cognitive development.

Folic acid plays an essential role in the development of a baby's brain and spinal cord during pregnancy. It can prepare the body for a healthy pregnancy and help prevent a number of birth defects such as *Spina bifida*² and other congenital malformation.

Pregnancy also reduces a woman's immunity, making pregnant women more susceptible to malaria infection and increasing the risk of illness, anaemia, severe disease and death. For the unborn child, maternal malaria increases the risk of spontaneous abortion, stillbirth, premature delivery, as well as low birth weight – a leading cause of child mortality.

¹ Residential elevation above sea level and smoking are known to increase haemoglobin concentrations. Consequently, the prevalence of anaemia may be underestimated in persons residing at high altitudes and among smokers if the standard anaemia cut-offs are applied. Recommended adjustments can be made to the measured haemoglobin concentration among persons living at altitudes higher than 1000 metres above sea level WHO. Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity. Vitamin and Mineral Nutrition Information System. Geneva, World Health Organization, 2011 (WHO/NMH/NHD/MNM/11.1) (<http://www.who.int/vmnis/indicators/haemoglobin.pdf>, accessed 16 November 2015).

² Spina bifida is a birth disorder that occurs when a baby's backbone doesn't fully close as it develops during the first month of pregnancy, leaving part of the spinal cord exposed. This neural-tube defect can cause nerve damage and, at its most severe, paralysis.



3. Nutritional status of women and adolescent girls in Timor-Leste

In the Timor-Leste Food and Nutrition Survey 2013, 24.8% of non-pregnant mothers aged 14–60 years were underweight (BMI<18.5), 10.2% were overweight and 12.6% had short stature (<145cm); 39.5% were anaemic (adjusted for elevation).

Iron deficiency anaemia was 15.7% amongst non-pregnant mothers aged 14–60.

The survey also showed that 18% of babies born to mothers under 20 years have a low birth weight, compared to 10% of babies born to mothers aged between 20 and 34 years.

4. Programme Objective

- ▶ All adolescent girls aged 12–16 receive 1 iron/folic acid (IFA) supplement (60 mg elemental iron + 2800 microgram folic acid) weekly and deworming (Albendazole 500 mg /Mebendazole 400 mg) every 6 months (*see SNIP deworming guideline*)
- ▶ All pregnant women receive 1 IFA supplement daily (60 mg elemental iron + 400 microgram folic acid) and deworming (Mebendazole 400mg) every 6 months during pregnancy and post-partum
- ▶ Adolescent girls, pregnant and breastfeeding women receive advice on optimal nutrition and care.





5. Pre-requisites for effective coverage

IFA supplementation requires adequate resources in terms of supplements, staffing, reporting formats, logistical requirements (transport and storage). Appropriate and sufficient locations for supplementation, that are easily accessible to the majority of the community, should be assured. Radio, television or print media are mass communication options to ensure women and adolescent girls are aware of the need to obtain and regularly consume supplements, along with direct information from health workers at all contacts.

For reaching adolescent girls, health staff will work alongside education staff in support of the School Health Strategy.

Health worker skills

- Knowledge of the protocol for delivering IFA supplementation
- Negotiation and communication skills to raise awareness in the community on the importance of IFA supplementation and adequate nutrition and care of adolescent girls, pregnant and breastfeeding women
- Counselling skills to allay any concerns and assist women and adolescent girls to understand the need for IFA supplementation
- Diagnostic skills to identify symptoms of iron deficiency anaemia
- Planning and organisational skills to calculate and ensure adequate IFA supplements are available for the catchment population for routine supplementation
- Monitoring and reporting skills to record the supplementation in the LISIO/health care and report health facility / SISCa statistics.

Job aids

SNIP job aid on IFA supplementation.

Supplies

- Adequate number of IFA supplements for the eligible adolescent girls and pregnant women in the catchment population
- LISIO /Child Health Cards to record supplementation
- Monitoring forms to report coverage / health facility statistics



6. Role of the Health Worker - Interventions and Process

- ▶ IFA supplements should be given to out of school adolescent girls aged 12–16, and pregnant and lactating women during health system contacts.
- ▶ All adolescent girls in lower secondary and secondary classes in school will be reached through schools, according to the School Health Strategy, with support from teaching staff. These girls should all be included, regardless of age, for practical purposes and ease of targeting.
- ▶ The health worker should advocate with women and girls to take the supplements regularly as prescribed and explain how they can improve their nutritional status.
- ▶ The dose given and date should be marked on the health card/LISIO.
- ▶ Women's access to nutritious foods should be assessed at every stage of life, especially during adolescence, during pregnancy, and while breastfeeding.

In malaria-endemic areas, iron and folic acid supplementation programmes should be implemented in conjunction with measures to prevent, diagnose and treat malaria during pregnancy. All women should be advised to sleep under insecticide treated nets.

An iron supplementation programme should form part of an integrated programme of antenatal and neonatal care that promotes adequate gestational weight gain, screening of all women for anaemia at antenatal and postpartum visits, use of complementary measures to control and prevent anaemia (e.g. hookworm control), and a referral system to manage cases of severe anaemia.

Key actions for Health workers:

1. Provide IFA Supplements

Supplementation may be provided during routine health services, national immunisation days, or micronutrient days. Check the Health card/LISIO to see when the adolescent girl/woman last received IFA supplementation.

How to give IFA:

- Explain to the adolescent girl/pregnant or lactating woman why the supplement is given
- Determine the appropriate dose and provide supplements for a set period (e.g. 1 month) until the next follow-up appointment



- Give IFA and describe clearly how and when to take the supplements:
 - ▶ IFA tablets should be taken with food to avoid nausea and vomiting, stomach pain, or constipation. Also, recommend they drink a lot of water to avoid becoming constipated.
- Discuss potential side-effects and any concerns; advise that black stools are normal when taking iron supplements.

IFA supplementation protocol

Deworming is recommended for prevention and management of anaemia alongside iron-folic acid supplementation as per the protocol below.

	Adolescent girls	Pregnant/lactating women
Frequency	<i>One IFA supplement every day for 1 week each month.</i>	<i>One IFA supplement daily.</i>
Duration	IFA should be given to adolescent girls from age of 12 to 16 years. *	IFA should be given as early as possible throughout pregnancy until the first three months of post-partum.
Recommended composition	One tablet contains 60 mg elemental iron + 2800 microgram folic acid.	One tablet contains 60 mg elemental iron + 400 microgram folic acid.
How to administer	Take one iron-folic acid tablet daily for 1 week each month by mouth with water, after meal. Taking iron-folic acid supplement after meal reduces stomach irritation.	Take one iron-folic acid tablet daily by mouth with water, after meal. Taking iron-folic acid supplement after meal reduces stomach irritation.

* For practical purposes, targeting through schools will select girls in lower secondary and secondary classes (or as stipulated in the School Health Strategy) regardless of age.

2. Promote Consumption of iron-rich Foods

Advise women and adolescent girls that:

- ▶ Prevention of iron deficiencies can be achieved via consumption of iron-rich foods, such as meat and liver, dark green leafy vegetables, beans, fortified foods.
- ▶ Animal source foods are the best source of bioavailable iron (iron that can be readily absorbed by the body).
- ▶ Non-haem sources, such as vegetables should be consumed alongside foods rich in Vitamin C (such as limes, mangoes, tomatoes, papaya, chilli, capsicum), which aid absorption of the iron or cooked with small amounts of meat.



- Some substances, such as tannins in tea, calcium in milk products and phytates found in some dietary fibre can prevent the body from absorbing all of the iron from non-haem sources. They should not be consumed with meals.

Find out which iron-rich foods are available in the community where you work and encourage women to eat them.

3. Further nutrition advice for Adolescent Girls and Non-pregnant Women

- Advise adolescent girls and non-pregnant women to eat many different types of nutrient-rich food, such as beans (soybeans, peanuts, black beans), orange-flesh sweet potato, pumpkin, papaya, and spinach/green leafy vegetables, as well as only iodised salt.
- Advise an adolescent girl to eat at least three meals daily; eating fish, chicken, eggs, or meat at least once a day will help her develop into a healthy adult and prepare her for healthy future motherhood.
- Advise an adolescent girl and her family to delay her first pregnancy until after age 20 to allow her body to fully develop. A fully developed body will enable her to deliver a strong baby.

4. Further Nutrition advice for Pregnant and Breastfeeding Women

- Pregnant women need to eat more food than usual (one extra bowl of nutritious food every day) to give birth to healthy and strong babies.
- Breastfeeding women need adequate nutrients to produce milk for their babies and maintain their own nutritional stores. Exclusively breastfeeding women have higher energy requirements for this reason and need to eat extra food.
- Counsel a pregnant/breastfeeding woman to eat a varied diet to ensure adequate vitamin and mineral intake; e.g. include beans (soybeans, peanuts, black beans), orange-flesh sweet potato, pumpkin, papaya, and spinach/green leafy vegetables, as well as only iodised salt. She should consume chicken or eggs daily if possible.
- Advocate for pregnant and breastfeeding women to decrease their workload and rest more during pregnancy; avoid carrying heavy loads. Lying down for 1 hour during the day, maybe after lunch, is helpful advice to give.
- Counsel that to allow the body to rest, pregnancies need to be spaced by a minimum of three years to reduce the risk of maternal pre-eclampsia and death, low birth weight, neonatal death and child stunting.
- Encourage husbands and partners to support their wives in these practices





5. Treatment of anaemia

Typical signs of iron-deficiency anaemia are paleness, tiredness, headaches and breathlessness.

Pale conjunctivae (eye lids), palms and tongue are typical signs.

A blood haemoglobin level of less than 7.0g/dl is an indicator of severe anaemia.

If a woman is diagnosed as having anaemia in a clinical setting, she should be treated with daily iron (120 mg of elemental iron) and folic acid (400 µg or 0.4 mg) supplementation until her haemoglobin concentration rises to normal. She can then switch to an intermittent regimen to prevent recurrence of anaemia.

Monitoring/Tracking Process

Record on Community Nutrition Information Board: Number of pregnant and lactating women receiving counselling on maternal nutrition.

Always record the dose of IFA given on the Health Card /LISIO.

Record health facility data on number of eligible pregnant and lactating women who have received IFA using the Nutrition Services Monitoring Chart (below).

Monitoring indicators

Outcome indicator: % of pregnant women who received IFA supplement during the pregnancy;

% of pregnant women who received 90 tablets during the pregnancy

% of lactating women who received 90 tablets during the first three months of breastfeeding period

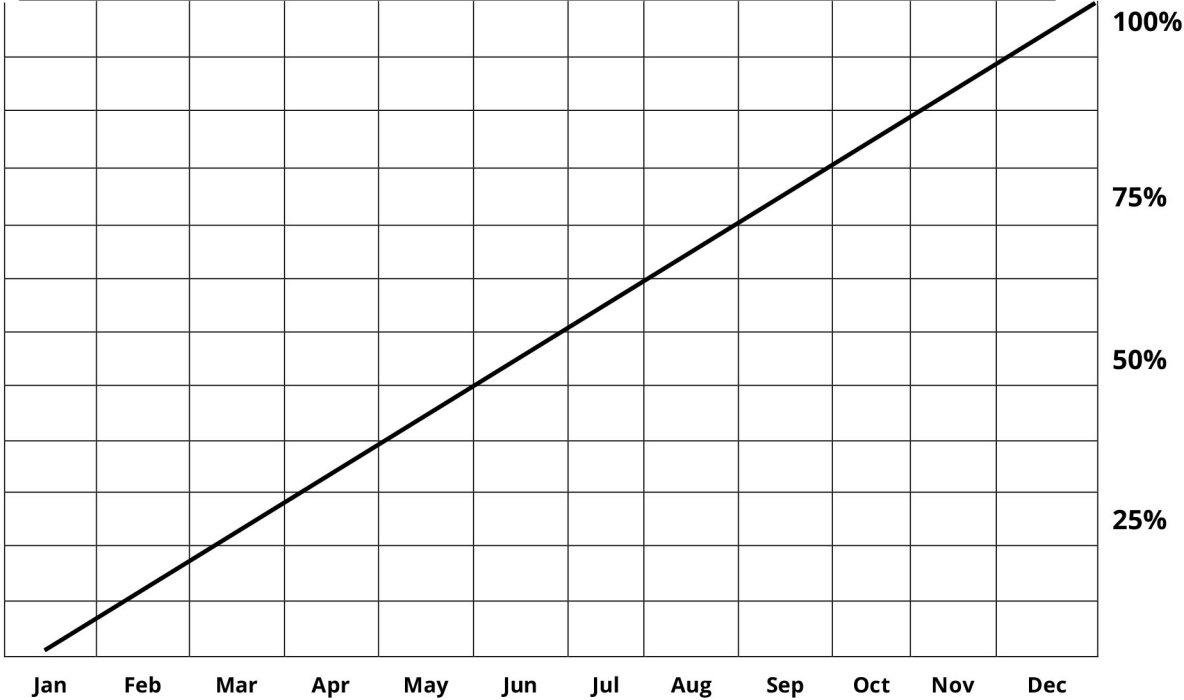
A new monitoring indicator will be developed to capture % of adolescent girls receiving IFA supplements.

Tracking Tool for Iron Folic Acid among Pregnant and Lactating Women

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Iron Folic Acid for pregnant and lactating women
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Population
												Total PLW received IFA
												Cumulative Total for the year



REFERENCES

WHO Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition. WHO 2013.

WHO. Deworming for health and development. 2005.

WHO. Prevention of iron deficiency anaemia in adolescents: Role of weekly iron and folic acid supplementation. 2011.

WHO. Global nutrition targets 2025: anaemia policy brief (WHO/NMH/NHD/14.4). Geneva: World Health Organization; 2014

WHO. Guideline: Intermittent iron and folic acid supplementation in menstruating women. Geneva, World Health Organization; 2011 (http://www.who.int/nutrition/publications/micronutrients/guidelines/guideline_iron_folicacid_suppl_women/en/).

WHO. Guideline: Daily iron and folic acid supplementation in pregnant women. Geneva, World Health Organization; 2012 (http://www.who.int/nutrition/publications/micronutrients/guidelines/daily_ifa_supp_pregnant_women/en/).

WHO. Guideline: Intermittent iron and folic acid supplementation in non-anaemic pregnant women. Geneva, World Health Organization; 2012 (http://www.who.int/nutrition/publications/micronutrients/guidelines/guideline_intermittent_ifa_non_anaemic_pregnancy/en/).

WHO. WHO recommendations on postnatal care of the mother and newborn. Geneva, World Health Organization; 2013 (http://www.who.int/maternal_child_adolescent/documents/postnatal-care-recommendations/en/).

WHO. *Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity*. Vitamin and Mineral Nutrition Information System. Geneva, World Health Organization, 2011 (WHO/NMH/NHD/MNM/11.1) (<http://www.who.int/vmnis/indicators/haemoglobin.pdf>, accessed 16 November 2015).





Timor-Leste SNIP Guidelines

MODULE 3:

Zinc and ORS for diarrhoea management





1. WHO recommendation

Mothers and other caregivers should provide children with 20 mg per day of zinc supplementation for 10–14 days (10 mg per day for infants under 6 months of age) for management of diarrhoea.

Technical notes

Oral rehydration salts (ORS), and particularly the low osmolarity formula, are a proven life-saving commodity for the treatment of children with diarrhoea. Use of zinc supplements with ORS to treat children with diarrhoea reduces deaths in children less than five years of age.

Zinc for the treatment of diarrhoea reduces diarrhoea mortality by 23% and is associated with a 14–15% reduction in incidence of pneumonia or diarrhoea. Use of zinc supplements has been found to reduce the duration and severity of diarrhoeal episodes and the likelihood of subsequent infections for two to three months. At the recommended dose zinc supplements are generally accepted by both children and caregivers and are effective regardless of the type of zinc salt used.

Supplementary zinc benefits children with diarrhea because it is a vital micronutrient essential for protein synthesis, cell growth and differentiation, immune function and intestinal transport of water and electrolytes. Zinc is an essential micronutrient and protects cell membranes from oxidative damage. It is also important for normal growth and development of children both with and without diarrhoea. Zinc deficiency is associated with an increased risk of gastrointestinal infections, adverse effects on the structure and function of the gastrointestinal tract, and impaired immune function. Dietary deficiency of zinc is especially common in lower-income countries because of a low dietary intake of zinc-rich foods (mainly foods of animal origin) or inadequate absorption caused by its binding to dietary fibre and phytates often found in cereals, nuts and legumes.

N.B. ORS should not be given to severely acutely malnourished children; RESOMAL is recommended in such cases.





2. Benefits of zinc supplementation and ORS in diarrhoea management

Diarrhoea is defined as the passage of three or more loose or liquid stools per day (or more frequent passage than is normal for the individual). Frequent passing of formed stools is not diarrhoea, nor is the passing of loose, "pasty" stools by breastfed babies.

Diarrhoea remains a leading cause of death globally among children under five years of age. Diarrhoea contributes to nutritional deficiencies, reduced resistance to infections and impaired growth and development. Severe diarrhoea leads to fluid loss, and may be life-threatening, particularly in young children and people who are already malnourished or have impaired immunity.

There are two simple and effective treatments for the clinical management of acute diarrhoea:

- use of low concentration oral rehydration salts (ORS)
- routine use of zinc supplementation,

Oral rehydration salts are a well-known and relatively simple treatment approach. They replace fluids lost from the child's body through diarrhoea.

Zinc supplementation has been found to reduce the duration and severity of diarrhoeal episodes and likelihood of subsequent infections for 2–3 months.

3. Situation in Timor-Leste

In the Timor-Leste Food and Nutrition Survey 2013, 16.7% of children under the age of 5 had diarrhoea in the two weeks before the survey. Only 6.7% of them received proper management in terms of proper feeding (breastfeeding and/or giving normal foods plus additional fluids), combined with ORS and zinc supplementation; 63% received ORS; zinc tablets were received by 33.3%; ORS combined with zinc was given to 29.9% of children.

34% of children aged 6–59 months were found to be zinc deficient (low serum zinc; $< 8.7 \mu\text{mol/L}$), with prevalence higher in rural areas compared to urban (42% rural to 18.6% urban).

4. Programme Objective

All children under 5 years should receive zinc supplementation and ORS for the treatment of diarrhoea (*except those with severe acute malnutrition who should be treated with RESOMAL according to IMAM protocol*).

A comprehensive package of interventions should be promoted to prevent and treat diarrhoea, including preventive water, sanitation and hygiene practices, zinc, ORS, exclusive breastfeeding and vaccines.

5. Pre-requisites for effective coverage

Health Worker skills

- Knowledge of the effectiveness of zinc and ORS in the management of diarrhoea
- Knowledge of the treatment protocol: how to administer ORS and zinc
- Knowledge of ways to help prevent diarrhoea and how to feed a child during treatment
- Counselling skills to help mothers/caregivers understand why the treatment is important and how to provide it
- Negotiation skills to help caregivers adopt improved hygiene and infant and young child feeding behaviours
- Monitoring and reporting skills to complete child health records and report health facility statistics

Job aids

SNIP job aid on Zinc and ORS

Supplies

Zinc supplements for diarrhoea management in sufficient quantities
 ORS in sufficient quantities for predicted caseload.
 LISIO Handbook for caregivers

6. Role of the Health Worker: Interventions and process

Health Workers should treat children presenting with diarrhoea at health facilities and counsel caregivers on action for prevention and treatment.

In addition, efforts should be made to improve outreach to communities to heighten awareness of the need to treat diarrhoea and promote the effective use of ORS and zinc. Home visits provide an optimal opportunity to discuss with caregivers; while SISCa or other community outreach sessions can be used to reach a wider audience.

Who to give zinc supplements and ORS solution to and how much to give

Health workers are encouraged to provide caretakers of children with diarrhoea:

- two 1-litre packets of ORS solution for home use until the diarrhoea stops
- enough zinc supplements to continue home treatment for 10–14 days
- Printed material (including text and illustrations) with advice on preventing and treating diarrhoea at home, e.g. LISIO.

What to give	Preparation by mothers/carers	How much to give	How long to give
Zinc supplements	None required	• 10 mg per day in those younger than six months • 20 milligrams per day for children older than six months	10–14 days
Oral rehydration salts	Dissolve entire content of packet in one litre of drinking water (water boiled for 10 minutes)	• Infants (under 6 months): one litre over a 24-hour period • Children 6 months to 5 years: one litre over an 8 to 24-hour period	Continue treatment until diarrhoea stops

Key messages for mothers and other caregivers:

- Prevent dehydration by giving Infants (under 6 months) one litre of ORS solution over a 24-hour period and children 6 months to 5 years one litre of ORS solution over an 8 to 24-hour period
- Provide children with 20 mg per day of zinc supplementation for 10–14 days (10 mg per day for infants under the age of six months):
 - ▶ For children aged 2–6 months: 1/2 tablet daily for 10 days.
 - ▶ For children aged 6 months–5 years: 1 tablet daily for 10 days.
 - ▶ For infants dissolve the tablet in a small amount of breastmilk, ORS or clean water in a cup. Older children can chew or swallow the tablets.
 - ▶ Make sure to take all the tablets for 10 days even if diarrhea has stopped.
- Continue feeding (or increase breastfeeding) during the episode and increase feeding afterward

Key actions for health care workers:

- Counsel mothers to begin to administer ORS solution at home
- Emphasise continued feeding or increased breastfeeding during, and increased feeding after, the diarrhoeal episode
- Provide children with 20 mg per day of zinc supplementation for 10–14 days (10 mg per day for infants under six months old)
- Counsel the mothers to take the child to a health care provider if there are signs of dehydration (see below) and or symptoms requiring medical treatment (e.g. bloody diarrhoea)
- Advise mothers of the need to increase fluids and continue feeding during future diarrhoeal episodes
- Treat any disease present as per the IMCI protocol
- Advise mothers/ caregivers on ways to improve hygienic practices to prevent diarrhoea and adopt optimal infant and young child feeding practices (see SNIP guideline on Infant and Young Child Feeding and Care).

Signs of mild to moderate dehydration	Lethargy, thirst, restless or irritable behaviour, normal to slightly sunken eyes and a sunken fontanelle in infants.
Signs of severe dehydration	Unconsciousness, poor drinking or inability to drink, lack of urine output, cool moist extremities, low or undetectable blood pressure, and a rapid and feeble pulse



7. Monitoring / Tracking Process

Record the illness and the administration of zinc and ORS in the Child's Health Card /LISIO

Monitoring and evaluation indicator:

Diarrhoea (number and % of children),
Treatment with oral rehydration salts (ORS) and zinc supplementation (number and percent of those with diarrhoea who received supplementation).

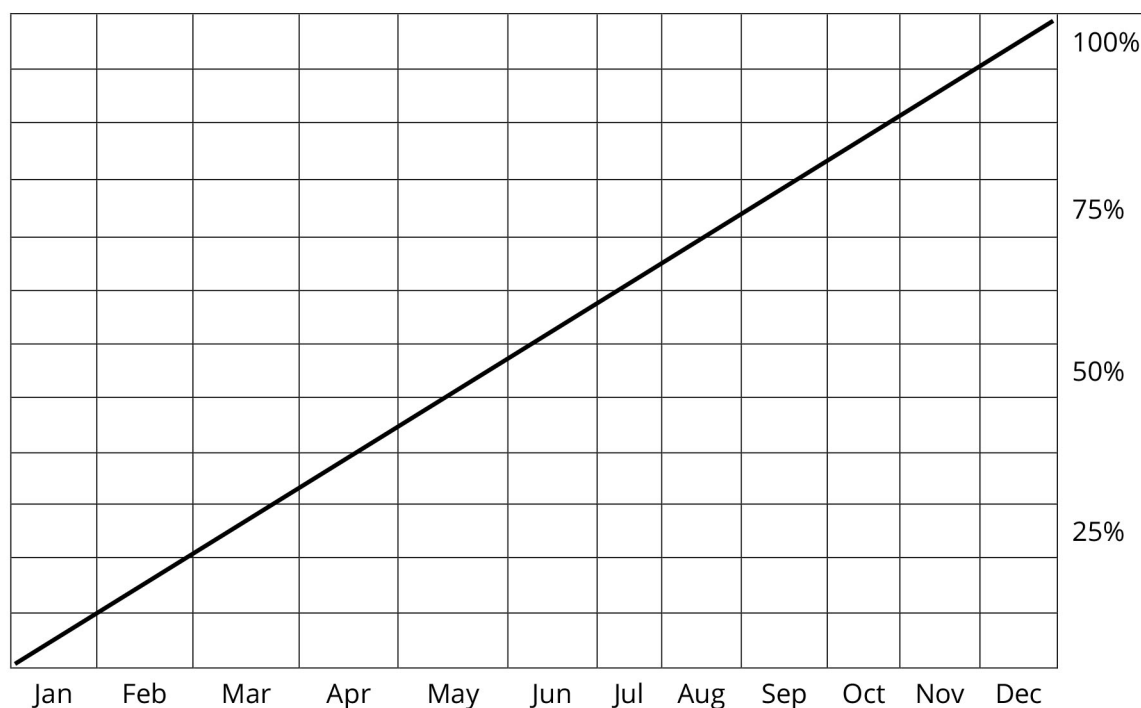
Complete the tracking tool below.

Tracking tool for ORS and zinc supplementation for diarrhea treatment

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	ORS and Zinc for diarrhea management
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Diarrhea incidence
												Total receiving ORS+zinc
												Cumulative Total for the year



REFERENCES:

http://www.who.int/elena/titles/bbc/zinc_diarrhoea/en/:

WHO 2006 Implementing the New Recommendations on the Clinical Management of Diarrhoea

<http://www.who.int/mediacentre/factsheets/fs330/en/>





Timor-Leste SNIP Guidelines

MODULE 4:

Deworming of children, pregnant and lactating women and adolescent girls for helminth control in population





1. WHO recommendation

WHO recommends periodic treatment with anthelmintic (deworming) medicines, without previous individual diagnosis to all at-risk people living in endemic areas.

People at risk are:

Pre-school-aged children
school-aged children
women of childbearing age (including pregnant women in the second and third trimesters and breastfeeding women)

Treatment should be given once a year when the prevalence of soil-transmitted helminth infections in the community is over 20%, and twice a year when the prevalence of soil-transmitted helminth infections in the community exceeds 50%. This intervention reduces morbidity by reducing the worm burden.

In addition:

- education on health and hygiene reduces transmission and reinfection by encouraging healthy behaviours;
- provision of adequate sanitation is also important but not always possible in resource-constrained settings.





Technical Notes

Helminths are a group of parasites commonly referred to as worms and include schistosomes and soil-transmitted helminths. Schistosome and soil-transmitted helminth infections are among the most common infections in developing countries and can impair nutritional status by causing:

- internal bleeding which can lead to loss of iron and anaemia;
- malabsorption of nutrients;
- diarrhoea; and
- loss of appetite which can lead to a reduction in energy intake.

Infections can also cause cognitive impairment as well as tissue damage that may require corrective surgery.

The nutritional impairment caused by schistosome and soil-transmitted helminth infections during childhood has been shown to have a significant impact on growth and development of children. Periodic treatment (deworming) of children together with improvement of water and sanitation, and health education can reduce the transmission of schistosome and soil-transmitted helminth infections.

Intestinal helminthiasis is a major contributory cause of iron-deficiency anaemia in women of reproductive age in endemic areas. In pregnant women, anaemia may be the underlying cause of maternal mortality, spontaneous abortion, premature birth, and low birth weight.

Mebendazole, albendazole, levamisole, and pyrantel may all be safely administered to pregnant women after the first trimester (Guidelines for the use of iron supplements to prevent and treat iron deficiency anaemia. Stolfus, R.J., Dreyfuss, M., International Nutritional Anemia Consultative Group (INACG) 1998.

2. Benefits of deworming

Deworming is one of the strategies for preventing and controlling anaemia. Anthelmintic drugs are used for treatment of schistosomiasis and soil-transmitted helminthiasis. Deworming contributes to good health and nutritional status of children and pregnant women.

To break the cycle of transmission, it is essential that treatment efforts be accompanied by hygiene education that encourages healthy behaviours.

3. Situation in Timor-Leste

In the Timor-Leste Food and Nutrition Survey 2013 19.3% of the mothers reported to have taken deworming tablets during their last pregnancy and a deworming tablet had been given to 38.8% of children aged 6–59 months during the 6 months preceding the survey. Iron-deficiency anaemia prevalence was 15.7% in non-pregnant mothers aged 14–60 and 18.9% in children aged 6–59 months. Deworming was significantly associated with reductions in anaemia amongst children and amongst mothers who had received deworming during their last pregnancy, the impact suggesting that the presence of worms was an underlying cause of anaemia.

A 2012 survey found that 29% of older children aged 7–16 years across Timor-Leste had worm infections, ranging by district from 4% in Manatuto to 55% in Dili.¹ It is likely that the burden of worm infestation among children aged below five years is similar to that of school children, once they are able to walk.

4. Programme Objective

- All children aged 1–5 years receive a deworming tablet every 6 months²
- All adolescent girls aged 12–16 years receive a deworming tablet every 6 months³
- All pregnant women receive a deworming tablet after the first trimester of pregnancy and post-partum.

¹ Timor-Leste National Parasite Survey. Dili: MOH, 2012

² Note that School-aged children aged 5–15 years should also receive deworming treatment, but this is outside the SNIP package.

³ Note that for girls in secondary and lower secondary classes, deworming will be provided to all regardless of age, along with iron folic acid supplementation, and in accordance with the School Health Strategy.



5. Pre-requisites for effective coverage

Health worker skills

- Knowledge of the protocol for delivering deworming tablets
- Negotiation and communication skills to raise awareness in the community on the importance of deworming and improvement of hygienic practices to prevent worm infestation
- Counselling skills to allay any concerns of pregnant women and caregivers and assist them to understand the need for deworming and practising good hygiene
- Planning and organisational skills to calculate and ensure adequate deworming tablets are available for the catchment population prior to any campaign (or are in stock at health facilities for routine delivery)
- Monitoring and reporting skills to record deworming in the Child Health Card / LISIO and report health facility / SISCa statistics.

Job aids

SNIP job aid on deworming: target groups, frequency and dose
SNIP job aid on hygienic practices

Supplies

- Adequate numbers of deworming tablets for the eligible individuals in the catchment population
- LISIO /Child Health Cards to record supplementation
- Monitoring forms to report coverage / health facility statistics

6. Role of the Health Worker: Interventions and process

Deworming medication should be given to pregnant women,⁴ adolescent girls and children aged 1–5 years at health facility or SISCa contacts or through child health campaigns in the community. Advice and counselling on hygienic practices, including hand-washing and food preparation should also be provided.

N.B MOH includes deworming within its Mass Drug Administration (MDA) programme as part of Neglected Tropical Disease Control. When this programme is in operation there is no need for health workers to offer deworming as part of SNIP. Administration of deworming should still be recorded in the LISIO.

Additionally infants aged 6–11 months will be included for deworming through administration of 5cc pyrantel pamoate syrup.

6.1 Give de-worming tablets to the groups below according to the protocols:

Children aged 1–5 years

Provide deworming tablets to children aged 1 to 5 years every 6 months at the health facility or SISCa as per the protocol below:

Supplement	Target	Dose	Time of administration
Deworming (Albendazole 400mg)	Children aged 1-2 years	½ tablet of 400mg Albendazole	Once for children aged 12-23 months
	Children aged 2-5 years	1 tablet of 400mg Albendazole	Children aged 2-5 years, every six months

- For children aged 1–2 years, crush half tablet and give to child with some water.
- For children aged 2–5 years, give one tablet to child to chew with some water.

Deworming in Timor-Leste should be done twice a year in January and July.

⁴ N.B. Lactating women do not currently receive deworming treatment in Timor-Leste.

Pregnant and lactating women, adolescent girls

Provide deworming tablets to pregnant, lactating women and adolescent girls as per the protocols below:

Deworming in pregnant and lactating women		Deworming in adolescent girls	
Iron and folic acid supplementation and deworming among pregnant women are important measures for reducing anaemia prevalence among vulnerable groups of women		Adolescents are at high risk of iron deficiency and anaemia due to accelerated increase in requirements for iron, poor dietary intake of iron, high rate of infection and worm infestation as well as the social norm of early marriage and adolescent pregnancy. The WHO recommends concurrent deworming with iron-folic acid supplementation for prevention and management of adolescent anaemia.	
Frequency	<i>Deworming:</i> one tablet every six months during pregnancy and post-partum.*	Frequency	<i>Deworming:</i> one tablet every six months
Duration	<i>Deworming:</i> after first trimester of pregnancy and post-partum.	Duration	<i>Deworming:</i> should be given to adolescent girls from age of 12 to 16 years**.
Supplement composition	<i>Deworming:</i> Mebendazole 500 mg	Recommended composition	<i>Deworming:</i> Albendazole 400 mg /Mebendazole 500 mg
How to administer	<i>Deworming:</i> take one table with water.	How to administer	<i>Deworming:</i> take one table with water.

* N.B. Lactating women do not currently receive deworming treatment in Timor-Leste.

** Note that for girls in secondary and lower secondary classes, deworming will be provided to all regardless of age, along with iron folic acid supplementation, and in accordance with the School Health Strategy.

Get deworming tablet during your routine ante-natal care and post-natal care at the health facility or SISCa for free.

If you are adolescent girls aged 12 to 16 years, get your deworming tablet at the health facility, your school, or youth group for free.

6.2 At the point of delivery, provide advice and counsel pregnant women and caregivers on the importance of hygiene in worm control. Hygiene education can also be provided to community groups using the following messages:

- Intestinal worms are easily prevented with improved hygiene and sanitation efforts.

The **Essential Hygiene Actions** should also be promoted:

1. Promote the use of sanitary latrines, including by children.
2. Promote hand washing with soap and water after going to the bathroom and after cleaning baby's faeces.
3. Promote hand washing with soap and water before preparing food, before eating food, and before feeding young children.

How to wash hands

1. Wet hands with running water.
2. Rub with soap or ash for about 30 seconds.
3. Clean between fingers, under fingernails, up to wrists. Scrubbing and soap or ash dislodges and remove germs.
4. Rinse hands with water poured from jug or tippy tap. Then air-dry—don't pick up germs from a dirty towel!

4. Promote the installation of a hand washing station next to the cooking area and another next to the toilet.
5. Encourage keeping all cooking containers and utensils clean, as well as water and food containers clean and covered.
6. Encourage reheating and sufficient cooling of any stored foods to ensure safety.
7. Encourage families to keep animals away from homestead and child play areas clean and protected.

7. Monitoring / tracking process

Always record the dose and date of deworming given on the Child Health Card /LISIO.

Record health facility data on number of eligible children and pregnant women who have received deworming using the Nutrition Services Monitoring Chart (below).



Monitoring and evaluation indicators

Percent of children age 6–59 months received deworming tablets in the last six months

Percent of pregnant women received deworming tablets in the last six months

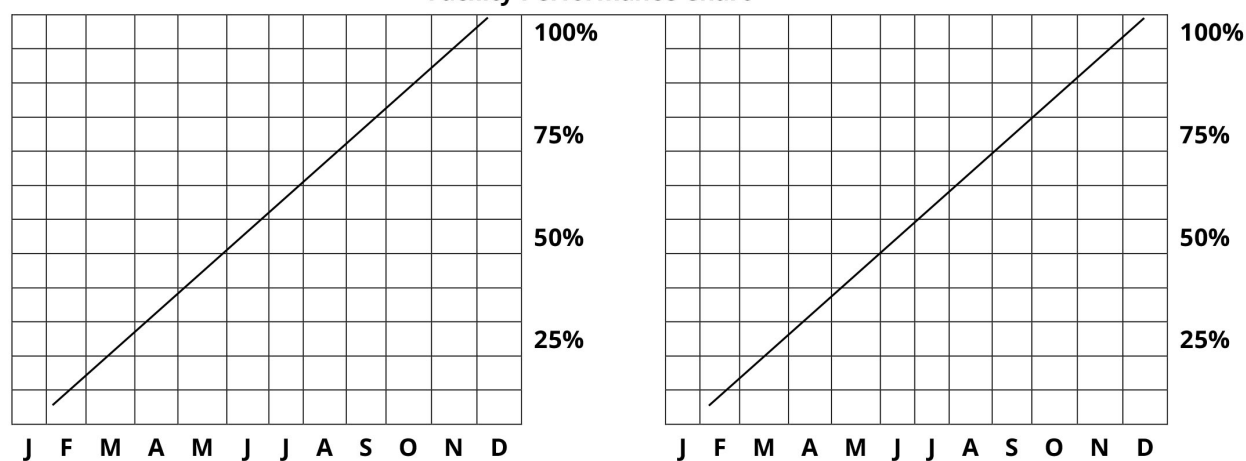
Percent of adolescent girls received deworming tablets in the last six months (this data may be collected as part of the School Health Strategy).

Tracking tool for Deworming among children 6-59mo

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Deworming for children 12-59 months
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart

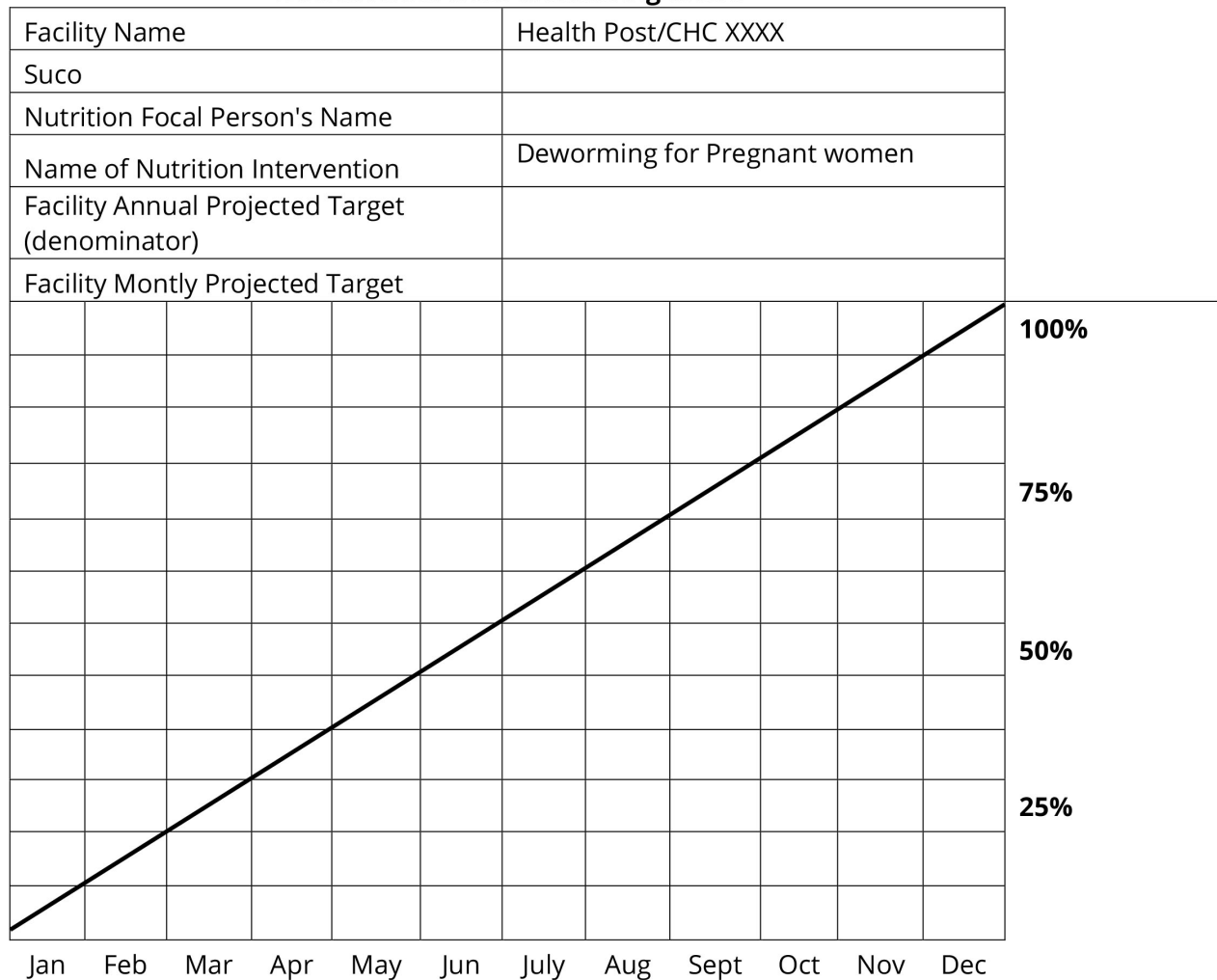


J	F	M	A	M	J	J	A	S	O	N	D		J	F	M	A	M	J	J	A	S	O	N	D	
												Target Population													Target Population
												Total received Deworming													Total received Deworming
												Cumulative Total for the year													Cumulative Total for the year

Children 12-23mo

Children 24-59mo

Nutrition Services Monitoring Chart



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Population
												Total Pregnant Women received Deworming
												Cumulative Total for the year



REFERENCES

WHO. Deworming for health and development. 2005.

<http://www.childrenforhealth.org/10-messages-on-water-sanitation-and-hygiene/>

Timor-Leste National Parasite Survey. Dili: MOH, 2012

WHO eLibrary of Evidence for Nutrition Actions (eLENA). Deworming to combat the health and nutritional impact of helminth infections

Timor Leste Food and Nutrition Survey 2013. MOH, UNICEF, Australian Aid 2015





SNIP GUIDELINE MODULE 4: DEWORMING OF CHILDREN, PREGNANT AND LACTATING WOMEN
AND ADOLESCENT GIRLS FOR HELMINTH CONTROL IN POPULATION







Timor-Leste SNIP Guidelines

MODULE 5:

Vitamin A Supplementation in infants and children aged 6–59 months¹

¹ Source: WHO Guideline: Vitamin A supplementation in infants and children 6-59 months of age. WHO 2011; Integrated Management of Childhood Illness Chart Booklet, WHO March 2014





1. WHO recommendation

In settings where vitamin A deficiency is a public health problem , vitamin A supplementation is recommended in infants and children 6–59 months of age as a public health intervention to reduce child morbidity and mortality.

All children diagnosed with measles should receive one dose of a vitamin A supplement. Children from areas of known vitamin A deficiency or where measles case fatality is likely to be more than 1% should receive 2 doses of vitamin A supplements, given 24 hours apart, to help prevent eye damage and blindness.

The recommended age-specific doses in the context of measles are:

- 50 000 IU for infants aged less than 6 months
- 100 000 IU for infants aged 6 to 11 months
- 200 000 IU for children $\geq$ 12 months.

If the child has clinical signs of vitamin A deficiency (such as Bitot's spots), a third dose should be given 4–6 weeks later

² Vitamin A deficiency is defined as a public health problem when prevalence of night blindness is 1% or higher in children 24–59 months of age or where the prevalence of vitamin A deficiency (serum retinol 0.70 μ mol/l or lower) is 20% or higher in infants and children 6–59 months of age.





Technical Notes: Vitamin A

A Cochrane review in 2010 showed that supplementation with vitamin A can reduce mortality and the prevalence rates of communicable diseases such as diarrhoea. The meta-analysis included 17 clinical trials and indicated that vitamin A supplementation reduces the risk of all-cause mortality by 24%. Another 2010 review assessed the effects and safety of a number of micronutrients, including vitamin A, in reducing morbidity and mortality for children and adults with HIV. This review included five trials on vitamin A supplementation in children and only three (all in Africa) contributed data on all-cause mortality. The data suggest that periodic vitamin A supplementation of HIV-infected children over six months of age is beneficial in reducing overall mortality risk.

The mechanisms by which vitamin A saves lives are not fully understood; it is not clear whether its action is mediated through the correction of underlying deficiencies or through adjuvant therapeutic effects. Vitamin A supplements may improve gut integrity and therefore decrease the severity of some cases of diarrhoea. The role of vitamin A in immunity may also affect the susceptibility and/or severity of other infections.

Provision of a high dose of vitamin A every six months until the age of five years has been based on the principle that a single high dose of vitamin A is highly absorbed, stored as a fat-soluble vitamin in the liver and mobilized over an extended period of time as needed. In infants 6–11 months of age doses of 100 000 IU and in children 12–59 months of age 200 000 IU have been considered to provide adequate protection for 4 to 6 months. Most children in this age group tolerate these doses of vitamin A well, though temporary side effects such as headache, nausea or vomiting and diarrhoea have been reported in a small percentage of cases. On a per-child basis, the cost of vitamin A supplementation is considered inexpensive.

Vitamin A is passed through breastmilk to the infant. Therefore, exclusive breastfeeding should be encouraged up to 6 months of age with continued breastfeeding to 24 months and beyond according to WHO guidelines.

Vitamin A deficiency (VAD) contributes to delayed recovery and to a high rate of post-measles complications. In addition, measles infection may precipitate acute VAD and xerophthalmia. As a result, measles accounts for a large proportion of preventable childhood blindness. Vitamin A supplements have been shown to reduce the number of deaths from measles by 50%. WHO's current policy advocates administering vitamin A to all acute cases. A high dose of vitamin A is given immediately on diagnosis and repeated the next day. Even in countries where measles is not usually severe, vitamin A should be given to all cases of severe measles.

Source: WHO Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition. WHO 2013.



2. Benefits of Vitamin A supplementation

Vitamin A is necessary to support healthy eyesight and immune system functions. Infants and children have increased vitamin A requirements to support rapid growth and to help them combat infections.

Vitamin A deficiency (VAD) is the leading cause of preventable blindness in children. It impairs the immune system and increases the severity and mortality risk of measles and diarrhoeal disease.

In pregnant women VAD causes night blindness and may increase the risk of maternal mortality. VAD occurs especially during the last trimester when demand by both the unborn child and the mother is highest.

The most common manifestation of VAD is night blindness: people have trouble seeing at night. This can lead to xerophthalmia (eye disease): a dry, thickened, lusterless condition of the white part of the eye. Bitot's spot, a spot-like, white foam, is one of the symptoms. Dryness affects the cornea that eventually starts to 'melt', and permanent vision loss follows. Milder forms of deficiency are invisible but also damaging to health.

3. Situation in Timor-Leste

The 2013 Timor-Leste Food and Nutrition Survey found that 8.1% of children aged 6-59 months had low serum retinol, indicating VAD. Children residing in urban areas were significantly more likely to exhibit the deficiency. Timor-Leste can be classified as having a mild public health problem of VAD according to WHO standards (2-9%).

It is of note that the current level of vitamin A deficiency is below the WHO definition of a public health problem (20% of children 6-59 months with low serum retinol). However, current data is based on one survey only, so the situation should be monitored through subsequent surveys to allow a decision to be taken of whether to continue the supplementation programme.





4. Programme Objective

- All children between 6 and 11 months of age receive a single dose of 100,000 IU Vitamin A supplementation
- All children between 1 to 5 years of age receive 200,000 IU Vitamin A supplementation every 6 months
- All children with measles receive appropriate Vitamin A supplementation (see protocol below)

Currently in Timor-Leste post-partum women are also provided with a 200,000 IU dose of Vitamin A supplementation though this is no longer recommended by WHO, due to lack of evidence on effectiveness.

5. Pre-requisites for effective coverage

Vitamin A supplementation campaigns should ensure adequate resources in terms of supplements, staffing, reporting formats, logistical requirements (transport and cold storage). Appropriate and sufficient locations for supplementation, that are easily accessible to the majority of the community, should be selected and there should be effective communication with communities prior to the event to alert them to the date, venue, timing and importance of Vitamin A supplementation. Radio, television or print media are mass communication options, along with direct information from health workers at all contacts.

Health worker skills

- Knowledge of the protocol for delivering Vitamin A supplementation
- Negotiation and communication skills to raise awareness in the community on the importance of Vitamin A supplementation
- Counselling skills to allay any concerns of caregivers and assist them to understand the need for Vitamin A supplementation of their children
- Diagnostic skills to identify measles and provide appropriate Vitamin A supplementation
- Planning and organisational skills – calculate and ensure adequate vitamin A supplements are available for the catchment population prior to the campaign (or are in stock at health facilities for routine supplementation)
- Monitoring and reporting skills to record the supplementation in the Child Health Card / LISIO and report health facility / SISCa statistics.





Job aids

SNIP job aid on Vitamin A supplementation.

Supplies

- Adequate numbers of blue (100 000 IU) and red (200, 000 IU) Vitamin A capsules for the eligible children in the catchment population
- Scissors to cut open the capsules
- LISIO /Child Health Cards to record supplementation
- Monitoring forms to report coverage / health facility statistics

6. Role of the Health Worker: Interventions and process

Vitamin A supplements should be delivered to children 6–59 months of age twice yearly, during health system contacts.

The dose given and date should be marked on the child health card.

Key actions for Health workers:

1. *Provide High-Dose Vitamin A Supplements to Children aged 6-59 months*

Supplementation may be provided during routine health services, national immunisation days, child health days, or micronutrient days. Check the child Health card/LISIO to see when the child/mother last received Vitamin A supplementation.

How to give Vitamin A:

- Explain to the mother why the supplement is given
- Determine the dose appropriate for the child's age (blue capsule for infants under 1 year; red capsule for children aged 1–5 years)
- Give Vitamin A Supplementation and Treatment

Give first dose any time after 6 months of age to ALL CHILDREN (including HIV+)
Thereafter vitamin A every six months to ALL CHILDREN



Target, dose and frequency of vitamin A supplementation

Supplement	Target	Dose	Time of administration
Vitamin A	Children aged 6-11 months	1 blue capsule of 100,000IU	Once for children aged 6-11 months
	Children aged 1-5 years	1 red capsule of 200,000IU	Children aged 1-5 years, every six months

Vitamin A Treatment:

Give an extra dose of Vitamin A (same dose as for supplementation) for treatment if the child has MEASLES or PERSISTENT DIARRHOEA.

If the child has had a dose of vitamin A within the past month or is on RUTF for treatment of severe acute malnutrition, DO NOT GIVE VITAMIN A.

2. Promote Breastfeeding as a Source of Vitamin A

Vitamin A in the mother's body passes into the breastmilk, so breastfeeding women must obtain vitamin A supplementation and eat a vitamin A-rich diet. Encourage women to consume vitamin A-rich foods prior to, and during, pregnancy and encourage exclusive breastfeeding of infants up to 6 months with continued breastfeeding up to 2 years and beyond.

3. Promote Consumption of Vitamin A-Rich Foods

This is especially important in pregnant and lactating women and in children under five. Animal sources are the richest and most fully absorbed by the body. Other sources include sweet potatoes, carrots, dark leafy greens, winter squashes/pumpkin, lettuce, dried apricots, red peppers, mango, papaya. Vitamin A is a fat-soluble vitamin, and therefore, needs to be consumed with fat in order to have optimal absorption. Find out which Vitamin A-rich foods are available in the community where you work and encourage women to eat them and prepare them for their children.



7. Monitoring and evaluation

Always record the dose of Vitamin A given on the Child Health Card (LISIO).

Record health facility data on number of eligible children who have received Vitamin A using the Nutrition Services Monitoring Chart (below).

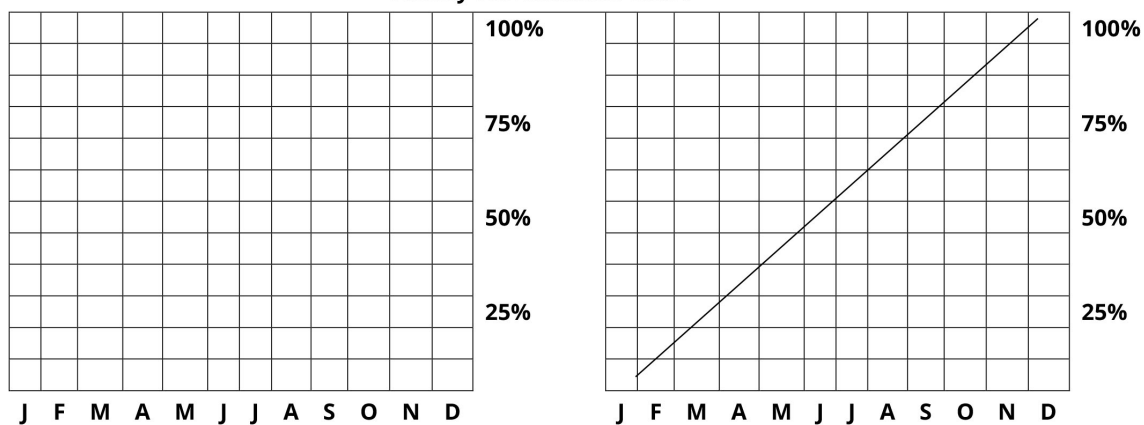
Monitoring and evaluation indicators

% of children aged 6-59 months who received Vitamin A supplementation in the last 6 months

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Vitamin A capsule for children 6-59 months
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



J	F	M	A	M	J	J	A	S	O	N	D		J	F	M	A	M	J	J	A	S	O	N	D	
												Target Population													Target Population
												Total received VA													Total received VA
												Cumulative Total for the year													Cumulative Total for the year

Children 6-11mo

Children 12-59mo



REFERENCES

WHO Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition. WHO 2013.

WHO Guideline: Vitamin A supplementation in infants and children 6–59 months of age. WHO 2011; Integrated Management of Childhood Illness Chart Booklet, WHO March 2014

Timor Leste Food and Nutrition Survey 2013. MOH, UNICEF, Australian Aid 2015









Timor-Leste SNIP Guidelines

MODULE 6:

Home fortification with Micronutrient Powder (MNP) for children aged 6–23 months





1. WHO recommendation

In populations where the prevalence of anaemia in children under 2 years or under 5 years of age is 20% or higher, home fortification of foods with micronutrient powders (MNPs) containing at least iron, vitamin A and zinc is recommended to improve iron status and reduce anaemia among infants and children 6–23 months of age.

MNPs should be commenced at the same time as complementary foods are introduced into the diet and used at minimum, for a period of 2 months, followed by a period of 3–4 months off supplementation, so that use of micronutrient powders is started every 6 months.

Recommended composition per sachet for one sachet per day dose:

Iron: 12.5 mg of elemental iron, preferably as encapsulated ferrous fumarate^b

- Vitamin A: 300 µg of retinol
- Zinc: 5 mg of elemental zinc, preferably as zinc gluconate

In addition to iron, vitamin A and zinc, multiple micronutrient powders may contain other vitamins and minerals at currently recommended nutrient intake (RNI) doses for the target population.





Technical Notes: MNPs

In lower-income settings, children's diets may be primarily plant-based. A lack of animal-source foods in these settings results in insufficient amounts of key micronutrients such as vitamin A, zinc, and iron, to meet the recommended intakes for children less than 24 months of age.

Infants and young children are most susceptible to the harmful consequences of these deficiencies. A compromised immune status resulting from poor nutritional status can directly lead to an increased risk of infectious diseases and potentially elevated rates of infant morbidity and mortality.

Supplementation has been proposed as one of the best available nutrition interventions to address these vitamin and mineral deficiencies, as it can be targeted to some of the most vulnerable population groups, such as those living in remote regions, as well as young children. MNPs were developed as an alternative to supplementation and have shown to be successful in reducing anaemia and iron deficiency in young children in a variety of contexts as they can be added directly to food.

MNPs are frequently packaged in small sachets, which are temperature and moisture resistant, giving them a long shelf-life and easing transportation and storage problems. These characteristics reduce the frequency of distribution necessary to maintain a supply of micronutrients.

Mild side effects can occur with supplementation, such as darkened stools, gastrointestinal pain, diarrhoea, constipation and vomiting. Though MNPs do not eliminate these side effects, they appear to reduce their frequency and severity and are highly acceptable. Iron is covered in a fat-based protective coating so that the taste, colour and aroma of food change minimally without greatly affecting children's dietary habits. The fortification of foods using MNPs can be done at home or any other locations where meals are prepared and consumed, such as schools or hospitals.

2. Benefits of MNP supplementation

MNPs have been shown to be successful in reducing anaemia and iron deficiency in young children.





3. Situation in Timor Leste

In the Timor-Leste Food and Nutrition Survey 2013, the prevalence of anaemia (haemoglobin concentration <110 g/L) among children aged 6–59 months was 62.5 percent indicating that Timor-Leste has a ‘severe’ public health problem among children (prevalence of anaemia ≥ 40 percent). Boys were more vulnerable to severe and moderate anaemia than girls, and anaemia was higher among children aged 0–23 months. The two measures of body iron stores, serum ferritin and body iron, both suggested that about a third of the anaemia was associated with low body iron stores and 62.0 percent was associated with high transferrin receptor (TfR) concentrations, i.e. low circulating iron.

Children from households with poor quality housing, and children not consuming green leafy vegetables, had a significantly higher level of iron deficiency.

4. Programme Objective

- A national programme is being rolled out with the objective that all children between 6 and 23 months of age receive 30 sachets (1 pack) of MNP every 2 months.

5. Pre-requisites for effective coverage

Ensure adequate resources in terms of supplements, staffing, reporting formats, logistical requirements (transport). Radio, television or print media are mass communication options, along with direct information from health workers at all contacts.

Health worker skills

- Knowledge of the protocol for delivering MNPs
- Negotiation and communication skills to raise awareness in the community on the importance of MNPs





- Counselling skills to allay any concerns of caregivers and assist them to understand the need for MNP supplementation of their children
- Planning and organisational skills – calculate and ensure adequate MNPs are in stock at health facilities for routine supplementation
- How to use MNPs and reassure caregivers in case of side-effects
- Monitoring and reporting skills to record the supplementation in the Child Health Card / LISIO and report health facility / SISCa statistics.

Job aids

MNP job aid and leaflet

Supplies

- Adequate numbers of MNPs for the eligible children in the catchment population
- LISIO /Child Health Cards to record supplementation
- Monitoring forms to report coverage / health facility statistics

6. Role of the Health Worker – Interventions and process

MNPs should be delivered to children 6–23 months of age during health system contacts.

The dose given and date should be marked on the child health card.

Distribution and support to compliance in use of MNPS for children aged 6–23 months.

Key actions for Health workers:

Actions to promote home fortification of foods with MNPs for children:

- MNPs should be provided to caregivers of children alongside advice on hygienic practices in the preparation of complementary foods and recommended breastfeeding practices, as well as steps to manage diarrhoea.





- Health workers should explain the home fortification procedure (including how to mix the powder with the food) and importance of compliance/adherence with intake of the MNP. Explain to caregivers that one sachet provides the recommended daily allowance of 15 vitamins and minerals for young children, required for their growth and development, health, strong body, and intelligence.
- Potential side-effects that could occur with feeding children with food fortified with MNP should be explained to caregivers to allay any concerns. Black stools are a common harmless side-effect.
- Provide children with MNP sachets: Every child aged 6 months to 2 years should receive 30 sachets (1 pack) of MNP to be consumed over 60 days/2 months. Maximum consumption of 1 sachet per day is enough.
- Caregivers should be advised to visit the SISCa or health facility every 2 months to obtain new supplies.

Steps to prepare MNPs:

1. Wash your hands with soap and water before preparing food for your child
2. Cook semi-solid or solid meal using locally available nutritious ingredients such as rice, egg, spinach, and carrot. Remember to wash all the food items before they are cooked
3. Place the amount of cooked meal that the child can eat at a single meal in a plate/bowl. Wait a while until the meal is cooled down (warm but not hot).
4. Open one MNP sachet from the top corner and sprinkle the content of the sachet onto the child's meal
5. Mix the meal and feed the child. Do not keep left-over meal. The powder will not change the colour or flavour of the food.
6. If one sachet cannot be finished for one meal, reserve the unused portion and mix with next meal within the same day.

Do not add MNP to hot food or to any hot or cold liquid.

7. Use one sachet per day only.
8. MNP should be stored in a cool and dry place and safe from the reach of children and animals.
9. Do not give MNP to your child if your child is:
 - a. receiving RUTF or RUSF; or
 - b. having illnesses such as malaria.





7. Monitoring and evaluation

Always record the dose of MNPs given on the Child Health Card (LISIO).

Complete the health facility tracking tool for MNP for Children 6-23 months old
Monthly data on MNP distribution should also be recorded in the HMIS.

Monitoring and evaluation indicators

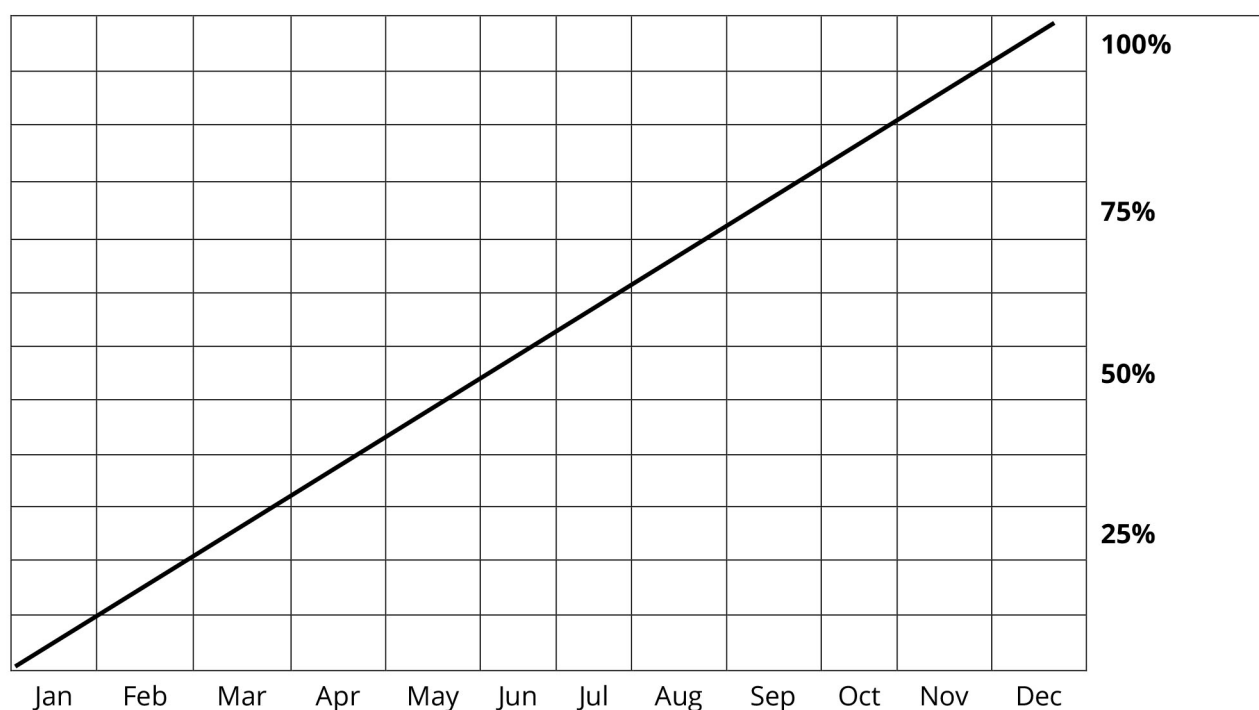
% children 6-23 months provided with MNPs

Tracking Tool for Micronutrient Powder for Children 6-23 months old

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Micronutrient Powder for children 6-23 months old
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Population
												Total received MNP
												Cumulative Total for the year



REFERENCES

WHO Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition. WHO 2013.

Timor Leste Food and Nutrition Survey 2013. MOH, UNICEF, Australian Aid 2015

Home Fortification Technical Advisory Group (HF-TAG), Q&A on home fortification using micronutrient powder (MNP). www.hftag.org





Timor-Leste SNIP Guidelines

MODULE 7:

Prevention of Iodine Deficiency



1. WHO recommendation

All food-grade salt, used in household and food processing should be fortified with iodine as a safe and effective strategy for the prevention and control of iodine deficiency disorders (IDDs), in populations living in stable and emergency settings, regardless of the underlying population risk of IDD¹.

2. Signs and symptoms of iodine deficiency disorders

Iodine deficiency is the single most important cause of the preventable mental retardation in the world, as well as a spectrum of morbidities referred to as iodine deficiency disorders.

Goitre, swelling of the thyroid gland, is the most common manifestation of iodine deficiency in both children and adults. *However, goitre is not recommended for assessing the response to an intervention, as it can take months or years for goitre to regress after the normalisation of iodine intake.*

Severe iodine deficiency during pregnancy results in foetal death or cretinism, marked by severe mental and physical growth retardation.

Mild and moderate deficiency during pregnancy hinders foetal development, and puts children at high risk of speech and hearing defects and impaired motor and physical growth.

Iodine deficiency during infancy and early childhood can also cause irreversible deficits in cognitive development.

Additional effects in women include irregular menstruation, fatigue, dementia, and apathy, delay in pregnancy and stillbirths.

As iodine deficiency signs and symptoms are not visible until considerable damage has been done, the focus of intervention is on prevention.

¹ Guideline: Fortification of food-grade salt with iodine for the prevention and control of iodine deficiency disorders. Geneva, World Health Organization; 2014





Technical Notes

Iodine is a trace element that is an integral part of the thyroid hormones essential for foetal development, regulation of metabolic activities of cells, and proper growth and development. When iodine requirements go unmet, synthesis of thyroid hormones is impaired, resulting in a spectrum of growth, developmental and functional abnormalities referred to as IDD.

WHO estimates that nearly 2 billion individuals worldwide, have insufficient iodine intake. Mountainous areas are particularly susceptible to iodine deficiency, owing to low levels of iodine in the soil and, thus, the locally grown and raised food.

Iodine requirements are greatly increased during pregnancy and lactation, owing to metabolic changes. During pregnancy, maternal thyroid hormone production (i.e., thyroxine) is up regulated and the transfer of thyroxine and iodine from the mother to the foetus is essential for proper brain development and thyroid function in the foetus. Although the rate of production of thyroid hormone returns to normal during lactation, iodine requirements remain elevated, as the breastfeeding mother provides the nursing infant with its sole source of iodine while the infant is exclusively breastfed (WHO, 2013).

Consistent consumption of small quantities of iodine can prevent IDDs and reverse some, but not all, of the negative effects of iodine deficiency. A 2014 WHO review showed that iodised salt has a large effect on reducing the risk of goitre, cretinism, low cognitive function and iodine deficiency.

The body of knowledge around the importance of the effect of iodine intake during pregnancy on the brain is undisputed. Children exposed to iodised salt during gestation, infancy and early childhood have higher IQ and reduced risk of low intelligence compared to unexposed children.

Salt is a good vehicle for iodisation because it is consumed almost universally without seasonal variation; there are relatively few production facilities, simplifying quality control; technology for iodisation is well established; consumer acceptability of iodised salt is high; and iodisation is very inexpensive. However, elevated salt intake results in elevated blood pressure and is associated with cardiovascular disease, and globally most populations consume salt at levels far exceeding needs. Therefore, WHO recommendations seek to reduce population salt intakes to <5g per day.

In specific situations, such as in emergencies, among displaced people and geographically remote areas, where iodised salt may not be accessible, increasing iodine intake should be provided in the form of iodine supplements for pregnant and lactating women, and a supplement or complementary food fortified with iodine for children 6–23 months of age.



3. Situation in Timor-Leste

The TLFNS 2013² found that 26.7% of the population of non-pregnant mothers aged 14–60 had Urinary iodine excretion (UIE) <100µg/L: 13.5% had urinary iodine excretion (UIE) concentrations (<50µg/L). The median UIE among non-pregnant mothers was 170 µg/L.

According to WHO cut-offs, a population median UIE between 100 and 199 µg/L represents adequate iodine nutrition.³

However, there are likely to be wide sub-national variations in population iodine status and the use of adequately iodised salt is required to both prevent deficiency and sustain iodine adequacy. The survey found that only 42.7% of household salt was adequately iodised (iodine level ≥15 ppm). WHO targets for sustainable elimination of IDD require the proportion of households using adequately iodised salt to be >90%.

4. Programme Objective

To achieve sustainable elimination of iodine deficiency disorders in the country by 2025

² Timor Leste Food and Nutrition Survey 2013. MOH, UNICEF, Australian Aid 2015

³ WHO 2013. Urinary iodine concentrations for determining iodine status deficiency in populations. Vitamin and Mineral Nutrition Information System. Geneva: World Health Organization; 2013



5. Pre-requisites for effective coverage

Political commitment, legislation and effective monitoring are essential pre-requisites to ensure that all salt available in Timor-Leste is adequately iodised.

Specific responsibilities pertaining to the Ministry of Health, the Department of Trade and Industry and private sector producers are outlined in the Timor-Leste Draft Iodisation of Salt Law to ensure that adequately iodised salt reaches the entire population, and particularly vulnerable groups such as young children and pregnant women. The process requires the establishment of effective mechanisms to ensure that iodine levels in salt are continuously checked along the food chain, from the iodisation site to the household. Such monitoring requires commitment by government and the salt industry and close collaboration between the public and private sectors.

Health workers play a role at community and individual level to raise awareness on use of adequately iodised salt:

Health worker skills

- Knowledge of the need for iodine as part of a healthy diet
- Negotiation and awareness-raising skills to impart key messages to all community members, including how to test and use iodised salt
- Practical experience to assist people to identify iodised salt through examining the packaging prior to purchase, and use of rapid test kits (when available) to test salt for iodine at community and household level
- Ability to advise on avoiding over-consumption of salt and the associated risks in terms of raised blood pressure and cardiovascular disease.

Job aids

Job aid on key messages

Supplies

Rapid test kits could be provided to facilitate checking of iodine content of salt during household visits. They can also be used as a tool during education and awareness-raising sessions to demonstrate iodised salt.



6. Interventions and process

There are three major components of a sustainable programme to eliminate IDD: political support, administrative arrangements, and assessment and monitoring systems.

Political support refers primarily to support at governmental level, through the Minister of Health and the executive group of government (Cabinet or equivalent). Political support for the elimination of IDD depends on community awareness and understanding of the problem.

Administrative arrangements:

The successful achievement of the process requires the establishment of a national IDD control commission, with full political and legislative authority to carry it out.

The process entails six components:

1. Assessment of the situation requires baseline IDD prevalence surveys, including measurement of urinary iodine levels and an analysis of the salt situation.
2. Dissemination of findings implies communication to health professionals and the public, so that there is full understanding of the IDD problem and the potential benefits of elimination.
3. Development of a plan of action includes the establishment of an intersectoral task force on IDD and the formulation of a strategy document on achieving the elimination of IDD.
4. Achieving political will requires intensive education and lobbying of politicians and other opinion leaders.
5. Implementation needs the full involvement of the salt industry. Special measures, such as negotiations for monitoring and quality control of imported iodised salt, will be required. It will also be necessary to ensure that iodised salt delivery systems reach all affected populations. In addition, the establishment of cooperatives for small producers, or restructuring to larger units of production, may be needed. Implementation will require training at all levels in management, salt technology, laboratory methods, and communication.
6. Monitoring and evaluation require the establishment of an efficient system for the collection of relevant scientific data on salt iodine content and urinary iodine levels.





Assessment and Monitoring System

Measurements of salt and urinary iodine provide the essential elements for monitoring whether IDD is being successfully eliminated.

In order to be effective, the surveillance system needs:

- laboratories, for measurement of salt iodine and urinary iodine, which are available at the national level with some support from international laboratories for quality control: use of regional reference laboratories is important for sample exchange to ensure external quality control; and
- production quality assurance charts and databases at the national level, for recording the results of the regular monitoring procedures – particularly for salt iodine, urinary iodine, thyroid size and, when available, neonatal Thyroid Stimulating Hormone (TSH).

These facilities must be backed up by the provision of adequate resources. Money, trained manpower, equipment, and materials are also required to support the implementation of salt iodisation and the establishment of monitoring systems.

Programme actions should seek to achieve the 10 indicators for IDD elimination (WHO, ICCIDD, UNICEF), which are:

1. An effective, functional national body (council or committee) responsible to the government for the national programme for the elimination of IDD
2. Evidence of political commitment to universal salt iodisation and the elimination of IDD;
3. Appointment of a responsible executive officer for the IDD elimination programme;
4. Legislation or regulations on universal salt iodisation (while ideally regulations should cover both human and agricultural salt, if the latter is not covered this does not necessarily preclude a country from being certified as IDD-free);
5. Commitment to assessment of progress in the elimination of IDD, with access to laboratories able to provide accurate data on salt and urinary iodine;
6. A programme of public education and social mobilisation on the importance of IDD and the consumption of iodised salt;
7. Regular data on salt iodine at the factory, retail and household levels;
8. Regular laboratory data on urinary iodine in school-aged children, with appropriate sampling for higher risk areas;
9. Cooperation from the salt industry in maintenance of quality control; and

10. A database for recording of results or regular monitoring procedures, particularly for salt iodine, urinary iodine and, if available, neonatal TSH, with mandatory public reporting.

This guideline recognises that salt reduction to <5 g/day and salt iodisation are compatible public health interventions. Monitoring of sodium (salt) intake and iodine intake at country level is needed to adjust salt iodisation over time as necessary, depending on observed salt intake in the population, to ensure that individuals consume sufficient iodine despite reduction of salt intake. Iodisation of salt should not justify promotion of salt intake to the public.

The national distribution of salt consumption is an important factor: sufficient iodine should be supplied to most members of the population, even those with the lowest salt intake, while at the same time preventing excessive iodine supply to those individuals whose salt intake remains high. Particular attention should be given to identifying potential barriers to equitable access for all population groups needing iodine-fortified salt.

Clear legislation should be established for food producers and distributors, especially where the main source of dietary salt is processed foods and meals consumed outside households. Legislation should cover not only proper iodisation of salt, but also the salt content of industrialised food products.

The Timor-Leste draft Law on salt iodisation should be ratified in order to enforce legislation and control measures to ensure all salt produced or imported into the country is adequately iodised, labelled as such and packaged appropriately. Further to this, all salt used in food service establishments or in food manufacturing will be required to be adequately iodised.

At the community level, *all households should be encouraged to purchase and consume only adequately iodised salt*. Particularly vulnerable groups include pregnant women and young children, as infant and child growth and mental health may be impaired by IDD, as can the mental health of mothers.

Role of the Health Worker

Health workers need to create awareness in the community around the necessity of using ONLY iodised salt and the important role of iodine for health and nutrition.

Key actions

- At every opportunity when mothers or children present at health facilities or at community gatherings:

Encourage households to use ONLY iodised salt for preparing food for the entire family. This can be done by discussing healthy diet and by advising families how to identify iodised salt in the market.



- ▶ Group counselling can be conducted in health clinics or during school visits alongside testing salt with rapid test kits:

Rapid test kits (RTK) are small 10–50 ml bottles containing a stabilized starch-based solution. One drop of the solution dripped on a teaspoon of salt containing iodine produces a blue/purple colour change. Colouration indicates that iodine is present. The colour does not tell you how much iodine is present. The kits are appropriate to indicate the presence or absence of iodine, but not of the concentration.

Rapid test kits can also be used to test salt for iodine during household visits, where appropriate or during specific campaigns. The test not only identifies whether salt is iodised, but leaves a lasting impression on people, that reinforces the importance of using only iodised salt.

- ▶ Advise families not to increase their normal consumption of salt and caution on the risks of excessive salt intake and disease.

7. Monitoring/Tracking process

The sustainable elimination of IDD requires that:

- Median urinary iodine levels in the target population are at least 100 µg/l and no more than 20% of values are below 50 µg /l;
- At least 90% of households are using salt with an iodine content of 15 parts per million (ppm) or more; and
- There is evidence of sustainability, as judged by the attainment of at least eight out of ten specified programmatic indicators in the Interventions and process section above.

Establishment of an efficient system for the ongoing and routine collection of relevant data, including measures of quality assurance and household use of iodised salt and measures of programme performance, is critical to ensure programmes for iodised salt are effective and sustained.

Monitoring both industry efforts in fortification and consumer behaviour related to consumption of food-grade salt and industrialised processed foods containing non-iodised salt is key to identifying gaps for effective scale-up and sustainability.



Monitoring of food-grade salt quality is essential to ensure both efficacy and safety of the process of iodine fortification. Monitoring of urinary iodine excretion (UIE) and urinary iodine concentration (UIC) is useful not only to detect deficiency but also to detect excessive intakes and therefore prevent the health risks of iodine excess, by adjusting the level of iodine fortification accordingly, as part of a monitoring system. Countries should determine iodine losses from iodised salt under local conditions of production, climate, packaging and storage. For these reasons, iodine losses may be extremely variable and influence the additional amount of iodine that should be added at factory level.

Identifying the barriers to an effective supply of iodised salt, and the barriers to strengthening consumer demand for iodised salt, prevents widening of unequal distributions of the benefits of health innovations.

Monitoring salt iodisation at production sites and in markets should be undertaken routinely by MOH and Ministry of Commerce, Industry and Environment in accordance with the Timor-Leste National Nutrition Strategy 2014–2019.

Monitoring household use of iodised salt and tracking progress in reduction of iodine deficiency are activities that are currently undertaken through national surveys at periodic intervals.

Monitoring and evaluation indicator for health workers

Indicator: % of households (families) consuming iodised salt

Health workers can monitor uptake and acceptability of iodised salt through recording the number of households using iodised salt during household visits.





REFERENCES

International Council for Control of Iodine Deficiency Disorders, United Nations Children's Fund, World Health Organization (2001). Assessment of Iodine Deficiency Disorders and Monitoring their Elimination. A guide for programme managers. Second edition.

Guideline: Fortification of food-grade salt with iodine for the prevention and control of iodine deficiency disorders. Geneva, World Health Organization; 2014

WHO 2014 Effect and safety of salt iodization to prevent iodine deficiency disorders: a systematic review with meta-analyses. Aburto, Nancy J. Abudou, Minawaer. Candeias, Vanessa, Wu, Tiixiang. World Health Organization. 2014

WHO 2013. Urinary iodine concentrations for determining iodine status deficiency in populations. Vitamin and Mineral Nutrition Information System. Geneva: World Health Organization; 2013

Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition. WHO 2013

Timor-Leste Food and Nutrition Survey 2013. MOH, UNICEF, Australian Aid 2015





Timor-Leste SNIP Guidelines

MODULE 8:

Implementing Integrated Management of Acute Malnutrition (IMAM)





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Abbreviations and Acronyms

>	Greater than
<	Less than
A	Absent
ANC	Ante Natal Care
BCC	Behaviour Change Communication
C	Continued
CHC	Community Health Centre
IMAM	Community-based Management of Acute Malnutrition known as Jestaun Malnutrisaun Aguda iha Kommunitade (JMAK) in Timor Leste
DC	Discharged Cured
DD	Discharged Defaulter
DDd	Discharged Dead
DHS	District Health Services
DNR	Discharged Non Respondent
FBF	Fortified Blended Food
GAM	Global Acute Malnutrition
GDRTL	Government of Democratic Republic of Timor-Leste
HF	Health Facility
HMIS	Health Management Information Services
HP	Health Post
IEC	Information Education and Communication
IMCI	Integrated Management of Childhood Illness
IYCF	Infant and Young Child Feeding
IV	Intravenous
JMAK	Jestaun Malnutrisaun Aguda iha Komunitade; Community-based Management of Acute Malnutrition
KONSSANTIL	National Council on Food Security, Sovereignty and Nutrition of Timor-Leste
LISIO	Livrinho Saúde Inan ho Oan; Health book for mothers and children
LNS	Lipid-based Nutrient Supplement
LoS	Length of Stay
LW	Lactating Women
MAM	Moderate Acute Malnutrition
MCHN	Mother and Child Health and Nutrition
MND	Micro Nutrient Deficiency
MNP	Micro Nutrient Powder
MoH	Ministry of Health
MUAC	Middle Upper Arm Circumference
NA	Nutrition Assistant
NA	New Admission
ND	Nutrition Department
NFP	Nutrition Focal Point



OTP	Outpatient Therapeutic Programme (also referred to as Outpatient Therapeutic Care)
PHC	Primary Health Care
PNC	Post Natal Care
PSF	Promotor Saude Familia, Community Health Volunteers
PW	Pregnant Women
R	Referred
RAD	Return After Default
RDC	Readmission Discharged Cured
RNI	Recommended Nutrient Intake
RNR	Readmission Non-Respondent
RUF	Ready to Use Food
RUSF	Ready to use Supplementary Food
RUTF	Ready to use Therapeutic Food
SAM	Severe Acute Malnutrition
SF	Supplementary Food
SISCA	Serviço Integrado de Saude Comunitaria; mobile health clinic
SNF	Specialised Nutritious Food
T	Transferred
TAIS	Timor Leste Asistencia Integrada Saude
TL	Timor Leste
TSFP	Targeted Supplementary Feeding Programme
TV	Timor Vita
UNICEF	United Nations Children's Fund
WFH	Weight For Height
WFP	World Food Programme
WHO	World Health Organization

Introduction

According to the Timor Leste Food and Nutrition Survey 2013 (TLFNS 2013), the prevalence of stunting, wasting, and underweight among children aged 0–59 months is 50.2% (95%CI: 49.2%–51.2%), 11% (10.4%–11.6%), and 37.7% (36.7%–38.7%) respectively.¹ The prevalence of severe acute wasting is 1.9% (1.6% – 2.2%), while the prevalence of moderate acute wasting is 9.1% (8.5% – 9.7%). Malnutrition is associated with frequent infections and poor health, less schooling, reduced economic productivity and low birth weight infants. Therefore, prevention and treatment of maternal and child malnutrition is a sound investment for the socio-economic development of the country. Acute malnutrition in children under five years of age increases their risk of death, inhibits their physiological and mental development and has life-long implications for their health.

The Integrated Management of Acute Malnutrition (IMAM) approach uses a case-finding and triage approach to provide nutrition and medical care to acutely malnourished children, according to their individual needs. IMAM is known as Jestaun Malnutrisaun Aguda iha Komunidade (JMAK) in Timor Leste.

These guidelines should be used by:

- ▶ Health service providers who are responsible for the care and treatment of children 6–59 months with acute malnutrition and malnourished PLW;
- ▶ Supervisors responsible for monitoring and reporting on management of acute malnutrition; and
- ▶ Policy makers and programme managers to aid the planning, design, implementation, supply chain management, monitoring and evaluation of IMAM programmes

¹ Timor Leste Food and Nutrition Survey 2013, Ministry of Health, 2014



Chapter 1: IMAM in the context of Timor-Leste

Target groups

- acutely malnourished children less than five years
- acutely malnourished pregnant and lactating women whose child is less than 6 months old (PLW)

The components of IMAM

The IMAM approach has four components:

Community outreach: this aims to improve effectiveness through early detection of cases and maximizing coverage. 'Active case finding' and community sensitisation are ways of achieving this and existing community networks can be used where possible. The follow-up of cases where required, is also a component of community outreach.

Targeted supplementary feeding programme (TSFP): Children with moderate acute malnutrition (MAM) and pregnant and lactating women with acute malnutrition are provided take-home rations every month. Moderately acutely malnourished children with complications are referred for medical treatment but continue in the TSFP.

Outpatient therapeutic programme (OTP): Children 6–59 months with severe acute malnutrition (SAM) WITH appetite and WITHOUT medical complications are treated with Ready to Use Therapeutic Food (RUTF) and routine medications. They can be managed at home with regular visits to the health facility. The majority of children with SAM (>85%) can be managed successfully in this way without any need for inpatient care.

Infants with SAM who are gaining weight, effectively feeding and have no medical complications can be managed in OTP.

Inpatient care: Severe acutely malnourished children WITHOUT appetite and/or WITH medical complications are treated as inpatients until stabilised. Infants < 6 months with SAM who are not gaining weight, ineffectively feeding and have medical complications are managed in in-patient care. Neonates should be treated on the paediatric ward due to the need for specialized care.

In Timor Leste, IMAM services are integrated with other child health and nutrition services provided through the existing basic health package. As IMAM is one component within SISCa activities, children with acute malnutrition can be identified and followed up through SISCa.



How the IMAM components work in Timor-Leste:

1. Community Mobilisation

This involves PSFs work together with community leaders and health workers to routinely identify cases of malnutrition in the community and follow up children already receiving treatment for malnutrition. Through community participation, communities are continuously encouraged to attend SISCa every month to receive health services and PSFs create awareness within the community about the IMAM programme. Community mobilisation is ongoing. Information is provided in chapter 2.

2. Supplementary Feeding Programme

Children and PLW are supported through the existing MoH maternal and child health Supplementary Feeding Programme which is normally provided at SISCa points, CHCs and health posts.

3. Outpatient Therapeutic Programme/Care

Children attend OTP biweekly/weekly at the CHC, health post or SISCa where a health worker provides a regular check-up following the IMCI protocols. If a child has deteriorated or failed to improve, s/he is referred to the nearest inpatient centre for stabilisation/ investigation.

4. Inpatient care

Inpatient care can be provided at a CHC with inpatient facilities or at a referral hospital. Medical conditions are stabilised and children are then transferred to an OTP at their nearest CHC or health post to continue with treatment while at home. Inpatient care will normally take three to seven days to stabilise the child's condition before being discharged to OTP.

By establishing IMAM CHCs, health posts and SISCa points, this will improve coverage and access for nutrition services and also strengthen the quality of inpatient care and community participation activities.

Given the importance of the need to improve nutrition in the first 1,000 days of life and acute malnutrition is often strongly attributable to poor caring practices, infant and young child feeding (IYCF) services are often integrated into IMAM programmes. Aspects on maternal nutrition should also be included as should education sessions on good hygiene practices.





Chapter 2: Community Mobilisation

Community outreach refers to a series of participatory activities which aim to:

- Raise awareness about the IMAM programmes, facilitate understanding of the programme (e.g. target population, programme components etc.) and minimise barriers to accessing treatment
- Identifying malnourished children as early as possible
- Maximizing programme coverage and uptake
- Minimise defaulter rates

It is more likely to be successful if one person (i.e. Health Promotion Officer) can be identified to coordinate all the community mobilisation activities either at District, Sub-district or CHC level. The person will have to work hand in hand with the District Nutritionist and CHC manager with the support of the health workers to ensure that the community mobilisation activities are being implemented.

Stages of Community Mobilisation

There various elements that are involved in community mobilisation.

1. Understanding community's socio-cultural characteristics

The context and characteristics of the community will help shape the programme. While a health-worker may already know this information, it is useful to think how it can positively contribute to IMAM service delivery and demand. Group discussion and interviews with key community figures and groups and organisations can help gather further information if required.

- Identify the best channels of communication channels to transfer information*
 - Asses the formal and informal channels of communication in the area.
 - The **informal channels** (e.g. market places, women gathering at water points, ceremonies such as sacrifice rituals to ancestral spirits, weddings, funerals, etc.) and formal (e.g. posters, community meetings are good venues for health workers to share information and to open up dialogue with the community members).
- Explore into the health attitudes & health seeking behaviour.*
 - Look for local terms for malnutrition – “horok” (mambae, “Hork”) “maun bobon”, “maun boten”, “sibira”, the perceived causes and common local solutions such as;
 - Moral conduct of the child or parents e.g. trespassing or stealing other people’s property then suffers from



- The displeasure of ancestors or the keepers of ancestral power. Failure to perform the expected annual rituals or to contribute animals or resources to these rituals might cause a person or their child to be struck with illnesses of swelling or wasting.
- Exposure to a bad or “dirty” wind and breastfeeding a child after conceiving a second one is thought to put the breastfeeding child at risk of thinness.
- o Identify factors that may hinder communities from accessing services from the health facilities.

2. Community Sensitisation

a) *Formulation of Sensitisation Messages:*

The messages need to be brief but comprehensive enough. It should include basic information about the IMAM programme such as:

- Target population
- How are children identified
- Where is the treatment available
- What happens on arrival at the clinic
- The type of treatment they receive
- Duration of treatment

Messages designed for a village audience will need to utilize the local disease names commonly associated with wasting and swelling. Annex 2 contains a sample of IMAM sensitisation messages.

Visual aids (see Annex 2) should be used to enhance the impact of the message.

b) *Dissemination of the Message:*

Key messages about IMAM can be conveyed by PSF using the most common channels of communication (both informal and formal) identified and to anyone presenting at health facility level, such as at the ante-natal clinic.

- o Discuss the message with key community figures such as those listed above. It is important to make it a participatory discussion of the message with key community members, rather than teaching/lecture sessions.
- o Involving existing community organisations and groups (e.g. women’s association, youth groups etc.) can further strengthen the dissemination of information.
- o In Timor-Leste community sensitisation can be done through:
 - Community meetings at suco and aldeia levels
 - Mass communication e.g. community radios, posters
 - Nutrition education in hospitals, CHCs Health Posts, SISCA and in the communities
 - Social gatherings/meetings (traditional dance, song, drama, performance, cock fights etc.)
 - Interpersonal communication



3. Case Finding

Infants, children and PLW with acute malnutrition need to be identified as early as possible and referred for treatment. Case finding is a way of achieving this.

Cases can be screened through:

- ◆ House to house visits
- ◆ Screening at all SISCA, CHC or Health Posts
- ◆ Screening at community meetings, health campaigns in the community and at other opportunities
- ◆ Growth monitoring sessions, health facilities, paediatric wards

Children 6-59 months and PLW are identified as malnourished by measuring the **mid-upper arm circumference (MUAC)** (Annex 3) and assessing for **bilateral pitting oedema** (Annex 4). Infants are identified by low birth weight, presence of oedema, lack of weight gain or visible signs of wasting. If they qualify for OTP or SFP or in-patient care they should be referred to the appropriate sites immediately.

MUAC measurement	Colour code	Status	Action required
What does MUAC measurement mean for Children 6-59 months?			
MUAC < 115 mm	Red	Severe Acute Malnutrition (SAM)	Refer to OTP *
MUAC ≥ 115 mm - < 125 mm (Yellow) = Moderate Acute Malnutrition (MAM)	Yellow	Moderate Acute Malnutrition (MAM)	Admit to TSFP
MUAC ≥ 12.5 cm	Green	Normal	Explain the child is well-nourished and no further action is required
What does MUAC measurement mean for PLW?			
MUAC < 23 cm	Red	Acute Malnutrition	Admit to TSFP
MUAC ≥ 23 cm	White	Normal	Explain the mother is well-nourished and no further action is required

*at OTP the child will be assessed to see whether he/she meets the criteria for in-patient and if so, will be referred to in-patient care.

What action to take if there is bilateral pitting oedema:

Grade	Description	Action required
+ 1 Oedema	Bilateral pitting oedema only on the feet	Refer to OTP
+2 Oedema	Bilateral pitting oedema on Feet, lower legs (may include hands and lower arms)	Refer to OTP
+3 Oedema	Bilateral pitting oedema of legs and arms and includes facial oedema with swelling around the eyes	Refer to in-patient care

Infants < 6 months

Severe acute malnutrition in infants who are 0–5 months of age is defined as:

Weight-for-length less than –3 Z-score or presence of bilateral pitting oedema;

Infants who are less than 6 months of age with severe acute malnutrition and any of the following complicating factors should be admitted for inpatient care:

- any serious clinical condition or medical complication as outlined for infants who are 6 months of age or older with severe acute malnutrition;
- recent weight loss or failure to gain weight;
- ineffective feeding (attachment, positioning and suckling) directly observed for 15–20 min, ideally in a supervised separated area;
- any pitting oedema;
- any medical or social issue needing more detailed assessment or intensive support (e.g. disability, depression of the caregiver, or other adverse social circumstances) (strong recommendation, very low quality evidence).

Infants with severe acute malnutrition who DO NOT have any complications should be admitted to the OTP.

If referring a child or mother for treatment, provide the mother or carer with a referral slip, explain to them that their nutritional status is poor and they need to seek nutritional assistance to improve their health and nutrition.

4. Follow-up

This involves visiting certain patients from both TSFP and OTP in their homes to investigate the reasons for their absence or defaulting or poor recovery, and to determine any need for special attention during the next health centre visit. The following children are followed up:

- Children who are clinically at risk i.e. static weight /MUAC or small gains and losses in weight



- Weight or medical condition does not improve within 3 weeks
- Child was initially treated in ITP or caretaker refused to go to ITP
- The child has been absent or defaulted from the programme

During the visit their health condition, environmental sanitation and food situation is checked

Who can do or assist in the follow up?

- o Community volunteers e.g. PSF, TBAs,
- o Traditional Healers
- o Mothers/caregivers whose children have successfully been treated or whose children are recovering in IMAM

How to do the follow-up?

- o Health workers at each facility should be responsible for coordinating follow-up visits with the community volunteers. After the OTP day, the child's monitoring card is reviewed with the assigned community worker and areas for special attention highlighted during home visits. If the volunteer is not present during the OTP session, then a message has to be sent to him or her to check on the cases requiring follow up in his/her village.
- o The volunteer (PSF) visits the identified cases in their homes according to action protocol (see Annex 16) and give appropriate health education depending on condition of the child and the home.
- o It is important to gain an understanding of the reasons for absence/default and to encourage return to the programme. The absentees and defaulters should not be reprimanded as this can discourage return.
- o Where feasible, the volunteers should record all follow-up visits in a register or exercise book if literate and report the results to the responsible health worker. Otherwise, volunteers can give a verbal report and the responsible health worker should document the feedback.

Ongoing Community Dialogue/Engagement

Community mobilisation should be seen as a constant dialogue in which communities can periodically voice their views and suggest alternative courses of action. Regular contact with the community can help identify new barriers to access and can thus provide a timely, joint solution to any such obstacles.





Chapter 3: Nutrition Education

Nutrition education aims to prevent children and mothers from becoming malnourished and requiring treatment. A variety of methods and tools can be used to create awareness among community members regarding nutrition and promote appropriate feeding practices through behavioural change communication (BCC). A IMAM programme can act as a useful platform for delivering nutrition education. This can be delivered at different levels from health facilities to SISCa, and household level.

a) Health education at health facilities

TSFP and OTP presents a good opportunity for health education. The gathering of mothers and caregivers is a good opportunity for health education. Caregivers can also be counselled at an individual level at TSFP, OTP and in-patient care. However, it is recommended not to provide too many messages at once to avoid overload with too much information.

- Clear information should be given on hygienic use of the ration and how and when it should be consumed.
- Practical preparation and cooking demonstrations should be given at the TSFP site.
- It is essential that messages be reinforced by practice. These messages should focus on:
 - o Basic hygiene such as hand washing with soap at critical moments²
 - o The importance of frequent and active feeding and what local foods can be given to young children;
 - o Identifying acute malnutrition (when to bring children for treatment);
 - o Recognizing signs of illness in children.

b) Nutrition education at community level

Screening points including SISCa, mobile clinics and home visits can be used to provide key messages on health, nutrition and hygiene.

The key messages for PLW and children would include but are not limited to the following:

- Early initiation of breastfeeding
- Exclusive breastfeeding for first six months
- Timely and appropriate introduction of complementary feeding from six months
- Continuation of breastfeeding up to two years or beyond
- Use of a variety of locally available food including animal products to enhance dietary diversity
- Proper and balanced diet during pregnancy and lactation

² After using the toilet, changing a nappy, before food preparation, before feeding children or eating.





- Care for Food safety,
- Washing hands with water and soap
- Hygiene and sanitation

These messages are outlined in more detail in other SNIP guidelines.

The key practices to support infant and young child nutrition:

6 key practices of breastfeeding:

1. Initiate breastfeeding within 1 hour of birth
2. Breastfeed exclusively for the first 6 months – no teas, no water, no honey – nothing but breastmilk
3. Continue to breastfeed until 2 years and beyond
4. Breastfeed frequently, on demand, day and night
5. Continue to breastfeed when the child or mother has a common illness
6. Avoid artificial nipples, like pacifiers, dummies or bottles

9 key practices of complementary feeding:

1. Start to give foods when the baby is 6 months old and continue to breastfeed until the child is 2 years or older
2. Practise good hygiene and proper handling of food
3. Feed responsively – allow baby to lead feeding and respond to signs
4. Increase the amount of food as the child gets older, and continue to breastfeed
5. Change the texture and consistency to match the growing child's needs and abilities
6. In addition to breastmilk feed babies frequently increasing the number of times a day the baby is fed (babies aged 6-7 months should be fed at least 3 times a day, increasing to 5 times a day as the child reaches 1 year of age)
7. In addition to breastmilk feed babies a variety of foods
8. Give babies fortified foods, micronutrient supplements (vitamin A and deworming according to protocols – see guidelines), including MNPs from 6-23 months
9. Continue to breastfeed during illness and give extra food, more often after illness.

Source: INS NFS IYCF training module



Management of acute malnutrition in infants and children aged 6 months to 5 years using mid-upper arm circumference (MUAC)



Notes:

¹ Source: WHO, 2013. Guideline updates on the management of severe acute malnutrition in infants and children.

² Clinically well: Child has no any danger signs as per IMCI guidelines such as unable to drink or breastfed; vomits everything; has had convulsion; lethargic or unconscious.

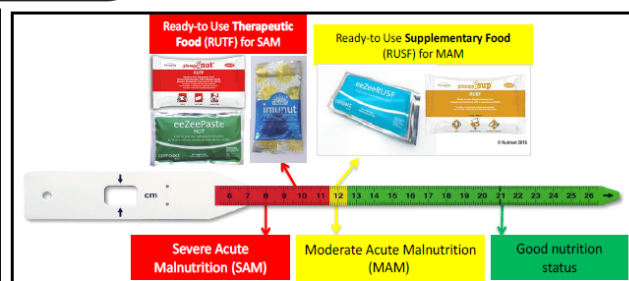
³ If a child does not have any complication but with severe (+++) oedema on both feet, the child should be admitted for in-patient care.

⁴ Appetite Test: is a test to ensure that an acute malnourished child has appetite for consuming RUTF (for SAM) or RUSF (for MAM).

⁵ Routine medicine: vitamins, medicine, and antibiotic administered as part of SAM treatment.

⁶ If the child fails to respond to MAM treatment after 4 months, sends the child for medical investigation.

⁷ If the child fails to respond to SAM treatment after 3 months, sends the child for medical investigation





Chapter 4. Targeted Supplementary Feeding Programme

Objectives of TSFP

The Targeted Supplementary Feeding Programme (TSFP) is aimed at moderately acutely malnourished children 6–59 months and malnourished pregnant and lactating women, to improve their nutritional status and to prevent mortality and morbidity among these vulnerable groups and their new-borns.

The specific objectives of TSFP are:

- To rehabilitate children 6–59 months with MAM
- To prevent children with MAM from developing SAM
- To prevent mortality and morbidity associated with MAM
- To prevent deterioration of maternal nutritional status and subsequent poor birth outcomes

Target group

- a) Children 6–59 months
- b) pregnant women within six months before giving birth
- c) Breastfeeding women up to six months after giving birth

Basic requirements for implementing the TSFP

WHO: TSFP is operated under the guidance of the nutrition coordinator, assistant, or focal point available at the health facility. A nurse, midwife or a doctor could also oversee the TSFP.

WHERE: TSFP is operated at targeted HPs, CHCs and Referral Hospitals

WHEN: TSFP sessions will be operating on daily basis at the health facilities

Basic equipment and supplies for TSFP

Basic equipment	Basic supplies
• MUAC tapes for children and PLW • Cooking utensils for cooking demonstration (in case FBF) • Water and soap for hand washing	• Supplementary food ration (FBF and RUSF in adequate quantity) • TSFP Referral slip • TSFP ration cards • TSFP enrolment cards • TSFP stock cards • TSFP Monthly log • Key messages on MAM/nutrition • Essential medicines required for routine medical protocol for TSFP

TSFP Admission Criteria

The table below describes the TSFP admission criteria

Category	Criteria
New admissions in TSFP	
Children 6-59 months	MUAC $\geq$ 115 mm – < 125 mm (Yellow) and no oedema
Pregnant (2nd and 3rd trimester)	MUAC < 23 cm
Lactating women (whose child is less than six months)	MUAC < 23 cm
Re-admissions in TSFP	
Readmission Discharged Cured (RDC):	Children and PLW who have been discharged cured from TSFP but again meet the admission criteria
Return After default (RAD)	Children and PLW who return to the program after defaulting and meet admission criteria within 2 month
Readmission Non-Respondent (RNR):	Children and PLW who were discharged non-respondent and referred for further medical check-up, returns to the program following necessary medical actions and meet admission criteria
Transfers	
Transfer from one site to another	Children and PLW transferred from one TSFP site would be admitted in the other upon necessary documentation*

*former TSFP site provides a written request to the beneficiaries for the enrolment in the new TSFP site



Those eligible to be admitted in the TSFP may arrive through different mechanisms:

- Referrals by health staff at SISCa, mobile clinics and PSF (Community Health Volunteers) after screening for moderate acute malnutrition using MUAC at the community level. These health staff will give the mother/caretaker a referral slip with the MUAC status marked and ask the caretakers to take the child to the nearest operational TSFP at CHC/HP.
- Self-referral – child is brought to health facility directly by caretaker without referral from community health workers or volunteers.
- Referrals by health care providers at the health facility level or from other health and nutrition programmes, such as a growth monitoring, paediatric ward, inpatient care.

TSFP Discharge criteria

Table 2 below describes the TSFP discharge criteria. The maximum length of stay (LoS) for children is four months in the program. Children who do not reach the discharged cured criteria within four (4) months will be discharged as non-respondents as there might be some other underlying cause/ infection that impedes the treatment of the child. The maximum LoS for PLW is six (6) months. The maximum length of stay for a pregnant woman in the programme is from the start of her second trimester until the delivery. A breastfeeding mother can stay in the programme until her child is six months old.

Discharge Categories	Discharge Criteria Children 6-59 months	PLW
Discharge Categories		
Discharged Cured (DC)	MUAC $\geq$ 125 mm	PW: MUAC $\geq$ 23 cm LW: MUAC $\geq$ 23 cm or when child gets 6 months old (whichever comes first)
Discharged Defaulter (DD)	Absent for two consecutive months	Absent for two consecutive months
Discharged Non-Respondent (DNR)	Did not reach discharge cured criteria within four (4) months is discharged non-respondent and referred to other health facilities to investigate underlying causes of poor response/ ill health	PLW who do not meet discharge cured criteria within six (6) months will be discharged as non-respondent and referred for further medical check-up and treatment
Discharged Dead (DDd)	Died during time registered in TSFP	Died during time registered in TSFP
Other Exit categories		
Transfer (T)	Transferred to other TSFP due to family movement	Transferred to other TSFP due to family movement
Referred (R)	Condition has deteriorated and child is referred to other component of IMAM (OTP, ITP)	Referred to other health facilities for medical check-up and treatment

TSFP Implementation

STEP 1: Screening of children 6–59 months and pregnant and lactating women

There are four screening steps that should be carried out when a child or PLW comes to the TSFP>

- Check the mid-upper arm circumference (MUAC)
- Check for bilateral pitting oedema
- Checking for any medical complications
- Check for appetite.

These four steps of screening are described below in relation to the TSFP.

Screening with MUAC

How to take a MUAC measurement is described in Annex 3.

The table below explains how to categorize the nutritional status of a child or PLW nutritional status according to the MUAC measurement and the action required.

MUAC measurement	Colour code	Status	Action required
What does MUAC measurement mean for Children 6-59 months?			
MUAC < 115 mm	Red	Severe Acute Malnutrition (SAM)	Refer to OTP *
MUAC ≥ 115 mm - < 125 mm (Yellow) = Moderate Acute Malnutrition (MAM)	Yellow	Moderate Acute Malnutrition (MAM)	Admit to TSFP
MUAC ≥ 12.5 cm	Green	Normal	Explain the child is well-nourished and no further action is required
What does MUAC measurement mean for PLW?			
MUAC < 23 cm	Red	Acute Malnutrition	Admit to TSFP
MUAC ≥ 23 cm	White	Normal	Explain the mother is well-nourished and no further action is required

*at OTP the child will be assessed to see whether he/she meets the criteria for in-patient and if so, will be referred to in-patient care.

Children and PLW who are on the border line of being acutely malnourished i.e. having MUAC equal to 125 mm or equal to 23 cm respectively would be asked to come for a follow-up screening visit next month to monitor whether their nutritional status has deteriorated and if any nutritional assistance is needed.

Checking for the presence of bilateral pitting oedema:

How to check bilateral pitting oedema is described in Annex 4.

Bilateral pitting oedema is classified in to three categories. No-one with oedema should be enrolled in the TSFP. Such children are severely malnourished and should be referred to OTP or ITP as per the grading of oedema.

Grade	Description	Action required
+ 1 Oedema	Bilateral pitting oedema only on the feet	Refer to OTP
+2 Oedema	Bilateral pitting oedema on Feet, lower legs (may include hands and lower arms)	Refer to OTP
+3 Oedema	Bilateral pitting oedema of legs and arms and includes facial oedema with swelling around the eyes	Refer to in-patient care

*If there is no appetite or complications case will be referred to in-patient care (see Chapter 5)

STEP 2: Medical Assessment

A skilled trained health care provider must assess the child's medical condition. The assessment includes taking a history of the child's condition from the caretaker and a full medical examination to rule out medical complications that may require that the child is transferred to inpatient care. The health care provider also assesses the medical condition of the PLW and will refer them to medical check-ups and treatment if required.

Children and PLW with medical complications should be referred for treatment but can stay in the TSFP.

STEP 3: Acceptability test for children who will receive Ready To Use Supplementary Food (RUSF)

The acceptability of RUSF for children should be assessed to see if they are able to eat the RUSF necessary for recovery. Ask the caregiver to wash her/his hands and the child's hands with soap. Show the caregiver how to use the supplementary food. Give the mother/caregiver supplementary food and ask the caregiver to give the RUSF to the child and watch to see if the child eats it. If the child is reluctant to eat the RUSF, the caregiver and child should be moved to a quiet and private area to encourage the child to take the RUSF, while the health care provider watches. This may take up to one hour. It is essential that the health care provider observes the child eating at least two small spoonfuls of RUSF. Care must however be taken to ensure the child is not forced to eat. The following table explains more about the acceptability test.

Acceptability	Observation	Action
Good	Child takes RUSF eagerly	Enrol in TSFP and send child home with monthly ration
Poor	Child takes RUSF with persistent encouragement	Enrol in TSFP and child can take the ration home but must be observed carefully for any weight loss or clinical deterioration
Refused	Child refuses RUSF even after persistent encouragement	Enrol in TSFP and discuss with the caregiver what the child likes to eat at home, how is their appetite in general and if necessary refer for medical care. Give the child the ration and arrange either a home visit or clinic visit within the coming days and subsequent regular follow-up. Discuss ways in which the RUSF could be gradually introduced into the child's current diet.

STEP 4: Enrolment and registration in the TSFP

Once the health facility staff confirms that they are eligible for the TSFP admission, cases are enrolled in the TSFP programme. The health staff should clearly explain to the caregivers of the children and PLW that they need to be enrolled in the programme because their nutritional status is poor and if not given timely assistance their health would further deteriorate and they could be prone to infections, diseases and even death. The beneficiaries of the programme must be informed that they have to come for a regular monthly visit to complete their treatment episode until discharged from the program.

The enrolment process at the TSFP requires filling the following two cards by the health staff:

- Enrolment card (see Annex 8 / registration book (kept at the health facility))
- Ration card (see Annex 9 (given to the beneficiary))

The enrolment card is kept at the health centre to track beneficiary participation in TSFP and the ration card is kept by the beneficiary for their own record.

The ration card is stuck to the LISIO, and enrolled cases are asked to bring the ration card on every follow-up visit. Information on the next follow-up visit is provided to the beneficiaries together with key nutrition messages outlined in Step 6.

The table below provides further details on the enrolment card:

Enrolment Card	
Purpose	To register beneficiary details and track progress at health facility
Presentation	Four enrolment cards for each of the below category: • Children 6-23 months= Pink enrolment card • Children 24-59 months= Yellow enrolment card • Pregnant women (2nd and 3rd trimester) = Purple enrolment card • Lactating women (first six months)= Blue enrolment card
Responsible person	Nutrition staff at CHCs and HPs
Submission points	None (stays at the health facility)
Frequency of recording	Updated with every visit to the Health facility
How the information will be used	The information from the enrolment card feeds into the monthly log of each health facility

Please see the table below on ration card for further details:

Ration Cards	
Purpose	Accountability of TSFP to the beneficiary
Presentation	Four ration cards for each of the below category: • Children 6-23 months= Pink enrolment card • Children 24-59 months= Yellow enrolment card • Pregnant women (2nd and 3rd trimester) = Purple enrolment card • Lactating women (first six months)= Blue enrolment card
Responsible person	Nutrition staff at CHCs and HPs
Submitted to	Beneficiaries of TSFP
Frequency of recording How the information would be used	Updated with every visit to the health facility To assess whether the beneficiary received the ration for the month

**STEP 5: Routine medication**

Following enrolment in the TSFP, the health staff would ensure that routine medicines (Albendazole) are given to the beneficiaries as per MoH protocol.

Routine Medicines		
Albendazole		
1) On admission check on the health card and/or ask the mother if the child has received albendazole in the last 6 months		
2) If not, administer albendazole to all children over 11 months of age		
Age Groups	Albendazole (mg)	
≤11 months	None	
12 – 23 months	200mg	
24-59 months	400mg	
Iron/Folic Acid		
Target group	Iron/folic acid (mg)	
Children	If signs of anaemia refer to IMCI guideline	
	Give Iron*	
	▪ Give one dose daily for 14 days.	
	AGE or WEIGHT	IRON/FOLATE TABLET
		IRON SYRUP
	Ferrous sulfate 200 mg + 250 µg Folate (60 mg elemental iron)	Ferrous fumarate 100 mg per 5 ml (20 mg elemental iron per ml)
2 months up to 4 months (4 - <6 kg)		1.00 ml (< 1/4 tsp.)
4 months up to 12 months (6 - <10 kg)		1.25 ml (1/4 tsp.)
12 months up to 3 years (10 - <14 kg)	1/2 tablet	2.00 ml (<1/2 tsp.)
3 years up to 5 years (14 - 19 kg)	1/2 tablet	2.5 ml (1/2 tsp.)
PLW	1 IFA supplement daily (60 mg elemental iron + 400 microgram folic acid)	

For pregnant and lactating women (PLW), the routine medicines will be according to the ANC and PNC guidance which will be linked with the TSFP.

STEP 6: Provision of Supplementary Food (SF)

Cases are provided with a monthly ration of either Timor Vita or Super Cereal (PLW) or RUSF (under five children). The caregivers and PLW are given guidance on the proper utilization of supplementary food at home including information on hygienic eating and avoid household sharing and the recommended daily ration. Caregivers would also be informed that there might be some side effects of the supplementary food in early days of treatment for example diarrhoea etc., but they should not worry as the child will and they should continue feeding the SF as per recommendations of the health staff.

The health staff should start the provision of SF rations on the first day of admission and then during the follow-up visits to the TSFP until the discharge of cured cases from the TSFP. Upon discharge, each beneficiary is provided with a ration of SF for one month. The table below reflects the daily and monthly ration size of FBF and RUSF:

Supplementary Food (SF)		Beneficiaries	Daily ration	Monthly ration
Ready to Use Supplementary Food (RUSF)	eeZeeRUSF	Children	1 sachet (92 g)	30 sachets (2.76 kg)
	Plumpy'Sup			
Fortified Blended Food (FBF)	Super Cereal	Pregnant and Lactating Women	200 g (10 tablespoons)	6 kg
	Timor Vita			

Fortified Blended Food (Timor Vita) is made of heat treated maize and soya beans, sugar, soybean oil, vitamins and minerals. A daily ration of 200 g provides 781 kcal energy, 30.3 g of protein and 20 g of fats. Timor Vita also contains more than 15 vitamins and minerals. Timor Vita would be the preferred supplementary food for PLW however due to production constraints and pipeline breaks, WFP and MoH may decide to provide the alternate supplementary food by importing.

Ready-to-Use Supplementary Food (RUSF, such as EeZeeRUSF and Plumpy'Sup) is designed specifically to treat moderate acute malnutrition in children 6–59 months. RUSF has animal source protein which is known to improve growth and development among children. It does not require cooking, is more hygienic and is easy to store and handle at the household level. It also has a longer shelf life of two years and has less chances of contamination. The key ingredients of RUSF are peanuts, sugar, vegetable oil, milk powder, soy protein, vitamin and minerals although different recipes are being piloted.

For a detailed profile of Supplementary foods, see annex 10.



Key messages

The caregivers are provided with key messages on the SF product as well as key messages on nutrition. The five key messages disseminated to caretakers and PLW are in annex X. In addition, the following information must be transmitted by health staff to caregivers and PLW:

- Clear advice must be given to mothers on how to prepare the ration
- Ensure the mother/caretaker understands that the ration is intended for the malnourished individual and is not to be shared.
- Explain how to store the ration safely
- Make sure the mother/caretaker knows when to return to the health facility

Caregivers should be informed clearly that the ration in TSFP is intended to supplement the diet at home and to provide sufficient additional energy and nutrient density to allow for rehabilitation.

The caregivers must also be provided key messages on health, nutrition and hygiene (see chapter 3).

Cooking demonstration

When Timor Vita/FBF is used, the health staff conduct monthly or bi-monthly cooking demonstrations at TSFP sites to advise PLW on how to prepare and eat supplementary food at home. PLW provided with Timor Vita/FBF are encouraged to add locally available ingredients to the supplementary food to improve dietary diversity.

STEP 7: Follow-up monthly visits to the TSFP

Children and PLW admitted in the TSFP should come for a follow-up visit every month for a follow-up check and receive the monthly ration of supplementary food until discharged from the program. During each visit:

- The MUAC is measured and oedema is checked to assess the progress of the beneficiary in the program.
- The health staff will fill and update the enrolment card and ration card for follow-up visit.
- The health staff would keep tracking the progress of the beneficiary in the program; for example, if a child has static weight in the follow-up visit, health staff should check for whether the SF is consumed regularly, if there is any household sharing etc. and measures should be taken to ensure that the child is consuming his ration on a daily basis in addition to other home cooked food.
- Home visits by health workers are recommended in the case of low or no weight gain to check on possible causes and to give the caregivers key messages on nutrition and hygiene.

During each of the follow-up visits, the health staff should determine the status of the beneficiary in the program as shown in the table below:

Beneficiaries status in the program	Children 6-59 months	PLW
Continue (C)	Children who need to continue treatment at the TSFP next month	PLW who need to continue treatment at the TSFP next month
Absent (A)	Children who are absent from the TSFP for one month	PLW who are absent from the TSFP for one month
Discharged Cured (DC)	Children whose MUAC has reached ≥ 125 mm	PW: MUAC ≥ 23 cm LW: MUAC ≥ 23 cm
Discharged Defaulter (DD)	Absent for two consecutive months	Absent for two consecutive months
Discharged Non-Respondent (DNR)	Did not reach discharge cured criteria within four months is discharged non-respondent and referred to other health facilities to investigate underlying causes of poor response/ ill health	PLW who do not meet discharge cured criteria within six months will be discharged as non-respondent and referred for further medical check-up and treatment <i>or when child gets 6 months old (whichever comes first)</i>
Discharged Dead (DDd)	Died during time registered in TSFP	Died during time registered in TSFP
Transfer (T)	Transferred to other TSFP due to family movement	Transferred to other TSFP due to family movement
Referred (R)	Condition has deteriorated and child is referred to other component of IMAM (OTP, ITP) or another health facility	Referred to other health facilities for medical check-up and treatment



STEP 8: Follow-up home visits at community level

Healthcare providers are responsible for the follow-up home visits of cases who have defaulted from the programme, those who are not responding well and relapses. Reasons for default should be determined and cases should be motivated to complete the treatment. In areas with many defaulters, the community-based team will inform the TSFP focal point (NFP) about the reasons of high default so that the program can be adapted to respond accordingly.

Children and PLW who are not responding well to the program should be identified by the health facility staff on the second visit to the TSFP and community-based staff should be asked to conduct a follow-up home visit to assess the reasons of poor response. These teams will provide support to caregivers on proper use of supplementary food, ensuring daily ration sizes are not exceeded and discourage household sharing.

There should be a strong linkage between the community and facility-based staff to ensure a proper feedback mechanism so that cases could be tracked on time at community level and the program is responsive to the emerging needs of the community.

Chapter 5: Outpatient Therapeutic Programme/Care

Objectives of OTP

OTP provides home-based treatment and rehabilitation for children who have severe acute malnutrition but good appetite and no medical complications.

Target group

Children 0–59 months

Basic requirements for implementing OTP

WHO: OTP is operated under the guidance of the nutrition coordinator, assistant, or focal point available at the health facility. A nurse, midwife or a doctor could also oversee the OTP.

WHERE: OTP is operated at targeted HPs, CHCs and Referral Hospitals

WHEN: OTP services should be carried out on a bi-weekly basis (i.e. every two weeks); weekly sessions may be carried out under certain circumstances, for example iff the child's condition is of concern and requires close follow-up.

Patients can be admitted to OTP on any day, but follow-up should be on a specific day. This day should be planned beforehand by health workers and included in the routine monthly or quarterly plans. The days when services are provided should be communicated to beneficiaries, PSFs and community leaders beforehand.

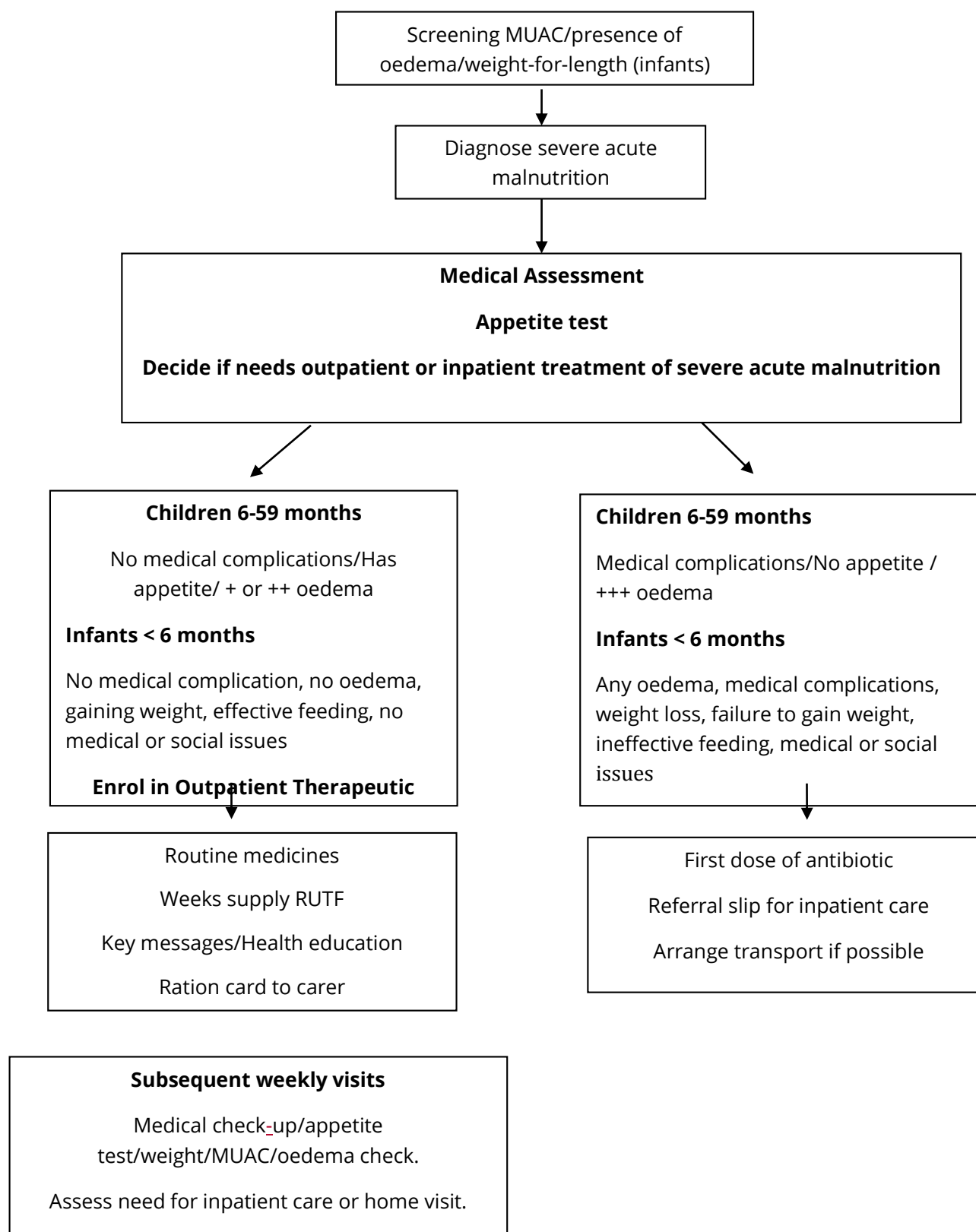
Basic equipment and supplies for OTP

Basic equipment	Basic supplies
- MUAC tapes for children and PLW - Cooking utensils for cooking demonstration (in case FBF) - Water and soap for hand washing	- RUTF - OTP patient card - OTP protocols - OTP Monthly report - Essential medicines required for routine medical protocol for OTP

Admission Criteria

Category	Age group	Indicator	Criteria
New admissions	Children 6-59 months	MUAC	Below 115 mm
			No medical complications
		Appetite test	Good
		Bilateral Pitting Oedema	+ or ++
	Infants < 6 months	Weight-for-length less than -3 Z-score	No pitting oedema or complications
Other new admissions	Children 0-59 months	Choice	Despite counselling, care giver refuses inpatient care
Transfer from inpatient therapeutic care	Children 0-59 months		From inpatient therapeutic care after stabilisation
Transfer from other OTP	Children 0-59 months		Patient moved from other OTP
Returned	Children 0-59 months		Returns after defaulting OTP treatment

Admission Procedure



STEP 1: Triage urgent cases

- Identify very sick children before the health promotion session at the SISCa and provide care immediately.
- Offer 10% sugar water to prevent the risk of hypoglycaemia if available and water quality is assured.

STEP 2: Anthropometric assessment

How to take the weight, length, MUAC and check for bilateral pitting oedema is described in Annex 3, 4 and 5.

- Take the weight of the child.
- Plot the weight of the child in the LISIO.
- Measure MUAC and assess for oedema; record the results in the LISIO.
- If the infant is less than 6 months take the length

Decide the extent of any acute malnutrition as per the tables below:

MUAC measurement	Colour code	Status	Action required
What does MUAC measurement mean for Children 6-59 months?			
MUAC < 115 mm	Red	Severe Acute Malnutrition (SAM)	Refer to OTP *
MUAC ≥ 115 mm - < 125 mm (Yellow) = Moderate Acute Malnutrition (MAM)	Yellow	Moderate Acute Malnutrition (MAM)	Admit to TSFP
MUAC ≥ 12.5 cm	Green	Normal	Explain the child is well-nourished and no further action is required

Grade	Description	Action required
+ 1 Oedema	Bilateral pitting oedema only on the feet	Refer to OTP
+2 Oedema	Bilateral pitting oedema on Feet, lower legs (may include hands and lower arms)	Refer to OTP
+3 Oedema	Bilateral pitting oedema of legs and arms and includes facial oedema with swelling around the eyes	Refer to in-patient care



Infants < 6 months

If the weight-for-length less is than -3 Z-score or there is presence of bilateral pitting oedema continue to assess for admission to OTP or in-patient

STEP 3: Medical Assessment

Medical assessment should be conducted following IMCI protocols. A medical doctor, nurse or nurse midwife should assess the child's medical condition. The assessment includes talking about the history of the child's condition with the caregiver. The health worker then gives the child a full medical examination using the IMCI checklist on the OTP monitoring card (see Annex 13) to check for any medical complications that may require inpatient care.

The Action Protocol (Annex 16) details which signs/complications require in-patient treatment. If the child meets the criteria for inpatient treatment, record the summary medical assessment in the LISIO and refer the child, arranging for transport by ambulance.

STEP 4: Appetite Test

For children 6–59 months only, the child's appetite must be assessed on admission. If the child does not take RUTF well, he cannot be treated in the OTP and must be referred to inpatient care. Lack of appetite may be caused by infection, poor liver function or gastro intestinal function. The RUTF will not be consumed at home which can lead to further deterioration in nutritional status.

The caregiver should move to a quiet and private area to encourage the child to take the RUTF under the observation of the health worker; observation is essential the child can be accepted for OTP (refer to Annex 11 on appetite test). Care must be taken to ensure the child is not forced to eat.

STEP 5: Decide if child should go to OTP or Inpatient

After the child's medical condition and appetite have been assessed, it is determined whether the child needs treatment in the inpatient facility or OTP.

Children 6–59 months

Children with less than 3+ oedema, no complications and appetite can be treated at the OTP. Those children who have been stabilised in inpatient therapeutic care are transferred to the OTP after discharge.

Infants less than 6 months

Infants with severe acute malnutrition, no oedema, no medical complication, who are gaining weight and feeding effectively and have no medical or social issues can be managed in OTP.





If the child meets criteria for treatment in inpatient:

- Explain the situation to the caregiver and advise the caregiver to keep the child warm.
- Give frequent small amounts of 10% sugar water and give first antibiotic dose, if possible.
- Record findings and treatments given in the LISIO.
- Refer the child to inpatient facility and note the referral in the register book.
- Inform the PSF from the child's Aldeia of the child's transfer to inpatient.

STEP 6: Admission to OTP

Explain the situation to the caregiver:

1. Principles of treatment

- Explain to the caregiver any action taken and advice for home care (drugs, RUTF).
- Advise the caregiver to return to the health facility every 2 weeks for routine medical examination and RUTF rations.
- Explain the rules which need to be followed (regular attendance, key messages on RUTF (Annex 12), etc.).
- Advise the caregiver to seek medical care immediately at the health facility if the child refuses to eat RUTF or becomes ill.

2. Assign OTP registration number if new admission

The numbering should be done as follows: <name of the sub district-health facility>/<number of the child>/OTP-. For example, the 5th child who is assessed in Same sub district, Betano health post, should be given the following number: Same-Betano/005/OTP.

- Complete the OTP monitoring card and note the admission to the OTP in the LISIO.
- If the child is transferred from the inpatient facility, inpatient workers send a card with the summary of inpatient treatment provided. Treatment and monitoring of the child while in the OTP should be continued on the same card.

STEP 7: Medical Treatment

Provide routine medicines to **all children admitted to the OTP** as shown in Annex 14).

The child should be referred to EPI for any outstanding vaccinations.

Additional medicines may be prescribed to treat other medical problems.

Children who have been transferred from inpatient should not receive routine medications that have already been administered during inpatient care. Check the child's inpatient transfer card (used to continue the OTP monitoring) for details of the medications that have already been given while in the inpatient.



Step 8: Nutritional Treatment

Children 6–59 months

RUTF is used for the nutritional treatment of children 6–59 months only. It contains all the energy and nutrients to meet the nutritional needs of the child and does not require any cooking or preparation. RUTF provides approximately 500 Kcal in each packet. The amount of RUTF to be consumed per day is based on the weight of the child (refer to Annex 15 for calculation of RUTF quantities).

Give the required RUTF ration to the caregiver.

- If the mother is still breastfeeding, advise her to give the RUTF after breast milk.
- Advise the caregiver to feed the child small amounts of RUTF and to finish the entire allocated daily ration each day before giving any other food.
- Emphasize that RUTF is vital for the recovery of the child and should not be shared. Explain that safe drinking water (boiled) should be given after the RUTF and as needed while eating it to maintain hydration. Caregivers should be advised not to mix RUTF with liquids, as this may foster bacteria.
- Give key messages. (See Annex 12)

Step 9: Care of infants < 6 months in OTP

In addition to medical treatment (Annex 14 – a course of broad-spectrum oral antibiotic, such as amoxicillin, in an appropriately weight-adjusted dose), the following actions are required for management of infants with SAM:

- a) counselling and support for optimal infant and young child feeding should be provided, based on general recommendations for feeding infants and young children, including for low-birth-weight infants;
- b) weight gain of the infant should be monitored weekly to observe changes;
- c) if the infant does not gain weight, or loses weight while the mother or caregiver is receiving support for breastfeeding, then he or she should be referred to inpatient care;
- d) assessment of the physical and mental health status of mothers or caregivers should be promoted and relevant treatment or support provided).

Step 10: OTP follow-up visits at the health facility

Patients should attend the OTP every two weeks or weekly if prescribed by the doctor, nurse or nurse midwife or an infant < 6 months, to have medical examinations and to receive their supplies of RUTF (children 6–59 months). The IMCI checklist on the OTP monitoring card should be completed during each follow-up visit until discharge (see Annex 13) An alert protocol is provided in Annex 16 to assist the health worker to determine of the child needs:

- referral to inpatient
- refer for home visit.





- if no problems identified continue as normal

Anthropometry

- The child's weight should be measured on every visit.
- MUAC should also be taken at each visit.
- Oedema should be assessed at each visit.
- Length should be taken on every month for infants

Medical history

- Key questions to the caregiver relating to an illness since the previous visit: asks about any episodes of diarrhoea, vomit, fever and cough experienced.

Medical examination

- Physical assessment for illness as per checklist (See Annex 16) and decision if any additional medical management is required.
- For children 6–59 months, appetite test with RUTF if there is weight loss or static weight, or if the caregiver highlights an issue with appetite
- Use alert protocol in Annex 16 to decide if child needs to be referred to inpatient or needs a home visit or is progressing well and no further action is needed. All absentees must be followed up at home before they are discharged as defaulters
- Record any action taken and/or medication given in response to health problems on the OTP card.
- Provide the appropriate ration of RUTF and reinforce education messages.
- Inform mother when she needs to return with child for next follow up visit.

Step 11: Follow-up visits at home (See Community Mobilisation section)

In a case where a child is transferred from OTP to the inpatient facility

Children should be transferred to inpatient care if:

- Medical condition deteriorates
- Weight loss is observed at three consecutive OTP sessions
- No weight gain after five OTP sessions
- The target discharge criteria have not been reached after 3 months in the programme, including a home-based follow-up visit Before this, the child should have been followed up at home and if the problem still persists, s/he should undergo thorough medical investigation.

STEP 12: Discharge from OTP

Discharge criteria

Infants who are less than 6 months of age can be discharged from all care when they are breastfeeding effectively or feeding well with replacement feeds, and

- a. have adequate weight gain, and
- b. have a weight-for-length ≥ -2 Z-score

Category	Age	Indicator	Criteria
Cured	Children 6-59 months	MUAC	>125 mm, 2 consecutive times
	Infant < 6 months	Bilateral Pitting Oedema	none
		Medical assessment	Clinically well
		Breastfeeding effectively or feeding well with replacement feeds AND a. have adequate weight gain, b. have a weight-for-length ≥ -2 Z-score	
Defaulted	Children 0-59 months		Absent from 3 consecutive sessions
Died	Children 0-59 months		Died during time registered in the OTP
Transfer to inpatient therapeutic care	Children 0-59 months		Condition has deteriorated and requires inpatient care
Transfer to other OTP	Children 0-59 months		Patient has been transferred to another OTP
Non cured	Children 0-59 months		Has not reached discharge criteria after four months

Discharge procedure

1. Give feedback to the caregiver on the final outcome of the child's treatment.
2. Ensure caregiver understands how to use any continuing medications.
3. Note discharge outcome in monitoring card. File the discharged card.
4. Counsel caregiver on good nutrition and cooking practices;
5. Advise the caregiver to immediately go to the nearest health facility if the child refuses to eat or has any of the following signs:
 - high fever
 - frequent watery stools or stools with blood; diarrhoea lasting more than 4 days
 - difficult or fast breathing
 - vomiting
 - not alert, very weak, unconscious, convulsion
6. If a child must be transferred to inpatient therapeutic feeding due to deterioration in his condition, the treatment and medications given in OTP before transfer must be noted in the child's LISIO, along with a referral letter for inpatient treatment.



Chapter 6: Inpatient Care of Children 0-59 months with SAM

All children with severe acute malnutrition and medical complications (for example dehydration, shock or sepsis; see full list in Annex 16) are admitted to the inpatient unit for stabilisation. This small proportion of cases cannot be managed in the OTP and these children are at the highest risk of death needing intensive 24-hour medical and nutrition care until their condition is stabilised and their appetite returns. This process should take about four to seven days to complete. The child is then transferred to the OTP until treatment is completed.

Basic requirements for implementing in-patient care

WHO: In-patient care is operated by a nutrition focal point or nurse. A doctor also oversees the patients.

WHERE: In-patient care is operated at CHCs with bed or referral hospitals

WHEN: Constant 24-hour in-patient care is provided

Basic equipment and supplies for OTP

Basic equipment	Basic supplies
• MUAC tapes for children • Scales • Height board • Weight-for-length charts (for infants) • Water and soap for hand washing	• F75 therapeutic milk • RUTF • In-patient patient card • In-patient protocols • In-patient monthly report • Essential medicines required for in-patient care

Admission Criteria

Category	Criteria
New admissions	Children 6-59 months MUAC < 115mm or bilateral pitting oedema + or ++ AND Medical complications Or poor appetite or Marasmic Kwashiorkor (= MUAC < 115mm with bilateral pitting oedema) or oedema +++ Infants < 6 months Weight-for-length less than -3 Z-score AND - any serious clinical condition or medical complication as outlined for infants who are 6 months of age or older with severe acute malnutrition; - recent weight loss or failure to gain weight; - ineffective feeding (attachment, positioning and suckling) directly observed for 15–20 min, ideally in a supervised separated area; - any pitting oedema; - any medical or social issue needing more detailed assessment or intensive support (e.g. disability, depression of the caregiver, or other adverse social circumstances) (strong recommendation, very low quality evidence).
Referral from outpatient care	- Develops any severe medical complication - Develops loss of appetite - Weight loss on 3 consecutive occasions for children 6-59 months, or on 1 occasion for infants < 6 months - No increase in weight for 5 consecutive weeks or for 2 occasion for infants < 6 months - Refuses OTP care - If not recovering after 3 months*
Returned	Returns after defaulting from inpatient treatment

* Before this time period child should have received a home visit and thorough medical investigation.



Admission procedure

STEP 1: TAKE A MEDICAL ASSESSMENT

First assess for the following life-threatening complications (see relevant sections below of assessment)

- Shock (from sepsis / dehydration)
- Severe dehydration (from diarrhoea)
- Severe anaemia with or without heart failure
- Hypoglycemia
- Hypothermia

infants < 6 months are particularly vulnerable to hypoglycaemia and hypothermia

Continue the medical assessment, asking the mothers/carer about the following:

- Symptoms of current illness
- Screening for diarrhea / dehydration
 - ▶ intake (kind of fluid, how much)
 - ▶ output (frequency and severity of diarrhea and vomiting, urine output)
- Duration of weight loss
- Dietary history of the child
 - ▶ breastfeeding practice
 - ▶ other milk intake (bottle feeding, cups)
 - ▶ complementary foods (variety, frequency, quantity and when started)
- Immunization history (BCG and measles especially relevant)
- Birth history (birth weight and gestation)
- Family health:
 - ▶ Parents health history, including TB and HIV
 - ▶ If parents sick: what disease? Still alive?
 - ▶ Siblings health history
 - ▶ TB in household
- Social history
 - ▶ Family size and spacing between children
 - ▶ Income
 - ▶ Food availability
 - ▶ Close contact with others with TB
- Developmental milestones

Continue the medical assessment looking for

- Signs of micronutrient and electrolyte deficiency
 - vitamin A deficiency, zinc deficiency, iron deficiency³
 - hypocalcaemia⁴
- Signs of local infection (pneumonia, skin, ear / nose / throat)

³ Clinical signs of iron deficiency include angular cheilitis and ulceration of the mouth

⁴ Clinical signs of hypocalcaemia include floppiness, weakness and hypotonic, decreased reflexes, abdominal distension, and when severe there are arrhythmias and ECG changes.

- Signs of developmental delay
- Screening for malaria (refer to IMCI guidance)
- Screening for clinical signs of tuberculosis (refer to IMCI guidance)
- Screening for clinical signs of HIV infection: an infant/child is suspected of HIV infection, if:
 - o His/her mother is known or suspected of being HIV positive and
 - o The infant/child HIV serologic rapid test is positive
 - o Presence of clinical signs of HIV infection and/or opportunistic infections

It is not essential to undertake any investigations for children with severe malnutrition. However, if available, it is helpful to test:

- o Blood glucose, Malaria smear, Hemoglobin
- o Chest X-Ray
- o Urinalysis

The other tests commonly requested are white blood cell count; erythrocyte sedimentation rate (ESR), stools, microscopy and serum electrolytes are of limited value. The protocol is designed to be administered without information from these investigations.

STEP 2: CONFIRM THE DIAGNOSIS OF ACUTE MALNUTRITION USING ANTHROPOMETRY

All malnourished children should be:

- Weighed
- Have their length measured (infants < 6 months only)
- Have their MUAC (mid upper-arm circumference) measured
- Checked for oedema

For infants calculate the weight-for-length using the standard charts (see Annex 6)

The majority of children with bilateral pitting oedema have severe acute malnutrition, however all children with oedema should be considered for alternative diagnoses such as nephrotic syndrome, heart failure or liver diseases.

The next step is to classify the degree of the malnutrition.

	Moderate Acute Malnutrition	Severe Acute Malnutrition
Weight for length (< 6 month)		< -3 SD of the median
MUAC (6-59 months)	From 115cm up to 125cm	< 115 cm
Oedema	None	Present



STEP 3: CONDUCT FEEDING ASSESSMENT

For children 6–59 months conduct an appetite test (see Annex 11)

For infants < 6 months feeding directly observe the mother breastfeeding the child (attachment, positioning and suckling) for 15–20 min, ideally in a supervised separated area;

STEP 4: DECIDE IF CHILD REQUIRES IN-PATIENT OR OUT-PATIENT TREATMENT

Severely acutely malnourished children with complications require inpatient management. Indications for inpatient therapeutic programme (ITP) are the following:

- ▶ Severe acute malnutrition with complications;
- ▶ Infants less than 6 month of age with severe acute malnutrition and medical complications, recent weight loss or failure to gain weight; ineffective feeding (attachment, positioning and suckling), any pitting oedema, any medical or social issue

If the child does not meet any of the above criteria, then refer to the OTP for further management

STEP 5: RECORD INFORMATION ON IN-PATIENT CARD

It is important to record all information on an in-patient card.

STEP 6: TREAT MEDICAL COMPLICATIONS

1. Treatment of Shock

The table on the next page lists the clinical signs of shock and of dehydration according to severity. Shock can be caused by either infection (septic shock) or by dehydration from diarrhea (hypovolaemic shock). It can be difficult to differentiate between the two causes using clinical signs. Table three indicates some signs which may not be present in septic shock but which are usually present in hypovolaemic shock. Children with septic shock are often afebrile.

Clinical signs of shock

	HYPOVOLAEMIC SHOCK	SEPTIC SHOCK
General state	Lethargic / drowsy / floppy	Lethargic / drowsy / floppy
Eyes	Very sunken, dry and no tears when crying	Usually normal
Mouth / Tongue	Very dry	Usually normal
Thirst	Drinks poorly / unable to drink	Drinks poorly / unable to drink
Respiratory rate	Fast	Fast
Pulse	Fast, weak, thready	Fast, weak, thready
Capillary return	Slow (> 2 seconds)	Slow (> 2 seconds)
Skin Pinch	Goes back very slowly	Usually normal
Hands and Feet	Cool and blue nail beds	Cool and blue nail beds
Fontanelle	Depressed	Usually normal

Children with shock need immediate treatment to prevent them from dying. If shock signs are present immediately provide treatment.

Treatment:

- Call a doctor if one is available;
- Give **oxygen** (4L by mask or 2L by nasal prongs) if available;
- Give intravenous **10% glucose bolus** (5 ml/kg);
- Administer an intravenous **fluid bolus (15ml/kg over 1 hour)**, use either:
 - o RLG5% (mix 50ml RL + 50ml 10% glucose to make 100 ml RLG5%) or
 - o ND5% (mix 50ml normal saline + 50ml 10% glucose to make 100 ml ND5%)

These fluids were made from individual solutions and use a burette to measure out 100 ml solutions to administer. This is important because it is necessary be very careful with fluid volumes in malnourished children. It is easily become fluid overloaded and develop heart failure.

- Give intravenous **antibiotics** (see Step 7)

**Monitor:**

Monitor pulse and respiratory rate every 10 minutes. Watch carefully for signs of fluid overload or signs of worsening shock. After one hour if **there are signs of improvement** then do the following:

- Repeat fluid bolus, 15ml/kg for 1 hour, then
- Change to oral rehydration with RESOMAL, 5-10ml/kg/hr for the next 4-10 hours
- Give the RESOMAL in alternate hours with F75 (see below for ReSoMal protocol)

If **there is no improvement after the first intravenous bolus**, then assume that there is septic shock. Please do the following:

- Ensure that the child received intravenous antibiotics.
- If available, transfuse whole blood (10 ml/kg over 3hrs), then begin with the F75.
- While waiting for blood incase blood is not there, give maintenance intravenous fluids (mix of 20 ml normal saline + 80 ml 5% glucose to make 100ml solution) at 4 ml/kg/hr.
- If blood transfusion is not possible, or if it involved lengthy wait, give repeat (second time) bolus of fluid as above.

If child deteriorates during intravenous rehydration, this could be due to worsening shock or to fluid overload (see table below). Call doctor if not already present. If the deterioration is due to fluid overload stop the intra-venous infusion and wait for improvement.

In the treatment of malnutrition it is important to remember that if shock is not present then do not give intravenous fluids.

If shock is NOT present, do not give intravenous fluids!

Signs of Improvement//Deterioration During Treatment of Shock

	Signs of Improvement	Signs of deterioration
Pulse	Slower (but above 80-100 / min) Stronger	Faster (increases by 25 beats/ min) Weaker or impalpable
Perfusion	Better (quicker capillary return) Warmer peripheries	Worse (slower capillary return) Colder peripheries
BP	Increases (SBP-DBP) increases	Remains low or unreadable (SBP-DBP) decreases
Respiratory rate	Decreases	Faster (increases by 5 breaths/ min)
Conscious state	Better	Worsens
Urine output	Begins to pass urine	No urine
Other		puffy eyes* Increasing hepatomegaly*

*signs that signify fluid overload (heart failure), from intolerance to the rate of infusion of the fluid

2. Treatment of Dehydration

The table below shows the clinical signs of dehydration

Clinical signs of dehydration

ASSESS	No Signs < 5% dehydration MILD	Some Signs 5-10% dehydration MODERATE	Multiple Signs 10% dehydration SEVERE
General state	Well / alert	*Restless / irritable	*Lethargic / drowsy / floppy
Eyes	Normal	*Sunken and no tears	Very sunken, dry and no tears
Mouth / Tongue	Moist	Dry	Very dry
Thirst	Maybe thirsty	Thirsty, drinks eagerly	Drinks poorly / unable to drink
Respiratory rate	Normal	Increased	Fast
Pulse	Normal	Fast	Fast, weak, thready
Capillary return	Normal (1 second)	Sluggish (2 seconds)	Slow (> 2 seconds)
Skin Pinch	Goes back quickly	*Goes back slowly	Goes back very slowly
Hands and Feet	Normal	Normal	Cool and blue nail beds
Fontanelle	Normal	Normal	Depressed

*Some signs of dehydration can also be found in malnutrition without dehydration.



Children with acute malnutrition may have sunken eyes and a slow skin pinch due to the loss of subcutaneous fat and they can be irritable and lethargic. This can lead to an overestimation of the percentage of dehydration in children with malnutrition. Always ask families how long the child's eyes have appeared sunken etc. If you are in doubt, err on the side of caution and opt for classifying the child with lower % dehydration, rehydrate slowly and continually re-evaluate the hydration status. Please note that children with dehydration of more or equal to 10% are commonly in hypovolaemic shock.

Assessment of dehydration in children with malnutrition is very difficult. As the clinical signs of severe malnutrition and dehydration overlap there is a tendency to overestimate dehydration in a child with malnutrition and thus risk over-hydrating the child. Therefore, guidelines for rehydration of children with severe malnutrition are empirical. All children with watery diarrhoea should be treated as outlined here. If the child also has shock, first treat the shock.

Treatment:

Children with severe acute malnutrition who present with some dehydration or severe dehydration but who are not shocked should be rehydrated slowly, either orally or by nasogastric tube, using oral rehydration solution for malnourished children - **RESOMAL** (**Rehydration Solution for Malnutrition** - (5–10 mL/kg/h up to a maximum of 12 h)

Full-strength, standard WHO low-osmolarity oral rehydration solution (75 mmol/L of sodium) should not be used for oral or nasogastric rehydration in children with severe acute malnutrition who present with some dehydration or severe dehydration.

- Administer RESOMAL 5ml/kg every 30 minutes, for the first 2 hours.
- Then give **RESOMAL 5-10 ml/kg hourly for the next 4-10 hours.**

Always offer the RESOMAL orally. Use a NGT if the child does not want drink or is vomiting repeatedly; or is completely unwilling or too weak to drink or is severely dehydrated.

ReSoMal should not be given if children are suspected of having cholera or have profuse watery diarrhoea (three or more loose or watery stools in a day, for more than 14 days). Such children should be given standard WHO low osmolarity oral rehydration solution that is normally made, i.e. not further diluted

Children with severe acute malnutrition and signs of shock or severe dehydration and who cannot be rehydrated orally or by nasogastric tube should be treated with intravenous fluids, either:

- a. half-strength Darrow's solution with 5% dextrose,
- b. Ringer's lactate solution with 5% dextrose.

If neither is available, 0.45% saline + 5% dextrose should be used.



Monitor:

Frequent observation of the response to treatment is an essential component of treatment and the best guide to the appropriate rate of rehydration. Here are the steps:

- Assess the child **30 minutely for 2 hours and then hourly for 6–12 hours**
 - Ensure that the RESOMAL is not vomited
 - Monitor ongoing losses (vomiting and diarrhoea)
 - Look for **signs of improvement or deterioration:**
- Slowing of pulse and respirations and return of urine output signify improvement
- Continuing rapid breathing and pulse suggest co-infection or overhydration
- Other signs of over-hydration include oedema of the eyelids and increasing hepatomegaly.
- If signs of over-hydration occur stop the fluids immediately and reassess in one hour.

Treatment of dehydration is complete when the child is no longer thirsty, has passed urine and signs of dehydration have disappeared.

Prevention:

Continue to give extra fluid to prevent further dehydration with ongoing diarrhea.

- Give RESOMAL after each episode of diarrhea.
- For a child < 2 years give 50–100 ml with every watery diarrhea
- For a child > 2 years give 100–200 ml with every watery diarrhea

Feeding during rehydration:

- Start diet (F75) as soon as possible.
- If child is alert, drinking can start F75 even before rehydration complete (feed F75 alternate hours with RESOMAL)
- Replace the RESOMAL doses at 4, 6, 8 and 10 hours with F75 if rehydration is continuing at these times.
- Continue breastfeeding, give between F75 feeding or Resomal.

3. Treatment of Severe Anaemia

If severe anemia is present, then provide blood transfusion. Blood transfusion is given when the child has:

- Hemoglobin <4 g/dL or
- Hemoglobin 4–6 g/dL with has respiratory distress, impending heart failure or needs oxygen.





Provision of blood transfusion:

- Give whole blood **10ml/kg over 3 hours. If the child has signs of heart failure at the outset transfuse 5-7ml/kg of PACKED RED CELLS instead.**
- Give Frusemide 1 mg/kg IV at the start of the transfusion
- Monitor the child every 15 minutes during the transfusion for signs of heart failure (rising pulse, respiratory rate, puffy eyes, increasing hepatomegaly).
- Monitor for signs of transfusion reaction: fever, itchy rash, dark red urine, confusion, SHOCK. If any of these signs occur stop the transfusion.

Blood transfusion is not generally available at facilities outside of select referral hospitals. If the child has severe anaemia they should be transferred by ambulance to the closest referral hospital with facilities for transfusion.

4. Treatment and Prevention of Hypoglycemia

The treatment is as follow:

- If Dextrostix / blood glucose < 3mmol, give:
 - o **50 ml of 10% glucose, or**
 - o **sugar solution** (1 rounded teaspoon of sugar in 3½ tablespoons of water), or
 - o feed with F75, orally or by a nasogastric tube (NGT).
 - o then commence feeding, as below
- If blood glucose $\geq$ 3mmol commence routine feeding as soon as possible (see appendix. 6)
- If the child is unconscious or lethargic give 5 ml/kg 10% glucose intravenous immediately, irrespective of the blood glucose.
 - o If the consciousness does not improve within 30 minutes, repeat the glucose bolus.
 - o If possible, check glucose again after 30 minutes; most children respond to treatment within 30 minutes.
 - o If still low or still unconscious repeat intravenous glucose.
 - o Then commence feeding with F75 (see appendix.5). For the first 2 hours, divide the F75 into 4 equal amounts and give it every 30 minutes, afterwards give full dose 2 hourly. Feeds should be given by NGT until the child is conscious.

Ongoing Prevention:

Prevent further hypoglycaemia by feeding the child 2 hourly day and night, keeping warm and treating infection

FREQUENT FEEDING PREVENTS HYPOGLYCAEMIA



**Monitoring:**

Clinical: if level of unconsciousness or body temperature fall below normal at any time, give further dextrose bolus as above. If possible repeat the examination of blood glucose, and for other causes of unconsciousness.

Blood levels: If the glucose was low on admission or the child was symptomatic repeat the blood glucose again after 2 hr. If the level falls again repeat treatment as above.

5. Treatment and Prevention of Hypothermia

Hypothermia is present when the child's body temperature is less than 35°C axillary or less than <35.5°C rectal. If a child's temperature is < 35°C axillary, then further check the severity of the hypothermia using low –reading temperature at rectal. Measuring rectal temperature is potentially hazardous, because there is a risk of trauma to rectal mucosa and subsequent infection. Therefore, this procedure must be done with great care.

Treatment:

If hypothermia present, the following steps need to be taken immediately:

- Rewarm the child or keep the child warm. Active rewarming can be done through:
 - o Skin-to-skin contact (Kangaroo method)
 - o Heater or using lamp.
 - o Pre-warm blanket
- Remove wet nappies / clothes / bedding.
- Make sure the child is dry and wrap in clothes, ensuring you cover the head.
- Cover with blanket.
- Ensure all windows are closed and air-conditioners are off, never use an air conditioned room for severe malnourished children.
- Give antibiotics. Hypothermia may be a sign of sepsis.
- Give 50 ml of 10% glucose orally or sugar solution and feed the child immediately, hypothermia and hypoglycaemia often occur together.

Monitor:

- Continue to check temperature every 30 minute, until it rises to >36.5°C
- Check glucose level if possible.

Prevent:

- As for prevention of hypoglycaemia, always change wet clothes/bedding immediately and keep away from draughts
- Avoid baths and prolonged periods where the child is uncovered, for example during examinations
- Encourage skin-to-skin contact



STEP 7: GIVEN OTHER TREATMENTS

1. Treat infection

Antibiotics are routinely given in children with malnutrition as the usual signs of infection, such as fever, are often absent, thus making diagnosis difficult.

- For children who do not appear unwell and with no obvious signs of infection give:

Children 6–59 months

- Cotrimoxazole** – for 5 days, avoid if jaundiced, or
- Amoxycillin** 15mg/kg three times per day for 5 days

For infants weighing minimum 2 kg

- Amoxycillin** 30 mg/kg b.i.d. (60 mg/d) in association with **Gentamycin**.
- Do not use Chloramphenicol in young infants.

- For children with severe malnutrition who appear unwell, including all children with malnutrition with oedema, the following steps to be followed:
 - Ampicillin** 50mg/kg IM or IV every 6 hours, for 2 days, then continue with Amoxycillin 15mg/kg three times per day orally for 5 days, total 7 days. Oral ampicillin can exacerbate diarrhea. If this happens, then change to the intravenous antibiotics.
 - Gentamicin** 7.5mg/kg IM or IV daily for 7 days
- If no improvement within 48 hours, add **Chloramphenicol** 25mg/kg IM/IV four times per day for 5 days.
- If specific infections requiring different antibiotics are identified clinically add specific antibiotics as indicated.

Dosage of Cotrimoxazole

	Dose according to body weight		
	4mg TMP / kg - 20mg SMX / kg bd		
	4 - <6kg	6 - <10kg	10-19kg
Adult tab (80mg TMP- 400mg SMX)	1/4 tab	1/2 tab	1 tab
Syrup (40mg TMP- 200mg SMX / 5ml)	2.5ml	5ml	7.5ml

Continue antibiotics for a total of 10 days if anorexia or other signs that the child is unwell persist. Look for other possible causes of infection.



2. Give measles vaccination

Measles vaccination must be given to all children 6–59 months without previous measles immunization. However, general condition of the child must be assessed prior to the provision of vaccine. Delay vaccination until any shock or severe complications have been treated.

3. Folic acid

Give children 6–59 months 5mg as a single dose on admission (day 1).

Give infants 1–6 months 2.5 mg in single dose on day 1

4. Treat malaria

For treatment of malaria, take malaria smear on admission irrespective of presence or absence of fever. Treat according to IMCI guideline.

5. Treat tuberculosis

If Tuberculosis (TB) is strongly suspected on a child based on the Scoring System for TB, then treat according to IMCI guideline.

HIV/AIDS

Children with severe acute malnutrition who are HIV infected and who qualify for lifelong antiretroviral therapy should be started on antiretroviral drug treatment as soon as possible after stabilization of metabolic complications and sepsis. This would be indicated by return of appetite and resolution of severe oedema. HIV-infected children with severe acute malnutrition should be given the same antiretroviral drug treatment regimens, in the same doses, as children with HIV who do not have severe acute malnutrition. HIV infected children with severe acute malnutrition who are started on antiretroviral drug treatment should be monitored closely (inpatient and outpatient) in the first 6–8 weeks following initiation of antiretroviral therapy, to identify early metabolic complications and opportunistic infections

Children with severe acute malnutrition who are HIV infected should be managed with the same therapeutic feeding approaches as children with severe acute malnutrition who are not HIV infected

HIV-infected children with severe acute malnutrition in whom persistent diarrhoea does not resolve with standard management should be investigated to exclude carbohydrate intolerance and infective causes, which may require different management, such as modification of fluid and feed intake, or antibiotics.





STEP 8. PROVIDE NUTRITIONAL TREATMENT

CHILDREN 6–59 MONTHS

Children with malnutrition have electrolyte imbalances – typically they have excess sodium (even though their serum sodium may be low) and deficiencies of potassium and magnesium.

**NEVER GIVE DIURETICS TO TREAT OEDEMA or ELECTROLYTE IMBALANCES
IN CASES WITH SEVERE ACUTE MALNUTRITION**

The commercially prepared milk formulas F75 already contain the correct amounts of additional potassium and other electrolytes / vitamins and minerals that are needed during the treatment of malnutrition.

Routine infant milk formulas do not satisfy these criteria and can be dangerous if given to children with severe acute malnutrition.

The child's diet should provide just enough energy and protein for maintenance (100 kcal/kg/day and no more than 1–1.5 g protein/kg/day).

- F 75, contains 75 kcal and 0.9 g of protein / 100 ml.

Principles

- Feeding must be started cautiously (slowly, small amounts, frequently).
- **Feeds should be started as soon as possible after admission**, after correction of dehydration.
- Always try to feed by spoon / cup before resorting to a NGT. If a NGT is required, try not to use it for longer than necessary and always explain to the mother why the NGT is required.

Commence feeding

- o Start **F75 at 130ml/kg/day**; feed ideally given every 2 hours (see Annex 19)⁵
- o **If severe oedema give only 100ml/kg/d** (Annex 19) – there are 2 separate charts – 1 for children without oedema and 1 for children with oedema)
- o **FEEDS MUST BE GIVEN AT DAY AND NIGHT. If the child will not wake to feed at night, a NGT should be used.**
- o The feed can be stretched to every 3 hours if the child can finish it, then to every 4 hours.

⁵ In some situations it may not be feasible to provide feeds 2 hourly. In this case feeds can be given 3 hourly but care needs to be taken that the child: a) doesn't develop signs of hypoglycemia before the next feed and b) is tolerating the volumes. In a ward setting where there are multiple patients receiving milk it may be more practical to feed all children 3 hourly.



INFANTS 1–6 MONTHS

Feeding approaches for infants who are less than 6 months of age with severe acute malnutrition should prioritise establishing, or re-establishing, effective exclusive breastfeeding by the mother or other caregiver.

1. INFANTS WITH PROSPECT OF BREASTFEEDING.

- Infant is still breastfeeding but is malnourished
- Infant has stopped breastfeeding but mother is willing to re-establish breastfeeding
- Infant has stopped breastfeeding (for example the mother is dead) but there is a wet-nurse available to supply breast milk

Support the mother to breastfeed the infant. See SNIP IYCF and Care guideline.

Supplementary feeding

The aim of nutritional treatment is to:

- Stimulate breast-feeding.
- Supplement the breast-milk with therapeutic milk until breast milk is sufficient to allow the child to gain weight on breastmilk alone.
- Treatment is based on **the Supplemental Suckling Technique (SST)**. This is a technique that stimulates breast-feeding and allows the infant to take supplemental milk through a tube attached to the breast as well as suckling at the breast.
- It is important to put the child to the breast as often as possible.
- The therapeutic milk used in the SST is **F100 diluted (F100D)**.
- **Infants with oedema should be given F75. When the oedema has resolved switch to F100 dilute.**

**Use ONLY commercially produced F100 which has been diluted.
Home prepared milk-based feeds/modified animal milk recipes are
not suitable for malnourished infants under 6 months.**

Do not use RUTF for infants less than 6 months.

How to give SST feeds to infants

- On admission immediately give one feed.
- Breast-feed every 3 hours for at least 20 minutes, more often if the child cries or seems to want more.





- 30–60 minutes after offering a normal breast-feed give maintenance amount of F100D
- F100D is given 8 times a day – 135/ml/kg/day is given
- The feed should provide 100kcal/kg/day
- If the infant is very ill give breast-feeds every two hours.
- If the infant is not able to suckle, give feeds by cup, dropper, syringe, or naso-gastric tube.
- At each feed try the supplementary suckling technique before using other methods, only use these methods if infant is not taking milk by supplementary suckling.

Table 17. Amount of F100 diluted (by weight) for infants during SST

Weight (kg) (8 feeds/day)	ml of diluted F100/feed
≤1.2	25
1.3-1.5	30
1.6-1.7	35
1.8-2.1	40
2.2-2.4	45
2.5-2.7	50
2.8-2.9	55
3.0-3.4	60
3.5-3.9	65
4.0-4.4	70

Preparation of F100 diluted

- ➔ Add one packet (456g) of F100 to 2.7ml of water (instead of the standard 2 litres) to make F100 dilute.
- ➔ For small quantities of F100 dilute: Use 100 ml of F100 already prepared and add 35 ml of water (gives 135ml).

Use 200 ml of F100 already prepared and add 70 ml of water (gives 270 ml).

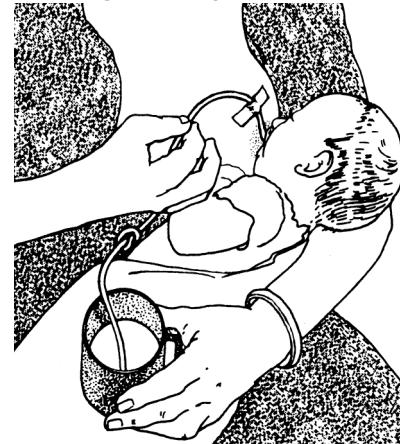


The Supplementary Suckling Technique

Supplemental milk (F100 diluted) is given using a tube the same size as an n°8 naso-gastric tube (if this is not available use the next best tube). The infant suckles and stimulates the breast, and at the same time draws the supplement through the tube. Mothers should sit in a quiet place and should be given support. Another mother who is using the technique successfully is the best person to demonstrate the technique to others.

- ➔ Cut a small hole in the side of the tube, near the end of the part that goes into the infant's mouth. This helps the flow of milk.
- ➔ F100 diluted is put in a cup. The end of the tube is put in the cup.
- ➔ The tip of the tube is put on the breast at the nipple and the infant is offered the breast in the normal way so that the infant attaches properly. Some mothers find it better to tape the tube to the breast.
- ➔ When the infant suckles on the breast, with the tube in his mouth, the milk from the cup is sucked up through the tube.
- ➔ At first an assistant may need to help the mother by holding the cup and the tube in place.
- ➔ The assistant should encourage the mother. After some time, mothers usually manage to hold the cup and tube without assistance.
- ➔ At first, the cup should be placed at about 5 to 10cm below the level of the nipple so the milk can be taken with little effort from a weak infant. As the infant becomes stronger the cup should be lowered progressively to about 30cm below the breast. Raising or lowering the cup determines the ease with which the infant gets the supplement. For very weak infants it can be at the level of the infant's mouth. If it is above this level, there is danger of aspiration. It may take one or two days for the infant to get used to the tube and the taste of the mixture of milks, but it is important to persevere.
- ➔ After feeding, the tube is flushed through with clean water using a syringe and then spun rapidly to remove the water. If possible the tube can then be left exposed to direct sunlight.

Figure 8. The supplemental suckling technique



**The progress of the child is monitored by the daily weight:**

- ◆ Weigh the baby daily with a graduated scale to within 20g.
- ◆ **The quantity of feed is NOT increased as the infant starts to gain weight.** If there is an increase in weight this is due to increased quantity of breast milk
- ◆ If after a few days the child does not finish all the supplemental food but continues to gain weight, it means the breast milk is increasing and the child has had enough.
- ◆ If the child loses weight over 3 consecutive days, yet seems hungry and is taking all the F100D, add 5mls to each feed

When the baby is gaining weight at 20g /day*

- ◆ Decrease the quantity of F100 diluted to one half of the maintenance intake
- ◆ If the weight gain is maintained (10g/day) for 2 consecutive days, then stop the supplement and continue on breast milk alone.
- ◆ If the weight gain is not maintained when the F100D is cut in half, change the amount given to 75% of the maintenance amount for 2 days and then reduce it again if weight gain is maintained
- ◆ If possible, keep the child in the Stabilisation Centre for 2 days on breast milk alone to make sure he/she continues to gain weight.

*After any oedema has resolved and the child is on F100D

Adequate nutrition and supplementation for breastfeeding mothers

Breastfeeding mothers need about 450 kcal/d of extra energy. Essential micronutrients in breast milk are derived from mother's food or micronutrient supplement. Therefore, it is important to meet the energy and nutrients requirement of the mother. The mother should consume at least 2500 kcal/d and also receive 200,000 IU vitamin A (unless there is a risk of pregnancy) if the infant is less than 2 months. Ensure the mother drinks at least 2 L of water/d since dehydration may influence the breast milk production.

2. INFANTS WITH NO PROSPECT OF BREASTFEEDING.

- Infant has never been breastfed and mother is unwilling to try to begin lactation
- Infant has stopped breastfeeding and mother is unwilling to attempt to re-establish breastfeeding and there is no wet-nurse.
- Mother is unavailable to breastfeed and there is no wet-nurse.



If there is no realistic prospect of being breastfed, the infant should be given appropriate and adequate replacement feeds such as commercial (generic) infant formula, with relevant support to enable safe preparation and use, including at home when discharged. Refer to the product guidance for the amounts to give.

STEP 9. PROVIDE SENSORY STIMULATION, EMOTIONAL SUPPORT AND EDUCATION

Psychosocial treatment

Children need psycho-social stimulation in addition to medical and nutritional treatment to recover from malnutrition. They should be encouraged to play with their siblings and other children. Carers should be encouraged to play with, hold and comfort children. Games and toys should be used if available. **Many children with malnutrition will have global developmental and social delay; this is usually reversible.**

Education

Hospitalization provides an ideal opportunity for health promotion and education. Parents should receive education on feeding (e.g. education regarding different food groups, nutritional value of different types of food) and playing with their children, how to seek medical assistance and how to treat simple illnesses at home. Hopefully this will help avoid a recurrence of the malnutrition. If a child is not up to date with their immunisations encourage parents to take the child for immunization if a facility is available.

Care of the mother

Assessment of the physical and mental health status of mothers or caregivers should be promoted and relevant treatment or support provided. Supportive care for breastfeeding should be provided to the mother, especially in very stressful situations. Focus needs to be directed at creating conditions that will facilitate and increase breastfeeding, such as one-to-one counseling, mother-to-mother support or establishing safe 'breastfeeding corners' for mothers and infants. Some traumatized and depressed women may need mental and emotional support which should also support an increase in breastfeeding. Also efforts should be made to strengthen the mother's confidence to breastfeed their babies.

It is important to assess nutritional status of the mother (MUAC and oedema). Alert the mother to the risk of having a new pregnancy during this period.

STEP 10: MONITORING THE CHILD

All information should be recorded on the in-patient card.

The following parameters should be monitored daily and recorded on the individual treatment card:

- Weight





- MUAC
- Degree of oedema (0 to +++)
- Body temperature (2x/d)
- Standard clinical signs: stool, vomiting, dehydration, respiration, cough and liver size
- Any other record: e.g. refuses a feed, whether the infant is fed by NGT or given intravenous infusion or transfusion.
- Height should be measured after one month

IMPORTANT POINTS

- It is important to explain to the carer that **diarrhoea** may continue or even become more frequent **after initiating feeding**. This must be treated by ongoing use of RESOMAL and NOT by stopping the milk feeds. The milk feed is an ESSENTIAL treatment for the malnutrition. Diarrhea usually settles in 3 – 4 days.
- If child develops **ABDOMINAL DISTENSION OR VOMITING** during feeding, reduce volume of feeds. If problem persists stop feed, give IV fluid 2-4ml/kg/hr and give MgSO4 50% 2ml intramuscularly.
- Children with **oedema will LOSE weight** for the first few days of treatment as they gradually lose their oedema. This is NORMAL. When their oedema is all gone they will begin to gain weight again. This should be monitored to make sure they start putting on weight.
- Ensure the child **drinks their full volume** of prescribed feed within an hour or so of receiving the milk. If the milk is allowed to stand at room temperature for long periods before being consumed it may become contaminated. Be sure to tell all parents to inform the nurse if the child does not drink the full volume. The parents may need to be encouraged to be more persistent with the feeding or an NGT may be required.

A child's diarrhoea should settle shortly after admission / treatment. If CONTINUING DIARRHOEA look for other causes, the possibilities include:

- Giardiasis / mucosal damage (malabsorption) – this is a common reason
 - Give metronidazole 7.5mg/kg three times per day for 7 days
- Lactose intolerance – this is a rare reason on F75 because **F75 is low-lactose**
 - Revert to F75 and reintroduce F100 more slowly
 - Try lower lactose (rice based) milk (appendix 6)
 - Try no-lactose diet: broth (chicken or egg recipe – appendix 6)
 - Lactose free formula is not readily available in Timor-Leste.
- Osmotic diarrhea – this should be suspected when diarrhea persists on F75 but resolves with the change to low-osmolar F75
 - Try low osmolar cereal-based F 75 (appendix 6)
 - Introduce F100 gradually



If these measures do not reverse the problem, or if the child deteriorates or has other medical problems, refer to the closest referral hospital for further pediatric medical assessment. Continue the therapeutic feeding regime and the progress of the child should be followed up regularly.

STEP 11. MOVING INTO THE TRANSITIONAL PHASE

As the child's medical condition starts to improve, RUTF is introduced. Indicators that signal the child is ready to start the transition phase are:

1. No serious medical problems, including no vomiting, watery diarrhoea, dehydration, no naso-gastric feeding, respiratory distress, or any complication which requires IV infusion
2. If the child had oedema on admission, the oedema has begun to reduce
3. The child has appetite

Follow the same frequency of feeding and monitoring that was used during the previous phase (usually 3 hourly feeds) and feed the child RUTF according to the quantities described in Annex 20.

- The full day's requirement of RUTF should be given to the carer at once, usually in the morning.
- It is important to check throughout the day that the child IS EATING and tolerating the RUTF.
- Monitoring (including checking that the child is eating) should be done every 3 hours and recorded on the monitoring sheet

For children who will not eat the prescribed amount of RUTF continue with F-75 to make up any deficit in the RUTF intake. Every 3 hours, first offer RUTF. If the child does not eat the prescribed quantity, offer the equivalent quantity of F-75 milk. If the child eats the required amount, do not give the F-75 milk feed.

When introducing RUTF, the following is important:

- Other than breastmilk, which should always be provided first if a child is still breastfeeding, no other food should be given to the patient during this period
- Children should be offered as much water to drink as they will take during and after they have taken some of the RUTF

Occasionally the condition of children who are in the transition phase will deteriorate. If this occurs, move the child back to phase one (giving F75 and not RUTF).

Signs of deterioration include: –

- *Signs of fluid overload*
 - o Rapid weight gain (more than 10g/kg/d).





- o Any increase in oedema or the development of new oedema (especially puffy eyes)
- o Rapid increase in the size of the liver
- *Signs of intolerance*
 - o Tense abdominal distension
 - o Vomiting, more than occasional
 - o Significant exacerbation of diarrhoea

It is common for children to experience change in stool frequency when they change diet from F-75 to RUTF. This does not need to be treated unless they lose weight or develop other signs of dehydration*. Several loose stools without weight loss is not a criterion to move back to phase 1.

* Dehydration is difficult to assess in acute malnutrition as some of the signs may be due to the malnutrition itself (e.g. 'sunken eyes', reduced tissue turgor). For this reason, weight loss is the most sensitive guide to dehydration in these children.

Very occasionally the child will refuse to eat RUTF at all. In these cases, provide F-100 milk if possible (using the existing protocol) until the child begins to eat RUTF.

STEP 12: Discharge Criteria

Children who are being treated as inpatients and have recovered from their medical complication(s) and are consuming the prescribed daily amount of RUTF should be discharged to continue and complete treatment for malnutrition as outpatients at the CHC, Health Post or at the SISCa.

Criteria for discharge:

Category	Definition
*Transfer to outpatient	• Appetite returned (the child eats prescribed daily ration for at least 1 day) • medical condition resolved / stabilised (for chronic conditions) and • bilateral pitting oedema resolving Infants < 6 months: • all clinical conditions or medical complications, including oedema, are resolved, and • the infant has good appetite, is clinically well and alert, and • weight gain on either exclusive breastfeeding or replacement feeding is satisfactory, e.g. above the median of the WHO growth velocity standards or more than 5 g/kg/day for at least 3 successive days, and • the infant has been checked for immunizations and other routine interventions, • the mother or caregiver is linked with needed community-based follow-up and support (strong recommendation, very low quality evidence).
Defaulter	Absent from inpatient facility for 3 consecutive days
Died	Died while in the inpatient facility

Discharge procedure:

1. Give the child sufficient RUTF to last until next/t OTP at nearest local health facility.
2. Inform the carer of the importance of RUTF and how it should be used, stressing that it is a medicine and should only be used for the child concerned and should not be shared with the other children in the family (refer Annex 12).
3. On discharge, ensure that all information is recorded on the inpatient monitoring chart (Annex 18) and in the inpatient register book.
4. Summarise treatment using the IMCI checklist on the OTP follow up card which is sent to the health facility where outpatient care will be continued (Annex 21).
5. Inform the carer of the date they should report to the CHC, Health Post or SISCa for outpatient care.
6. The OTP follow up card is then sent to the health worker at the CHC or health post with the ambulance/car taking the mother back home. If not, it is given to the mother and the mother is asked to give the card to the health worker on the day that she presents at the health facility for outpatient care.
7. Children discharged from inpatient care are included in list for follow up by PSF during the first week of discharge



Chapter 7: Monitoring and Supervision

Monitoring and supervision is an important element of the IMAM programme. This section elaborates on the steps to take and provides some tools to be used during monitoring and supervision. Monitoring and supervision should be part of training for relevant staff and needs to be integrated as much as possible with existing nutrition and SISCa services.

Responsibilities

The district nutritionist is responsible for the IMAM programme within their district and will visit the health facilities (inpatient and outpatient) and SISCa (with IMAM programme) at least once every month to monitor and supervise activities. The district nutritionist is also responsible for collecting and analysing data and producing standard reports.

At the health facility level, the manager of the health facility (medical officer, nurse, or midwife) will conduct the day to day monitoring to make sure that activities are conducted according to protocols. The manager of the health facility will also be responsible for supervising the other staff. Individual monitoring cards are completed by health workers at each visit while PSFs fill out register books. Both these activities are supervised by the manager.

Monitoring and tracking individual children

Individual children are monitored largely via their TSFP, OTP or in-patient card, LISIO, and reports from PSFs and community members regarding follow-up visits. All children should be registered and receive an TSFP, OTP or in-patient card as soon as they arrive – children arriving at OTP should receive an OTP card even if they are to be immediately transferred to inpatient. A list of children who have been transferred between TSFP, OTP and inpatient should be kept and regularly cross checked with facility managers to be sure the children have arrived or to record any death or default on the appropriate tally sheet.

Cards should be kept in a file with cards of current cases separated from discharged cases. Discharges should be filed according to their outcome so they can be easily counted and cross checked against registers and reports.



Monitoring at facility/ catchment area level

This refers to monitoring the quality of treatment at the health facility and SISCa level and the coverage of cases of acute malnutrition within the catchment areas.

On-site monitoring is regularly conducted by the CHC manger or Inpatient Coordinator in the case of the inpatient facility and occasionally by the District Nutritionist. The on-site monitoring should focus on the treatment process as well as how effectively protocols are followed. During the on-the-site monitoring, the TSFP/OTP cards, Inpatient charts and LISIO should also be checked to see if the protocols are followed correctly. Supervision checklists are used during the monitoring, checklists are provided shown in Annex 22 for the inpatient and Annex 23 for the outpatient care and Annex 24 for TSFP.

On-site monitoring should be followed by on-the-job training if the protocols are not followed based on guidelines.

Performance indicators (see below) should also be reviewed monthly for each facility and reasons for any indicators below Sphere standards should be investigated.

In general, coverage of cases will be closely linked to the coverage by SISCa/ MCH services of all children under five years. The total number of children attending SISCA/MCH services each month should be compared with accurate population estimates for under-fives for an approximate coverage figure. Any absent children not attending SISCA/ MCH services should be followed-up. Specially-designed coverage surveys can also be used to evaluate coverage.

Barriers to access for any communities or individuals should be investigated regularly and addressed by the health team and communities.

Monitoring at programme level

Programme monitoring is done by monitoring the (1) appropriateness and (2) effectiveness of the programme in addressing acute malnutrition and the process should involve community members. DPHO Health Promotion along with volunteers should be involved in any monitoring at community level. However, the district nutritionist should be informed about the outcome of community consultations so that these can be incorporated into the programme accordingly.

Monitoring the appropriateness of the programme

The appropriateness of the programme is monitored mainly through conducting focus group discussions at the community level.

General guidelines on conducting focus group discussions

Gather a group of between 5 and 15 participants. Participants should be selected on the





basis of age, gender, ethnicity and religious, political or group affiliations. Participants may be at similar positions and experience (e.g. carers of children in the IMAM) or with different ones (e.g. mothers in the IMAM programme and mothers not included in the programme).

The focus group discussions should be guided and directed to focus on the issues related to IMAM programmes in the community. The facilitator should introduce specific topics such as coverage, access, recovery, service delivery, and lessons learnt (depending on the information required) and opinion of the participants sought. This should also be integrated to cover other topics such as SISCa.

Interviews with key community members

Interviews with key community members can be used when a more detailed picture of the community's perspective is sought. For example, if further information/clarifications are needed on the issues raised at a focus group discussion, some key community figures can be identified through volunteers and semi-structured interviews can be organised to collect more information from them. These interviews may also be used as means of finding solutions to some problems. Key informant interviews could be conducted with mothers in the programme or those mothers not coming to the programme. Ensure vulnerable households are included in the sample for interview.

Effectiveness of the programme

The effectiveness of the programme is determined based on the analysis of routine data collected at the health facility level.

Every week the health worker at each health facility fills out the register book. The register book is used to monitor admissions, attendance, plans for follow up and the final outcome of the child. At the end of the month the health worker prepares the monthly report together with the sub-district focal person or CHC manager and sends reports to the district nutritionist. The report is compiled and sent to the MoH at national level. (Annexes 25, 26 and 27 give examples of inpatient, OTP and TSFP reporting formats.)

Calculating programme performance

Programme performance is calculated through the analysis of treatment cards and compilation of monthly reports, and by comparing results with international standards. Health post workers and health workers at the facility level and district level should calculate and review the programme performance data in terms of cure, death, and default rates on a monthly basis, identifying trends and problems as they occur. Other data may also be reviewed to provide a more detailed assessment of the programme performance.

Ideally, the performance indicators are calculated combining outcomes for all children in TSFP, OTP and inpatient for a given district (taking care not to double count children who move between TSFP, OTP and inpatient) to give a holistic picture. If it is not feasible to combine the figures, the performance indicators can be reported separately for TSFP, OTP and inpatient, but it should be clearly indicated that figures are being reported for TSFP, OTP only or inpatient only so they can be interpreted in that context.

Total No. of Exits

Total No. of OTP Exits = total cured + total died + total defaulted + total non-cured + total transferred to inpatient*

Recovery rate

/Recovery rate = No of patient discharged for recovery / Total No of exits

Death rate

Death rate = No of patient died in the programme / Total No of exits

Defaulter rate

Defaulter rate = No of true defaulters / Total No of exits

The results will then be compared against the Sphere Standards (see below) and the effectiveness of the programme will be calculated.

Indicator	Acceptable	Alarming
Recovery rate	> 75%	< 50%
Death rate	< 10%	> 15%
Defaulter rate	< 15%	> 25%

NOTE: Use the Sphere standards as a rough guide to determine the programme effectiveness.

*If combining TSFP, OTP and Inpatient data, transfers between the two are excluded from the Total Exits.

If calculating TSFP data separately, the Sphere Performance Indicators and Appropriate Bench Mark for the Treatment of Moderate Acute Malnutrition (MAM):

Indicators	Sphere standards
% recovered	> 75 %
% defaulted	< 15 %
% died	< 3%
% coverage	>50% (rural)
>70% (urban)	
Optional indicators	
Length of stay	2-3 months



Supply Chain Management (SCM) for TSFP

There are various steps involved in the supply chain management, which are explained below:

Estimation of caseload and required tonnage of supplementary food

Estimated caseload for each district is calculated based on population figures (on latest HMIS data), latest prevalence rate, incidence, correction factor and expected coverage. However, if the population figures are perceived to be inaccurate, caseload can be estimated using an indirect method (Annex 28). Based on the caseload, the tonnage of supplementary food is estimated for each HF and district. This data feeds into pipeline/logistics to inform about the estimated tonnage requirement and helps in initial distribution plan of SF at each health facility.

Food request Note (FRN)

Monthly food requests will be submitted each month based on the actual beneficiaries during the reporting month +5% extra to account for new admissions. The DPHO nutrition will be responsible for totalling the beneficiaries and preparing the monthly food request for the district and submit to national level (ND of MOH). Once the monthly food requests have been received and consolidate at national level, the FRN will forward to WFP to provide food. WF should keep MoH informed about any pipeline problems so they can plan accordingly.

Storage of Supplementary Food

- Supplementary food stored at the distribution point (health facility) should be housed in a safe and secure room which will protect the supplementary food from rain/ water damage, rats and theft.

Minimum requirements are as follows:

- Roofs must not be leaking, walls and floors should not have cracks;
- Doors and windows should be secured;
- Adequate space to store food and allow aeration and movement of staff;
- The food should be stored on a raised platform or pallets, allowing for ventilation and as a secondary preventive measure to against water and pest damage;
- Food commodities should stack separately from each other;
- Food commodities should be stored separately from non-food commodities;⁶
- Stores should be in a compound where there is adequate space to carryout distribution;
- Food movements in the store need to be well recorded with a proper filing system in place;
- Any significant damage in and around the store need to be repaired in a timely manner;

⁶ Hazardous materials, fuels, poisons, etc must not be stored with food stocks.



- The store should always be kept clean and food should be stacked properly with a “First In First Out” Logic in mind.
- Remove and separate any damaged/spoilt or out-of-date- food
- After distribution, when stored in the household, the minimum requirements should be followed:
- Sealed container to prevent damage from water or pest;
- Avoid storing in direct sun light;

Disposal of damaged food

Disposing of and destroying goods should only be conducted if the goods are completely unsalvageable, unfit for any consumption or have no commercial value. Destruction can only happen after a formal decision from the MoH’s Cabinet for Sanitary Surveillance.

1. The Storekeeper identifies and/or separates any commodities earmarked for disposal or destruction
 - Spoiled food should be separated immediately and stored away from the main store if possible in order to prevent cross-contamination.
2. The Storekeeper fills out a Loss / Damage report
The Loss Report should specify in detail
 - The Cause of the loss (what caused the goods to become damaged)
 - Commodity details, amount earmarked for disposal / destruction, other details as specified in loss report
 - Detailed description on WHY the goods needs to be destroyed
3. Obtain a Certificate of Inspection from the Cabinet for Sanitary Surveillance (MoH)
 - The Certificate of Inspection is issued before any goods are destroyed, and only after the Cabinet for Sanitary Surveillance staff conducted an inspection of the items marked for disposal or destruction.
 - The Certificate of Inspection details whether the Commodities are:
 - o Fit for consumption by humans and / or animals,
 - o Unfit for consumption and needs to be destroyed.
4. Determine whether goods still have any commercial value
 - The Storekeeper, the Logistics Officer and Director General determine whether the goods still have any commercial value as Animal Feed, Fertilizer or any other industrial product.

If Yes:

 - These goods are either sold at the highest price, or donated to a willing recipient
 - The sale should be by competitive tender where possible
 - See more in the section “Tendering & Contract Management”.





If No:

- Destruction of goods can only be conducted under supervision of the Logistics Officer of the Ministry of Health,
- A Destruction Report is compiled stating the quantities and the method of destruction, signed by the Logistics Officer and the Director General, and forwarded to the ministry for filing.

5. Dispose of Commodities in a safe and reliable way

- Disposal should be conducted in a method stated by public disposal laws, such as incineration.

6. Obtain a Certificate of Destruction from MoH

- A Certificate of destruction is issued by the Cabinet for Sanitary Surveillance after the commodities have been destroyed.

ANNEXES

ANNEX 1: Glossary

Terminology	Explanation
Acute Malnutrition	Acute malnutrition is a form of under-nutrition. It is caused by a recent decrease in food consumption and/or illness resulting in bilateral pitting oedema or sudden weight loss. It is defined by wasting (low mid-upper arm circumference [MUAC] or low weight-for-height (z-scores) or the presence of bilateral pitting oedema or
Anthropometry	Measurement of the human body. It is used to measure and monitor the nutritional status of an individual or population group
Appetite	The decisive criteria for participation in outpatient care. The test is done at admission and at all outpatient care follow-on sessions to ensure that the child can eat RUTF. If the child has no appetite, s/he must be referred for inpatient care
Bilateral Pitting Oedema	Bilateral pitting oedema, also known as nutritional oedema, kwashiorkor or oedematous malnutrition, is a sign of severe acute malnutrition (SAM). It is defined by bilateral pitting oedema of the feet and verified when thumb pressure applied on top of both feet for three seconds leaves a pit (indentation) in the foot after the thumb is lifted.
Community- Based Management of Acute Malnutrition (IMAM)	IMAM refers to the management of acute malnutrition through: 1) inpatient care for children with SAM with medical complications and infants under 6 months old with SAM and complication, loss of weight or failure to gain weight and ineffective feeding; 2) outpatient care for children with SAM without medical complications and infants under 6 months old with SAM without complications, gaining weight and effective feeding 3) community participation; and 4) supplementary feeding for children with moderate acute malnutrition (MAM) that may be provided depending on the context in the country of implementation

Terminology	Explanation
Community Participation	In Timor Lester community participation for IMAM includes community assessment, community mobilisation, active case-finding and referral, and case follow-up, as well as active participation of the community in monitoring and evaluation of the programmes.
Community Referral	Community referral is the process of identifying children with acute malnutrition in the community and sending them to the health facility for IMAM services
Community Volunteer	A community volunteer is a person who mobilises the community, conducts screening, referral and follow-up in the community. He or she may receive an incentive but no remuneration. In Timor-Leste an example of a community volunteer is the PSF
Basic Health Care Package	Basic health care package refers to the set of services provided at health facilities, as mandated by the Timor-Leste national health policy. The package varies based on the health facility type (e.g., health centre versus health post)
Chronic Malnutrition:	Chronic malnutrition is also referred to as stunting and develops as a result of inadequate nutrition or repeated infections or both, over an extended period of time; typically, during the critical window of opportunity of the first 1,000 days from conception to two years of age. It is measured by the nutritional index of HAZ and is manifested by a child being too short for his or her age. Unlike wasting, the development of stunting is a slow cumulative process that may not be evident immediately. Chronic malnutrition is irreversible after 24 months of age and its prevention should be prioritised.
F75	Formula 75 (75 kcal/100ml) is the milk-based diet recommended by WHO for the stabilisation of children with SAM in inpatient care



Terminology	Explanation
F100	Formula 100 (100 kcal/100ml) is the milk-based diet recommended by WHO for the nutrition rehabilitation of children with SAM after stabilisation in the inpatient care. F-100 was used before RUTF and other ready to use therapeutic foods were available
Global Acute Malnutrition (GAM)	GAM is a population-level indicator referring to overall acute malnutrition prevalence, defined by wasting measured by WFH < -2 z-score (WHO standards or NCHS references) or the presence of bilateral pitting oedema. GAM is divided into moderate and severe acute malnutrition (GAM = SAM + MAM).
Growth failure	The condition where an individual is shorter and/or thinner than their well-nourished counterparts and where the individual does not meet her/his growth potential. Growth may fail due to deficiencies of various micronutrients, energy, protein and/or macro-minerals.
Health Care	Health care is the prevention, treatment and management of illness and the preservation of mental and physical well-being through the services offered by health care providers. Health care embraces all the goods and services designed to promote health, including preventive, curative and palliative interventions, whether directed to individuals or to populations
Health Care Provide	Health care provider refers to the medical, nursing and allied health professionals, including community health workers
Health Care System	A health care system refers to the organised delivery of health care
Health System	A health system consists of all structures, resources, policies, personnel, services and programmes involved in the promotion, restoration and maintenance of health



Terminology	Explanation
Inpatient Care in the context of IMAM	Inpatient care is a IMAM service treating children with SAM with medical complications until their medical condition is stabilised and the complication is resolved (usually in 4–7 days). Treatment then continues in outpatient care until weight recovery is achieved. Inpatient care for SAM with medical complications is provided in a hospital or health facility with 24-hour care capacity
Malnutrition	Occurs when the nutrient and energy intake does not meet or exceeds an individual's requirements to maintain growth, immunity and organ functions. Malnutrition is a general term and covers both undernutrition and overnutrition (overweight/obesity).
Marasmic Kwashiorkor	Marasmic kwashiorkor is the simultaneous condition of severe wasting (Marasmus) and bilateral pitting oedema (kwashiorkor).
Micronutrient Deficiencies	Micronutrient deficiencies are a consequence of reduced or excess micronutrient intake and/or absorption in the body. The most common forms of micronutrient deficiencies are related to iron, vitamin A and iodine deficiency
Mid-Upper Arm Circumference (MUAC)	Low MUAC is an indicator for wasting, used for a child that is 6 to 59 months old. MUAC < 115 mm indicates severe wasting or SAM. MUAC ≥ 115 mm and < 125 mm indicates moderate wasting or MAM. MUAC is a better indicator of mortality risk associated with acute malnutrition than WFH
Moderate Acute Malnutrition (MAM)	Moderate acute malnutrition (MAM): represents the proportion of children 6–59 months in the population who are classified with WHZ ≥ -3 and < -2 and or MUAC ≥ 115 mm and < 125 mm.
Ready-to-Use Therapeutic Food (RUTF)	RUTF is an energy-dense, mineral- and vitamin-enriched food specifically designed to treat SAM. RUTF has a similar nutrient composition to F100. RUTF is soft, crushable food that can be consumed easily by children from the age of 6 months without



Terminology	Explanation
	adding water. Unlike F100, RUTF is not water-based, meaning that bacteria cannot grow in it and that it can be used safely at home without refrigeration and in areas where hygiene conditions are not optimal. It does not require preparation before consumption. Plumpy'nut® is an example of a commonly known lipid-based RUTF
Referral	A referral is a child who is transferred to a different component of IMAM (e.g., from outpatient care to inpatient care for medical reasons) but has not left the programme
Routine Health Services	Routine health services refer to those services provided at health facilities depending on staff capacity and facility resources. These services include the essential health care package and other services
Scale-Up	Scale-up involves the expansion of services (e.g., from the pilot phase to the programme phase, as part of a strategy to expand geographical coverage to the targeted area or nationally).
Severe Acute Malnutrition (SAM)	SAM is defined by the presence of bilateral pitting oedema or severe wasting (MUAC < 115 mm. A child with SAM is highly vulnerable and has a high mortality risk. SAM can also be used as a population-based indicator defined by the presence of bilateral pitting oedema or severe wasting
Specialized nutritious foods	Refers to the range of specialized food products and supplements that provide varying levels of energy, micronutrients, and macronutrients necessary for growth and health in order to prevent or treat undernutrition. Specialized nutritious foods are often defined or categorized as follows: • Ready-to-Use foods (RUF): is the existing generic term that refers to foods that do not need to be prepared, cooked, or mixed with water. Ready-to-Use Supplementary Food (RUSF) is a type of RUF that is specifically designed for the treatment of moderate acute malnutrition in children 6–59 months of age.





Terminology	Explanation
	Ready-to-Use Therapeutic Food (RUTF) – see glossary definition is an energy-dense mineral and vitamin-enriched RUF, Fortified blended foods (FBF) are a mixture of cereals and other ingredients (such as soya beans or pulses) that have been milled, blended, pre-cooked by extrusion or roasting, and fortified with a premix and with a wide range of vitamins and minerals. Micronutrient powders (MNPs) are a mix of multiple micronutrients used in programmes to prevent MND among children 6–59 months, and are also increasingly to prevent MND among school-age children through school feeding programmes. MNPs are distributed in small sachets that are added to solid or semi-solid foods after preparation and prior to consumption. MNPs are tasteless, odourless and easily dissolvable in most warm foods. MNPs do not provide energy, but do provide the complete FAO/WHO recommended daily intake as per Recommended Nutrient Intake (RNI) of each micronutrient per dose. Most countries use the 15 micronutrient formulation.
Supplementary Foods	Supplementary foods are specially formulated foods, in ready-to-eat (see Specialised Nutritious foods) or in milled form, which are modified in their energy density, protein, fat or micronutrient composition to help meet the nutritional requirements of specific populations. Supplementary foods are not intended to be the only source of nutrients and are different from complementary foods, in that the latter are intended for progressive adaptation of infants 6 months of age and older, to family foods. They are also different from food supplements, which refer to vitamin and mineral supplements in unit dose forms such as capsules, tablets, powders or solutions, where national jurisdictions regulate these products as food. Supplementary foods have been used to rehabilitate moderately malnourished persons or to prevent a deterioration of nutritional status of those most at risk by meeting their additional needs, focusing





Terminology	Explanation
	particularly on children 6–59 months of age, pregnant women and lactating mothers. Examples of supplementary foods include fortified blended foods, which can be used to prepare smooth, ready-to-eat porridges, and lipid-based nutrient supplements.
Undernutrition	Undernutrition occurs as a consequence of an insufficient intake of energy, protein and/or micronutrients, poor absorption or rapid loss of nutrients due to illness or increased energy expenditure. Undernutrition encompasses low birth weight, stunting, wasting, underweight, bilateral pitting oedema and micronutrient deficiencies



ANNEX 2: A sample of IMAM Messages for sensitisation

A new treatment is available at the Health Post for thin [*krekas*] children, and for children whose bodies are swollen [*isin bubu*]. This treatment is for children under 5 yrs old.

Parents who are concerned about their child's health can have the child's arms and feet measured by a trained volunteer from their own *aldeia*. The measurement is quick and painless. The volunteer uses a simple cloth tape similar to the ones used by tailors in the market. If the measurement shows the child to be admissible, he is sent with a note to the Health Post, where he receives a weekly ration of a new medicinal food.

These village arm measurements are intended to assist parents who are too busy, or too far from the local Health Post. Parents may always choose instead to take their children directly to the Health Post, but the child must still undergo the same measurement of arms and legs there in order to be selected for the new treatment.

If you know of a child who is *krekas* or has *isin bubuk* tell his parents about this new treatment and ask them to have the child checked by the *aldeia* volunteer*

Some important points about the new treatment:

- o Admitted children must return to the health post weekly to receive more of the medicinal food.
Normally the treatment continues for several months. It is important not to interrupt the treatment.
- o The medicinal food is very powerful and should not be shared with other family members
- o Children who do not qualify for this treatment may still be eligible for other food assistance. So even if you don't feel your child has a serious nutrition problem it is still good to have his arms/legs measured.
- o The treatment will be available continuously – including through the time of food shortage. If your child is measured now and found to be ineligible, remember that he can be re-measured at your request the following week or month, if his health or the family food situation becomes worse.
- o Diseases of thinness and swelling go by different names in different places, but this treatment is helpful for almost all of them. If the child is suffering from one of the following diseases, you should also ask for the volunteer to examine the child's arms and feet.
 - o Tetum version: *isin tun, isin lasae, ain bos, horok, horok kaut, moras aat*





- o **Mambae version:** *etan bub, lukmotor, hork, eta bub telamit, maunboten, liman bubu, ain bubu, etan fraku, sibira, tulukmotu, moras aat, sag kal dudu*

In this aldeia:

Name of volunteer is _____

The weekly HP treatment day is held on _____

* the term “volunteer” could be substituted with other terms (e.g. “measurer”) if it is considered inaccurate or disliked by those performing the measurement.

Sample of visual aids for community sensitization

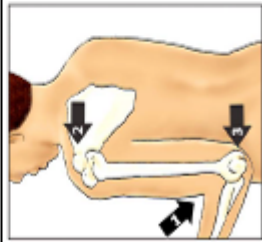
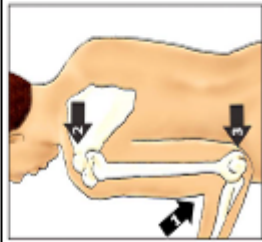
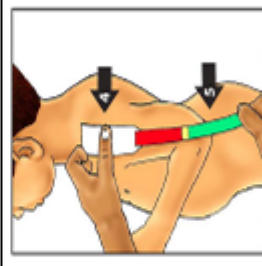
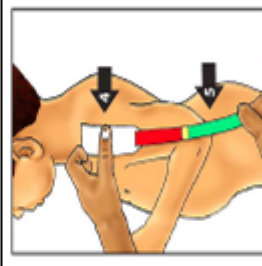
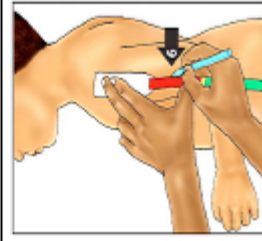
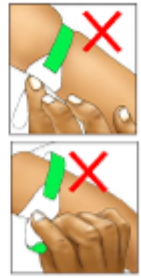


ANNEX 3: How to measure MUAC

The same procedure is applied for PLW.

Screening acute malnutrition in infants and young children aged 6-59 months using Mid-Upper Arm Circumference (MUAC) and Oedema



Measuring MUAC			
 (1) Bend left arm 90° (Note: Left arm is recommended, if left arm is not possible (e.g. injury) right arm can be measured)  (2) Locate tip of shoulder (3) Locate tip of elbow	 (4) Place tape at 0 cm at tip of shoulder.  (5) Pull the other end of tape past tip of bent elbow and read length of upper arm.	 (6) Calculate the mid-point and mark with a pen.	 (7) Straighten arm and place the MUAC tape around the mid-point.  (8) Place tape through window of the MUAC tape. Correct the tape tension  Too loose Too tight
 IF MUAC is RED, the child is with severe acute malnutrition (SAM). IF MUAC is YELLOW, the child is with moderate acute malnutrition (MAM). Admit for SAM treatment, give RUTF. Admit for MAM treatment, give RUSF. 		 IF MUAC is GREEN, the child is well nourished, encourage mother and counsel on good nutrition.	
		Checking Oedema	
		 1. Press the back of both feet using thumb and hold it for 3 second and release the pressure. 2. If you see a shallow hole/pit on both feet as shown in the picture, the child is malnourished.	



ANNEX 4: How to assess oedema

1. Firm thumb pressure is applied to the feet for three seconds, counting 1001, 1002, 1003.
2. The thumbs are removed
3. If a depression persists (on both feet) then the patient has nutritional oedema.
4. If oedema is assessed, it has to be verified by another health worker. Only children with bilateral pitting oedema are recorded as presenting oedema



ANNEX 5: Taking weight and length

1. WEIGHING THE CHILD

- use accurately calibrated scales
- weigh the child naked and without wraps
- children/infants who are unable/unwilling to stand alone on a scale should be weighed in their carer's arms.

Child's weight = (child + carer weight) – carer weight
UNICEF electronic scales (UNISCALE) will calculate this automatically

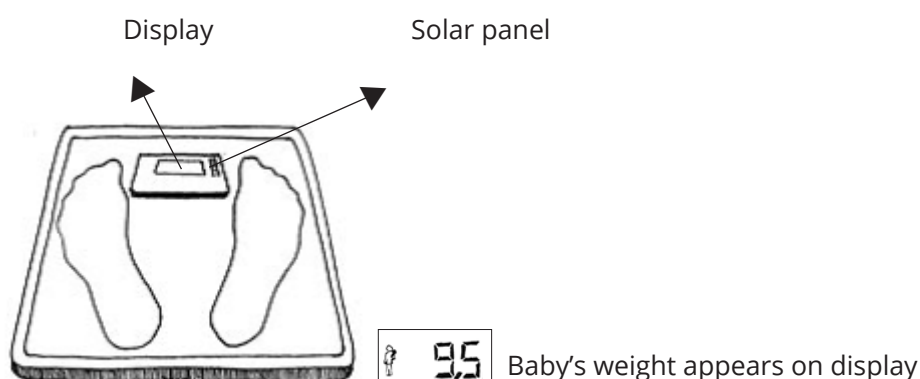
It is recommended to weigh children using a scale with the following features:

- Solidly built and durable
- Electronic (digital reading)
- Measures up to 150 kg
- Measures to a precision of 0.1 kg (100g)
- Allows tared weighing, if possible

“Tared weighing” means that the scale can be re-set to zero (“tared”) with the person just weighed still on it. Thus, a mother can stand on the scale, be weighed, and the scale tared. While remaining on the scale, if she is given her child to hold, the child's weight alone appears on the scale. Tared weighing has two clear advantages:

- o There is no need to subtract weights to determine the child's weight alone (reducing the risk of error).
- o The child is likely to remain calm when held in the mother's arms for weighing.

UNISCALE (made by UNICEF) has the recommended features listed above





If the child is less than 2 years old or is unable to stand, you will need to do tared weighing. Stress that the mother must stay on the scale until her child has been weighed in her arms.

Explain the tared weighing procedure to the mother as follows.

- The mother will remove her shoes and step on the scale to be weighed alone first. She may need to adjust any long garments that could cover the display and solar panel of the scale.
- After the mother's weight appears on the display, tell her to remain standing on the scale.
- Re-set the reading to zero by covering the solar panel of the scale (thus blocking out the light).
- Then give the mother her child to hold. The child's weight will appear on the scale.
- Record the child's weight.

If the child is 2 years or older, you will need to weigh the child alone if the child will stand still. Explain that the child will need to step on the scale alone and stand very still.

2. MEASURING LENGTH (INFANTS)

A child's length is measured lying down (recumbent). If a child is less than 2 years old, measure recumbent length.

Measuring LENGTH – you need two people for this task

- Remove shoes / socks and any "hair ties"
- Lie the child on the length board
- The child's head must be flush with the end of the board (the measurer's hands should be beneath the child's mandible and gently pulling upwards).
- The child must be "centred" on the board, the legs extended (knees straight) and the feet square against the slide of the board
- Hold the slide firmly against the flexed feet to record the length.



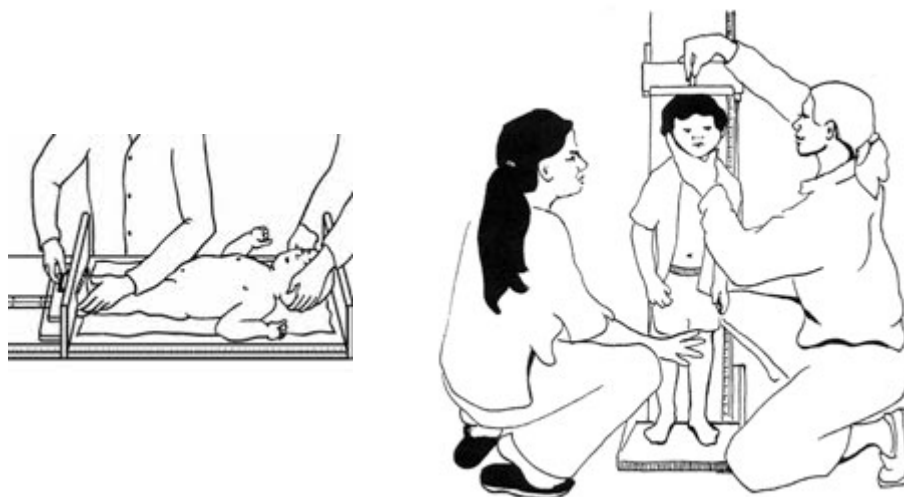
Length board

Movable footboard

Fixed headboard

Movable headboard

Fixed baseboard





ANNEX 6: Weight-for-Length Reference Card (< 87 cm)

Boys' weight (kg)					Length cm	Girls' weight (kg)				
-4SD	-3SD	-2SD	-1SD	Median		Median	-1SD	-2SD	-3SD	-4SD
60%	70%	80%	90%				90%	80%	70%	60%
1.7	1.9	2.0	2.2	2.4	45	2.5	2.3	2.1	1.9	1.7
1.8	2.0	2.2	2.4	2.6	46	2.6	2.4	2.2	2.0	1.9
2.0	2.1	2.3	2.5	2.8	47	2.8	2.6	2.4	2.2	2.0
2.1	2.3	2.5	2.7	2.9	48	3.0	2.7	2.5	2.3	2.1
2.2	2.4	2.6	2.9	3.1	49	3.2	2.9	2.6	2.4	2.2
2.4	2.6	2.8	3.0	3.3	50	3.4	3.1	2.8	2.6	2.4
2.5	2.7	3.0	3.2	3.5	51	3.6	3.3	3.0	2.8	2.5
2.7	2.9	3.2	3.5	3.8	52	3.8	3.5	3.2	2.9	2.7
2.9	3.1	3.4	3.7	4.0	53	4.0	3.7	3.4	3.1	2.8
3.1	3.3	3.6	3.9	4.3	54	4.3	3.9	3.6	3.3	3.0
3.3	3.6	3.8	4.2	4.5	55	4.5	4.2	3.8	3.5	3.2
3.5	3.8	4.1	4.4	4.8	56	4.8	4.4	4.0	3.7	3.4
3.7	4.0	4.3	4.7	5.1	57	5.1	4.6	4.3	3.9	3.6
3.9	4.3	4.6	5.0	5.4	58	5.4	4.9	4.5	4.1	3.8
4.1	4.5	4.8	5.3	5.7	59	5.6	5.1	4.7	4.3	3.9
4.3	4.7	5.1	5.5	6.0	60	5.9	5.4	4.9	4.5	4.1
4.5	4.9	5.3	5.8	6.3	61	6.1	5.6	5.1	4.7	4.3
4.7	5.1	5.6	6.0	6.5	62	6.4	5.8	5.3	4.9	4.5
4.9	5.3	5.8	6.2	6.8	63	6.6	6.0	5.5	5.1	4.7
5.1	5.5	6.0	6.5	7.0	64	6.9	6.3	5.7	5.3	4.8
5.3	5.7	6.2	6.7	7.3	65	7.1	6.5	5.9	5.5	5.0
5.5	5.9	6.4	6.9	7.5	66	7.3	6.7	6.1	5.6	5.1
5.6	6.1	6.6	7.1	7.7	67	7.5	6.9	6.3	5.8	5.3
5.8	6.3	6.8	7.3	8.0	68	7.7	7.1	6.5	6.0	5.5
6.0	6.5	7.0	7.6	8.2	69	8.0	7.3	6.7	6.1	5.6
6.1	6.6	7.2	7.8	8.4	70	8.2	7.5	6.9	6.3	5.8
6.3	6.8	7.4	8.0	8.6	71	8.4	7.7	7.0	6.5	5.9
6.4	7.0	7.6	8.2	8.9	72	8.6	7.8	7.2	6.6	6.0
6.6	7.2	7.7	8.4	9.1	73	8.8	8.0	7.4	6.8	6.2
6.7	7.3	7.9	8.6	9.3	74	9.0	8.2	7.5	6.9	6.3
6.9	7.5	8.1	8.8	9.5	75	9.1	8.4	7.7	7.1	6.5
7.0	7.6	8.3	8.9	9.7	76	9.3	8.5	7.8	7.2	6.6
7.2	7.8	8.4	9.1	9.9	77	9.5	8.7	8.0	7.4	6.7
7.3	7.9	8.6	9.3	10.1	78	9.7	8.9	8.2	7.5	6.9
7.4	8.1	8.7	9.5	10.3	79	9.9	9.1	8.3	7.7	7.0
7.6	8.2	8.9	9.6	10.4	80	0.1	9.2	8.5	7.8	7.1
7.7	8.4	9.1	9.8	10.6	81	10.3	9.4	8.7	8.0	7.3
7.9	8.5	9.2	10.0	10.8	82	10.5	9.6	8.8	8.1	7.5
8.0	8.7	9.4	10.2	11.0	83	10.7	9.8	9.0	8.3	7.6
8.2	8.9	9.6	10.4	11.3	84	11.0	10.1	9.2	8.5	7.8
8.4	9.1	9.8	10.6	11.5	85	11.2	10.3	9.4	8.7	8.0
8.6	9.3	10.0	10.8	11.7	86	11.5	10.5	9.7	8.9	8.1

ANNEX 7: Referral slip

													
KARTAUN REFERAL													
Data: _____													
Marka (x) ba ida:	Marka (x) ba ida:												
<table border="1" style="margin: auto;"> <tr> <td style="padding: 5px;">PTI</td> <td style="padding: 5px;">PTE</td> <td style="padding: 5px;">TPSH</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	PTI	PTE	TPSH				<table border="1" style="margin: auto;"> <tr> <td style="padding: 5px;">Labarik</td> <td style="padding: 5px;">IIR</td> <td style="padding: 5px;">IFS</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Labarik	IIR	IFS			
PTI	PTE	TPSH											
Labarik	IIR	IFS											
Naran: _____													
Idade: _____ Sexu: M F LKL: _____ cm													
Naran Inan/aman (<i>karik labarik</i>): _____, Tlp: _____													
Suco: _____ Aldeia: _____													
Razoens refere: _____													
Refere ba fatin: _____													
Naran pesoal halo refere: _____, Tlp: _____													
Fatin Sukat/Tetu: _____													
C													

ANNEX 8: TSFP Enrolment cards

Enrolment card for children 6 – 23 months

						
KARTAUN REGISTU						
Rekorda Labarik Fulan 6-23 ba TPSH						
1. Data: / /	2. Postu Administrativu:	3. Munisípiu:	4. Naran Facilidade Saúde:	5. Numero LISIO:		
A. Informasaun Demografia Basika:						
6. Naran:	7. Idade (Fulan):		8. Sexo	Mane/Feto		
9. Naran Inan/Kuidador:	10. No. Telefone:		Suco/Aldeia:		11. Lao oras hira husi uma ba FS:	
B. Informasaun Tama						
12. Tama (Sirkulu Ida):	a. Tama Foun	b. Transfere Husi Fatin TPSH Seluk		C. Tama Fila Fali		
				C.1. Depois Kura	C.2. Depois La-kura	C.3. Depois Fila
13. Tama Refere husi (Sirkulu Ida):	a. Rasik	b. Tetu- Sukat Iha SISCA	c. Tetu-Sukat Iha Mobile Clinic	d. Vizita Uma	e. Facilidade Saúde	f. Seluk-Seluk
C. Medikamentu Simu Rutina;						
14. Aimoruk	Vitamina A	AlbendaZole	Vasinasau Sarampo	Seluk (Spesifikasaun)	-	-
15. Data simu:						
D. Kartu Rejistu (Priense kada Vizita)						
	1º Mes (Tama)	2º Mes	3º Mes	4º Mes	Kolom adisional karik beneficiario falta	
Data Sukat: (LL/FF/TTTT)						
Data Vizita tuir mai: (LL/FF/TTTT)						
LKL (CM):						
Statuto iha TPSH *						
Aihan Suplementu (Tipo no Kuantidade) [RUSF: Ready to Use Supplementary Food (eeZeeRUSF/Plumpy sup)]	RUSF (Saset)	RUSF (Saset)	RUSF (Saset)	RUSF (Saset)		
Data Distribuisaun: (LL/FF/TTTT)						
Data Distribuisaun Tuir Mai: (LL/FF/TTTT)						
Asinatura Husi ema nebe atende						
Asinatura Husi Beneficiario						
Kriteria Tama: Labarik idade fulan 6 - 23 ho LKL entre 11.5 - 12.4 cm ho vontade han diak, klinikamente diak no la iha bubu. Kriteria Hasai: hetan LKL liu husi ka hanesan (≥) 12.5 cm , falta fulan 2 tuir malu (Failha), Mate, la hetan kriteria KURA (hasai hanesan La Kura), transfere ba programa seluk ka TPSH seluk. * Abreviasaun uza iha TPSH: F: Foun, KU: Kura, KT: Kontinua, FL: Failha, M: Mate, LK: La-Kura, R: Referral, FA: Falta, TFDK: Tama Fali Depois Kura, TFDL: Tama Fali depois Failha, TFDL: Tama Fali depois La-Kura.						

Enrolment card for children 24 – 59 months

						
KARTAUN REGISTU						
Rekorda Labarik Fulan 24-59 ba TPSH						
1. Data: / /	2. Postu Administrativu:	3. Munisípiu:	4. Naran Facilidade Saúde:	5. Numero LISIO:		
A. Informasaun Demografia Basika:						
6. Naran:	7. Idade (Fulan):		8. Sexo:	Mane/Feto		
9. Naran Inan/Kuidador:	10. No. Telefone:		Suco/Aldeia:	11. Lao oras hira husi uma ba FS:		
B. Informasaun Tama						
12. Tama (Sirkulu Ida):	a. Tama Foun	b. Transfere Husi Fatin TPSH Seluk		C. Tama Fila Fali		
				C.1. Depois Kura	C.2. Depois La-Kura	C.3. Depois Falia
13. Tama Programa husi (Sirkulu Ida):	a. Rasik	b. Tetu- Sukat Iha SISCA	c. Tetu-Sukat Iha Mobile Clinic	d. Vizita Uma	e. Facilidade Saúde	f. Seluk-Seluk
C. Medikamentu Simu Rutina:						
14. Aimoruk	Vitamina A	AlbendaZole	Vaksinasaun Sarampo	Seluk (Spesifikasaun)	-	-
15. Data Simu:						
D. Kartu Registru (Priense kada Vizita)						
	1º Mes (Tama)	2º Mes	3º Mes	4º Mes	Kolom adisional karik beneficiario falta	
Data Sukat: (LL/FF/TTTT)						
Data Vizita Tuir Mai: (LL/FF/TTTT)						
LKL (CM):						
Statuto iha TPSH *						
Aihan Suplementu (Tipo no Kuantidade) [RUSF: Ready to Use Supplementary Food (eeZeeRUSF/Plumpy sup)]	RUSF (Saset)	RUSF (Saset)	RUSF (Saset)	RUSF (Saset)		
Data Distribuisaun: (LL/FF/TTTT)						
Data Distribuisaun Tuir Mai: (LL/FF/TTTT)						
Asinatura Husi ema nebe atende						
Asinatura Husi Beneficiario						
Kriteria Tama: labarik idade fulan 24 - 59 ho LKL entre 11.5 - 12.4 cm ho vontade han diak, klinikamente diak no la iha bubu. Kriteria Hasai: hetan LKL liu husi ka hanesan (≥) 12.5 cm, falta fulan 2 tuir malu (Faiha), Mate, la hetan kriteria KURA (hasai hanesan La Kura), transfere ba programa seluk ka TPSH seluk. * Abreviasaun uza iha TPSH: F: Foun, KU: Kura, KT: Kontinua, FL: Falia, M: Mate, UK: La-Kura, R: Referral, FA: Falta, TFDK: Tama Fali Depois Kura, TFDL: Tama Fali depois Falia, TFDL: Tama Fali depois La-Kura.						

B1

Enrolment card for pregnant women

							
KARTAUN REGISTU							
Rekorda Inan Isin Rua ba TPSH							
1. Data: / /	2. Postu Administrativu:	3. Munisípiu:	4. Naran Facilidade Saúde	5. Numero LISIO:			
A. Informasaun Demografia Basika							
6. Naran:		Idade (Tinan)	7. No. Telefone:	8. Statuto (Siklu Ida)	Inan Isin Rua (Sirkulu Ida)		
9. Hela Fatin	Suco/Aldeia:	10. Lao oras hira husi uma ba Facilidade Saúde (FS):			a. Semester Sengudo b. Semester Terseiro		
B. Informasaun Tama							
11. Tama (Sirkulu Ida):	a. Tama Foun	b. Transfere Husi Fatin TPSH Seluk		c. Tama Fila Fali			
				C.1. Depois Kura	C.2. Depois La-Kura	C.3. Depois Fala	
12. Tama programa Husi (Sirkulu Ida):	a. Rasik	b. Tetu-Sukat iha SISCAS	c. Tetu-Sukat iha Mobile Klinika	d. Vizita Uma	e. Facilidade Saúde	f. Seluk (spesifikasi)	
C. Medikamentu Simu Rutina							
13. Aimoruk	a. Vaksinasuun TT	b. IFA		c. Seluk (spesifikasi)	-	-	
14. Data Simu:							
D. Kartaun Rejistu (Priencia kada Vizita)							
	1º Mes (Tama)	2º Mes	3º Mes	4º Mes	5º Mes	6º Mes	Observasaun
Data Sukat: (LL/FF/TTTT)							
Data Vizita Tuir Mai: (LL/FF/TTTT)							
LKL (CM):							
Statuto iha TPSH *							
Aihan Suplementu (Tipo no Quantidade) Fortified Blended Food (FBF): TV= Timor Vita / SC= Super Cereal	FBF (Kg)	FBF (Kg)	FBF (Kg)	FBF (Kg)	FBF (Kg)	FBF (Kg)	
Data Distribuisaun: (LL/FF/TTTT)							
Asinatura Husi ema nebe atende							
Asinatura Husi Beneficiario							
Kriteria Tama: Inan isin rua iha trimester II no III ho LKL menus husi 23 cm (< 23 cm) ho vontade han diak no klinikamente diak. Kriteria Hasai: hetan LKL liu husi ka hanesan (z) 23 cm, falta fulan 2 tui-tuir malu (Failha), Mate, la to'o/hetan kriteria KURA (hasai hanesan La Kura), transfere ba programa seluk ka TPSH seluk. * Abreviasaun uza iha TPSH: F: Foun, KU: Kura, KT: Kontinua, FL: Failha, M: Mate, LK: La-Kura, R: Referral, FA: Falta, TFDK: Tama Fali Depois Kura, TFDL: Tama Fali depois Failha, TFDL: Tama Fali depois La-Kura							B2

Enrolment card for lactating women

 KARTAUN REGISTU Rekorda Inan fo susu ba TPSH							
1. Data: / /	2. Postu Administrativu:	3. Munisípiu:	4. Naran Facilidade Saúde	5. Numero LISIO:			
A. Informasaun Demografia Basika							
6. Naran:	Idade (Tinan)		7. No. Telefone:	8. Inan fo Susu (Fo deit Susu deit bebe ho susuben eksklusiva husi Inan nia Susuben)			
9. Hela Fatin	Suco/Aldeia:		10. Lao oras hira husi uma ba facilidade Saúde (FS):				
B. Informasaun Tama							
11. Tama (Sirkulu Ida):	a. Tama Foun	b. Transfere Husi Fatin TPSH Seluk		c. Tama Fila Fali			
				C.1. Depois Kura	C.2. Depois La-Kura	C.3. Depois Fila	
12. Tama programa Husi(Sirkulu Ida):	a. Rasik	b. Tetu-Sukat iha SISCAS	c. Tetu-Sukat iha Mobile Klinika	d. Vizita Uma	e. Facilidade Saúde	f. Seluk (spesifikasi)	
C. Medikamentu Simu Rutina							
13. Aimoruk	a. Vaksinasun TT	b. IFA	c. Seluk (spesifikasi)	-	-	-	
14. Data Simu:							
D. Kartaun Registu (Prienca kada Vizita)							
	1º Mes (Tama)	2º Mes	3º Mes	4º Mes	5º Mes	6º Mes	Observasaun
Data Sukat: (LL/FF/TTTT)							
Data Vizita Tuir Mai: (LL/FF/TTTT)							
LKL (CM):							
Statuto iha TPSH *							
Aihan Suplementu (Tipo no Kuantidade)	FBF (Kg)	FBF (Kg)	FBF (Kg)	FBF (Kg)	FBF (Kg)	FBF (Kg)	
Fortified Blended Food (FBF):							
TV= Timor Vita / SC= Super Cereal							
Data Distribuisaun: (LL/FF/TTTT)							
Asinatura Husi ema nebe atende							
Asinatura Husi Beneficiario							
Kriteria Tama: Inan fo susu iha periodu eksklusivu ho LKL minus husi 23 cm (< 23 cm) ho vontade han diak no klinikamente diak. Kriteria Hasai: hetan LKL liu husi ka hanesan (≥ 23 cm, falta fulan 2 tui-tuir malu (Failha), Mate, la to'o/hetan kriteria KURA (hasai hanesan La Kura), transfere ba programa seluk ka TPSH seluk. * Abreviasaun uza iha TPSH: F: Foun, KU: Kura, KT: Kontinua, FL: Failha, M: Mate, LK: La-Kura, R: Referal, FA: Falta, TFDK: Tama Fali Depois Kura, TFDL: Tama Fali depois Failha, TFDL: Tama Fali depois La-Kura							

B3

ANNEX 9: TSFP Ration Cards

Ration card for children 6 – 23 months

					
KARTAUN SIMU AI-HAN SUPLEMENTU					
Ba Labarik idade fulan 6-23 ho Malnutrisaun Aguda Moderadu (MAM)					
Naran (Inan/Kuidador):				Numeru Lisio:	
Labarik nia Naran:				Seksu (M/F):	
Idade (Fulan):					
Naran Fasilidade Saúde:					
	Fulan Simu Ai-han Suplementu				Kolom adisional karik beneficiariu falta
	1° Mes (Tama)	2° Mes	3° Mes	4° Mes	
Loron Sukat: LL/FF/TTTT					
Loron Visita Tuir Mai: LL/FF/TTTT					
LKL (CM):					
Ai-han Suplementu Nebe'e Simu (Tipo no Kuantidade) Ready to Use Supplementary Food (RUSF): eeZeeRUSF/Plumpy sup	RUSF (Saset)	RUSF (Saset)	RUSF (Saset)	RUSF (Saset)	
Asinatura husi ema nebe'e atende					
Nota : Benefisiariu nebe'e Lori Kartaun nee iha direitu atu simu ai-han kada fulan: ==> Ready to use Supplementary Food (RUSF): Saset 30 kada fulan (Saset 1 loron ida)					

Ration card for children 24 – 59 months

					
KARTAUN SIMU AI-HAN SUPLEMENTU					
Ba Labarik Idade Fulan 24 - 59 ho Malnutrisaun Aguda Moderadu (MAM)					
Naran Inan/Kuidador:				Numeru Lisio:	
Labarik nia Naran:				Seksu (M/F):	
Idade (Fulan):					
Naran Fasilidade Saúde:					
	Fulan Simu Ai-han Suplementu				Kolom adisional karik beneficiariu falta
	1° mes (Tama)	2° mes	3° mes	4° mes	
Data Sukat: LL/FF/TTTT					
Data Visita Tuir Mai: LL/FF/TTTT					
LKL (CM):					
Ai-han Suplementu Nebe'e Simu (Tipo no Kuantidade), Ready to Use Supplementary Food (RUSF) : eeZeeRUSF/Plumpy sup	RUSF (Saset)	RUSF (Saset)	RUSF (Saset)	RUSF (Saset)	
Asinatura Husi ema nebe'e Atende					
Nota : Benefisiariu nebe'e Lori Kartaun nee iha direitu atu simu ai-han kada fulan: ==> Ready to use Supplementary Food (RUSF) : Saset 30 kada fulan (Saset 1 kada loron)					D1

Ration card for pregnant women

							
KARTAUN SIMU AI-HAN SUPLEMENTU							
Ba Inan Isin Rua ho Malnutrisaun Moderadu							
Naran Inan Isin Rua/ Cuidador				Numeru Lisio:			
Status (sirkula ida)	a. Trimester 2 b. Trimester 3			Idade (tinan/anos):			
Naran Fasilidade Saúde							
	Fulan Simu Ai-han Suplementu						Observasaun
	1° Mes (Tama)	2° Mes	3° Mes	4° Mes	5° Mes	6° Mes	
Data Sukat: LL/FF/TTTT							
Data Visita Tuir Mai: LL/FF/TTTT							
LKL (CM):							
Ai-han Suplementu Nebe'e Simu (Tipo no Kuantidade) [Fortified Blended Food]	FBF (kg)	FBF (kg)	FBF (kg)	FBF (kg)	FBF (kg)	FBF (kg)	
Asinatura Husi ema nebe'e Atende							
Nota : Benefisiariu nebe'e Lori Kartaun nee iha direitu atu simu ai-han kada fulan: ==> Timor Vita/ Batar U'ut 6kg (Plastiku 2) [Konsume kada loron 200 grama ka sukat Kanuru han 10]							D2

Ration card for lactating women

							
KARTAUN SIMU AI-HAN SUPLEMENTU							
Ba Inan Fo Susu ho Malnutrisaun Moderadu							
Naran Inan Fo Susu				Numeru Lisio:			
Status	Fo Susu (Prioridu Susu eksklusivu)			Idade (tinan/anos):			
Naran Fasilidade Saúde							
	Fulan Simu Ai-han Suplementu						Observasaun
	1° mes (Tama)	2° mes	3° mes	4° mes	5° Mes	6° Mes	
Data Sukat: LL/FF/TTTT							
Data Visita Tuir Mai: LL/FF/TTTT							
LKL (CM):							
Ai-han Suplementu Nebe'e Simu (Tipo no Kuantidade) [Fortified Blended Food]	FBF (kg)	FBF (kg)	FBF (kg)	FBF (kg)	FBF (kg)	FBF (kg)	
Asinatura Husi ema nebe'e Atende							
Nota : Benefisiariu nebe'e Lori Kartaun nee iha direitu atu simu ai-han kada fulan: ==> Timor Vita/ Batar U'ut 6kg (Plastiku 2) [Konsume kada loron 200 grama ka sukat Kanuru han 10]							D3

ANNEX 10: Profile of Supplementary Food

Timor vita Nutrition facts

S.#	Macronutrients and Minerals	Amount per 200 g	S.#	Vitamins	Amount per 200 g
1.	Energy (kcal)	781	10.	Vitamin A (ug RAE)	1,092
2.	Protein (g)	30.3	11.	Thiamine-Vitamin B1 (mg)	1.10
3.	Fat (g)	20.0	12.	Riboflavin-Vitamin B2 (mg)	1.40
4.	Calcium (mg)	800	13.	Niacin-Vitamin B3 (mg)	21.1
5.	Copper (mg)	0.9	14.	Pantothenate-Vitamin B5 (mg)	4.0
6.	Iodine (ug)	80	15.	Pyridoxine-Vitamin B6 (mg)	2.9
7.	Iron (mg)	18.3	16.	Folate-Vitamin B9 (ug DFE)	323
8.	Selenium (ug)	28.9	17.	Cobalamin-Vitamin B12 (ug)	4
9.	Zinc (mg)	15.0	18.	Vitamin C (mg)	202.1
			19.	Vitamin D (ug)	12.0
			20.	Vitamin E (mg)	19.7

RUSF Nutrition facts

S.#	Macronutrients and Minerals	Amount per 92 g (1 sachet)	S.#	Vitamins	Amount per 200 g
1.	Energy (kcal)	500	11.	Vitamin A (ug RAE)	874
2.	Protein (g)	13	12.	Thiamine-Vitamin B1 (mg)	0.92
3.	Fat (g)	31	13.	Riboflavin-Vitamin B2 (mg)	1.75
4.	Calcium (mg)	299	14.	Niacin-Vitamin B3 (mg)	5.4
5.	Copper (mg)	1.7	15.	Pantothenate-Vitamin B5 (mg)	3.5
6.	Iodine (ug)	92	16.	Pyridoxine-Vitamin B6 (mg)	0.6
7.	Iron (mg)	10.6	17.	Folate-Vitamin B9 (ug DFE)	213
8.	Selenium (ug)	28.5	18.	Cobalamin-Vitamin B12 (ug)	2
9.	Zinc (mg)	12.4	19.	Vitamin C (mg)	85.1
10.	Magnesium (mg)	83	20.	Vitamin D (ug)	17.9
			21.	Vitamin E (mg)	23.0
			22.	Vitamin K (ug)	23.0

ANNEX 11: Procedures for conducting the appetite test

- The appetite test should be conducted in a quiet area.
- Explain to the carer the purpose of the appetite test and how it will be carried out.
- The carer should wash her hands and that of the child with soap.
- The carer should sit comfortably with the child on her lap and offer the RUTF from the packet or put a small amount on her finger and give it to the child.
- The carer should offer the child the RUTF gently, encouraging the child all the time. If the child refuses, then the carer should continue to quietly encourage the child and take time over the test. The test usually takes a short time but may take up to one hour. The child must not be forced to eat the RUTF.
- The child needs to be offered plenty of water to drink from a cup while he/she is taking the RUTF.

Result of the appetite test

The child needs to consume the following amount of RUTF to pass the appetite test.

Body weight (Kg)	Minimum amount that malnourished patients should take to pass the appetite test
< 4	½ of the sachet
4 – 6.9	½ of the sachet
7 – 9.9	1 sachet
10 – 14.9	1 sachet



ANNEX 12: RUTF key messages

1. RUTF is a food and medicine for very thin child only and should not be shared with other family members.
2. Sick children often do not like to eat. Give small regular meals of RUTF and encourage the child to eat often (if possible 8 meals a day). Your child should have ____ packets a day.
3. RUTF is the only food sick/thin children need to recover during their time in OTP.
4. If the child is breastfeeding, continue to give breast milk.
5. Always offer the child plenty of clean water to drink (those > 6months) while he/she is eating RUTF.
6. Use soap for children's hands and face before feeding if possible.
7. Keep food clean and covered.
8. Sick children get cold quickly. Always keep the child covered and warm.



ANNEX 13: OTP patient card

Card (front):

DIRECT ADMISSION DETAILS: OUTPATIENT THERAPEUTIC CARE									
Name					Reg. N°				
District					Village/Aldea				
Age (months)		Sex	M	F	Date of Admission				
Admission	Direct from Community	Transfer from SFP	From SISCa	Readmission (Relapse)			Inpatient Refusal		
Total Number in Household		Twin	Yes	No	Distance to home (hrs)				
Admission Anthropometry									
MUAC (cm)				Oedema	Yes	No			
Admission Criteria	Oedema	MUAC <11.0cm	Other admission criteria (specify)						
Medical History (in line with IMCI protocol)									
Diarrhoea	Yes	No	Stools per Day			1-3	4-5	>5	
Vomiting	Yes	No	Passing Urine			Yes	No		
Fever	Yes	No	Family History of TB			Yes	No		
Cough	Yes	No	If oedema, how long swollen?						
Appetite	Good	Poor	None	Breastfeeding			Yes	No	
Reported Problems									
Medical Examination (in line with IMCI protocol)									
Respiration Rate (# min)	<30	30 - 39	40 - 49	50+	Chest Retractions		Yes	No	
Temperature (°C)					Signs of Anemia/Conjunctiva		Normal	Pale	
Eyes	Normal	Sunken	Discharge	Dehydration		None	Moderate	Severe	
Ears	Normal	Discharge	Mouth		Normal	Sores	Candida		
Lymph Nodes	None	Neck	Axilla	Groin	Disability		Yes	No	
Skin Changes	None	Scabies	Peeling	Ulcers / Abscesses	Extremities		Normal	Cold	
Routine Admission Medication									
Drug	Date	Dosage			Drug	Date	Results(Positive/negative)		
Vitamin A					Rapid Test				
Amoxicillin					Anti Malarial				
Albendazole should be provided on 2nd visit:					All vaccines completed?		Measles		
Albendazole									
Other Medication									
Drug	Date	Dosage			Drug	Date	Dosage		

Card (back):

FOLLOW UP VISITS: OUTPATIENT THERAPEUTIC PROGRAMME																		
Name											Registration Number							
Visit	ADM. to OTP	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Date																		
Anthropometry																		
Target weight																		
Weight (kg)																		
Weight loss * (Y/N)			*		*													
MUAC (mm)																		
Oedema (+ ++ +++)																		
* WEIGHT CHANGES: MARASMICS: if below admission weight on week 3 refer for home visit. If no weight gain by week 5 refer to Inpatient.																		
Medical History																		
Diarrhoea (# days)																		
Vomiting (# days)																		
Fever (# days)																		
Cough (# days)																		
Medical Examination																		
Temperature (°C)																		
Respiratory Rate (# / min)																		
Dehydrated (Y/N)																		
Anaemia (Y/N)																		
Skin Infection (Y/N)																		
RUTF Test Good/Poor/Refused																		
Action Needed (Y/N) (note action below)																		
Other Medication (note at the front of card)																		
Plumpynut (# sachets)																		
Name of Examiner																		
OUTCOME ***																		
*** A= absent D= defaulter (3 consecutive absences) T= transfer to inpatient X= died SFP= discharged cured NC= discharged non-cured																		
** Action Taken (include date)																		
Named PSF/health worker to follow up the child at home												Designation (PSF/Nurse/Midwife)						

ANNEX 14: Routine medications in OTP

Drug	When	Age/Weight	Prescription	Dose
AMOXYCILLIN	On admission	2-12 months (4-10kg)	Syrup 125 mg 5ml	3 times/day for 5 days
		12 months-5 years (10-19kg)	Syrup 125mg 10ml	
ANTI MALARIAL*	On admission (as required)	>2 months old	See malaria protocol	See malaria protocol
ALBENDAZOLE**	Second visit	< 1 year	DO NOT GIVE	None
		12-23 months	200 mg	Single dose on second visit
		≥ 2 years	400 mg	
MEASLES VACCINATION***	On week 4	From 6 months	Standard	Once on week 4
IRON/FOLIC ACID ****	On day 14 for mild/moderate anaemia	> 2 months old	See iron/folic acid protocol	Give one dose daily for 14 days
VITAMIN A	Only give if signs of vitamin A deficiency or history of measles (do NOT give if oedema)	6 months to 1 year	100 000 IU	Single dose on admission (for children with oedema - single dose on discharge)
		≥ 1 year	200 000 IU	

***MEASLES: Children should be referred to EPI for any outstanding vaccinations

****IRON/FOLIC ACID: Not to be given routinely. Where there is moderate anaemia as identified by some palmar pallor give iron/folic acid after 14 days in the programme and not before (see protocol). For severe anaemia refer to inpatient care.

1. Routine Antibiotics

a) First-line antibiotic: AMOXYCILIN

Age or Weight	AMOXYCILLIN-25mg/kg (Give 3 times a day for 5 days)	
	Syrup 125 mg / 5 ml	Tablet 250 mg
2 – 4months (4 - <6 kg)	5 ml	½
4 months – 12 months (6 - <10 kg)	10 ml	1
12months – 5 years (10- <20kg)	15ml	1 ½

b) Second-line antibiotic: COTRIMOXAZOLE

Age or Weight	COTRIMOXAZOLE (Trimethoprim -TMP + sulfamethoxazole-SMX) twice a day for five days		
	Adult Tablets 80 mg TMP + 400 mg SMX	Child Tablets 20 mg TMP + 100 mg SMX	Syrup/ 5 ml 40 mg TMP + 200 mg SMX
4 – 12 months (4 - <6 kg)	¼	1	2.5ml
4months – 12 months (6- <10 kg)	½	2	5 ml
12months – 5 years (10- <20kg)	1	3	7.5 ml

2. Anti malarial treatment protocol

A malaria rapid test should always be conducted for severely malnourished children being admitted to the inpatient or OTP. If full laboratory testing is available at the health centre, then it should be utilised.

FIRST – LINE ANTIMALARIAL: Artemether-Lumefantrine (Coartem®) or Chloroquine

SECOND – LINE ANTIMALARIAL: Quinine tablets

► FOR COARTEM® (for malaria falciparum & mix infections)

- Explain to the mother that she should watch her child carefully for 1 hour after giving a dose of coartem®. If the child vomits within 1 hour, she should repeat the dose and return to the clinic for additional tablets.

- Inform the mother that the coartem® tablets are in the blister and after breaking should be taken immediately because after 24 hours coartem® tablets exposed to air are totally inactivated and cannot be used for treatment of malaria.
- Explain to the mother that, for small children, paracetamol and coartem® can be crushed, diluted in clean, boiled water and then put either directly into the mouth using a syringe or given with a spoon.

ARTEMETHER – LUMEFANTRINE (Coartem®)

Age group	Weight group	Blister colour	(Day 1)	(Day 2)	(Day 3)
4 months to 5y	5 to 14 kg	Yellow	1 tb ☼,	1 tb ☼,	1 tb ☼,
			1 tb ☺	1 tb ☺	1 tb ☺

► FOR CHLOROQUINE (for malaria vivax):

- Explain to the mother that she should watch her child carefully for 30 minutes after giving a dose of chloroquine. If the child vomits within 30 minutes, she should repeat the dose and return to the clinic for additional tablets.
- Explain that itching is a possible side effect of the drug, but is not dangerous.

*AGE or WEIGHT	CHLOROQUINE Give daily for 3 days			QUININE
	TABLET (150 mg base)			TABLET(300 mg)
	Day 1	Day 2	Day 3	3 times daily for 7 days
2 – 4 months (<4kg)	¼	1/8	1/8	¼
4 - 12 months (4 - <10kg)	½	½	¼	¼
12 months to 5 years (10 – <20kg)	1	1	½	½

Administration of Chloroquine for malaria vivax in young infant

Age Group	Weight group	Chloroquine		
		Day 1	Day 2	Day 3
0 - 4 months	<5 kg	10 mg/kg	5 mg/kg	5 mg/kg

ANNEX 15: RUTF ration in OTP

Weight of child (kg)	Packets per day	Packets per <u>one</u> week	Packets per <u>two</u> week
3.5 – 3.9	1.5	11	22
4.0 – 5.4	2	14	28
5.5 – 6.9	2.5	18	36
7.0 – 8.4	3	21	42
8.5 – 9.4	3.5	25	50
9.5 – 10.4	4	28	56
10.5 – 11.9	4.5	32	64
≥ 12	5	35	70

ANNEX 16: OTP action protocol

SIGN	TRANSFER TO INPATIENT CARE	OUTREACH VISIT
APPETITE	Refuses to eat or has difficulty taking/ swallowing RUTF	Eats less than ¾ of the RUTF by third visit
BREASTFEEDING (INFANTS < 6 MONTHS)	Ineffective feeding (attachment, positioning and suckling) directly observed for 15–20 min, ideally in a supervised separated area;	
OEDEMA	Children 6-59 months: Grade +++	Oedema persisting
	Infants < 6 months: any bilateral pitting oedema	
	Marasmic- Kwashiorkor	
VOMITING	Increase in oedema or development of oedema	
TEMPERATURE	Vomits everything	
	Fever >39°C	
	Hypothermia <35°C	
RESPIRATORY RATE (rr) AND FAST BREATHING (according to IMNCI guidelines for age)	>60 respirations/minute under two months	
	>50 respirations/minute from 2-12 months	
	>40respirations/minute from 1-5 years	
	>30respirations/minute for over 5 years	
HYDRATION STATUS	Any chest drawing in	General medical deterioration
	Poor urine output	
	Sunken eyes, skin patch goes back very slowly/ slowly	

SIGN	TRANSFER TO INPATIENT CARE	OUTREACH VISIT
ANAEMIA	Some or severe palmar pallor, difficulty breathing	
SUPERFICIAL INFECTION	Extensive infection requiring IM treatment	
SKIN	Extensive/ open skin lesions/infection	
ALERTNESS	Very weak, lethargic, unconscious	
NEED FOR INFUSION OR NG TUBE	Child has had convulsions or is convulsing now Any condition that requires infusion or NG tube feeding	
WEIGHT CHANGES	Children 6-59 months Weight loss for 3 consecutive weeks Static weight for 5 consecutive weeks Infants < 6 months Recent weight loss or failure to gain weight	Children 6-59 months Weight loss for 2 consecutive weeks Static weight for 3 consecutive weeks
RETURN FROM INPATIENT CARE/ REFUSES INPATIENT CARE		Return from inpatient care or refuses inpatient care (for two weeks)
MALNOURISHED INFANTS < 6 MONTHS	Any medical or social issue needing more detailed assessment or intensive support (e.g. disability, depression of the caregiver, or other adverse social circumstances)	Return from inpatient care or refuses inpatient care (until discharge)
NOT RECOVERING	If not recovered after 3 months refer to hospital for investigation	
ABSENCE		Absent for 2 weeks

ANNEX 17: Inpatient admission form

Name	Aldea/Suco.....	Date of Birth.....	Age.....
Date of Admission.....	MUAC..... (cm)	Weight..... (Kg)	

HISTORY

Oedema	Y / N	How long for
Diarrhoea	Y / N	How long for
Vomiting	Y / N	How long for
Cough	Y / N	How long for
Rash	Y / N	How long for
Fever	Y / N	How long for
Anorexia	Y / N	How long for

History of TB Y / N (Provide details).....

Is child Breast feeding Y / N If N, when stopped and what does child drink now?.....

Was child previously admitted to inpatient? Y / N (Please give details) Date previously admitted.....

Diagnosis.....

Birth History Birth weight.....

Condition at Birth (if resuscitated, sick, provide details).....

Vaccinations: BCG ☐ DPT1 ☐ DPT2 ☐ DPT3 ☐ Polio0 ☐ Polio1 ☐ Polio2 ☐ Polio3 ☐ Measles ☐

Any **medications** in last 2 weeks.....

FAMILY HISTORY Any history of TB contact Y / N, (give details)

Other Y / N (detail please).....

Mother well	Y / N (details please).....	Number of Siblings	Alive..... Died.....
Father well	Y / N (details please).....		

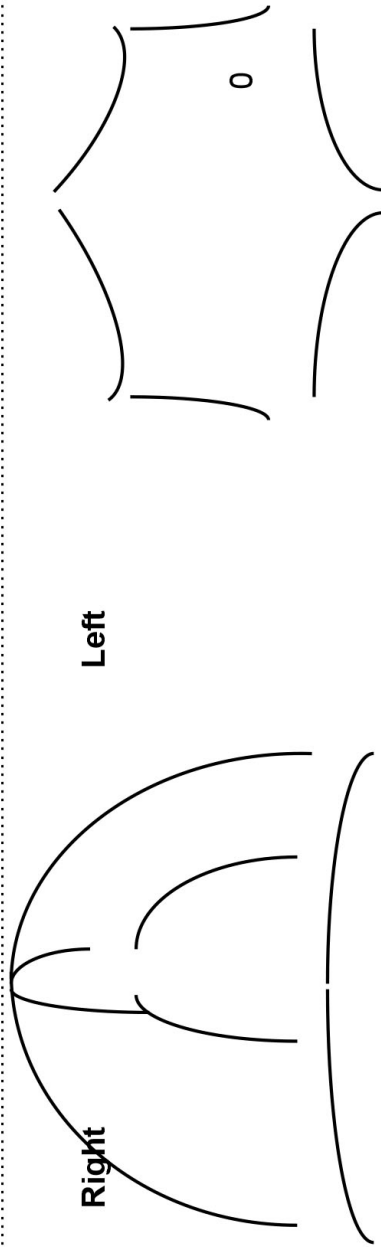
Health of remaining siblings Well Y / N (provide details including age).....

EXAMINATION on admission

Pulse .../ min	RR .../ min	BPmmHg
Temperature (axillary)°C	Pallor Y/N	Lymphadenopathy Y/N site
Skin.....	Mouth	
Signs of dehydration Y/N		



Signs of shock Y/N (check extremities)
Conscious state (normal / Irritable or apathetic, drowsy, unconscious)
Chest signs.....Please draw your findings below
Other



Laboratory results: MPS (+, ++, +++)
PCV
Other results (*specify*).....

Diagnosis (*severe or moderate malnutrition and specify the complication*)

ANNEX 18: Inpatient daily monitoring chart

DAYS IN HOSPITAL		Week 1								Week 2											
DATE		1 (admission)		2		3		4		5		6		7		8		9		10	
Time of day		am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
1. DRUGS: Indicate and sign when drugs are given																					
FOLIC ACID 5mg OD																					
VITAMIN A																					
COTRIMOXAZOLE/Amoxicillin																					
GENTAMICIN																					
AMPICILIN																					
MALARIA DRUG/s:																					
TB DRUGS:																					
RESOMAL																					
Other																					
2. FEEDS: (F75, F100 or PlumpyNut)																					
Feed (F75, F100, plumpyNut)-																					
Amount of feed (in ml/sachet)																					
1=03.00am 5= 15.00pm		1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5	1	5
2=06.00am 6= 18.00pm		2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6
3=09.00am 7= 21.00pm		3	7	3	7	3	7	3	7	3	7	3	7	3	7	3	7	3	7	3	7
4=12.00am 8= 24.00 (mid		4	8	4	8	4	8	4	8	4	8	4	8	4	8	4	8	4	8	4	8
3. NUTRITION ASSESSMENT and ANTHROPOMETRY																					
Weight (kg)																					
MUAC (cm)																					
Oedema 0 + ++ +++																					
4. OBSERVATIONS and EXAMINATIONS																					
Appetite Poor Good Fair																					
Diarrhoea Y / N Frequency																					
Vomiting Y / N Frequency																					
Cough Y / N																					
Extremities (feet & hands cold) Y/N																					
Dehydration Y / N																					
Temperature (°C) -4 times a day																					
Respiration -4 times a day																					
*Until stable																					
Pulse rate -4 times a day																					
*Until stable																					
PROGRESS (Good, Fair, Poor)																					
Date of Discharge/Death.....												Outcome.....									
Discharge.....(Kg)												MUAC on discharge (cm)									
												Weight on									

ANNEX 19: Amount of F75 to give in Stabilisation Phase

A. Feeding of F75 for Children with Severe Malnutrition WITHOUT Oedema

F-75 feed volumes by feeding frequency, and body weight and for naso-gastric feedings (column 2,3 and 4 are approximately 11ml/kg/feed, 16ml/kg/feed, and 22 ml/kg/feed respectively)				
Child's Weight Kg	2-hourly (ml/feed)	3-hourly (ml/feed)	4-hourly (ml/feed)	switch to NG feeding if intakes (ml) fall below:
2.0	20	30	45	210
2.2	25	35	50	230
2.4	25	40	55	250
2.6	30	45	55	270
2.8	30	45	60	290
3.0	35	50	65	320
3.2	35	55	70	340
3.4	35	55	75	360
3.6	40	60	80	380
3.8	40	60	85	400
4.0	45	65	90	420
4.2	45	70	90	440
4.4	50	70	95	460
4.6	50	75	100	490
4.8	55	80	105	510
5.0	55	80	110	530
5.2	55	85	115	550
5.4	60	90	120	570
5.6	60	90	125	590
5.8	65	95	130	610
6.0	65	100	130	640
6.2	70	100	135	660
6.4	70	105	140	680
6.6	75	110	145	700
6.8	75	110	150	720
7.0	75	115	155	740
7.2	80	120	160	760
7.4	80	120	160	780
7.6	85	125	165	810
7.8	85	130	170	830
8.0	90	130	175	850
8.2	90	135	180	870
8.4	90	140	185	890
8.6	95	140	190	910
8.8	95	145	195	930
9.0	100	145	200	950
9.2	100	150	200	980
9.4	105	155	205	1000
9.6	105	155	210	1030
9.8	110	160	215	1040
10.0	110	160	220	1060

**B. Feeding of F75 for Children with Malnutrition WITH SEVERE Oedema**

F-75 feed volumes for children with severe oedema (Amounts of F75 to provide 100kcal/kg/d) (severe oedema (+++): generalised; including feet, lower and upper legs, arms, hands and face)			
oedematous weight (kg)	2-hourly (ml/feed)	3-hourly (ml/feed)	4-hourly (ml/feed)
3.0	25	40	50
3.2	25	40	55
3.4	30	45	60
3.6	30	45	60
3.8	30	50	65
4.0	35	50	65
4.2	35	55	70
4.4	35	55	75
4.6	40	60	75
4.8	40	60	80
5.0	40	65	85
5.2	45	65	85
5.4	45	70	90
5.6	45	70	95
5.8	50	75	95
6.0	50	75	100
6.2	50	80	105
6.4	55	80	105
6.6	55	85	110
6.8	55	85	115
7.0	60	90	115
7.2	60	90	120
7.4	60	95	125
7.6	65	95	125
7.8	65	100	130
8.0	65	100	135
8.2	70	105	135
8.4	70	105	140
8.6	70	110	145
8.8	75	110	145
9.0	75	115	150
9.2	75	115	155
9.4	80	120	155
9.6	80	120	160
9.8	80	125	165
10.0	85	125	165
10.2	85	130	170
10.4	85	130	175
10.6	90	135	175
10.8	90	135	180
11.0	90	140	185
11.2	95	140	185
11.4	95	145	190
11.6	95	145	195
11.8	100	150	195
12.0	100	150	200

ANNEX 20: Transition phase quantities of RUTF

Weight (Kg)	RUTF (per sachet)
	8 feeds per day (3 hourly feeds)
3.0 to 3.4 kg	$\frac{1}{4}$ sachet
3.5 – 3.9	$\frac{1}{4}$ sachet
4.0 – 4.4	$\frac{1}{4}$ sachet
4.5 – 4.9	$\frac{1}{4}$ sachet
5.0 – 5.4	$\frac{1}{4}$ sachet
5.5 – 5.9	$\frac{1}{4}$ sachet
6 – 6.9	$\frac{1}{4}$ sachet
7 – 7.9	$\frac{1}{4}$ sachet
8 – 8.9	$\frac{1}{2}$ sachet
9 – 9.9	$\frac{1}{2}$ sachet
10 – 10.9	$\frac{1}{2}$ sachet
11 – 11.9	$\frac{1}{2}$ sachet
>12	$\frac{1}{2}$ sachet

ANNEX 21: Card (front): transfer from inpatient to OTP

DISCHARGE DETAILS: INPATIENT THERAPEUTIC PROGRAMME									
Name					Reg. N°				
District					Aldea				
D.o.B and Age (months)		Sex	M	F	Date of Admission to ITP				
Admission	Direct from Community		From SISCa		Readmission (Relapse)		Inpatient Refusal		
Total Number in Household		Twin		Yes	No	Distance to home (hrs)			
Anthropometry on the day of Admission to the Inpatient (ITP)									
MUAC (cm)			Oedema		Yes	No			
Admission Criteria	Oedema	MUAC <11.0cm	MUAC 11.0-12.5cm	Other admission criteria (specify)					
Medical History on admission to the Inpatient (ITP)									
Diarrhoea	Yes	No	Stools per Day		1-3	4-5	>5		
Vomiting	Yes	No	Passing Urine		Yes	No			
Fever	Yes	No	Family History of TB		Yes	No			
Cough	Yes	No	If oedema, how long swollen?						
Appetite	Good	Poor	None	Breastfeeding		Yes	No		
Reported Problems									
Medical Examination on admission to the Inpatient (ITP)									
Respiration Rate (# min)	<30	30 - 39	40 - 49	50+	Chest Retractions		Yes	No	
Temperature (°C)					Signs of Anemia/ Conjunctiva		Normal	Pale	
Eyes	Normal	Sunken	Discharge		Dehydration		None	Moderate	Severe
Ears	Normal	Discharge			Mouth		Normal	Sores	Candida
Lymph Nodes	None	Neck	Axilla	Groin	Disability		Yes	No	
Skin Changes	None	Scabies	Peeling	Ulcers / Abscesses	Extremities		Normal	Cold	
Routine Admission Medication									
Drug	Date	Dosage			Date	Results(Positive/negative)			
Vitamin A					Rapid Test				
Drug	Date	Dosage			Drug	Date	Dosage		
Amoxycillin					Anti Mararial				
Albendazole should be provided on 2nd visit:					All vaccines completed?		Measles		
Albendazole									
Other Medication									
Drug	Date	Dosage			Drug	Date	Dosage		
Summary of Inpatient care / advise for OTP									
Outcome of Inpatient care (Stabilisation)									
Discharge outcome	Stabilised	Defaulter	Died	Transfer to Hospital	Carer's Choice	Number of Days in Inpatient			
Date of discharge									

ANNEX 22: Inpatient supervision checklist

ACTIVITY	SCORE	COMMENT
1. General hygiene		
Is the inpatient clean (rooms and general)		
Is there clean drinking water available for the patients (in every room)		
Is the child clean (personal hygiene)		
Availability of health promotion material sessions conducted		
2. Admission		
Admission criteria and procedure adhered to		
Height measured on admission and discharge		
WHF calculated on admission		
3. Medical treatment		
Medical assessment carried by doctor out every day + recorded		
Drugs provided to the child as recommended by doctor		
Transition (to RUTF) done as soon as complications are stable		
4. Nutrition assessment		
Weight measured correctly every day (observe)		
Is the weight measured correctly (observe)		
MUAC measured correctly every day (observe)		
Oedema assessed correctly daily (observe)		
5. Physical examination		
Is Respiration, pulse and temperature taken 4 (four) times a day		
6. Observations		
Child's condition assessed every one hour		
Child condition (diarrhoea, cough, dehydration, vomit, extremities etc.) recorded after observation		
7. Monitoring (admission, daily etc.		
Admission history & physical examination done by doctor on admission		
All children registered in the malnutrition register on admission and discharge		
8. Milk preparation		
Milk preparation area is clean, utensils clean and covered		
F75, F100 and Resomal prepared correctly		
Child receives correct quantity of milk		
RUTF provided correctly (amount) and education (messages) provided		



Milk given every three hours		
9. Discharge		
Discharged according to protocol (stable, good appetite for RUTF)		
All status report properly filled in on discharge and filed in Malnutrition file		
OTP transfer card completed and sent with ambulance/carer to OTP at CHC or HP		
10. Logistics and supplies		
Is there at least 1 box of F75, F100, RUTF and Resomal in the inpatient		
Is there clean cups, jug, utensils available		
Are all prescribed drugs available in the inpatient		
TOTAL SCORE:		

Grading system: 1=Poor 2=Fair 3= Good

Supervisor: _____

Sign: _____

Date: _____

ANNEX 23: Supervision Checklist Outpatient Care Site, Example

Health Facility: _____

Date: _____

	Total observed	Total correct	Direct observation at site	Quality 1 – Done correctly 2 – Done, but needs improvement 3 – Not done/ done incorrectly	Comment
Number of staff and volunteers present					Staff: Volunteers:
Staff greet caregivers and are friendly and helpful					
Registration numbers assigned correctly	Total new adm in past month__				
Registration numbers written on all documents					
Grade of Bilateral Pitting Oedema measured accurately	Total oed adms observed__				
MUAC measured accurately	Total MUAC observed__				
Weight measured accurately	Total wts observed__				
Height measured accurately	Total hts. observed__				
Weight-for-Height % calculated correctly	Total WH% checked__				
Admission is according to correct criteria	Total cards checked__				(spot check cards)
Medical history recorded accurately	Total Med His observed__				
Physical exam performed and recorded accurately.	Total cards checked__	Total w/ full exam __			(Check card)
Child's appetite assessed using RUTF (on admission and return visits)					how assessed and by whom



Routine medications given according to protocol and recorded accurately	Total cards checked____	Total with correct meds____			
Amount of RUTF needed is correctly calculated	Total cards checked____				
Appropriate education given to mothers					Note topic and form::
Follow up drugs given according to protocol and recorded accurately	Total cards checked____				
Slow responders are identified according to the definition for follow-up and communicated to CHWs	Total NR needing visit during past month____	Total			
Follow up priorities discussed with CHW/ volunteer; List of names recorded/ cards marked			List/ clear discussion?		
Beneficiaries discharged according to protocol.	Total cards checked____				
Correct number of absentees/ defaulters identified for follow-up	Total no. abs/ default cards____	Total w/ outcome recorded____			
Tally sheets, reg, and RUTF stock cards correct	Total weeks reviewed____				(spot check)

ANNEX 24: Stock cards and Food inspection reports

Stock card for Fortified Blended Food (FBF)

 KARTAUN STOK: Fortified Blended Food (FBF)										
PROGRAMA: TPSH										
Fulan:			Produto: Timor Vita							
Naran fasildade Saúde:			Munisipiu:							
Manajer Stok:			Numeru Telefone:							
Restu Fulan Uluk:			KG							
No	Data (LL/FF/TTTT)	Numeru Waybill	Kuantidade ho Kilo Grama (KG)						Asinatura	Razoens lakon 1. Infestadu 2. Estragu 3. A'at 4. ema naok 5. seluk tan
			Total simu	Data prazu	Total distribui	Total transfere internal	Total lakon	Total taka balansu		
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
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20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Sumario fim do mes		Restu Fulan Uluk	Total simu	Total distribui	Total transfere internal	Total lakon	Taka balansu	Asinatura	A	

Nota:
 1. Atu evita sura sala, mak unidade hotu-hotu iha kartaun stok tenke uza Kg ba Timor Vita no Super Cerial
 2. Ai-han ruma atu destroi sei presiza karta klarifikasaun husi WFP



Weekly Food Inspection Report				
Date	Commodity	Quantity (bags3/kg	Condition	Signature

Stock card for Ready to Use Supplementary Foods

										
KARTAUN STOK: Ready to Use Supplementary Food (RUSF)										
PROGRAMA: TPSH										
Fulan:						Produto: Timor Vita				
Naran fasilidade Saúde:						Munisipiu:				
Manajer Stok:						Numeru Telefone:				
Restu Fulan Uluk:						SASET				
No	Data (LL/FF/TTTT)	Numeru Waybill	Kuantidade ho SASET						Asinatura	Razoens lakon 1. Infestadu 2. Estragu 3. A'at 4. ema naok 5. seluk tan
			Total simu	Data prazu	Total distribui	Total transfere internal	Total lakon	Total taka balansu		
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
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25										
26										
27										
28										
29										
30										
31										
Sumario fim do mes		Restu Fulan Uluk	Total simu	Total distribui	Total transfere internal	Total lakon	Taka balansu	Asinatura	A1	

Nota:
 1. Atu evita sura sala, mak unidade hotu-hotu iha kartaun stok tenke uza Kg ba Timor Vita no Super Cerial no Saset ba RUSF (no eeZeeRUSF/Plumpy sup)
 2. Ai-han ruma atu destroi sei presiza karta klarifikasaun husi WFP



Weekly Food Inspection Report				
Date	Commodity	Quantity (Sachets)	Condition	Signature

ANNEX 25: Inpatient report form

RELATORIO INPATIENT THERAPUTIC CARE

DISTRITO

CHC/OSPITAL

FULAN	Janerio	Feveiru	Marsu	Abril	Maiu	Junu	Juillu	Agustu	Setembru	Outobru	Novembru	Dezembru	TOTAL CADA TINAN
Ena ne bee Hato relatorio													
(A) TOTAL IHA PROGRAMA COMESA													
FULAN PRIMEIRO													
B Kwashiorkor													
C Marasmus													
D Seluk													
E Muda husi OTP													
F Filafali depois desai													
G TOTAL ADMITE (G) = B+C+D+ E+F													
H Cura ona (*bebe fulan 0-6)													
I Mate													
J Sai tamba Falta													
K Muda ba OTP													
L Muda ba Ospital- referral													
M TOTAL SAI (M) = H+I+J+K+L													
TOTAL IHA PROGRAMA IHA FULAN													
IKUS (A+G-M)													

INFORMASAUIN SELUK

FULAN	Janerio	Feveiru	Marsu	Abril	Maiu	Junu	Juillu	Agustu	Setembru	Outobru	Novembru	Dezembru	TOTAL CADA TINAN
Mane													
Feto													
Utiliza Plumpy-nut													
Utiliza F-75													
Utiliza F-100													

ANNEX 26: OTP report form

RELATORIO OTP

SUB DISTRITO

CHC/HP

FULAN	Janeiro	Fevereiro	Março	Abril	Maio	Junho	Julho	Agosto	Setembro	Outubro	Novembro	Dezembro	TOTAL CADA TINAN
Em a ne bee Hato relatorio													
(A) TOTAL IHA PROGRAMA COMESA													
FULAN PRIMEIRO													
B Krekas Maran *(LKL <11.0cm)*													
C Seluk admisaun													
D Muda husi ITP													
E Filafati depois desai													
F Muda husi OTP seluk													
G TOTAL ADMITE = B+C+D+E+F													
H Cura ona													
I Mate													
J Sai tamba Falta *(Falta Seman 3)*													
K La cura *(Fulan 4/Semana 16)*													
L Muda ba ITP													
K Muda ba OTP seluk													
M TOTAL SAI = H+I+J+K+L													
(A+G-M) TOTAL IHA PROGRAMA IHA FULAN IKUS													

INFORMASAUN SELUK

FULAN	Janeiro	Fevereiro	Março	Abril	Maio	Junho	Julho	Agosto	Setembro	Outubro	Novembro	Dezembro	TOTAL CADA TINAN
Mane													
Feto													
Utiliza Plumpy-nut													

ANNEX 27: TSFP Monthly Report form

PROGRESSU RELATÓRIU SEMESTER 2

Tarjetu Programa Suplementu Hahan

Relata hosi:

Periodu Relatóriu:

Data halo Relatóriu:

LABARIK IDADE FULAN 6 - 59 HO MALNUTRISAUN AGUDA MODERADU (MAM) HO LKL 11.5-12.4cm

</



ANNEX 28: Estimating caseload

1. Indirectly estimating potential caseload

Estimating the approximate yearly potential burden of severe acute malnutrition (SAM) at national level among children 6–59 months can be done indirectly by the use of latest national SAM prevalence estimates, an incidence correction factor and population figures as shown in Section 2 below.

However this should only be done as a rough estimate and such figures should be interpreted with caution for a number of reasons:

- There is little evidence to indicate that SAM prevalence is uniform across a country and/or the same in highly populated areas as elsewhere (in fact most evidence points to the opposite) therefore the use of averages may lead to either over or underestimations.
- National SAM prevalence figures can be problematic: they are often outdated; the season in which national surveys were conducted can greatly affect estimates due to seasonal fluctuations in prevalence; they may not accurately reflect all forms of SAM (i.e. oedema and MUAC may be missing) and therefore represent an underestimation of prevalence.
- Population figures used for the estimate are often outdated and based on projections.
- There is still much to be learnt about the accuracy of incidence correction factors.

If national surveys (including MICS and DHS) are to be used for the useful calculation of overall caseloads and programme targets, then they **MUST** include measurement of SAM according to the measurement criteria used nationally for treatment programmes: presence of bilateral pitting oedema and MUAC <11.5cm in Timor-Leste.

An alternative method, preferable where CMAM programmes are already established and collating admission data, is to extrapolate targets based on the previous year's admissions, taking into account factors such as seasonality, geographical expansion plans, predicted increases in treatment coverage based on programme activities/adjustments and completeness of reporting (also described in section 2 below)



Box 1: Useful definitions

Prevalence: The proportion of malnourished children 6-59 months in a population at a point in time.

Incidence: The occurrence of new cases of malnourished children 6-59 months in a population over a specific time period (usually a year).

Estimated burden: The number of malnourished children 6-59 months present in a population at a certain point or over a period of time (based on prevalence and incidence)

Target caseload: The number of malnourished children a programme expects to treat based on burden and a coverage objective (geographical and treatment)

2. Calculations

Estimating Prevalence of SAM

The proportion of malnourished children 6–59 months in a population at a given time is estimated through anthropometric population based surveys (SMART, MICS, DHS). Be aware that, as noted above, prevalence must be estimated using the same admission criteria that are being used for the CMAM programme.

Estimating Annual Incidence of SAM

Incidence is the proportion of new cases of SAM out of the total population of children under five that occur over a specific time period. We seldom have data on incidence as it cannot be collected during cross sectional surveys therefore an incidence correction factor is needed to estimate the total cases occurring over the period of a year from the prevalence.

An estimate of incidence may be obtained as given below but with two important caveats which mean that the potential caseloads calculated using this estimate must be used cautiously:

- The mean duration of a SAM episode is not easy to estimate and may vary from setting to setting (available estimates vary widely).
- The method relies on an assumption of constant incidence. This assumption is unlikely to be true for a condition such as SAM which is strongly associated with infection and food availability which are usually seasonal.



***Incidence = Prevalence/average duration of disease***

A common estimate of the average duration of an untreated SAM episode is 7.5 months (Garenne et al 2009). Using this to estimate incidence over one year (i.e. 12 months) yields:

$$\text{Incidence} = \text{Prevalence} \times 12/7.5 = \text{Prevalence} \times 1.6$$

Note: If the incidence is specifically known, that can be used in place of the 1.6 figure.

Estimating burden¹ of SAM (Need)

The burden of SAM is an estimation of the total number of SAM cases in a population over a specific period and it can be estimated through calculation of SAM prevalence within the 6–59 month population (either nationally or within a defined geographic area) with incidence correction factor² as follows:

$$\text{Burden} = \text{Population 6–59m} \times [\text{Prevalence} + (\text{Prevalence} \times 1.6)]$$

$$\text{Or simplified to: Burden} = \text{Population 6–59m} \times \text{Prevalence} \times 2.6$$

Estimating annual target caseload of SAM

The target caseload is the number of children 6–59 months a particular programme expects to treat within a specific time period based on estimated prevalence and incidence, and a coverage objective.

Method 1.

A rough estimation of the target caseload for the purposes of planning in a new area/country can be obtained by adapting the above to take account of planned geographical target area for service delivery and target treatment coverage.

$$\text{Target} = \text{Population 6–59m in geographical area} \times \text{Prevalence} \times 2.6 \times \text{treatment coverage (\%)}^4$$

****** Calculated from total population in the geographical target area (n) x estimated proportion of children 6–59m in the population (%)

Caveat: As the prevalence within a population is likely to fluctuate over the year according to the seasonality (lean or harvest), it is important that the prevalence used for a yearly calculation is neither disproportionately high nor low. The recommendation is to take an average of low and high season prevalences for this calculation.

Depending on the stage of the programme, the target treatment coverage may be based on Sphere standards, experience documented in well-run CMAM programmes in a similar context or on a gradual building up from existing health facility coverage. E.g. a target of 50% may be used for the first 6 months of the programme, rising to 70 or 80% at the end of the first year in line with levels documented to be achievable in well-run CMAM programmes.



In subsequent years where a recent survey has re-estimated prevalence the same equation can be used. If there is no recent survey then the equation becomes problematic as the number of previous years prevalent and incident cases who remain (i.e. have not been treated, spontaneously recovered without treatment or died) will be unknown. In this case the below method is advised.

Method 2.

An alternative and preferable method for estimating programme targets which is more appropriate for already established CMAM programmes where admission reports are being collated is to extrapolate from the previous year's admissions figures. Last years collated admissions figures can be adapted by taking account of the following:

- adding on estimates calculated as above for areas of expansion not covered in the previous year.
- % reporting, i.e. if 75% of facilities with CMAM services submit reports giving a total admissions of 3620 children a very rough estimate for 100% of facilities would be $(3620/75) \times 100$
- Adding an estimated number of cases for any predictable surges in coverage and therefore admissions due to mobilisation events, or further decentralisation of services. The numbers to add on could be based on previous experiences of similar surges.
- Any predicted increases in prevalence compared to the previous year (e.g. where early warning indicators predict higher than usual seasonal increases)

The result will only be a best guestimate but one that is based on the reality of what programmes are achieving in terms of numbers of children reached.









Timor-Leste SNIP Guidelines

MODULE 9:

Nutrition in Emergencies



1. Recommendation

Unless indicated otherwise, WHO nutrition recommendations in stable situations apply also to emergencies. In exceptionally difficult circumstances, the focus needs to be on creating conditions that will facilitate breastfeeding, such as establishing safe ‘corners’ for mothers and infants, one-to-one counselling and mother-to-mother support. Traumatized and depressed women may have difficulty responding to their infants and require particular mental and emotional support. Every effort should be made to identify ways to breastfeed infants and young children who are separated from their mothers.

Breast-milk substitutes, milk products, bottles and teats should never be part of a general or blanket distribution. Dried milk products should be distributed only when pre-mixed with a milled staple food and should not be distributed as a single commodity. A general food basket should provide 2100 kcal per person per day and include products fortified with vitamins and minerals. Special focus should also be on early identification and management of infants and children with acute malnutrition to prevent serious illness and death.

WHO ENA: Summary of WHO recommendations for nutritional care and support during emergencies.

Emergency response is governed by global standards, which include:

- The Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief; IFRC/ICRC
- The Sphere Project (2011). Humanitarian Charter and Minimum Standards in Humanitarian Response. Geneva:
- CHS Alliance (2014). Core Humanitarian Standard on Quality and Accountability.

The term **nutrition emergency** is a generic term used in these guidelines to refer to a situation characterised by high mortality, high levels of acute malnutrition or a substantial increase in absolute numbers of acutely malnourished individuals. A nutrition emergency could be present in any of the different types of emergency described in Section 2.

Nutrition intervention in emergencies is further guided by National protocols, including *Timor-Leste Contingency Plan – Nutrition Cluster Timor-Leste. Updated February 2015*, and *Timor-Leste Guiding Principles For Feeding of Infants And Young Children In Emergencies 2006*, and informed by Nutrition Cluster Coordination Handbook (2013) and Operational Guidance for IYCF-E (2007 ver2.1, 2010 addendum), produced by the Global Nutrition Cluster.

Key processes include:

- Coordination
- Assessing and reporting needs
- Implementing Emergency Nutrition Interventions, incorporating protection issues
- Ensuring communication and accountability
- Monitoring, reporting and evaluation

In Timor-Leste the President has responsibility for declaring an emergency.



2. Classification of nutrition emergencies and Core Principles of response

The UN disaster risk reduction framework¹ outlines a multi-hazard analysis of disaster or emergency risks. The potential of a hazard to cause a disaster depends on both the severity of the event, and the vulnerability of the population to the impacts of that event. A single hazard or a combination of hazards may cause different types of disaster, which can be classified as fast-onset, slow-onset or complex.

Fast-onset emergencies are caused by sudden events such as earthquakes, floods and violence. Impacts may include widespread loss of food stocks, crops and livestock; disruption of markets and income sources; injury and disease; displacement or loss of homes. Urgent responses are required, usually in the form of food, medical, psychosocial and shelter assistance to affected populations and those that might be hosting them.

Slow-onset emergencies are caused by gradual events such as drought, or by cumulative shocks and stresses that erode people's assets and coping capacity until they are unable to meet their food and other basic needs. While emergency response is often required, the prevention or mitigation of slow-onset emergencies is often best approached through disaster preparedness activities. For nutrition, this often involves strengthening response capacity and services such as behaviour change communication (BCC) activities to improve communities' use of preventative healthcare services and efforts to improve infant and young child feeding (IYCF), livelihood interventions aimed at improving adequate quantity and quality of food for household use, among others.

Complex emergencies are those in which natural or human-made hazards are combined with conflict and a breakdown of governance and security. Complex emergencies require emergency response both to save lives and livelihoods as well as ensure protection of the affected population and associated vulnerable groups.

Different types of hazards trigger different types of disasters or emergencies.

¹ Sendai Framework for Disaster Risk Reduction 2015-2030. United Nations 2015.

3. Nutritional needs in emergencies and vulnerable groups

3.1 Assessment of nutritional needs

The various ways to assess needs at the onset of an emergency include:

Table 1: Sources of data on nutritional situation

Data source	Collected by	Action based on findings
Surveys/ assessments	Most likely led by Nutrition Cluster (NC) with participation from NC members including health workers	Results will be discussed in coordination meetings and required actions discussed
Routine programme data	Health workers as part of regular programming	An increase in cases with particular nutritional problems or different nutrition problems should be flagged to Nutrition Coordinators and the NC
Informal information from community	Health workers through contact and dialogue with community	An increase in cases with particular nutritional problems or different nutrition problems should be flagged to Nutrition Coordinators and the NC

N.B. Any needs that are reported that are non-nutritional should also be flagged immediately so they can be relayed to the relevant sectors and the information acted upon accordingly.

Simple Infant and Young Child Feeding in Emergencies (IYCF-E) indicators can be included in multi-sectoral assessments. Early IYCF-E assessment information is especially looking for factors that indicate that infants and young children are at increased and significant risk, and that warrant further investigation. Some of the warning signs include:

- General distribution of infant formula and milk products, and/or bottles and teats
- Mothers reporting difficulties in breastfeeding or stopping breastfeeding due to the crisis situation
- Reports of infants under 6 months who are not breastfed
- Reports of increased diarrhoea in infants under 12 months
- Poor availability of food for complementary feeding (in the markets or from food aid provided).
- Mothers reporting difficulties feeding their children.

3.2 Classification / identification of nutritional needs

The WHO classifies nutrition emergencies according to Global Acute Malnutrition (GAM) thresholds. However, it is important to be aware of rapidly increasing numbers and prevalence, so trend data is important for early warning.

Table 2: WHO crisis classification by GAM rates

Severity	Prevalence of GAM
Acceptable	<5%
Poor	5-9%
Serious	10-14%
Critical	>=15%

Source: WHO 2003, *The Management of Nutrition in Major Emergencies*

Disruption and displacement of populations in emergency situations greatly impacts on the health and nutrition status of infants and young children. There is an increased risk of death among the affected population and in particular among vulnerable groups, such as orphans, children and pregnant and lactating women.²

Malnutrition is a major threat to child survival during an emergency and for those who survive; it can also have tremendous consequences on their cognitive, social, motor skill, physical and emotional development. Adequate nutrition and care of children has been identified as one of the key factors to promote child health and stability.

In emergencies the risk of disease is increased by the crowded and unsanitary conditions in which many displaced families must live. Breastmilk substitutes (formula and other milk products) prepared without safe water are at high risk of contamination with gastro-intestinal and other pathogens, making babies vulnerable to diarrhoeal disease and subsequent malnutrition. Breastmilk substitutes fed to babies via bottles are especially hazardous: if feeding bottles cannot be sterilised, germs readily contaminate the bottle and multiply between feeds. Traumatized and depressed women may have difficulty responding to their infants and require particular mental and emotional support.

During emergencies, the risk of diarrhoea is exacerbated and transmission rates soar. Poor access to clean water, poor food hygiene practices, introduction to new or unusual foods, disrupted eating patterns and high rates of infectious illness due to overcrowded/insufficient living conditions and moving populations create a perfect environment for diarrhoeal disease.

² Source: WHO Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition. WHO 2013



Vitamin A intake is often limited in emergency situations where the food supply is either inadequate or inappropriate and access to vitamin A-rich foods is reduced. Without proper food support, body reserves of vitamin A become severely depleted. In the emergency context, there is an increase in communicable and infectious diseases due to over-crowded shelter conditions and disruption due to population displacement and the demise of health infrastructure. Measles is especially common in emergencies and can trigger acute malnutrition and aggravate Vitamin A deficiency to dangerous levels.

Effects of the emergency and disruption of access to basic food needs, health services and water and sanitation, will be felt more quickly and may have a more deleterious impact on families affected by HIV and AIDS. Emergencies can also provoke and aggravate cases of chronic or acute malnutrition and micronutrient deficiencies through the impact they have on psychosocial wellbeing.

3.3 Protection issues

The needs of particularly vulnerable groups should be taken into consideration at the planning stage. Emergencies often result in a combination of separation of families and the breakdown of social support systems for individuals outside traditional family structures. Rape may be used as a weapon of war, and/or women or children may turn to risky coping strategies of exploitative sexual work for basic needs. Mechanisms for protecting women and girls should be established and considerations mainstreamed into nutrition programmes. This will involve organisation of interventions such as the receipt of food, in a way that ensures women and girls are not placed in dangerous situations, as well as ensuring adequate rations for families. Additionally, systems should be set up to facilitate reporting of sexual exploitation and abuse and for effective response referral.

Special measures must be taken to ensure all children are protected from harm and given equitable access to basic services. In certain situations, children and young people may be vulnerable to undernutrition, exploitation, sexual violence and lack of opportunity to participate in decision-making.³ Orphans and unaccompanied, separated, or other vulnerable children and youth may be at particular risk and may need to be registered for nutritional or livelihood interventions.

Older people can be particularly affected by disasters. Their traditional support networks may be disrupted and those dependent on family members may find themselves separated or alone. Risk factors that reduce access to food and yet increase nutrient requirements include disease and disability, psychosocial stress, cold and poverty. In addition, older people may find themselves in new roles, such as caring for young children in situations where adults have died or are separated from the family.

³ The Convention on the Rights of the Child states that a child is considered to be an individual below the age of 18 years. This definition can differ depending on cultural and social contexts.



4. Core principles of emergency nutrition response

Considering the context in which emergency response takes place and the particular vulnerabilities of different groups within communities, nutrition interventions must ensure that the following thirteen core principles are considered:⁴

1. **Nutritional interventions should save lives, alleviate suffering and be conducted in a way that ensures no further harm to affected people; that they benefit those who are most affected and vulnerable; that they take into consideration their role in protecting affected people from violence and other human rights abuses.** People's access to impartial assistance – in proportion to need and without discrimination – should be assured. Assisting people through feeding programmes in their home communities is always preferable to establishing relief camps.
2. **The precise vulnerabilities specific to each context and the changing nature of vulnerabilities over time must be assessed and considered in the design of a response and continually monitored.** Individuals within an emergency-affected population may be affected differently on the basis of their ethnic origin, religious or political affiliation. Displacement may make vulnerable certain people who in normal situations would not have been at risk. Women, children, older people, persons with disabilities or people living with HIV may be denied vital assistance or the opportunity to be heard due to physical, cultural and/or social barriers.
3. **The active participation of the affected population is essential to providing assistance in ways that best meet their needs, including those of vulnerable and socially excluded people.** Local efforts to prevent, prepare for and respond to emergencies, and to the effects of conflict, should be supported and the capacities of local actors at all levels reinforced so that communities play decisive roles in the planning, execution, monitoring and evaluation of projects and programmes.
4. **The adaptation and coping strategies of a population should not be underestimated nor undermined.** People's capacity and strategies to survive with dignity are integral to the design and approach of humanitarian response. Unnecessary feeding programmes can have a negative impact, creating dependency and disruptions in local market mechanisms.

⁴ Sources: MSF (2002) *Nutrition Guidelines*, 2002; WHO, et.al. (2000). *The Management of Nutrition in Major Emergencies*; Sphere Handbook 2011; IASC (2011) Gender TIPS Sheet for Nutrition, <https://www.humanitarianresponse.info/system/files/documents/files/Nutrition%20Gender%20Marker%20Kit.pdf>



5. **Effective emergency nutrition response must be based on a comprehensive, contextualised diagnosis (assessment, monitoring and evaluation), in order to analyse people's needs, vulnerabilities and capacities to respond and recover in each context.** Response should be sensitive to local customs, beliefs and practices.
6. Many factors influence nutritional status, therefore **interventions should be multi-sectoral or link to interventions in other sectors which cover health, hygiene, water and sanitation and caring practices.**
7. **Emergencies should be addressed in a holistic manner from preparedness, prevention, mitigation, response to recovery.** Relief efforts should be followed by development initiatives in order to minimise detrimental effects such as dependency on relief assistance and promote the recovery of livelihoods. They should be linked to preventative and recuperative health services.
8. **IDPs and refugees require special consideration in regard to their right to food.** They may have recently lost productive assets and face possible reliance on a host community.
9. **Emergency nutrition response should be planned and implemented in coordination between the relevant authorities, humanitarian agencies and civil society organisations engaged in impartial humanitarian action, working together for maximum efficiency, coverage and effectiveness.**
10. **Performance, transparency and learning are essential to providing optimal nutritional response in emergencies.** Nutritional interventions should be continually monitored, evaluated and accountable to stakeholders; projects should be adapted in response to learning.
11. **Opportunities for capacity development of nutritional actors should be capitalised on in order to build future response capacity.**
12. **Nutritional interventions should meet National minimum standards for humanitarian response and adhere to National guidelines.**
13. **Natural resource endowments in crisis-affected and crisis-prone areas should be protected and promoted in the context of comprehensive risk management strategies.**



5. The objective of Nutrition in Emergencies (NiE) and types of interventions

5.1 Programme objective

The objective of NiE interventions is to prevent excess mortality and morbidity resulting from malnutrition.

Vulnerable groups in an emergency

The population groups listed in Table 3 have been identified in Timor-Leste as particularly vulnerable in the case of deterioration in the nutritional situation during emergencies. This information should be used for planning purposes to estimate scale and cost of possible interventions.

Table 3: Characteristics of nutritionally vulnerable groups in Timor Leste

Vulnerable groups	Proportion (2010 population census)	Estimated prevalence of acute malnutrition within the group (particularly vulnerable)
Pregnant Women	4.6 % of general population	26.5*%
Lactating Women	4.2 % of general population	26.5%
Children 6-59 months	~ 15% of general population	11%
Disabled / Chronically ill	?	?
Elderly	?	35**%
Orphans, Vulnerable Children	?	11***%
* based on data for non-pregnant women ** estimated based on 26.5% of women aged 14-60 years had BMI <18.5 *** estimate based on national wasting prevalence		

Source: Contingency Plan, Nutrition Cluster – Timor-Leste, Feb 2015

5.2 Nutrition in Emergencies Interventions

5.2.1 Timor-Leste NiE Programme Components

When responding to crisis in Timor-Leste, the following programmatic components make up comprehensive nutrition programming:

1. Infant and Young Child Feeding in Emergencies
2. Treatment of diarrhoea with ORS/Zinc
3. Prevention and treatment of vitamin A deficiency
4. Prevention and treatment of micronutrient deficiencies
5. Prevention and management of moderate acute malnutrition
6. Management of severe acute malnutrition
7. Nutrition, HIV and AIDS
8. The psychosocial components of nutrition
9. Nutritional care for groups with special needs
10. The use and role of food assistance
11. Food handling, storage and preparation
12. Household food security and livelihoods

The best way to prevent malnutrition is to ensure optimal feeding and care for children. In the emergency context, displaced or devastated communities are often dependent on the provision of food aid to meet their basic nutritional requirements. When food aid is provided, issues around food handling, preparation and storage are highlighted because the normal food systems, including cooking facilities and access to fuel and water, are often disrupted and yet food must continue to be prepared and eaten.

Providing ORS with zinc in emergencies is a simple and cost-effective intervention, which can greatly reduce the length and severity of diarrhoea, preventing severe dehydration, malnutrition and death (*see SNIP guideline on zinc and ORS*).

Acute malnutrition needs to be addressed in the emergency context both to support a child's right to sufficient food, growth and wellbeing and to prevent more serious illness and death. From a cost perspective per child, moderate acute malnutrition is significantly cheaper to treat than severe acute malnutrition.⁵

Table 4 shows how to decide when to implement selective feeding programmes in order to address acute malnutrition rates.

⁵ Source: WHO Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition. WHO 2013

Table 4: Decision-making criteria for Selective Feeding programming

Scenario	Actions required
Food availability at household level below 2,100 kcal per person per day Malnutrition rate ^a 15% or more or 10-14% with aggravating factors ^b	<i>Unsatisfactory situation:</i> Improve general rations until local food availability and access can be made adequate <i>Serious situation:</i> • General rations (unless situation is limited to vulnerable groups); plus • Supplementary feeding generalized for all members of vulnerable groups, especially children and pregnant and lactating women • Therapeutic feeding programme for severely malnourished individuals
Malnutrition rate ^a 10-14% or 5-9% with aggravating factors ^b	<i>Risky situation</i> • No general rations; but • Supplementary feeding targeted to individuals identified as malnourished in vulnerable groups • Therapeutic feeding programme for severely malnourished individuals
Malnutrition rate ^a under 10% with no aggravating factors ^b	<i>Acceptable situation:</i> • No need for population interventions • Attention for malnourished individuals through regular community services
a - Malnutrition rate is defined as the percentage of the child population (6 months to 5 years) who are below the reference median weight-for-height -2 SD. b - Aggravating factors: • general food ration below the mean energy requirement • crude mortality rate more than 1 per 10 000 per day • epidemic of measles or whooping cough (pertussis) • high incidence of respiratory or diarrhoeal diseases	

Source: Contingency Plan, Nutrition Cluster – Timor-Leste, updated February 2015.

A full range of NiE interventions for different population groups are included in Annex 1.



5.2.2 Infant and Young Child Feeding in Emergencies (IYCF-E) interventions

Actions for appropriate IYCF-E

In emergencies it becomes even more difficult for mothers and carers to look after infants and young children when lives are disrupted. Assistance should pay special attention to IYCF to prevent morbidity, undernutrition and mortality.

Community-based support networks, such as mother-to-mother support groups and peer or lay counsellors may be an extremely useful resource for promotion of appropriate IYCF.

Early emergency response

The Infant and Young Child Feeding in Emergencies (IYCF-E) operational guidance⁶ gives full details on IYCF-E implementation. A *Statement on appropriate support for infant and young child feeding during emergency* should be issued as soon as possible by adapting the draft in the Timor-Leste Nutrition Cluster Contingency Plan. In the first few days of an emergency, immediate links with other sectors should be established, such as with reproductive health to provide 'safe havens' for pregnant and lactating women. These 'safe havens' should be easily-accessible areas where privacy, security and shelter are provided with access to water and food. Basic supportive care of breastfeeding mothers and their infants can be offered and peer-to-peer support nurtured. This may be a corner of the CHC or hospital.

Minimum level of response

A minimum response to support IYCF-E is indicated in *all* emergencies. This should include nutritional adequacy and suitability of any general food ration for older infants and young children; consideration of supplementary feeding of pregnant and lactating women; ensuring and easing access to basic water and sanitation facilities, cooking, food and non-food items; ensuring rest areas for populations in transit, including private areas for breastfeeding if culturally indicated; and establishing timely registration of newborns to support early initiation and exclusive breastfeeding.

⁶ The Operational Guidance on IYCF-E was developed and is managed by an interagency collaboration (IYCF-E Core Group) to help those concerned with emergency response to meet their responsibilities to infants and young children and their caregivers in emergencies. It is a practical reflection of key policy and strategies, including the WHO Guiding principles for feeding infants and young children during emergencies, the UNICEF/WHO Global Strategy and the Code. The Operational Guidance on IYCF-E was endorsed by the WHA 43.23 (2010). <http://www.enonline.net/operationalguidanceiycfv2.1>

Artificial feeding in emergencies

Any support of artificial feeding in an emergency should be based on a needs assessment by skilled technical staff, including a risk analysis. This applies both in the context of HIV where replacement feeding may have been established pre-crisis or in any population where infants may be artificially fed. Interventions that support artificial feeding should meet key criteria on targeting, use, procurement, distribution and management of breast-milk substitutes, as detailed in the operational guidance on IYCF-E, the *International Code of Marketing of Breastmilk Substitutes* and the *Timor-Leste 2006 Guiding Principles For Feeding of Infants And Young Children In Emergencies*.

Infant feeding and HIV in emergencies

In the interest of overall child survival, introducing replacement feeding or early cessation of breastfeeding is unlikely to be a safe option in most emergency situations. In Timor-Leste, where the recommendation is EBF with ARVs for HIV-infected mothers, the recommendation should remain unchanged, even if ARVs are temporarily not available. Where the HIV status of the mother is unknown or if she is known to be HIV negative, early initiation and EBF for the first 6 months, continuation of breastfeeding into the second year of life or beyond, and nutritionally adequate and safe complementary feeding for children 6–23 months is recommended, as for the general population.

In countries that recommend formula feeding for the infants of HIV-infected mothers, great care should be taken to ensure that Code-compliant infant formula is available only for those infants who need it. National authorities and/or the authority managing the emergency should establish whether the recommendation for formula feeding is still appropriate given the circumstances. For further guidance, consult the latest WHO recommendations and United Nations guidelines.



6. The International Code of Marketing of Breastmilk Substitutes

The **International Code of Marketing of Breastmilk Substitutes** is an international health policy framework for breastfeeding promotion, adopted by the World Health Assembly (WHA) of the World Health Organization (WHO) in 1981. The Code provides recommendations on the restrictions on marketing of breastmilk substitutes, to ensure that mothers are not discouraged from breastfeeding and that substitutes are used safely if needed. The Code also covers ethical considerations and regulations for the marketing of feeding bottles and teats. Some of the provisions in the Code include:

- No advertising to the public of any product within the scope of the Code;
- No free samples to mothers;
- No promotion of products through healthcare systems;
- No gifts to healthcare providers
- No words or pictures idealising artificial feeding or pictures of infants on labels of formula cans, feeding bottles, etc.

The draft *Timor-Leste Code of Marketing of Breastmilk Substitutes, Breastmilk Supplements and Related Products* is awaiting ratification.



7. Coordination Mechanisms in an Emergency and the Nutrition Cluster

7.1 Coordination mechanisms

Co-ordination during an emergency is facilitated through the Cluster Approach. The Cluster Approach is a way of organising coordination among humanitarian actors, including the government, to facilitate more predictable leadership, improved planning and prioritisation, stronger partnerships and enhanced response capacity and accountability.

It provides a framework for effective partnerships among international and national humanitarian actors in each sector. The aims are to ensure that international responses are appropriately aligned with national structures and to facilitate strong linkages among international organisations, national authorities, national civil society and other stakeholders.

7.2 Nutrition Cluster objectives and principles

Objectives

The objective of the Nutrition Cluster (NC) is to coordinate and ensure accountability of all the partners in the nutrition sector as well as the technical quality of interventions for emergency preparedness, response and early recovery in order to ensure appropriate nutrition services for populations affected by emergencies and disasters.

Principles

NC members reaffirm the supremacy of internationally agreed principles of humanitarian action reflected in “Humanitarian Charter” and “Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief”.

The NC actions at every stage of preparedness and response to emergencies will follow the principles of impartiality, neutrality and humanity.

The members of the NC agree to:

1. Focus on results and strive to reduce red tape
2. In all circumstances prioritise needs of the populations affected by crises
3. Value diversity and respect individual NC member agency mandates
4. Foster inclusiveness and members’ participation in decision making in the NC



5. Build NC member agencies' capacity to address nutrition needs of populations in emergencies
6. Be accountable to donors, partners and beneficiaries
7. Involve beneficiaries in design and implementation of the cluster activities, build on and strengthen local capacities to prevent, mitigate and respond to emergencies
8. Collaborate with other relevant clusters (Health, WASH, Logistics, Food) at every stage of preparedness and response to emergencies in order to ensure that NC actions are cost effective, adequate and comprehensive.

7.2 Nutrition Cluster activities in Timor-Leste

Hazard mapping

In 2015 the Nutrition Cluster selected priority hazards from the ones identified by the National Disaster Management Directorate. The priorities were classified according to two main dimensions, likelihood and impact upon nutrition situation, on the scale from one to five. Furthermore, other factors such as vulnerabilities and vulnerable groups were considered in the analysis and the following hazards were identified as having strongest potential and likelihood for negative impact on nutrition situation of the affected populations and therefore considered as priorities for nutrition cluster contingency planning:

1. Floods
2. Earthquake
3. Drought
4. Conflict
5. Landslide

The disaster risk and hazard map analysis for Timor-Leste finalised in 2010 provides an overview of municipalities vulnerable to these hazards (UNDP 2010). Out of the five main hazards, the Nutrition Cluster agreed to focus on Earthquake, Flood and Drought/Food Insecurity.

Contingency Planning

The Timor Leste Nutrition Cluster contingency plan includes a detailed plan of activities by different phases and for different types of crisis (see section 2 for definitions), summarised in Table 5.



Table 5: Principal cluster activities during the different phases of emergency response
Phase 1

Phase 1 <i>Sudden-onset crisis:</i> First 24-72 hours <i>Slow-onset crisis:</i> First 1-2 weeks	• Access contingency plan with pre-crisis information • Preliminary contacts, activation of the NC, activation of the inter-agency contingency plan (if any) • Preliminary enquiries and consolidation of information and gathering baseline/pre-crisis information • First nutrition cluster coordination meeting(s) – national and (if applicable) subnational levels • Develop: - o preliminary scenario based on nutrition situation in affected areas needs and risks - o update “Who-Where -When-What” (4W) matrix and gap analyses - o identification of initial, gender-sensitive response priorities and actions • Establishment of a nutrition coordination office and database on response at MoH • Participation in initial inter-cluster/inter-sectoral coordination meetings; contribution to initial inter-cluster/sectoral analysis and planning • Review to finalise and start the joint initial rapid assessment (IRA) or multi-cluster initial rapid assessment (MIRA) *
Phase 2 <i>Sudden-onset crisis:</i> First 4-10 days <i>Slow-onset crisis:</i> First month	• Complete MIRA and draft report available • Agree on cluster information management and establish emergency nutrition surveillance (field reporting) • Formulation of initial nutrition cluster response plan based on findings of MIRA and estimate funding needs • Conduct in-depth cluster specific assessment • Finalise assessment report and draft response plan • Regular health and nutrition cluster coordination meetings – national and subnational levels - o up-dated working scenario, 4W resource inventory and gap analyses - o agreement on up-dated, gender-sensitive response priorities and actions • NC member agencies prepare individual project designs and proposals • Preparation of nutrition component of the UN-OCHA flash appeal (if any) • Preparation of proposals for CERF funding (if any) • Review committee to vet proposals (if any) • Preparation and dissemination of regular nutrition-sector bulletins using agreed pre-crisis template • Activate technical working group(s) • Coordination of logistics support for nutrition activities • Continuing participation in inter-cluster/inter-sectoral coordination meetings; contribution to inter-cluster/sectoral analysis and planning and effective integration

Phase 3 <i>Sudden-onset crisis:</i> ≈ 4-6 weeks (disaster) to up to 3 months (conflict) <i>Slow-onset crisis:</i> ≈ 2-3 months	• Maintenance of routine surveillance activities • Continuation of regular nutrition coordination meetings (e.g. weekly) • Finalisation of nutrition sector strategic/action plan - o planning scenario (identified nutrition problems and risks) - o overall objectives, strategies, strategic/action plan for health sector • Resource mobilisation • Implementation and monitoring of initial response (with gender- sensitive indicators) • Continuation of regular nutrition coordination meetings (e.g. weekly) - o frequent updating of 4W, resource inventory, and gap analyses - o work with technical working groups, as/when needed - o organisation of joint training, as/when needed • Monitoring implementation of the nutrition response strategy & cluster action plan
Phase 4 (continuing humanitarian response & progressive recovery) Phasing out	• Continuation of regular nutrition coordination meetings (e.g. biweekly or as needed) • Periodic up-dating of the planning scenario, and gap analyses • Coordinating the replacement of departing surge support and international teams • Establishment/suspension of technical working groups, as needed • Maintenance of programme monitoring and surveillance system • Real-time or interim/mid-term evaluation of sector response • Comprehensive assessment/in-depth sub-sector assessments, as needed • Updating of strategic action plan with increasing focus on recovery • Contingency planning for possible changes in the situation • Phase-out plan for emergency programmes as recovery programmes increase • Final (ex-post) evaluation and lessons-learned exercise

Source: Contingency Plan, Nutrition Cluster – Timor-Leste, updated February 2015.

*See the Contingency Plan for MIRA tools.

The NC supports the Government of Timor-Leste emergency preparedness and response efforts and adheres to its nutritional policies and guidelines. In order to improve efficiency of national emergency preparedness and response when relevant the NC, as a responsible partner, will engage in policy dialogue with the Government. Besides supporting Government plans to protect populations from the impact of crises, NC will invest in building capacities of local communities and structures to decrease vulnerabilities and increase resilience to potential hazards.

Where the capacity of the health system is exceeded, members of the NC such as NGOs and UN agencies will assist. Not all the above-mentioned components will be implemented by the NC directly. For example, treatment of diarrhoea with ORS/Zinc in most circumstances will be implemented by the Health Cluster and ensuring household food security and livelihoods by the Food Cluster. NC will collaborate closely with the WASH cluster to ensure health facilities and any temporary shelters have adequate water and sanitation services. Logistics Cluster has a major role in ensuring uninterrupted supply of adequate quantity of commodities for management of nutrition in emergencies. NC will work with other relevant cluster towards comprehensive and effective relief action.

The quality of engagement with communities is a vital determinant of the success of nutrition interventions. Community mobilisation comprises a range of activities that help implementers understand the affected communities, build relationships with them and foster their participation in programme activities. These are important during all activities.

The Timor-Leste Nutrition Cluster Contingency Plan should be updated regularly. It includes details of coordination structures to be set up, key actors, and their responsibilities, scenarios of emergency situations and minimum response standards and identifies priority vulnerable groups and their likely needs.

Monitoring, surveillance and early warning systems that provide information to help plan and guide the response toward target areas and populations and monitor interventions are also required.

Preparedness measures may also include standby resources or plans to enable fast scale up of necessary supplies and staffing to respond to an emergency.

8. The role of the Health Worker in responding to NiE in Timor-Leste and skills required

8.1 Health Worker role

The role that a Health Worker will play in terms of responding to a nutritional emergency depends very much on the context and specific needs. Table 9 below lists some examples of the types of activities a Health Worker may be involved with.

Table 9: The Role of the Health Worker in responding to nutritional emergencies

NiE specific area	Potential role of Health Worker
Contingency planning, early warning, assessment, situational analysis	• Collect and report data on nutrition situation • Assist in identification of vulnerable groups • Alert in case of increase in nutrition-related problems • Work with affected population to assist in identification of most appropriate interventions to respond to nutritional needs
IYCF-E	• Anticipate and ensure that the needs of mothers, infants and young children are considered in an emergency situation / when planning for an emergency • Follow adherence to Code of Marketing of Breastmilk substitutes; help to communicate messages around this to raise awareness • Do not accept donations for breastmilk substitutes, bottles and teats, nor distribute milk powder or liquid milk • Provide support to breastfeeding mothers to initiate / continue exclusive breastfeeding of children under 6 months, support to continued breastfeeding • Assist in establishment of 'safe havens' for breastfeeding • Provide reassurance and support, boost confidence of mothers trying to breastfeed

NiE specific area	Potential role of Health Worker
	• Support to appropriate complementary feeding • Refer mothers / caregivers for appropriate care in the case of health problems, including mental health issues • Prioritise pregnant and lactating women for shelter, food, water, security
Other SNIP in emergencies	• Apply SNIP skills to NiE (CMAM, counselling, nutritional supplementation etc.) • Referral and follow-up of individuals and groups requiring nutritional support, including mothers, infants and young children, older people, other vulnerable groups • Provide additional support in emergency-affected areas so that SNIP can be scaled up to respond to additional needs
Monitoring, evaluation, reporting	• Ensure application of NiE principles at ground level • Ensuring mechanisms in place by which abuse / exploitation can be reported • Ensure correct targeting and distribution to most vulnerable groups • Report inadequacies in targeting, distribution etc. • Assist in monitoring nutrition situation for deterioration / improvement



8.2 Health worker skills

Health workers adequately trained and effectively delivering the SNIP interventions in stable contexts will be able to quickly scale up interventions in emergencies, or skilled staff may be temporarily deployed to emergency-affected areas.

Counselling skills to assist caregivers with infant and young child feeding will be particularly important.

Accurate and timely monitoring and reporting will assist with preparedness, rapid response and save lives.

8.3 Job aids

The SNIP job aids should be accessible for Health Workers responding in an emergency situation.

Particular focus may be on IYCF and aids that focus on counselling and support to mothers and caregivers to continue to breastfeed and provide adequate complementary feeding to their infants and young children.

8.4 Supplies

Supplies for regular SNIP activities are likely to be needed in increased amounts, particularly vitamin A, supplementary and therapeutic foods for CMAM and associated support items. Where indicated, supplies to provide all children in the affected area with complementary foods may be required alongside family food rations where necessary.



9. Standards for NiE Interventions

National policies and guidelines will guide activities alongside global standards and initiatives to improve accountability, quality and performance in humanitarian action (see section 1).

Those involved in the provision of services are accountable to the community they serve in emergency and non-emergency periods. At a minimum, this should include:

- Provision of public information to communities about the service being provided, outlining its aims, and proposed activities, as well as making clear what the provider cannot address.
- Provision of essential information about the service, including timing and targeting criteria for events such as GFD, SFP screening days, surveys and meetings. The time frame, exit strategy and limitations of the service should be explained and the roles and responsibilities of the community negotiated. Information on relief assistance entitlements should be publicised in a transparent manner and communicated in a way that is inclusive and accessible to all members of the community.
- Engagement in ongoing consultation with the beneficiary community in a language and manner that they can understand, which includes listening to the priorities and needs of a range of community stakeholders including women, men, and vulnerable or marginalised groups; clearly communicating any changes in project plans or entitlements of beneficiaries; and listening to feedback and reactions from beneficiaries on project plans and expected results.
- Systematic feedback mechanisms can be set up that enable service providers to report to beneficiaries on project progress, and beneficiaries to keep service providers informed of any challenges or complaints with the system and whether projects are meeting their needs. Responding to feedback and adapting services in response is an essential part of this, as well as explaining to all stakeholders the changes made and/or why change was not possible.⁷

⁷ Adapted from Emergency Capacity Building Project four basic elements of accountability. Emergency Capacity Building (ECB) Project (2007), Impact Measurement and Accountability in Emergencies: The Good Enough Guide. Oxfam Publishing. Oxford.



10. Monitoring / Tracking process

Routine monitoring of SNIP will continue in emergencies, though the regularity of review and analysis of data is likely to increase so that managers can maintain a firm overview of the situation and ensure service provision is reaching target populations.

Additional surveys and assessments will be conducted to assess the situation and maintain an effective and reactive response.



REFERENCES

- Contingency Plan – Nutrition Cluster Timor-Leste. Updated February 2015.
- Guiding Principles For Feeding of Infants and Young Children In Emergencies, Dili, July 2006
- HAP (2007). HAP Standards in Humanitarian Accountability. Humanitarian Accountability Partnership.
- Infant and Young Child Feeding in Emergencies Core Group. (2007, February). Operational Guidance on infant and young child feeding in emergencies (for emergency relief staff and programme managers). version 2.1. Emergency Nutrition Network and addendum 2010.
- IFRC/ICRC. The Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief. Prepared jointly by the International Federation of Red Cross and Red Crescent Societies and the International Committee of the Red Cross
- The Sphere Project (2011). Humanitarian Charter and Minimum Standards in Humanitarian Response. Geneva: The Sphere Project
- WHO Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition. WHO 2013.
- WHO (1981). The International Code of Marketing of Breast-milk Substitutes. Geneva: WHO, and subsequent relevant World Health Assembly resolutions

ANNEX 1: NiE interventions and target groups

Vulnerable group	Interventions	Routine programme	Responsibility	Essential/ optional
Pregnant women	Acute malnutrition (TSFP)	Yet to start,	NC	Essential
	Blanket supplementary feeding (BSFP)	limited coverage	Food Cluster (FC)	Optional
	Micronutrient supplementation	Yes, ANC	MoH, NC	Essential
	Iodized salt in the general food distribution (GFD)	N/A	FC	Essential
	Breastfeeding counselling	Yes, ANC	Health Cluster (HC), NC	Essential
	Have the resources, such as fuel, water and utensils, to cook their food ration	No	FC/Logistic Cluster (LC)	Essential
	Health, nutrition and hygiene education	Limited	HC, NC, WASH cluster (WC)	Essential
	Designated IYCF areas	No	HC, NC, CP, LC	
Lactating women	Acute malnutrition (TSFP)	Yet to start,	NC	Essential
	BSFP	limited coverage	FC	Optional
	Micronutrient supplementation	Yes, ANC	MoH, NC	Essential
	Iodized salt in GFD	NA	FC	Essential
	IYCF counselling & support	Yes, PNC	MoH, NC	Essential
	Have the resources, such as fuel, water and utensils, to cook their food ration	No	FC/LC	Essential
	Health, nutrition and hygiene education	Limited	HC, NC, WC	Essential
	Designated IYCF areas	No	HC, NC, CP, LC	Essential

Vulnerable group	Interventions	Routine programme	Responsibility	Essential/ optional
Children 0-6 months	Exclusive breastfeeding (EBF)	60% EBF	MoH, HC, NC, CP	Essential
	Re-lactation management	No	MoH, HC, NC	Essential
	Designated IYCF areas	No	MoH, HC, NC, CP, LC	Essential
	Mother support group/ trained IYCF counsellors	Yes	MoH, HC, NC	Essential
Children 6-23 months	BSFP	No	NC	Optional
	Multiple micronutrient powders (MNPs)	Limited coverage	MoH, NC	Essential
	Vitamin A (at 6 month)	Yes	MoH	Essential
	Deworming	Yes	MoH	Essential
	Treatment for SAM (OTP/ITP)	Yes	MoH, NC	Essential
	Treatment of MAM (OTP)	Limited coverage	NC	Essential
	Iodized salt as part of GFD	NA	FC	Essential
Children 24-59 months	BSFP	No	NC	Optional
	Multiple micronutrient powders (MNPs)	Limited coverage	MoH, NC	Essential
	Vitamin A (at 6 month)	Yes	MoH	Essential
	Deworming	Yes	MoH	Essential
	Treatment for SAM (OTP/ITP)	Yes	MoH, NC	Essential
	Treatment of MAM	Limited coverage	NC	Essential
	Iodized salt as part of GFD	NA	FC	Essential

Vulnerable group	Interventions	Routine programme	Responsibility	Essential/ optional
Disabled / Chronically ill	General ration (when applicable)	?	FC	Essential
	Organization of food distribution adapted to the needs of disabled / chronically ill			
	Have the resources, such as fuel, water and utensils, to cook their food ration		FC/LC	Essential
	Link disabled / chronically ill people with supporting families for joint preparation of meals			
Elderly (aged xx years and above)	Access to milling services/ additional during the Phases II and III of the emergency response		FC/LC	Essential
	Health, nutrition and hygiene education			
	General Ration (when applicable)	?	FC	Essential
	Provide food that is digestible for older people (such as maize flour rather than whole grain maize), and that takes account of digestive disorders and a common lack of teeth		FC	Essential
	Organization of food distribution adapted to the needs of elderly		FC/LC	Essential
	Have the resources, fuel, water and utensils, to cook their food ration		FC/LC	Essential
	Link older people with supporting families for joint preparation of meals		FC/LC	Optional
	Access to milling services / additional during the Phases II and III of the emergency response		FC/LC	Optional

Vulnerable group	Interventions	Routine programme	Responsibility	Essential/ optional
Orphans, Vulnerable Children	Children from 6-59 months see above	No	As above	Essential
	Aged 5 to 17years: General ration (when applicable), ITP, ORS/Zn	No	FC	Essential
	Support for child headed households to access services including food distributions	No	FC/Protection cluster (PC)	Essential
	Support for access to milling services	No	FC/LC	Optional
	Linkage to social support services	No	NC/HC/WC	Essential
	Health, nutrition and hygiene education			





Timor-Leste SNIP Guidelines

MODULE 10:

Nutrition information systems





1. Recommendation

The 2015 Global Nutrition Report stated that, “Data are needed to guide action, support advocacy, monitor progress toward the World Health Assembly (WHA) and Sustainable Development Goal (SDG) targets, and strengthen accountability.... National governments, international agencies, and program implementers should place a special focus on collecting credible coverage data for interventions to prevent and treat undernutrition...”

In May 2012, the 65th World Health Assembly (WHA) endorsed the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition (MIYCN). The WHA resolution urges Member States to put the MIYCN Plan into practice by including proven nutrition interventions relevant to the country in maternal, child and adolescent health services and care. The MIYCN Plan calls for a well-defined framework that would allow a harmonised and internationally accepted approach to monitoring of progress towards nutrition targets at both the national and global levels as well as on the actions taken to put the Comprehensive Implementation Plan into practice.

The monitoring framework has a core set of indicators (Annex 9), to be reported by all countries and an extended set of indicators, from which countries can draw to design national nutrition surveillance systems fitting the specific epidemiological patterns and program decisions.

WHO 2014. Indicators for the Global Monitoring Framework on Maternal, Infant and Young Child Nutrition (24 November 2014)



Technical Notes / definitions

Monitoring

'The systematic and continuous assessment of the progress of a piece of work over time... It is a basic and universal management tool for identifying the strengths and weaknesses in a programme. Its purpose is to help all the people involved make appropriate and timely decisions that will improve the quality of the work.' *Gosling and Edwards, 1995*

Evaluation

The systematic and objective assessment of an ongoing or completed intervention, programme or policy, its design, implementation and results. The aim is to determine relevance and fulfilment of objectives, as well as efficiency, effectiveness, impact and sustainability. OECD DAC

Monitoring and evaluation, though two distinct activities are closely linked. Monitoring is a routine activity with data collected on a regular e.g. daily or monthly basis. Its basic purpose is to keep track of programme activities and improve the efficiency of interventions. Evaluation tends to be episodic, undertaken at critical points in a project cycle and its basic purpose is more to do with improving effectiveness and informing future programming.

Indicators

Indicators are the essential tools of M&E, providing a measure against which performance or progress of an intervention can be compared. Indicators provide a simple and reliable means to measure achievement or reflect changes connected to a project or programme. Where possible, indicators should be disaggregated to reflect differences according to gender, age or other relevant factors.

Type of indicator	Indicators	Example
Impact	Measure the quality and quantity of the longer term results contributed to by the intervention outcomes	% children under-5 years stunted
Outcome	Measure intermediate results influenced by the intervention outputs. They often correspond to a change in people's behaviour as a result of the intervention	% children 0-5 months exclusively breastfed
Output	Measure the quantity, quality and timeliness of products that result from activities of the programme	% of children 6-59 months screened for acute malnutrition
Input	Measure the quantity, quality and timeliness of resources – human, financial and material - information provided for a programme/project	% CHC with designated Nutrition Coordinator

Source: *Harmonised Training Package. Module 20: Monitoring and evaluation. NutritionWorks, ENN, IASC, USAID 2011. Indicators from Timor-Leste Draft Nutrition Monitoring and Evaluation Framework: Nutrition Monitoring and Evaluation, Nutrition Department, Ministry of Health.*



2. Importance and purpose of Nutrition information systems: data, data quality and data management

A nutrition information system (NIS) involves continuous collection, analysis and interpretation of nutrition-related data for making timely and effective decisions to improve the nutritional health of the population. A good NIS will consist of the following features:

- The ability to collect and process information easily so that it can be available promptly to various levels of government administration and the local community for making policy decisions and developing interventions
- The ability to detect changes and prevent large increases in malnutrition during times of stress
- As far as possible, it uses data and information already available from routine reporting at the local level
- It is designed so that the information can be collected and processed by frontline health workers in the community

A NIS is essential for monitoring and evaluation, and also serves broader objectives, including:

- Providing an alert and early warning capability,
- Tracking whether activities are making a difference to the nutritional status of individuals, target groups and communities
- Supporting individual and health facility management,
- Identifying where successes and gaps/challenges may be
- Assisting programme planning, design and resource allocation
- Ensuring accountability for funds spent, as well as to communities, managers and donors
- Underpinning and stimulating research,
- Permitting nutrition situation and trends analyses,

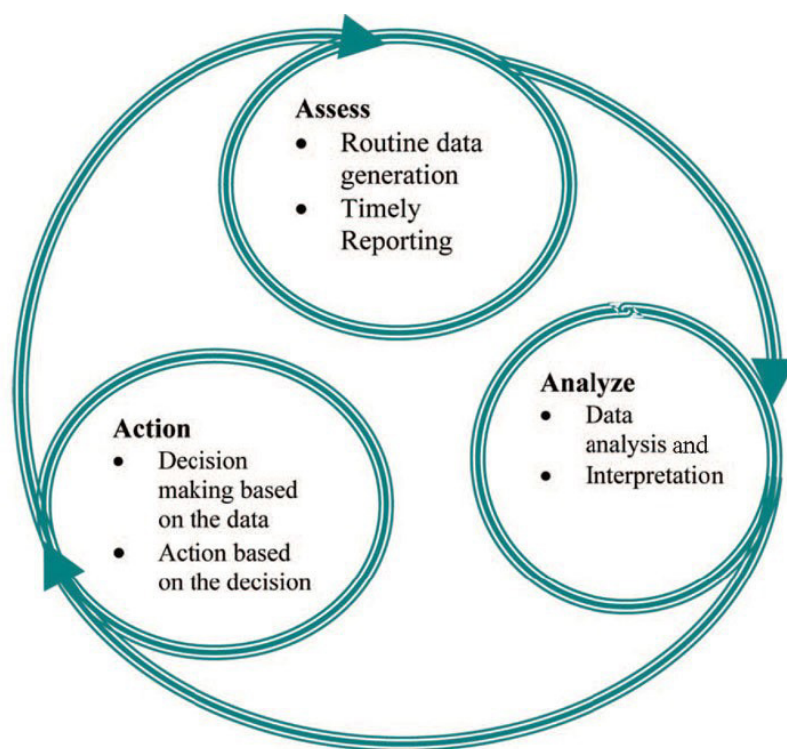
Information is of little value if it is not available in formats that meet the needs of multiple users, i.e. policy-makers, planners, managers, health-care providers, communities and individuals. Dissemination and communication are therefore essential attributes nutrition information systems.

An effective NIS should guide prompt action to respond to deterioration of the nutritional status of vulnerable people in the population, particularly children and mothers. The NIS is a continuous (cyclic) process, illustrated by the triple A cycle (figure X). Information generated by the NIS can be used for decision-making from the community level to the national level.



The triple A cycle has:

- An *assessment* aspect involving service generated data recording and timely reporting
- *Analysis* and interpretation of the data based on the national guidelines and procedure
- An *action* component which involves decision making and implementation using the information, which in turn will automatically be followed by another assessment.



Data from different sources are used for several purposes at different levels of the system:

- **Individual level** data enables effective and timely management of the child or pregnant woman. Health-care records (LISIO/child health card) provide the basis for individual care.
- **Health facility level** data, both from aggregated facility level records and from administrative sources, such as supplies records, enable managers to determine resource needs, guide purchasing decisions for equipment and supplies, and develop community outreach. Data from health facilities can provide immediate and ongoing information relevant to nutrition decision-making,
- **Population level** data are essential for decision-making and generate information not only about those who use the services but also, crucially, about those who do



not use them. Periodic nutrition surveys provide information on nutritional status of the population and on individual beliefs, behaviours and practices that are critical determinants of uptake of good nutrition practices and affect nutritional status.

- **Nutrition surveillance** brings together information from facilities and communities with a main focus on assessing trends, enabling early warning and providing a timely basis for action.

The role of the health worker is largely focused on monitoring nutrition programmes. Monitoring information is used primarily for management decisions.

Monitoring nutrition programmes helps to:

- assess the quantity, quality and timeliness of programme inputs;
- verify that inputs are transformed, through activities, into outputs that generate results;
- provide information to improve targeting; identify operational constraints to programme effectiveness thus helping managers to improve implementation;
- determine if a process or service, such as vitamin A supplementation, is meeting national or set standards;
- determine whether a programme is servicing the target groups.

Evaluation uses monitoring information, as well as other sources of data, to answer a range of questions such as is the programme relevant, appropriate, effective and does it have impact?

3. Nutrition Information Systems in Timor-Leste

SNIP is integrated within the Primary Health Care package in Timor-Leste and monitoring and reporting through the health facility follows existing HMIS systems.

In addition, the Ministry of Health is implementing Nutritional Surveillance, Nutrition Programme Joint Monitoring and periodic Nutrition Surveys.

Supportive supervision is closely linked with Information systems and is covered in a separate guideline.



4. Objective of SNIP information management

The objective of Specific Nutrition Intervention Package (SNIP) information management is to inform decision-making in the areas of accountability, activity implementation, allocation of resources and policy at national, district and health facility level.

The following components are necessary to achieve this:

1. There is a comprehensive framework that guides the monitoring, evaluation and review work, including core indicators and targets.
2. The monitoring, evaluation and review component specifies data sources, identifies and addresses data gaps, and defines responsibilities for data collection and information flow.
3. Data analysis and synthesis work is specified, and data quality issues are anticipated and addressed.
4. Data dissemination and communication are effective and regular.
5. Prospective evaluation is planned and implemented.
6. There is a system of joint periodic progress and performance reviews.
7. There are processes by which related corrective measures can be taken and translated into action.

Important processes are: (1) data generation, (2) compilation, (3) analysis and synthesis, and (4) communication and use.

Key basic principles for the use of information for action include:

- **only collect data that will be used;**
- **maximise the use of data at the level they are collected; and**
- **collect the minimum, feasible amount of data required to inform and improve decisions leading to action.**

5. Pre-requisites for effective coverage

The Health Metrics Network defines six components of a health information system, which are also relevant for a NIS. The system can be further subdivided into its *inputs, processes and outputs*. Inputs refer to resources, while processes describe how indicators and data sources are selected and data is collected and managed. Outputs deal with the production, dissemination and use of information. Accordingly, the six components of a NIS are:

Inputs

1. **Resources** – these include the legislative, regulatory and planning frameworks required to ensure a fully functioning NIS, and the resources that are prerequisites for such a system to be functional. Such resources involve personnel, financing, logistics support, information and communications technology (ICT), and coordinating mechanisms within and between the six components.

Processes

2. **Indicators** – a core set of indicators and related targets forms the basis for a NIS plan and strategy. Indicators need to encompass nutritional status and its determinants; inputs, outputs and outcomes.
3. **Data sources** – can be divided into two main categories; (1) population-based approaches (e.g. nutrition surveys) and (2) institution-based data (individual records, service records and resource records). A basic set of standards for each. Additional data-collection approaches and sources can provide important information, such as other surveys, research, and information produced by community based organisations.
4. **Data management** – this covers all aspects of data handling from collection, storage, quality-assurance and flow, to processing, compilation and analysis. Quality of data is important to ensure that it is accurate and the right picture is being presented. Consistent data enables trends to be seen over time or different locations compared. Managing data properly maximises data quality, reducing the number of gaps and errors in the data.

Outputs

5. **Information products** – data must be transformed into information that will become the basis for evidence and knowledge to shape action.
6. **Dissemination and use** – the value of nutrition information can be enhanced by making it readily accessible to decision-makers and by providing incentives for information use.

For a NIS to function, various policy, administrative, organisational and financial prerequisites must be in place. Supportive legislative and regulatory environments are needed to enable confidentiality, security, ownership, sharing, retention and destruction of data. Investment is required to strengthen ICT, and provide human resources to run these systems. Expertise and leadership at national and subnational levels must also be provided to enable the monitoring of data quality and use. And there must be infrastructure and policies in place to transfer information between producers and users both inside and outside the system.

6. Process of nutrition information management in Timor-Leste

Components of the NIS in Timor-Leste include:

- Community level data collection and tracking
- Facility and service provision level data collection and tracking
- Nutritional Surveillance
- Nutrition Programme Joint Monitoring
- Nutrition Survey

Community Level Data Collection and Tracking (Local Area Monitoring)

Purpose: Community processes and individual, family and community behaviour and practices influence nutrition impact and outcomes but routine HMIS does not always collect information about community processes and practices. The programme therefore intends to implement local areas monitoring where the community will be engaged in assessment and recording of nutrition related interventions and practices happening in communities.

Process: The current practice of establishing Mother Support Group (MSG) for promoting nutrition and health interventions and practices in each Suco will be continued. The MSG members will include the community health volunteers (PSF) and other women and men from each of the Aldeia of the Suco. The MSG members will collect and record community level data collection during their interaction with their respective communities. Data validation will be done by designated nutrition focal point of Health Post or CHC responsible for providing services to the Suco. The monitoring and recording process will be facilitated by NGOs working with MSG and the nutrition focal point conducting SISCA.

Product: The above noted process will produce community level information which will be displayed at the SISCa site for each Suco in a Community Nutrition Information

Board (CNIB). The CNIB will have community level nutrition process and practice indicators and other information about the Suco. The data collected from community will include existence of MSG promoting infant and young child feeding and other nutrition behaviours, practice of infant and young feeding, screening and follow up of children with acute malnutrition, screening and follow up of malnourished pregnant and lactating women, ANC and PNC for pregnant and post-partum women, respectively and immunization, vitamin A supplementation and deworming of children. Every quarter, the MSG (and PSF) will update information on the CNIB, with the assistance of the Suco-based health care providers. The Nutrition focal point attending SISCAs and where feasible of NGOs working with Mother Support Groups (MSG) will facilitate the process and also validate the data collected by the, MSG.

Facility and Service Provision Level Data Collection and Tracking

Currently, nutrition service delivery is done through Hospitals, CHCs and SISCAs. It is anticipated that in future more services will be delivered by facilities and some services and counselling will also be done through home visits. Information about nutrition services and counselling provided at facilities and SISCAs sessions and of home visits (when it starts) will be collected at the time of delivering services by the service provider. The information collected will include screening of children under-five and pregnant and lactating women for malnutrition, treatment of children and women found malnourished, micronutrient supplementation, deworming, counselling on infant and young child feeding and maternal nutrition, ANC, PNC and treatment of childhood illnesses.

The current practice of recording of each intervention in forms and registers at the time of service delivery by the service provider will be continued and improved. The sub-district nutrition coordinator will compile and review all service delivery records and the information collected will be consolidated and reported through HMIS in the revised Nutrition HMIS form. Intervention progress tracking charts (annex-3) will be created and displayed in each health facility to enable the health facilities to track progress of key interventions in the geographic area covered by the facility.

Nutrition Surveillance Implementation and Scale-up

Nutrition Surveillance (NS) is defined as “an ongoing system for generating information on the current and future magnitude, distribution and causes of malnutrition in populations for policy formulations, programme planning, management and evaluation (UN 1975, World Food Conference in 1974).

The objectives of the Nutrition Surveillance System (NSS) of Timor-Leste are:

- a) To provide reliable and real time data on nutrition impact, outcomes and outputs to help identify and make adjustment in policy, programme and resources allocation and use
- b) To identify potential nutrition related emergencies in the communities and to issue alerts.

The key features of the NSS will include the following:

- *Outputs:* The NSS is expected to provide real time programme performance data that help tracks continuously national programme performance in ensuring that desired programme inputs are in place and to track progress towards nutrition outputs, outcomes and impact
- *Representativeness:* NSS will give nationally representative data for tracking trends of key Nutrition Indicators for informing policy and programme actions.
- *Sample sites:* Three Sucos from each of the 13 district (total 39) will be purposively selected;
- *Surveillance targets:* Pregnant women, children 0–23 months and children entering school.
- *Frequency of data collection:* Health facilities will report following HMIS reporting schedule but will have a separate reporting NSS reporting module. Data from school entering children will be collected on the first month of school calendar year every year. Community data about pregnant women and children 0–23 months will be collected through home visit by the Suco-based doctors twice every year. One of the community data collection will be in the same month as the school data collection.
- *Indicators:* The indicators used will be subset of National M&E framework indicators. Some of the current National M&E framework indicators will be modified/broken down/simplified to facilitate ease of data collection and reporting.
- *Use of Information Technology:* An appropriate software (such as SMS) will be adopted and customised for entering data from the surveillance sites directly to the DHIS-2 Platform. Data collected by NSS will feed into the DHIS-2 platform. The DHIS-2 platform will be customised to produce dashboard with NNS data outputs charts. In addition, NNS gathered information will be analysed to produce policy briefs and recommendations. Concept note for designing NNS is in Annex 8.

Nutrition Programme Joint Monitoring

The aim of Nutrition Programme Joint Monitoring (NPJM) is to monitor inputs, process, services outputs and community process in selected areas to feed into programme improvement process. The joint monitoring will be led by the Nutrition department and have members from agencies supporting nutrition interventions in the country. Joint monitoring will be conducted once every 6-months, preceding the national nutrition programme review meeting.

The joint monitoring will be done using pre-determined tools and process and the finding consolidated and shared during the review meetings. The joint monitoring tool will include facility readiness assessment tool mentioned earlier, and addition tools that enable collection of information about community process as well as facility services outputs. Draft of Concept Note and tool for joint monitoring will be validated later jointly with partners.

Nutrition Survey

Nutrition survey is needed to a) get reliable data at impact and outcome level, b) to have independent assessment and verification of progress and achievement; and c) collect in-depth information about changes in determinants of malnutrition.

Nutrition survey could be done every 5–7 years in order to see the changes on the impact level indicators of nutritional status of children and women. Once the Nutrition Surveillance System becomes fully operational and is validated as robust, the need for survey is expected to be less

Nutrition survey results will be used to track long term trends in nutrition situation and key determinants and to guide planning, implementing, and monitoring and evaluation of nutrition programmes including monitoring the progress towards government initiatives that aim to improve nutrition situation in Timor-Leste (such as Zero Hunger Challenge initiative).

6.1 Role of the Health worker in routine monitoring and reporting

Annex 1 indicates the impact, outcome, output and input indicators associated with nutrition programming.

- Impact indicators relate to nutritional status of children and women;
- Outcome indicators relate to the coverage/utilisation/practice of SNIP
- Output indicators relate to availability or accessibility of services
- Input indicators relate to resources and activities required to produce quality outputs.

Healthworkers will mainly focus on collecting and reporting outcome indicators. Each SNIP activity will have an indicator (s) to measure that activity. The table below shows these indicators and where the data comes from to measure this indicator.

Module	Indicator	2019 Target*	Data source	Collected by whom
Infant and Young Child Feeding (IYCF) and Care	% of newborns who were breastfed within one hour	Maintained	Monthly reports	Health workers
	% children 0-5 months exclusively breastfed	80%		
	% of 6-23 months who met minimum acceptable diet	50%		
	% of children 0-23 months weighed this month (growth monitoring)			
	% of children under-five continued breastfeeding until 1 year	>80%		
	% children 6-23 months who received multiple micronutrient	70%		
Nutritional Care of the Pregnant Woman and Breastfeeding Woman and Adolescent Girls	% of pregnant women who received IFA supplement during the pregnancy	60%	Monthly reports	Health workers
	% of Pregnant Women receiving nutrition counselling (at health facility and SISCa)			
Zinc & ORS for Diarrhoea Treatment	% of Children with diarrhoea administered ORT (ORS+Zn) for treatment of diarrhoea	60%	Monthly reports	Health workers
Vitamin A Supplementation	% of children aged (6-59 mo) who received Vitamin A supplementation in the last 6 months	80%	Monthly reports	Health workers
Integrated Management Of Acute Malnutrition (CMAM)	Recovery rate (%) of children 6-59 mo with severe acute malnutrition	>75%	Monthly reports	Health workers
	Recovery rate (%) of children 6-59 mo with Moderate acute malnutrition	>75%		
	Recovery Rate (%) of PLW with acute malnutrition			
	% of children 6-59 months screened for acute malnutrition (using MUAC)			
	% of pregnant women (ANC) and lactating women (within first 6mo) with MUAC measured this month			
Iodine Deficiency, Control & Elimination	% of households (families) consuming Iodised salt		Monthly reports	Health workers
Deworming of Children, in Pregnancy & Helminth Control in Population	% of children aged (12-59 mo) who received deworming in the last 6 months	80%	Monthly reports	Health workers
	% of pregnant women who received deworming during pregnancy	60%		

Module	Indicator	2019 Target*	Data source	Collected by whom
Nutrition in Emergencies		Same indicators apply in emergencies		
Nutrition Programme Information Systems	As well as the indicators above, Nutrition Managers will also be interested in impact indicators such as:		Surveys	MoH and Nutrition Cluster
	% of under-five children with wasting	<10		
	% of under-five children with stunting	<40		
	% of under-five children with underweight	<30		
	% of low birthweight babies			
	% of women in reproductive age group (15-49y) with BMI less than 18.5	<20		
	% of under five children with anemia	<40		
	% of women in reproductive age (15-49y) with anemia	<20		
	% Vitamin A deficiency among under-five children	<20%		
	% Iodine deficiency (urinary iodine excretion among WRA	<20%		
	% Zinc deficiency among under-five children	<20%		
	Low birth weight (Birth weight <2500g)	<10%		
Nutrition Programme Management	Nutrition Manager will collect data on inputs such as:		Monthly reports	Health workers
	% of health facilities with stock out of drugs & consumables for high impact nutritional interventions			
	% of health facilities with essential equipment and commodities for diagnosis and management of malnutrition (installed and functioning)			
	% of health facilities that have at least one staff trained for high impact nutritional interventions			

*According to Timor-Leste National Nutrition Strategy 2014-2019

Reporting

The data needed to calculate these indicators can be recorded in:

- Domiciliary Health register
- LISIO register
- CMAM data forms

The ways that the data can be recorded and sent to Nutrition Managers is through:

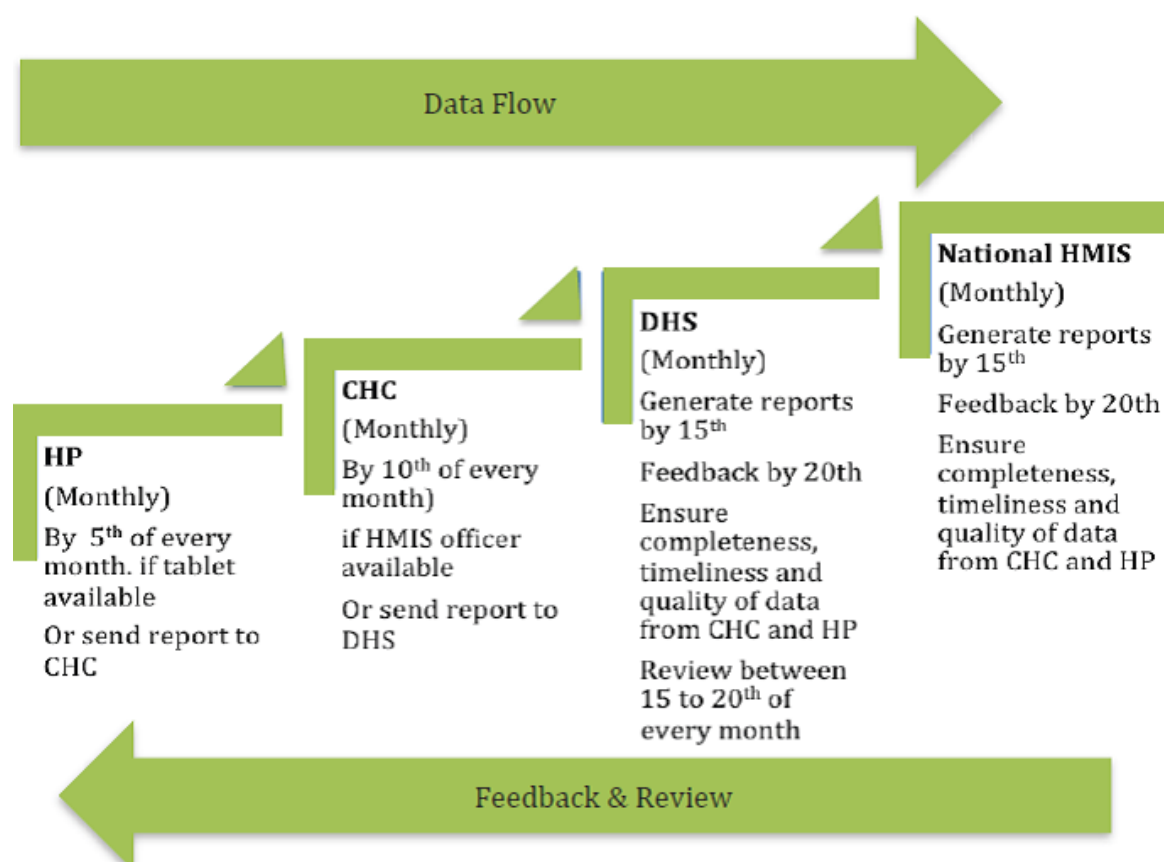
- HMIS
 - o An example of the HMIS form is included in Annex 2.
- Facility and Service Provision Level Data Collection and Tracking which includes (see Annex 3):
 - o Vitamin A capsule supplementation tracking
 - o Tracking tool for Deworming among children 6–59mo
 - o Tracking Tool for Micronutrient Powder for Children 6–23 months old
 - o Tracking Tool for Iron Folic Acid among Pregnant and Lactating Women
 - o Tracking Tool for Deworming for Pregnant Women
 - o Tracking tool for ORS and zinc supplementation for diarrhea treatment
 - o Tracking tool for screening under-five for malnutrition (Severe Acute Malnutrition)
 - o Tracking tool for SAM Cure Rate
 - o TSFP report
 - o OTP report
 - o In-patient report
 - o Facility Readiness Assessment Tool

Data flows

Data Flow in HMIS: The data flow for Primary Health Care is integrated into routine HMIS system within different programmes. This prevents duplication of collection or dual reporting. The data collected will be entered digitally through DHIS 2 interface. The level of entry can be:

1. Health Post
2. CHC –Sub district level
3. CHC– district level
4. National HMIS

The service provider, based on type of event, shall enter data from outreach activities.



Reports from health posts and CHCs are collated at district level and combined into one report, which is sent to national level.

Analysis and action

Recording and reporting data facilitates analysis, which will determine if the indicators show improvements or deteriorations in the situation. The facility tracking tools are a useful aid for this as they can help visualize upwards and downward trends which may indicate a worsening or improving situation depending on the indicator.

To understand why a situation is worsening or improving, further questions need to be asked as described in the table on the following page.

Worsening trend	Improving trend	Flat-line trend (no change)
Has there been a turnover of staff? Have there been any shortages in medicine or equipment? Has anything happened in the community which may worsen a child or mother's nutritional status? Has anything happened which may put patients off coming to the health facility?	What are the reasons for this improvement? Have staff been trained recently? Has supervision improved staff knowledge and skills? Have other activities started in the community that may have an effect?	Is data being collected and recorded correctly? Is the health facility adequately staffed? Have staff been trained recently? Are outreach activities in place & effective?

Based on the answers to these questions), action may need to be taken to improve the programme performance.

Who to share the data with

All those involved in the information system from the health post and CHC, district level and national level need to be informed of the analysis of the data. By seeing the performance and trends of the different activities and how they can compare with other locations, it:

- Contributes to understanding about the different activities that are being implemented in a particular area
- Increases ownership of the different activities which enhances programme quality
- Increases ownership of data which enhances data quality
- Assists understanding of the data health workers need to collect

The health system is also accountable to its patients and therefore analysis data can be published publically so communities are able to see how well activities are being implemented.

National and District Nutrition Programme Reviews Meetings

The purpose of Nutrition Programme Review Meeting (NPRM) will be to review progress, challenges and lessons learnt in the implementation of agreed plan, and to provide recommendations, including adjustment of plan.

The national level NPRM will be done every six months and district level NPRM will be done every quarter. The national level meeting will be conducted by the National Nutrition Department and the district level will be conducted by the respective DHS.

Review findings will be used by nutrition programme managers to improve programme implementation towards the agreed set target.



REFERENCES

Timor-Leste Draft Nutrition Monitoring and Evaluation Framework: Nutrition Monitoring and Evaluation, Nutrition Department, Ministry of Health.

Harmonised Training Package. Module 20: Monitoring and evaluation. NutritionWorks, ENN, IASC, USAID 2011

Monitoring and evaluation of nutrition and nutrition-related programmes. A training manual for programme managers and implementers. The University of Nairobi Applied Nutrition Programme, Tufts University School of Nutrition Science and Policy, USAID Bureau for Africa, Office of Sustainable Development, Sustainable Approaches to Nutrition in Africa Project. 1999.

Health Education and Training (HEAT) Programme. Nutrition HEAT Module, Session 13: Nutrition Information System. Revised 2014. OpenLearn Works. Free educational projects supported by the Open University.

WHO 2014. Indicators for the Global Monitoring Framework on Maternal, Infant and Young Child Nutrition (24 November 2014) http://www.who.int/nutrition/topics/proposed_indicators_framework/en/

WHO 2011. Monitoring, evaluation and review of national health strategies. A country-led platform for information and accountability. International Health Partnership + Related Initiatives, WHO.

WHO 2010 Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies.

WHO 2008. Framework and standards for country health information systems / Health Metrics Network, World Health Organization, June 2008.



ANNEX 1: Nutrition M&E indicators from Draft Nutrition Monitoring and Evaluation Framework

No	Indicators
I	Impact (Nutrition Status)
1	% of under-five children with wasting
2	% of under-five children with stunting
3	% of under-five children with underweight
4	% of low birthweight babies
5	% of women in reproductive age group (15-49y) with BMI less than 18.5
6	% of women in reproductive age (15-49y) with anemia
7	% of children 6-59 mo the age with anemia
8	% of under-five children with Vitamin A deficiency
9	% of under-five children with Zinc deficiency
II	Outcome (Nutrition service utilization and programme coverage)
10	% of newborns who were initiated breast feeding within one hour
11	% children 0-5 months exclusively breastfed
12	% of 6-23 mo who met minimum acceptable diet
13	% of children aged (6-59 mo) who received Vitamin A supplementation in the last 6 months
14	% of children aged (12-59 mo) who received deworming in the last 6 months
15	% of pregnant women who received deworming during pregnancy
16	% of pregnant women who received IFA supplement during the pregnancy
17	% of households (families) consuming Iodised salt
18	Cure rate (%) of children 6-59 mo with severe acute malnutrition
19	Recovery rate (%) of children 6-59 mo with Moderate acute malnutrition
20	% of Pregnant Women receiving nutrition counselling (at health facility and SISCa)
21	% of Children with diarrhoea administered ORT (ORS+Zn) for treatment of diarrhoea
22	Recovery Rate (%) of PLW with acute malnutrition
III	Output (Availability and Accessibility to nutrition services)
23	% of health facilities (hospital, CHC, HP) implementing high impact nutrition interventions (IYCF, CMAM, micronutrient supplementation) as per protocols
24	% of sucos having community groups promoting Nutrition related behavior and practices
25	% of CHC and hospital facilities achieving Baby Friendly status
26	% of children 0-23 months weighed this month (growth monitoring)
27	% of children 6-59 months screened for acute malnutrition (using MUAC)
28	% of pregnant women (ANC) and lactating women (within first 6mo) with MUAC measured this month
IV	Input (Resources and Activities)
29	# CHC with designated Nutrition Coordinator

No	Indicators
30	% of health faculties with stock out of drugs & consumables for high impact nutritional interventions
31	% of health faculties with essential equipment and commodities for diagnosis and management of malnutrition (installed and functioning)
32	% of health facilities that have at least one staff trained for high impact nutritional interventions
33	% of district with costed plans for nutrition interventions (as part of district health sector plan)
34	% of planned nutrition budget funded
35	% of globally recommended nutrition related frameworks/laws/regulations present

ANNEX 2: HMIS Nutrition Reporting

	Number					
	Male	Female				
No. of under-five children with diarrhoea treated with ORS+Zinc						
No. of children 0-59 months weighed -						
No of children 6-59 months screened with MUAC						
No of children 0-59 months with bi-pedal oedema						
No of children 0-59 months with height measured						
No. of children 12-59 months who received deworming						
	0-5.99 months		6-23.99 months		24-59 months	
	Male	Female	Male	Female	Male	Female
No. of children under-five below the road to health card by weight for age						
No. of children 0-59 months below the road to health card by height for age						
No. of children 0-59 months below the road to health card by height for weight						
No. of children 6-59 months who received Vitamin A supplement						
No. of children aged 6-23 months who received multiple micronutrient supplementation						
No of children with Moderate Acute malnutrition (MUAC>11.5 - <12.5cm)						
No of MAM cases on supplementary food						
No. of MAM children achieved MUAC >12.5cms or more (recovered)						
No. of MAM children in treatment absent for 2 consecutive weeks (defaulter)						
No of Children with Severe Acute Malnutrition (MUAC<11.5cm)						
No of active SAM children in inpatient treatment						
No of active SAM children in outpatient treatment						
No of SAM children transferred from inpatient to OTP						
No of children diagnosed as having SAM recovered from OTP (achieved MUAC 12.5 or more)						
No of SAM children in OTP treatment absent for 3 consecutive weeks						
No of SAM children non-recovered (>4mth and not recovered)						

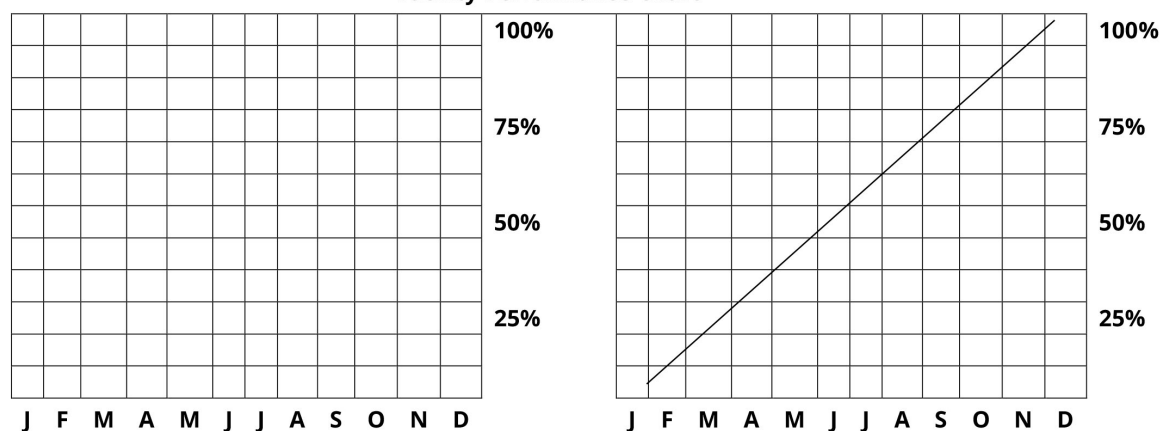
ANNEX 3: Facility and Service Provision Level Data Collection and Tracking

Annex 3a. Vitamin A capsule supplementation tracking

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Vitamin A capsule for children 6-59 months
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



J	F	M	A	M	J	J	A	S	O	N	D		J	F	M	A	M	J	J	A	S	O	N	D	
												Target Population													Target Population
												Total received VA													Total received VA
												Cumulative Total for the year													Cumulative Total for the year

Children 6-11mo

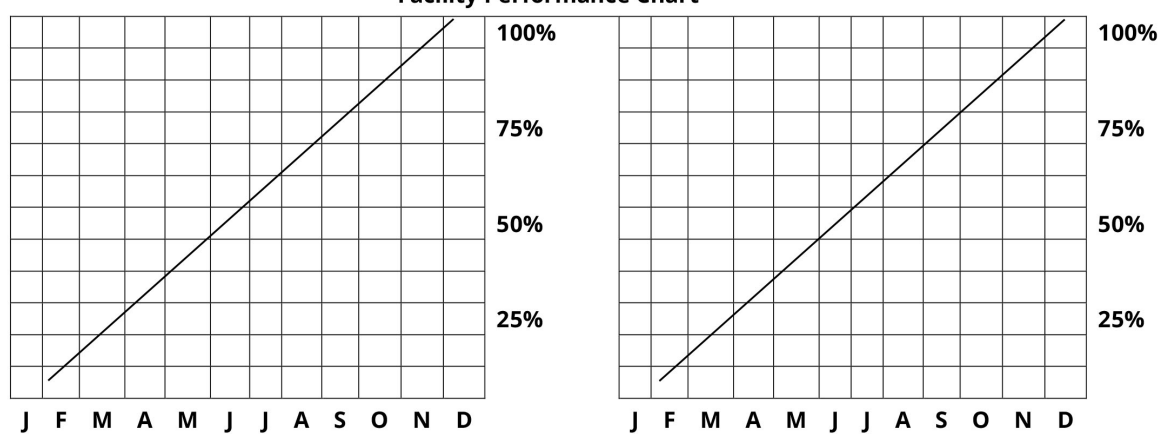
Children 12-59mo

ANNEX 3B: Tracking tool for Deworming among children 6-59mo

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Deworming for children 12-59 months
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



J	F	M	A	M	J	J	A	S	O	N	D		J	F	M	A	M	J	J	A	S	O	N	D	
												Target Population													Target Population
												Total received Deworming													Total received Deworming
												Cumulative Total for the year													Cumulative Total for the year

Children 12-23mo

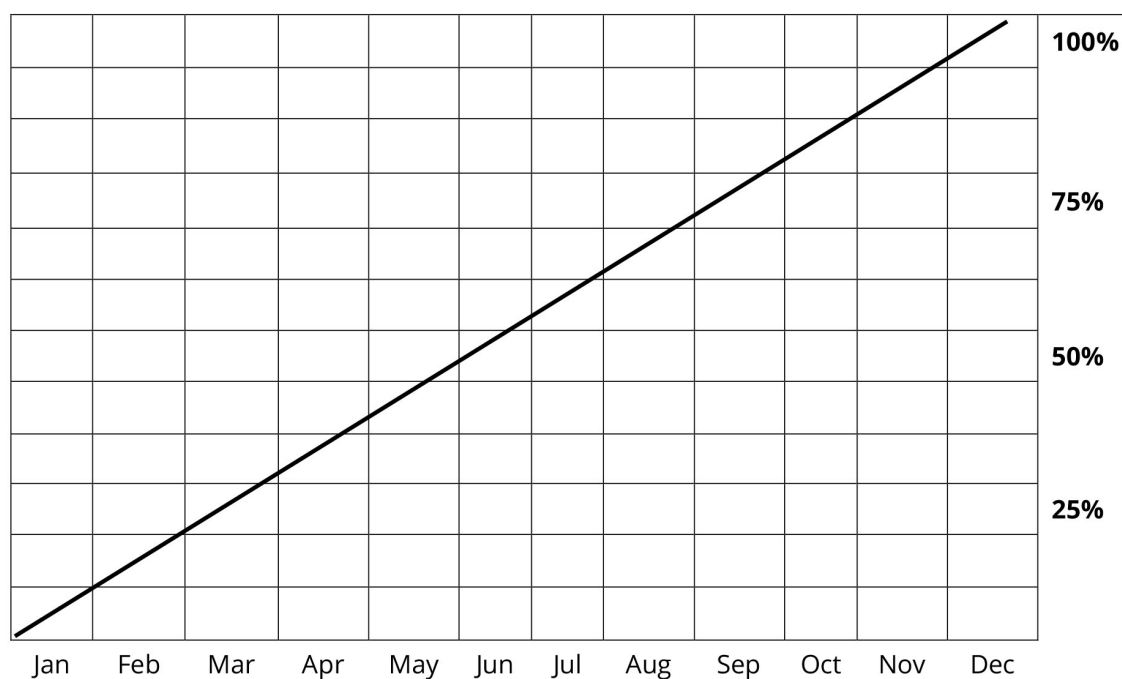
Children 24-59mo

ANNEX 3C: Tracking Tool for Micronutrient Powder for Children 6-23 months old

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Micronutrient Powder for children 6-23 months old
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



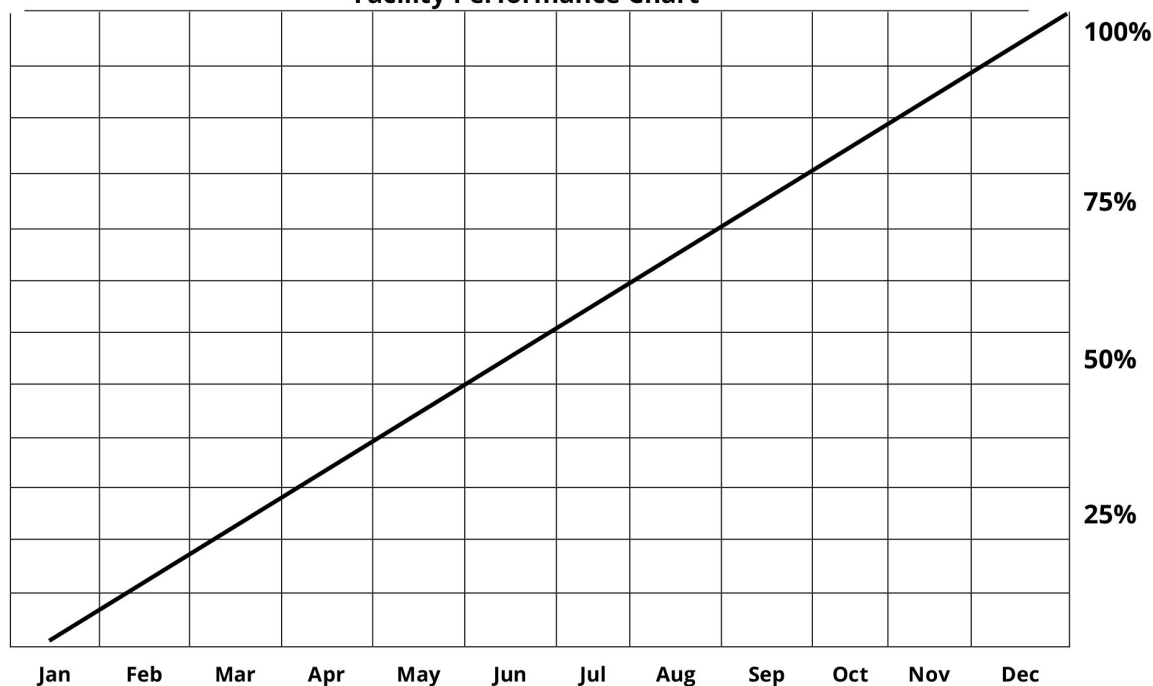
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Population
												Total received MNP
												Cumulative Total for the year

ANNEX 3D: Tracking Tool for Iron Folic Acid among Pregnant and Lactating Women

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Iron Folic Acid for pregnant and lactating women
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



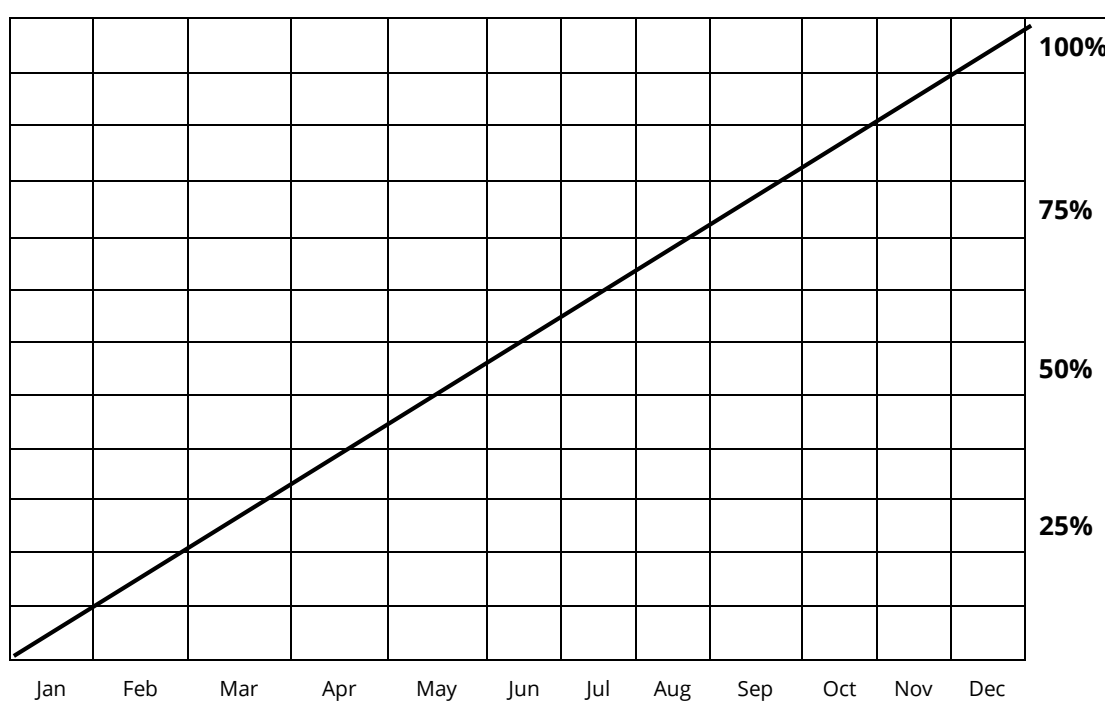
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Population
												Total PLW received IFA
												Cumulative Total for the year

ANNEX 3E.

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	Micronutrient Powder for children 6-23 months old
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



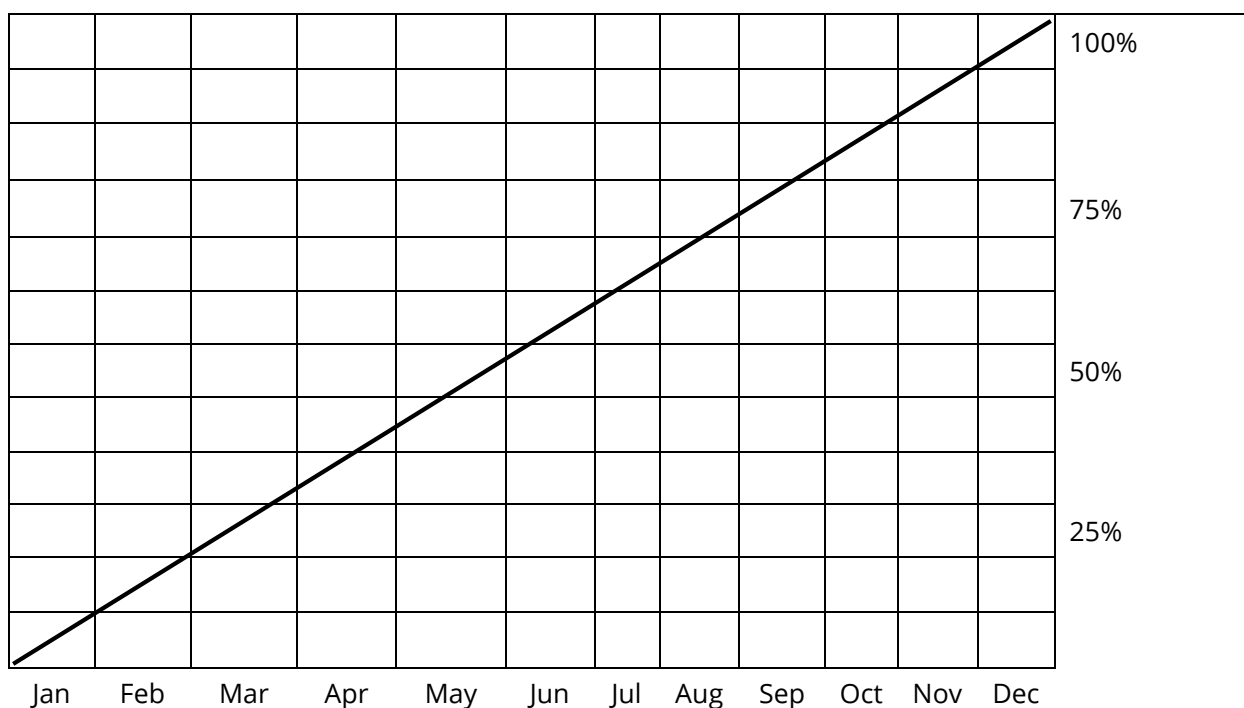
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Population
												Total received MNP
												Cumulative Total for the year

ANNEX 3F: Tracking tool for ORS and zinc supplementation for diarrhea treatment

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	ORS and Zinc for diarrhea management
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



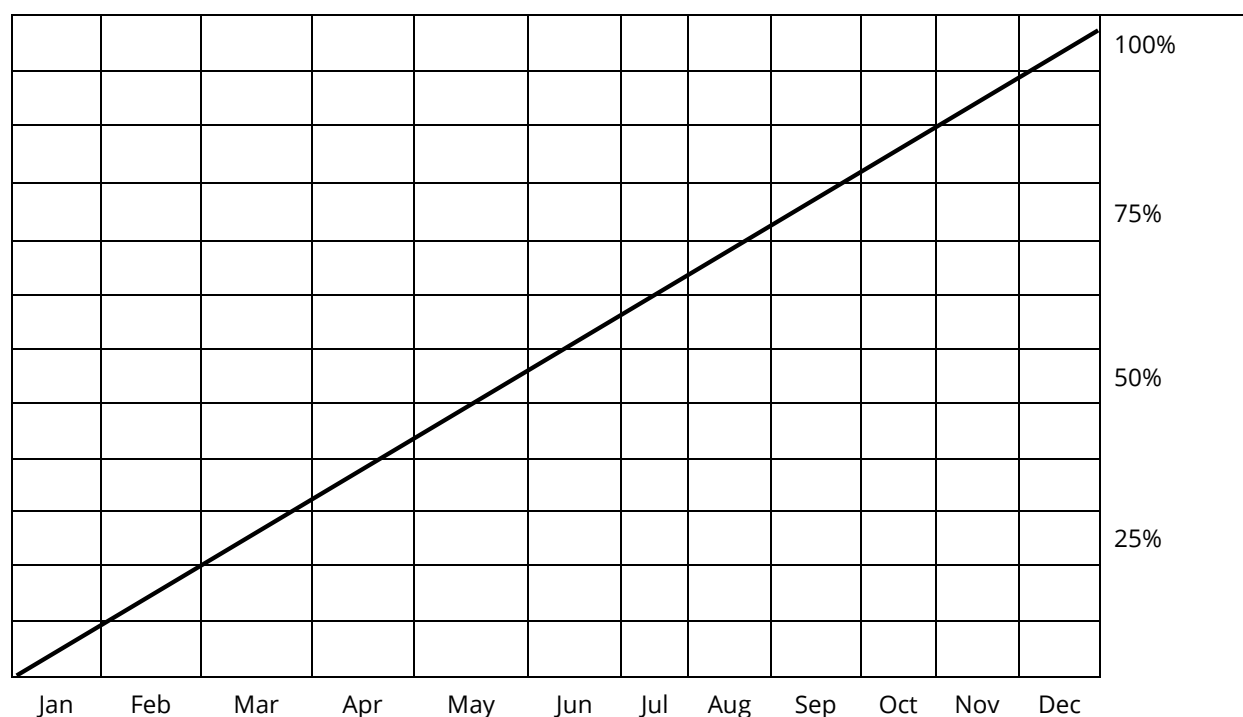
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Diarrhea incidence
												Total receiving ORS+zinc
												Cumulative Total for the year

ANNEX 3G: Tracking tool for screening under-five for malnutrition (Severe and Moderate Acute Malnutrition)

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	IMAM – Children under-five screened
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



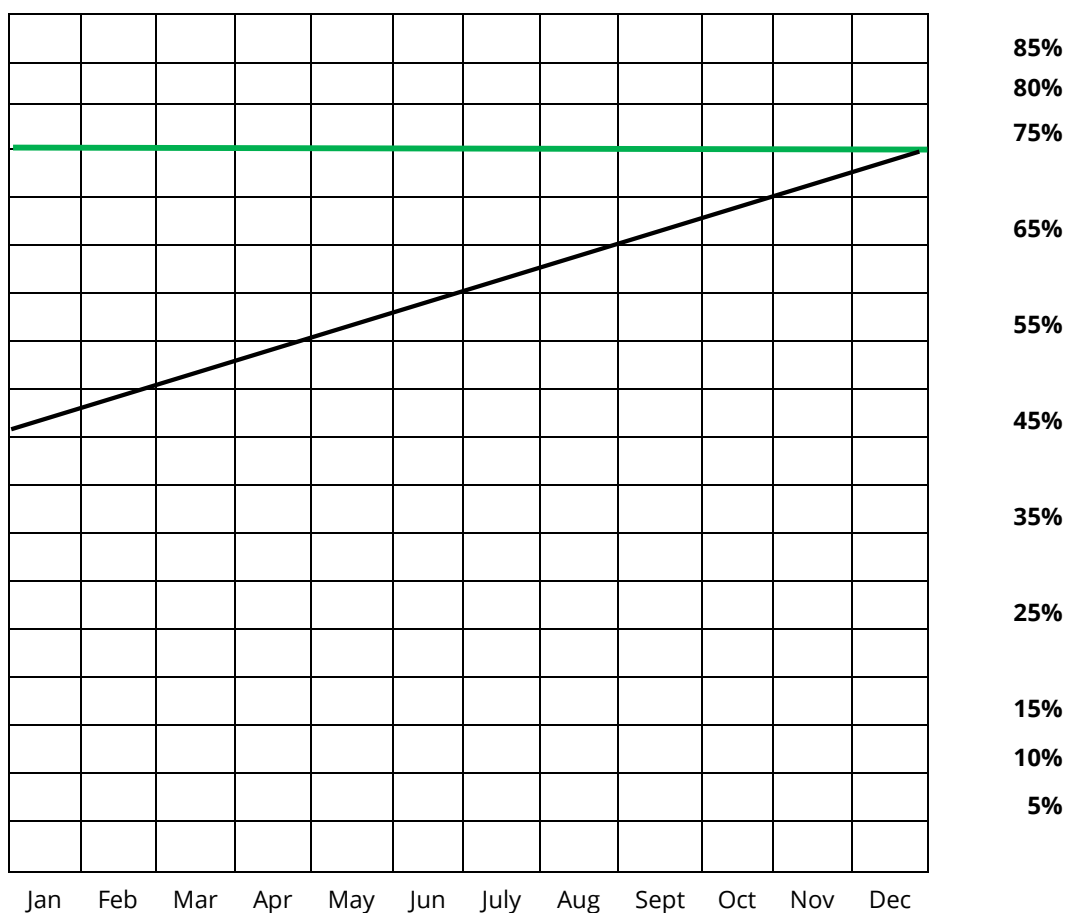
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Target Population
												Total Screened
												Cumulative Total for the year

ANNEX 3H: Tracking tool for SAM Recovery Rate

Nutrition Services Monitoring Chart

Facility Name	Health Post/CHC XXXX
Suco	
Nutrition Focal Person's Name	
Name of Nutrition Intervention	IMAM - Recovery Rate
Facility Annual Projected Target (denominator)	
Facility Monthly Projected Target	

Facility Performance Chart



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
												Total recovered
												Total exit
												Recovery rate

ANNEX 4: Facility Readiness Assessment Tool

Facility Name	
District	
Sub district	
Suco	
Date	

Proposed Score Card Domains and Score for Facility Supportive Supervision

Domains	Proposed Maximum Total Score out of 100
Infrastructure/Facility	15
Technology-equipment, drugs, other supplies	15
Human Resources-numbers, skills, supervision, motivation	15
Management/coordination/management information	15
Community engagement/mobilization	15
Service delivery-availability, volume, quality	25
Total	100

1. Infrastructure/Facility				
Domains and performance questions	How to check/ Means for verification	Findings/response		Rating (put 1 for yes and 0 for no)
		Yes	No	
Does the facility have adequate space and equipment allocated for nutrition Services provision (room, chair, desk, etc.)	Observation			
Does the facility have adequate space for storing nutrition supplies/commodities	Observation			
Does the facility have adequate space for displaying nutrition information and performance charts	Observation			
Is the facility's nutrition services provision area ceiling, roofs, walls, floor, doors, windows adequately maintained	Observation			
<i>Infrastructure/Facility total</i>				
Technology-equipment, drugs, other supplies				
Does the facility has stock out of any following nutrition supply				

Multiple Micronutrient (MNP)	Observation			
RUTF	Observation			
F-75	Observation			
F-100	Observation			
Resomal	Observation			
Vitamin A	Observation			
Deworming tablet	Observation			
Zinc	Observation			
ORS	Observation			
Iron Folic Acid	Observation			
Supplementary food	Observation			
Does the facility has stock out of any following nutrition equipment				
MUAC Tape (for children and pregnant women)	Observation			
Salter scale for weighing children	Observation			
Weighing scale for mothers	Observation			
Height measuring board for children	Observation			
Height measuring stand for mother	Observation			
Weighing scale for newborn	Observation			
Does the facility have a complete defined set job-aids (including guidelines, IEC material) for SNIP?	Observation			
Technology-total				
Human Resources-numbers, skills, supervision, motivation				
Does the facility has the adequate number of health workers (based on the MOH standard)	Interview			
Does the facility have Nutrition coordinator or nutrition focal point	Interview			
Does Nutrition Coordinator or focal point are trained on SNIP	Interview			
Does Nutrition Coordinator or focal point provide training on SNIP for community volunteers	Interview			
Does Nutrition Coordinator or focal point are regularly conducted supportive supervision	Interview			
Human Resources total				
Management/coordination/management information				
Does the facility have quarterly meeting with health volunteers	Meeting notes			

Does the facility have collected data from community (MSG) on Nutrition intervention	Copy community-based data			
Does the facility have recorded and updated nutrition information data on monthly basis	Copy of updated data			
<i>Management information total</i>				
Community engagement/mobilization				
Does the facility engage the community members and local authority to mobilise the community for nutrition intervention	Interview and verify information from community			
<i>Community mobilization/engagement total</i>				
Service delivery-availability, volume, quality				
Does the facility provide nutrition services at CHC or HP	interview and observation			
Does the facility support nutrition services at SISCa	Interview and verify information from community			
Does the Nutrition Coordinator or focal point involve home visit activity	Interview and verify information from community (home visit)			
% households covered by the facility for nutrition services (<50%=0, 51-80%=1, >80%=2)	Report			
<i>Service delivery-total</i>				
Grand Total				

ANNEX 5: Inpatient report form

RELATORIO INPATIENT THERAPUTIC CARE

FULAN	Janeiro	Fevereiro	Março	Abril	Maio	Junho	Julho	Agosto	Setembro	Outubro	Novembro	Dezembro	TOTAL CADA TINAN
Ena ne bee Hato relatorio													
(A) TOTAL IHA PROGRAMA COMESA													
FULAN PRIMEIRO													
B Kwashiorkor													
C Marasmus													
D Seluk													
E Muda husi OTP													
F Filafali depois desai													
G TOTAL ADMITE (G)= B+C+D+ E+F													
H Cura ona (*bebe fulan 0-6)													
I Mate													
J Sai tamba Falta													
K Muda ba OTP													
L Muda ba Ospital- referral													
M TOTAL SAI (M)=H+I+J+K+L													
TOTAL IHA PROGRAMA IHA FULAN IKUS (A+G-M)													

INFORMASAUN SELUK

FULAN	Janeiro	Fevereiro	Março	Abril	Maio	Junho	Julho	Agosto	Setembro	Outubro	Novembro	Dezembro	TOTAL CADA TINAN
Mane													
Feto													
Utiliza Plumpy-nut													
Utiliza F-75													
Utiliza F-100													

ANNEX 6: OTP report form

RELATORIO OTP

SUB DISTRITO		CHC/HP												
		Janerio	Fevereiro	Marsu	Abril	Maiu	Junu	Juillu	Agustu	Setembru	Outobru	Novembru	Dezembru	TOTAL CADA TINAN
Ema ne bee Hato relatorio														
(A) TOTAL IHA PROGRAMA COMESA FULAN PRIMEIRO														
B Krekas Maran *(LKL <111.0cm)*														
C Seluk admisaun														
D Muda husi ITP														
E Filafali depois desai														
F Muda husi OTP seluk														
G TOTAL ADMITE =B+C+D+E+F														
H Cura ona														
I Mate														
J Sai tamba Falta *(Falta Seman 3)*														
K La cura *(Fulan 4/Semana 16)*														
L Muda ba ITP														
K Muda ba OTP seluk														
M TOTAL SAI =H+I+J+K+L														
(M)														
TOTAL IHA PROGRAMA IHA FULAN IKUS (A+G-M)														

INFORMASAUN SELUK

FULAN	Janerio	Fevereiro	Marsu	Abril	Maiu	Junu	Juillu	Agustu	Setembru	Outobru	Novembru	Dezembru	TOTAL CADA TINAN
Mane													
Feto													
Utiliza Plumpy-nut													

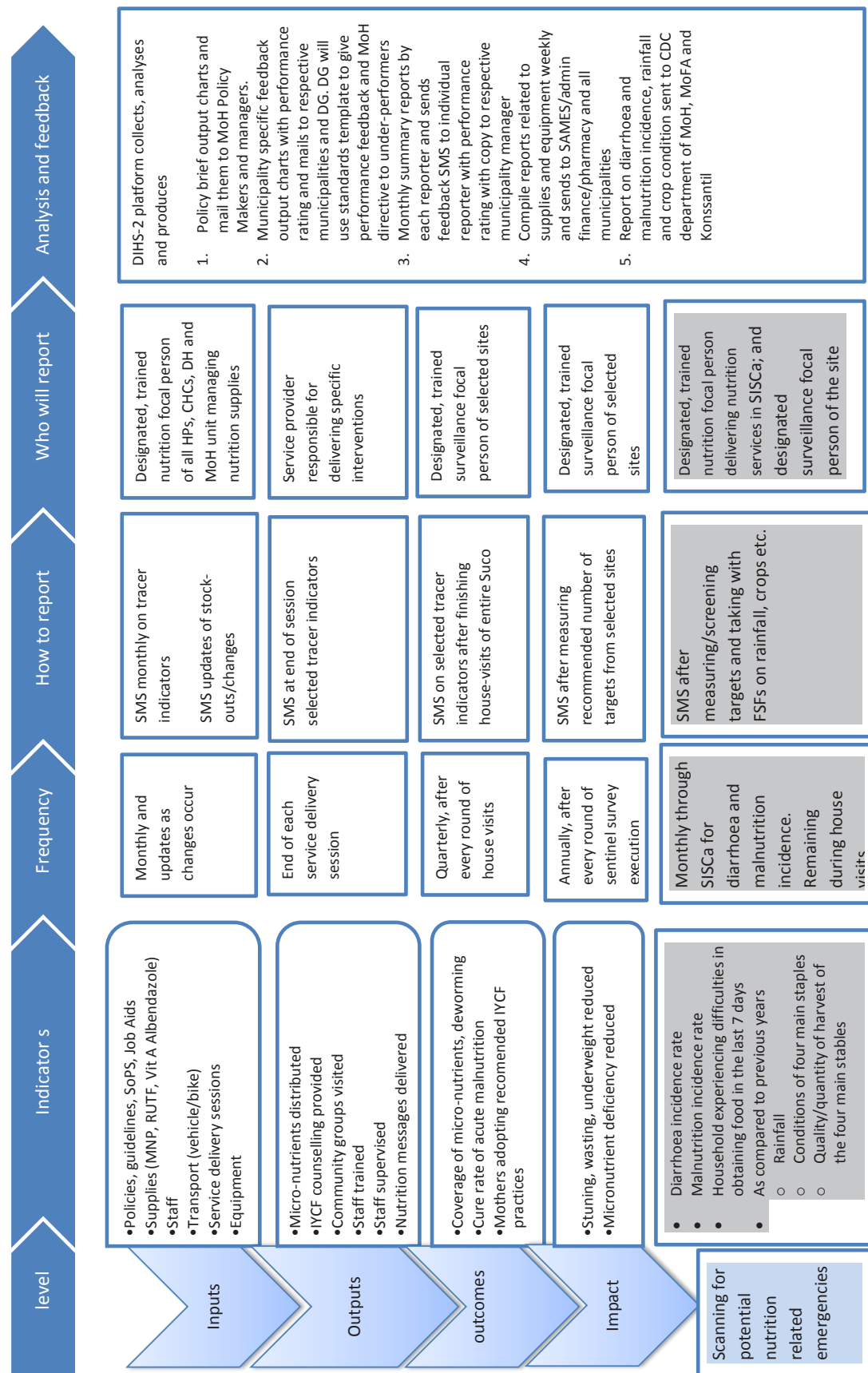
ANNEX 7: Referral slip

													
KARTAUN REFERAL													
Data: _____													
Marka (x) ba ida:	Marka (x) ba ida:												
<table border="1"> <tr> <td style="text-align: center;">PTI</td> <td style="text-align: center;">PTE</td> <td style="text-align: center;">TPSH</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	PTI	PTE	TPSH				<table border="1"> <tr> <td style="text-align: center;">Labarik</td> <td style="text-align: center;">IIR</td> <td style="text-align: center;">IFS</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Labarik	IIR	IFS			
PTI	PTE	TPSH											
Labarik	IIR	IFS											
Naran: _____													
Idade: _____ Sexu: <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">M</td><td style="width: 20px;"></td></tr></table> <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">F</td><td style="width: 20px;"></td></tr></table> LKL: _____ cm		M		F									
M													
F													
Naran Inan/aman (<i>karik labarik</i>): _____, Tlp: _____													
Suco: _____ Aldeia: _____													
Razoens refere: _____													
Refere ba fatin: _____													
Naran pesoal halo refere: _____, Tlp: _____													
Fatin Sukat/Tetu: _____ <table border="1" style="float: right;"><tr><td style="text-align: center;">C</td></tr></table>		C											
C													

 EUROPEAN UNION		 MINISTÉRIO DA SAÚDE		KONSOLIDASAUN PROGRESU RELATÓRIU MENSAL				 WFP Timor-Leste						
Munisípiu:				Relata hosi:		Periodu Relatóriu:		Data halo Relatóriu:						
LABARIK IDADE FULAN 6 - 59 HO MALNUTRISAUN AGUDA MODERADU (MAM)														
Labarik MAM nuir grupu idade	Desagregadu tuir seksu	Tarjetu benefisiarius (DEV Plan)	A: Total Inisidu husi fulan ne'e	Tama foun iha fulan ida ne'e			E: Hasi		F: Transfere	G: Total Hasi	H: Total ikus fulan ne'e (planu ba fulan oin)	Total simu ai- han suplementu iha fulan ne'e		
				B. Kazu foun	TFDK	TFDF	TFDL	Kura	Mate	Fadha	La-kura			
	Mane													
	Felo													
Fulan 24 - 59 no	Mane													
	Felo													
Total														
% PLANU VS ATUAL BENEFISIARIU														
06-23 month		24-59 month												
Mane		Feto		Mane		Feto								
Grand Total %		#DIV/0!												
Dezempenhu atual														
Padraun Sphere														
> 75%														
< 3%														
<15%														
% BENEFISIARIU SINU AHAAN FULAN NEE														
INAN ISIN RUA (IIR) NO INAN FO SUSU (IFS) HO NIA LKL MENUS HUSI (< 23 cm														
Tanjatu Estimasaun:														
IIR & IFS ho LKL < 23 cm	Tarjetu benefisiarius (DEV Plan)	A: Total Inisidu husi fulan ne'e	B. Kazu foun	C: Kazu tuun		D: Total tama D=B+C	E: Hasi		F: Transfere	G: Total Hasi G=E+F	H: Total ikus fulan ne'e (planu ba fulan oin)	Total simu ai- han suplementu iha fulan ne'e		
				TFDK	TFDF	TFDL	Kura	Mate	Fadha	La-kura	H=A+D+G			
Inan Isin Rua														
Inan fo Susu														
Total														
% PLANU VS ATUAL BENEFISIARIU														
Inan Isin Rua		Inan fo Susu												
Grand Total %														
Dezempenhu atual														
Padraun Sphere														
				> 75%		< 3%		<15%						
		# Labarik fulan 06 - 59 no IIR no IFS		Dezempenhu atual		Kura		Mate		Total Sai				
				Padraun Sphere		> 75%		< 3%		< 15%				
SACHETS for eeZeeRUSF & BAGS for TIMOR VITA														
Komoditi	Loke balansu	Total simu iha stok fulan ne'e	Total hahan iha stok fulan nee	Total distribui	Total haruka fila	Total aatlakon	Taka balansu	Loke balansu	Total hahan iha stok fulan nee	Total distribui	Total haruka fila	Total aatlakon	Taka balansu	Remarks
Timor Vita (MT)														
Pumpy sup (MT)														
(%) Perzentajen distribuisaun, haruka fila no aatlakon														
Timor Vita (mt)														

ANNEX 9

Figure-1: Conceptual Framework for Designing Digital Technology-based Nutrition surveillance system



ANNEX 10: Table of Core indicators for the Global Monitoring Framework on Maternal, Infant and Young Child Nutrition

#	Indicator	Data sources	Collection frequency	Analysis	Indicator type
Primary outcome indicators, monitoring progress towards the six global nutrition targets					
1	Prevalence of low height-for-age in children under five years of age	DHS, MICS, NSS, NNS	3-5 years	Age, sex, u/r, region	WHA Target
2a	Prevalence of haemoglobin <11 g/dL in pregnant women	DHS, MICS, NSS, NNS	3-5 years	u/r, region	WHA Target
2b	Prevalence of haemoglobin <12 g/dL in non-pregnant women	DHS, MICS, NSS, NNS	3-5 years	u/r, region	WHA Target
3	Prevalence of infants born <2500 g	DHS, MICS, NSS, NNS	3-5 years	Sex	WHA Target
4	Prevalence of weight-for-height >2 SD in children under five years of age	DHS, NNS	3-5 years	Age, sex, u/r, region	WHA Target
5	Prevalence of exclusive breastfeeding in infants aged six months or less	DHS, MICS, NSS, NNS	3-5 years		WHA Target
6	Prevalence of low weight-for-height in children under five years of age	DHS, MICS, NSS, NNS	3-5 years	Age, sex, u/r, region	WHA Target
Intermediate outcome indicators, monitoring conditions on the causal pathways to the targets					
7	Prevalence of diarrhoea in children under 5 years of age	DHS, MICS	3-5 years	u/r, region	intermediate outcome indicator
8	Proportion of women aged 15-49 years with low body mass index (<18.5 kg/m ²) ³	DHS, MICS	3-5 years	u/r, region	intermediate outcome indicator
9	Number of births during a given reference period to women aged 15-19 years /1000 females aged 15-19 years	DHS, MICS	3-5 years	u/r, region	intermediate outcome indicator
10	Proportion of overweight and obese women 18+ years of age (body mass index ≥25 kg/m ²)	DHS, MICS	3-5 years	u/r, region	intermediate outcome indicator

#	Indicator	Data sources	Collection frequency	Analysis	Indicator type
11	Proportion of overweight in school-age children and adolescents 5-18 years (BMI-for-age >+1 SD)	School-surveys, NNS	at least every 5 years	Age, sex, u/r, region	intermediate outcome indicator
Process indicators, monitoring programmes and situation-specific progress					
12	Proportion of children aged 6-23 months who receive a minimum acceptable diet	DHS, MICS, NNS	3-5 years	Age, sex, u/r, region	process indicator
13	Proportion of population using a safely managed drinking service	DHS, MICS, WHS	3-5 years	u/r, region	process indicator
14	Proportion of population using a safely managed sanitation service	DHS, MICS, WHS	3-5 years	u/r, region	process indicator
15	Proportion of pregnant women receiving iron and folic acid supplements	DHS, MICS	3-5 years	u/r, region	process indicator
16	Percentage of births in baby friendly facilities	NutriDash, GINA	annual	u/r, region	process indicator
17	Proportion of mothers of children 0-23 months who have received counselling, support or messages on optimal breastfeeding at least once in the last year	NutriDash	annual	u/r, region	process indicator
Policy environment and capacity indicators, measuring political commitment					
18	Number of trained nutrition professionals /100,000 population	WHS	annual	region	policy and capacity indicator

#	Indicator	Data sources	Collection frequency	Analysis	Indicator type
19	Number of countries with legislation /regulations fully implementing the International Code of Marketing of Breast-milk Substitutes (resolution WHA34.22) and subsequent relevant resolutions adopted by the Health Assembly	NutriDash, GINA	annual		policy and capacity indicator
20	Number of countries with maternity protection laws or regulations in place	NutriDash, GINA	annual		policy and capacity indicator







Timor-Leste SNIP Guidelines

MODULE 11:

Supportive Supervision





1. Recommendation

A supervisory structure and process exists for SNIP activities that includes monthly supervisory visits to primary health care staff. Tools are available for supervisors, supervisory visits take place on or close to a planned schedule and feedback is being given to staff. Feedback and recommendations from supervision are used to improve services. Source: Technical Capacity Assessment. Essential Nutrition Actions (ENA) Framework within the Health System. JSI. January 2014.

Technical Notes

Supportive supervision is a process of helping staff to improve their own work performance continuously. It is carried out in a respectful and non-authoritarian way with a focus on using supervisory visits as an opportunity to improve knowledge and skills of health staff.

Supportive supervision encourages **open, two-way communication**, and building **team approaches** that facilitate problem-solving. It focuses on **monitoring** performance towards goals, and **using data** for decision-making. It depends upon regular follow-up with staff to ensure that new tasks are being implemented correctly.

Feedback to staff on their activities, the data they collect and their performance is essential to further building skills, solving problems and to overall programme improvements.

Source: Module 4: WHO 2008: Supportive supervision Training for mid-level managers (MLM) - WHO/IVB/08.04





2. Why conduct supportive supervision?

Supervision is an opportunity to provide follow-up training, improve performance, and solve other systemic problems that contribute to poor coverage of nutrition interventions. This guideline focuses on supportive supervision: a process that promotes sustainable and efficient programme management by encouraging effective two-way communication, as well as performance planning and monitoring.

Supportive supervision, mentoring of community workers and supervision of mother support groups are critical to the success of a community-based programme. Supervision is often the weakest link in a community based programme and needs to be given proper attention in the design and planning of the programme. A system for supervision and mentoring is required that covers all the different counselling channels or contacts (e.g. IYCF counselling, CMAM, GMP, house-to-house visits, etc.) at which SNIP is provided.

3. Situation in Timor-Leste

Supportive supervision is undertaken on a quarterly basis in Timor-Leste. The Nutrition Department at National level supervises Municipal Health Services and municipal CHCs; Municipal Health Services in turn supervise CHCs at sub-district and community level; and CHC staff supervise Health Posts.

A supportive supervision function is included in the Essential Roles and Duty of Public Health Technician for Nutrition (Sub-district Nutrition Coordinator) as follows:

- Support the Planning and implementation of appropriate nutrition program and nutrition supply plan, including monitoring and supportive supervision, including:
- Conduct regular monitoring and supportive supervision of nutrition program implementation in Health post, SISCAs and community level through house to house visit
- Support the capacity building initiatives to improve the knowledge, skills and sense of responsibility and ownership of the programmes
- Support Nutrition Focal Point in Health Post Level and Sucos to establish the Health Community Volunteers or Mother Support Group to enable their active participation in implementation and monitoring of nutrition program.



The M&E for Primary Health care in Timor-Leste includes Supportive Supervision to assess the readiness of facilities to deliver PHC, including SNIP. Tools are included within the PHC package.

Separate tools have been designed for Health post, CHC-SD and CHC-Municipality based on the services offered. These tools are dynamic and can be elevated to higher quality or standards once the facility achieves basic standards.

The Supportive supervision tools can also be used as a checklist by the facility in charge. CHC-SD need to create a group of supervisors, who can periodically pay visits to HP (minimal frequency once a month) and in each visit need to report in the visitor's book in detail the findings and areas of improvement found in the HP based on the facility readiness tools. All facilities shall be visited at least once per quarter from next higher facility.

4. Objective of Supportive supervision

To guide, motivate and support staff/community workers to build their knowledge, skills and confidence to improve their performance, leading to improved quality and coverage of SNIP services.

The objectives of supervision of service delivery levels are:

- To confirm and support compliance with the health system management and service delivery standards.
- To assist staff in providing improved preventive, promotive and essential curative services.
- To review SNIP coverage and quality and to assist in the formulation of plans and strategies for improvement.
- To build capacity for self-assessment, problem-solving, solution-finding and solution implementation through guidance, support and on-the-job training





5. Pre-requisites for effective supportive supervision

Staffing

A core set of identified supervisors, well trained on supportive supervision techniques and with updated information and skills on nutrition issues.

Supervision activities need to be included in regular work plans, budgets and tasks of these supervisors, ensuring that they have the time to conduct the supervision. It should not be seen as an optional task to be conducted only if there happens to be time or logistical opportunities such as an available vehicle going in a particular direction or similar. It should be institutionalised as part of the expected tasks of the identified staff, with agreed targets for regularly scheduled supervisory visits. Supervisory visit reports should be part of the monthly information and feedback provided to the worker and facility where he or she works.

Supervisors need support and authority from the central or municipality level to implement supervision or make changes to improve services at a health facility.

Job aids

- SNIP job aids to update skills of health workers during supervision visits;
- Checklists
- Forms for recording recommendations and following up.

Supplies/resources

Sufficient vehicles and fuel to enable visits.



6. Interventions and Process

Supportive supervision entails the following 4 steps:

1. Set up a supportive supervision system

- Train a core set of supervisors.
- Create checklists and recording forms.
- Ensure appropriate resources are available — vehicles, per diem, areas for collaboration with other programmes.

2. Plan regular supervisory visits

- Where: use data to decide priority supervision sites.
- When: schedule supervision visits using a work plan.
- What subjects to train: identify training needs and skills that need updating.

3. Conduct supportive supervision visits

- Collect information: observation, discussion and data review
- Use of data.
- Problem-solving and feedback.
- On-the-job training.

4. Follow-up

- Follow up on agreed actions by supervisors and supervised staff.
- Regular data analysis.
- Feedback to all stakeholders (see Monitoring/Tracking section below).

6.1 Set up a supportive supervision system

Train a core set of supervisors.

Supervisors need to be provided with an orientation on supportive supervision and mentoring of community workers, with tools (such as a supervision checklist) and resources (such as transport funds) to undertake this activity.

Suggestions on how to involve supervisors in training include:

1. Update supervisors on current policies, new SNIP practices, techniques, and management skills.
 1. Train supervisors on how to coach, mentor, effectively communicate, and conduct performance planning. This will build their supervisory skills to better guide service providers to improve performance and solve problems at the health facility level.
 2. Involve supervisors in the training process conducting training needs assessments, building training-of-trainers (TOT) skills, and carrying



out workshops. Because they know the issues at the health facility level, supervisors can help identify training needs and performance gaps, and develop training priorities for vaccinators.

3. Train supervisors on adult learning and training techniques. This will strengthen their capacity to deliver effective on-site instruction and follow-up.
4. Involve supervisors in the development of training curricula and job aids. This ensures buy-in and builds the capacity of the supervisor to effectively transfer skills and knowledge to health workers.
5. Help supervisors build a receptive environment for new techniques by updating all staff on new practices. For example, if a nurse at the health centre is going to be trained in MUAC screening practices, the supervisor can brief the health centre staff on the new technique and how to support this practice.

Create checklists and recording forms

The supervisory checklist is a list containing priority issues that must be observed and recorded by the supervisor. The checklist helps the supervisor to focus on priority issues and reminds him/her to observe and record them.

The information collected should help the supervisor to decide what corrective action can be taken during the visit, and what issues need to be followed up for action in the longer term.

A checklist contains items to be checked at EVERY site visit. However, it should not deter the supervisor from recording and following up on other critical issues that he/she has observed but that are not included in the checklist.

Consider SMART when developing a quality checklist:

Specific: items should be specific, with details on what exactly needs to be observed. For example, a question such as “Does the health worker give feeding advice to mother/carer of infant under-6 months?” is not specific, but “Does the health worker explain exclusive breastfeeding to mother/carer of infant under-6 months?” is more specific. The information collected should be critical and should help in taking managerial decisions.

Measurable: focus on items for which information is available at the facility or those that can be observed in a regular session.

Achievable: Keep it simple; Additional observations or comments should be easy to complete and flexible to record. The list should be as short as possible and include only priority areas to observe and record during supportive supervision visits. If the list is too long, filling it will become a mechanical exercise. Also, supervision for SNIP is likely to be integrated with supervision for other services, which further limits the time available and highlights the need to check on the most critical aspects of SNIP during supervision.



Relevant: only include information that can help assess performance and guide action for improving interventions

Time-bound: when considering issues around coverage or frequency of intervention in particular, it is important to note the timeframe over which SNIP was delivered.

A supervisory visit is an excellent opportunity to provide on-the-job training to individual health workers or with health-centre staff as a whole. Standard SNIP job aids and training materials can be used.

6.2 Plan regular supervisory visits

The plan should indicate:

- **where** to conduct visits
- **when** to conduct visits
- **what** are the objectives to cover during the visit.

Where:

1. You need to decide priority areas, as some municipalities/health facilities, will need more supportive supervision visits. You must use nutrition monitoring data and information from previous supervision visits to select priority areas for supervision. Review your priority plan with the Nutrition Department. Criteria for selecting priority areas might include:

- high prevalence of acute malnutrition
- high drop-out rates from IMAM
- low coverage rates of vitamin A supplementation or other SNIP activities.
- poor reports from previous supervision visits.

Other criteria could include:

- areas with few or no visits in the past;
- areas with recent outbreaks of measles;
- frequent stock problems (overstock or stock-outs);
- new staff who may need monitoring/training on SNIP;
- problems identified by health staff or the community;
- good coverage in the past but drop in coverage or low coverage of SNIP now;
- coverage rates above 100% or drop-out rates that are negative;
- prioritised municipalities for new intervention introduction;
- areas submitting no reports or incomplete reports.



When

Once you have prioritised areas to be visited over the next quarter/year, you need to prepare a supportive supervision schedule. The annual/quarterly work-plan of activities should be consulted when scheduling supportive supervision visits. The following issues should be considered.

- Visits should preferably be on days when there are SNIP activities planned.
- Routine as well as outreach and mobile sessions should be supervised.
- The health worker under supervision should be informed of the schedule.
- The schedule should be feasible and practical, taking into account the distance, transportation constraints due to weather or travel conditions.
- The supervisor should schedule enough time to visit the site fully, and if possible provide on-site training.

It is important to monitor planned visits versus held visits and record the reasons for not holding any visit as planned (e.g. lack of transport, competing priorities, etc.).

The frequency of supervisory visits will vary with the situation:

- Problem-solving and motivation of staff will demand frequent supervision if they are to result in improved performance.
- New health centres or major changes in existing health centres (e.g. new staff, new responsibilities) will require frequent visits.
- It will be necessary, however, to undertake at least two visits per year to each health facility. When supervisory visits are made routinely, supervisors are better able to monitor performance and can identify and address problems before they negatively impact service delivery. Lesser performing health facilities should receive more frequent visits.

When planning the schedule, ensure that adequate time is available; for example, it may take two hours or more to meet the needs of a single supportive supervision visit.

- Adding unscheduled visits (that is, the worker is unaware of the visit in advance) may be useful in addition to any planned visits.

What to cover during the visit

It is important to have a clear understanding of the main objectives of the visit. This could include main tasks to observe, or main topics on which training should be given. A review of previous supervision reports, checklists, or data analysis, can assist in identifying which topics to cover during supportive supervision visits.

- Always be prepared to use data:
 - review the local data on site during the visit;
 - bring summary data, monthly reports, etc. as reference material (see M&E module for available data)



- Prepare an agenda for the visit in advance. The agenda should include one or two issues that have already been identified as priorities for the area.

Although certain training topics can be planned in advance, some training needs may become evident during the visit or during discussions with health staff.

6.3 Conducting a supervisory visit

During a supervisory visit to the health facility, the supervisor should conduct the following main steps:

- 1) Collect information: observation, discussion and data review
- 2) Problem-solving
- 3) On-the-job training.
- 4) Record the observation and feedback.

Collect information: observation, discussion and data review

Supervisors can collect information using a number of methods/tools including:

- observing the health-facility environment and the health worker providing SNIP;
- listening to health workers;
- reviewing the records;
- using a checklist;
- talking with parents and community members;
- reviewing recommendations from past visits;
- conducting a rapid community survey.

Use your communication skills to do this:

- o Ask questions, using more open-ended than closed questions
- o Listen to the other
- o Observe non-verbal language
- o Be honest
- o Know your topic (how to supervise and coach)
- o Be respectful
- o Be empathetic

Observing the health-facility environment and health worker providing SNIP
Supervisors can obtain a lot of information by simply observing the health-facility environment. For example, they may observe the following:

- are supplementation practices correct?
- is the health worker making use of the available job aids as necessary?
- is the health facility clean?



- is the health worker interacting well with the community and informing them about services?
- are IEC posters, monitoring charts, etc. displayed on the walls?
- check the availability of stock and the condition of equipment.

As a supervisor you should watch the health worker doing the work, rather than simply listening to health staff talking about what he/she usually does. When observing the health worker, watch how he/she:

- screens infants /children
- prepares and distributes supplements
- weighs children
- completes tally sheets and LISIO/child health card
- communicates with parents.

Important: Do not intervene or correct the health worker while he/she is working (unless you feel that harm will be done to the visiting child or mother without your intervention).

Listening to health staff

Listening to health workers' concerns is critical in providing appropriate support. During discussions with health workers you should explain the purpose of your visit, and offer them the opportunity to share their concerns. If possible, try to meet with each staff member individually, and explain the reason for the visit.

Ask question to health staff

Sample questions to ask individual health workers include:

- are they able to get their work done? If not, why not?
- do they have a special interest in any particular aspect of their job?
- do they have any ideas about how the health facility could be organized so that the community receives a better SNIP service?

Try to ask questions that require more than a "yes" or "no" answer. For instance, ask open-ended questions.

Example of a closed-ended question: "Do you know how to give Vitamin A?"

Example of an open-ended question:

"How would you know if the child needs Vitamin A supplementation?"

Meet with the supervision team within the facility and ask for additional feedback on service delivery.



Reviewing data and using a supervisory checklist

Reviewing data can provide useful information about a health worker's performance. It may also provide information on any gaps in the knowledge and skills of health workers, or alternatively any lack of equipment. Data records that should be reviewed during a supervisory visit include:

- SNIP coverage monitoring charts
- Tally sheets, registers for SNIP
- Defaulter tracking system
- Monthly reports
- SNIP work plans
- IEC materials posted on walls
- Minutes of community meetings

During the visit the supervisor may also use a set of predetermined indicators that are formatted into a checklist (see Annex 3).

Talking to the parents and community members

Talking with parents and members of the community is the only way supervisors can learn how community members view the health services provided. It is especially useful to talk to women as they leave the health centre (exit interviews) and to visit members of the village health committee.

Ask community members how they are treated when they visit the facility. Do they understand the SNIP they/their child has received? Have they been given practical nutrition/feeding advice to follow at home? Do they know when to return? Meet with designated community leaders during the visit to get their feedback.

Problem-solving and feedback

Problem-solving with staff

Discuss findings and recommendations with the health facility team. Identify gaps and solve problems in positive ways. Ask the staff to identify areas of strength and weakness. A supervisor can serve as a facilitator and help the staff develop strategies for solving problems through provision of constructive feedback.

Step 1: Describe the problem and its impact

- Focus on the problem and not individuals. Be sure to identify if the problem is due to a lack of skills or to an external factor that prevents the health worker from doing his/her job?
- Explain the impact (long-term and short-term) of the problem.





- Tackle one problem at a time.
- Be specific in explaining the problem. If possible, back it up with facts rather than judgment alone.

Step 2: Discuss the causes of the problem with health staff

- Identifying the cause of the problem involves asking “why” repeatedly.
- This should not be an opportunity to blame others or blame the system.
- It may sometimes be necessary to seek causes in other sources (e.g. community members, data, etc.). Review coverage data and dropout rates. Work with the team to identify reasons for dropout rates and strategies for improvement.
- Prioritise causes according to those that can more easily be addressed.

Step 3: Implement solutions and monitor regularly

- Solve problems together: solutions to be implemented should reach a common awareness of what needs to be done and by whom.
- Both the supervisor and supervisee should keep a written log/record of items discussed, including strengths and weaknesses, and actions to be taken (by whom and by when).
- Solutions that can be implemented immediately should be implemented first, e.g. revision of key breastfeeding messages
- Develop an implementation plan that details what, how, who and when.
- Set target coverage rates for improvement.
- Follow up on progress.

Feedback to the health staff concerned

- Praise health workers in public for good performance and for practices that meet quality standards. Correct performance only in private.
- Provide staff with informational updates on policies or new recommended practices.

In the first instance, feedback must be to the supplier of the information, i.e. the health worker under supervision. When data collection is completed, the supervisor should work with health-facility staff as a team, describing each problem in detail and making constructive comments.

If you have some bad behaviour to comment on, begin with the positive, and be specific about weaknesses, rather than simply saying, “That was not done well”.

Give learners reasons for their success or failure. Don’t just say “Well done” but give a reason – “Well done. You correctly read the MUAC and took appropriate action”. Don’t say “You are wrong” but rather “There may be a problem” and explain it. Example: “The data from your tally sheet do not match the data in the reporting form. How can this be corrected?”



On-the-job training

Provide support and strengthen capacity of health care providers to meet performance goals:

- Identify information/training needs together with staff.
- Work with health facility and municipality- or central-level authorities to set priorities.
- Provide on-site updates and training.
- Ensure availability of SNIP job aids at facility level.
- Follow up on equipment and supply problems in a timely manner with the municipality or central level authorities.
- Work on ways to improve the delivery system with the municipality- or central-level authorities.

Refer to the seven steps of the training approach (SNIP module 1) when teaching a skill. Evaluate the participant's ability to perform the skill according to the standardised procedure, if possible as outlined in the SNIP guidelines.

4. Follow-up

Supportive supervision does not end with the conducted visit. Back in the office the supervisor should plan for follow-up, which may include the following:

Follow up on agreed actions by supervisors and supervised staff.

- act on issues you agreed to work on;
- involve health workers in the planning process and work with them to develop checklists, job aids, monitoring tools, etc.;
- discuss equipment supply and delivery problems with higher levels;
- review monthly reports and establish regular communication with supervised staff to see if recommendations are being implemented;
- identify career growth or leadership opportunities for the personal development of supervised health staff.

Establishing regular monthly meetings with all health facilities within a municipality can provide an opportunity for health workers to learn new approaches and strategies used in different health facilities and to receive continuing education. It can also be a forum to acknowledge their achievements and their sites.





Conduct follow-up visits

Follow-up visits provide continuity between past and future supervisory visits for a health worker, by:

- ensuring problems identified at a previous visit do not persist;
- reinforcing with the health worker that issues found during the last visit are still important;
- supporting the health worker. If the problem has not been fixed, why not?
- checking if past on-the-spot training has been effective;
- ensuring that the performance of the health worker is being monitored and improved.

Steps for the follow-up visit include:

- reviewing the supervisor's report from the previous visit and continuing to work on the issues raised in the report;
- telling health workers what you have learned from the previous visit, in order to avoid repeating the same information;
- observing health workers to see if bad behaviours or attitudes have been corrected and, if it is the case, congratulating them;
- highlighting the observations from the previous visit that have not changed and noting that these items still need to be followed up;
- checking if any perceived lack of improvement is due to hidden problems that need to be addressed;
- fulfilling promises made at the previous visit (i.e. if supplies or technical information/documentation had been promised).

Monitoring / Tracking Process

It is useful to maintain a supportive supervision record-book at each supervisory site. This should record the date of the visit, main observations, training given, and agreed follow-up actions.

Preparing a supervision report

After each supervisory visit, the supervisor must prepare a supervisory report. This report is vital for planning corrective measures and future supervisory visits. It should inform programme managers and others (e.g. Director of Medical/Health Services; Nutrition department heads; community leaders; health workers) of the situation in the health centre and the findings of the visit.



The supervision report must:

- identify who is being supervised;
- list the tasks and responsibilities of the supervised persons and comment on how well they are performed;
- assess overall performance of health workers (attendance; punctuality; spirit of initiative; creativity; capacity to work in an independent manner);
- discuss each item in the supervision checklist;
- describe what immediate corrective actions were taken during the visit;
- identify the next steps agreed with the staff members concerned;
- be shared with the supervisee (either a copy or written/verbal summary).

Other methods of sharing supportive supervision findings include:

- Publish a simple newsletter or bulletin. It could entail one or two pages of text with illustrations. Accounts of personal experiences or successes, provided such stories are presented positively, will enable staff to recognise themselves in the process. The distribution of the newsletter should be as wide as possible.
- Organise a seminar to discuss the results of the supervisory visits. This can result in interesting discussions and exchange of ideas for problem-solving.
- Share information at monthly meetings.

REFERENCES

Children's Vaccine Program at PATH. Guidelines for Implementing Supportive Supervision: A step-by-step guide with tools to support immunization. Seattle: PATH (2003).

Technical Capacity Assessment. Essential Nutrition Actions (ENA) Framework within the Health System. JSI. January 2014.

UNICEF Programming Guide, IYCF, May 2011, Nutrition Section, Programmes, UNICEF New York.

Guidelines for Supportive supervision in the health sector. Volume 1. USAID. January 2008. Addis Ababa, Ethiopia.

Planning and Adaptation Guide of the Community IYCF Counselling Package, UNICEF 2012.

WHO 2008: Supportive supervision Training for mid-level managers (MLM) - WHO/IVB/08.04



ANNEX 1: IMAM Inpatient supervision checklist

ACTIVITY	SCORE	COMMENT
1. General hygiene		
Is the inpatient clean (rooms and general)		
Is there clean drinking water available for the patients (in every room)		
Is the child clean (personal hygiene)		
Availability of health promotion material sessions conducted		
2. Admission		
Admission criteria and procedure adhered to		
Height measured on admission and discharge		
WHF calculated on admission		
3. Medical treatment		
Medical assessment carried by doctor out every day + recorded		
Drugs provided to the child as recommended by doctor		
Transition (to RUTF) done as soon as complications are stable		
4. Nutrition assessment		
Weight measured correctly every day (observe)		
Is the weight measured correctly (observe)		
MUAC measured correctly every day (observe)		
Oedema assessed correctly daily (observe)		
5. Physical examination		
Is Respiration, pulse and temperature taken 4 (four) times a day		
6. Observations		
Child's condition assessed every one hour		
Child condition (diarrhoea, cough, dehydration, vomit, extremities etc.) recorded after observation		
7. Monitoring (admission, daily etc.		
Admission history & physical examination done by doctor on admission		
All children registered in the malnutrition register on admission and discharge		
8. Milk preparation		
Milk preparation area is clean, utensils clean and covered		
F75, F100 and Resomal prepared correctly		
Child receives correct quantity of milk		
RUTF provided correctly (amount) and education (messages) provided		
Milk given every three hours		
9. Discharge		
Discharged according to protocol (stable, good appetite for RUTF)		
All status report properly filled in on discharge and filed in Malnutrition file		
OTP transfer card completed and sent with ambulance/carer to OTP at CHC or HP		
10. Logistics and supplies		
Is there at least 1 box of F75, F100, RUTF and Resomal in the inpatient		
Is there clean cups, jug, utensils available		
Are all prescribed drugs available in the inpatient		
TOTAL SCORE:		

Grading system: 1=Poor 2=Fair 3= Good

Supervisor: _____

Sign: _____ **Date:** _____



ANNEX 2: IMAM Supervision Checklist Outpatient Care Site, Example

	Total observed	Total correct	Direct observation at site	Quality 1 – Done correctly 2 – Done, but needs improvement 3 – Not done/ done incorrectly	Comment
Number of staff and volunteers present					Staff: Volunteers:
Staff greet caregivers and are friendly and helpful					
Registration numbers assigned correctly	Total new adm in past month__				
Registration numbers written on all documents					
Grade of Bilateral Pitting Oedema measured accurately	Total oed adms observed__				
MUAC measured accurately	Total MUAC observed__				
Weight measured accurately	Total wts observed__				
Height measured accurately	Total hts. observed__				
Weight-for-Height % calculated correctly	Total WH% checked__				
Admission is according to correct criteria	Total cards checked__				(spot check cards)
Medical history recorded accurately	Total Med His observed__				
Physical exam performed and recorded accurately.	Total cards checked__	Total w/ full exam __			(Check card)
Child's appetite assessed using RUTF (on admission and return visits)					how assessed and by whom
Routine medications given according to protocol and recorded accurately	Total cards checked__	Total with correct meds__			



Amount of RUTF needed is correctly calculated	Total cards checked____				
Appropriate education given to mothers					Note topic and form::
Follow up drugs given according to protocol and recorded accurately	Total cards checked____				
Slow responders are identified according to the definition for follow-up and communicated to CHWs	Total NR needing visit during past month____	Total			
Follow up priorities discussed with CHW/ volunteer; List of names recorded/ cards marked			List/ clear discussion?		
Beneficiaries discharged according to protocol.	Total cards checked____				
Correct number of absentees/ defaulters identified for follow-up	Total no. abs/ default cards____	Total w/ outcome recorded____			
Tally sheets, reg, and RUTF stock cards correct	Total weeks reviewed____				(spot check)

Additional Supportive supervision tools for PHC, which incorporate nutrition considerations are detailed in the PHC package.

ANNEX 3: Joint Monitoring Check-List (Tool)

Nutrition Programme Joint Monitoring Check-list (tool)									
Name of Municipality.....		Dates (from to) of Joint monitoring visit.....							
Domain-1: Geographic Access									
Indicators	How to Check	Items to check	Observation/ finding		Total obtainable score	Score obtained site-1	Score obtained site-2	Score obtained site-3	Average Score obtained by municipality
			Yes	No					
1. All Aldeia of the Suco have SISCa point within 30 minutes walk or a health facility within one hour walk	Ask to how many Aldeia, the Sisca or health facility provides preventive services directly. Ask for the travel time by walking from the facility or SISCa to the centre of each of the Aldeia. If the travel time is less than 30 minutes from SISCa and less than an hour from facility mark "yes" and score 20. If the distance is more than that mark "no" and score 0				20	20			7
2. Nutrition service delivery area has adequate space for laying out equipment, education materials and supplies	Check the nutrition service delivery area and if there is adequate space for service provision, storing equipment and displaying education materials, mark yes and if not adequate mark 'no'. Score 10 if "yes" and 0 if 'No'				10	10			3
3. Waiting place for mothers/care-givers have adequate shade/protection from rain	Check the nutrition service delivery area and if there is adequate waiting area. Mark "yes" if space is adequate and "no" if not adequate. Score 10 if "yes" and 0 if 'No'				10	0			0
4. Suco has a doctor engaged in Nutrition services delivery/promotion	Check with the Soco-Xefe if the doctor assigned to the Suco stays in the Suco and provides nutrition services. Check if the doctor is there in the SISCa session and takes part in nutrition service delivery or education/counselling. If all this is true mark "yes" and if not true mark "no". Score 20 if "yes" and 0 if 'No'				20	20			7
6. Suco has Mother Support Group (MSG) with member coming from all aldeia of the Suco	Check with the Soco-Xefe and PSF if the Suco has mother support group (MSG). If yes, ask MSG chair person if the MSG has members coming from all Aldeia of the Suco. If 'yes' to all score 20 and if 'no' score 0				20	20			7

7. MSG member of the Suco come from all aldeia and are trained on maternal and child nutrition promotion	Ask MSG member if they have been trained/oriented on their role within the last one year. If 'yes' score 10 and if 'no' score 0			10	0					
9. MSG members of Suco demonstrate awareness about their roles and show keenness to create awareness and support mother adopt appropriate practices and seek care	Observe the MSG members and see if they take part in Nutrition/health promotion. Ask MSG members what they have actually done in the last one month for health/nutrition promotion in their community. If they are taking part in Nutrition/health promotion mark 'yes' and mark 'no' if they are not. Score 10 if "yes" and 0 if "no"			10	0					
Total score Geographic Access				100	70					23
Domain-2: Availability of Essential Commodities										
Indicators	How to Check	Items to check	Observation/ finding		Total obtainable score	Score obtained site-1	Score obtained site-2	Score obtained site-3	Average Score obtained by municipality	
			Yes	No						
1. Functional screening equipment and supplies available	Check inventory and physical presence of items at the service delivery point. Minimum required quantity of equipment should be at least one set for SISCa session and two sets (one fixed at facility and one for SISCa and outreaches). Equipment need to be functional equipment to count as available. For each 'yes' mark 1 and for each 'no' mark 0 and compute the total score out of 10	Salter Scale with accessories								0
		Uni-scale or alternative scale for weighing mothers								0
		MUAC tape for child								0
		MUAC tape for adult								0
		Others:								0
		Total score obtained								0
		Total score obtained for screening equipment and supplies out of allocated total of 10=(total score/total line items) X 10			10	8				3

2. No stock-out of supplies for treatment of SAM	Check stock and physical presence of items at the service delivery point. Minimum required quantity should be at least equal to the past consumption of one SISCa session for the SISCa and past consumption of the facility for at least a month for a facility. Minimum required quantity should be there at the service delivery point (facility or SISCa) to count as available. For each 'yes' mark 1 and for each 'no' mark 0 and compute the total score out of 10	RUTF																	0
		F-100																	0
		F-75																	0
		Resomal																	0
		Others:																	0
		Total score obtained																	0
		Total score obtained for supplies for treatment of SAM out of allocated total of 10=(total score/total line items) X 10																	2
3. No stock-out of supplies for treatment of MAM	Check stock and physical presence of items at the service delivery point. Minimum required quantity should be at least equal to the past consumption of one SISCa session for the SISCa and past consumption of the facility for at least a month for a facility. Minimum required quantity should be there at the service delivery point (facility or SISCa) to count as available. For each 'yes' mark 1 and for each 'no' mark 0 and compute the total score out of 10	RUSF																	0
		Timor Vita																	0
		Total score obtained																	0
		Total score obtained for supplies for treatment of MAM out of allocated total of 10=(total score/total line items) X 10																	0
																			0
																			0
																			0
4. No stock-out of micronutrients and other supplies-vitamin A, iron-folic acid, Zinc, ORS etc.	Check stock and physical presence of items at the service delivery point. Minimum required quantity should be at least equal to the past consumption of one SISCa session for the SISCa	Vitamin A																	0
		Iron-Folic Acid																	0
		Multiple Micronutrient Sachet																	0
		Zinc																	0
		ORS																	0
																			0
																			0



345

[illegible]

Total score obtained out of allocated total of 10=(total score/total line items) X 10			10	6	2				
Total score Availability of Essential Commodities			100	64	21				
Domain-3: Availability of Trained Human Resources									
Indicators	How to Check	Items to check	Observation/ finding		Total obtainable score	Score obtained site-1	Score obtained site-2	Score obtained site-3	Average Score obtained by municipality
			Yes	No					
1. Formally designated person delivers SNIP in health facility and SISCa	Ask if the nutrition service provider is recruited for Nutrition or has formally been assigned nutrition function. Score 10 if "yes" and 0 if "No"				10	10			3
2. Person delivering SNIP in health facility+ SISCa trained on IYCF counselling	Ask if the person delivering SNIP in health facility+ SISCa trained on IYCF counselling. Score 10 if "yes" and 0 if "No"				10	0			0
3. Person delivering SNIP in health facility +SISCa trained on Maternal Nutrition Counselling	Ask if the person delivering SNIP in health facility+ SISCa trained on Maternal Nutrition counselling. Score 10 if "yes" and 0 if "No"				10	0			0
4. Person delivering SNIP in SISCa trained on community mobilization for Nutrition	Ask if the person delivering SNIP in health facility+ SISCa trained on community mobilization for Nutrition. Score 10 if "yes" and 0 if "No"				10	0			0
5. Person delivering SNIP in health facility+SISCa demonstrate satisfactory level of competence in service delivery	Physically observe service provider at work and ask questions to service provider and verify if the statements in the check-list are true. For each 'yes' mark 1 and for each 'no' mark 0 and compute the total score out of 10	SISCa or facility service delivery session is organised appropriately MUAC measured correctly Weight of baby taken by salter scale correctly Weight of mother taken correctly Height of mother taken correctly Nutrition registers and forms are filled correctly							0

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Indicators	How to Check	Items to check	Observation/ finding		Total obtainable score	Score obtained site-1	Score obtained site-2	Score obtained d site-3	Average Score obtained by municipality
			Yes	No					
The provider asks questions to check message retention at the end of counselling/health education session									0
PSF and MSG members are given specific nutrition related responsibility during and after the session									0
Total score obtained									0
Total score obtained out of allocated total of 20=(total score/total line items) X 20					20	15			5
7. Person delivering SNIP in Health Facility and SISCa has received supportive supervision visit and documented feedback from line manager in the last 3 months	Ask the person delivering SNIP in health facility+ SISCa if s/he has received supportive supervision visit in last 3 months, check feedback record. If answer is "yes" and record of feedback is available score 10 and if answer is "no" or there is no record of feedback score 0.				10	10			3
Total score Availability of Trained Human Resources									18
Domain-4: Initial Utilization									
Indicators	How to Check	Items to check	Observation/ finding		Total obtainable score	Score obtained d site-1	Score obtained site-2	Score obtained d site-3	Average Score obtained by municipality
			Yes	No					
1. Proportion of children 0-59 months who were brought to the SISCa or Health Facility for health/nutrition screening within the last one month	Check attendance to the SISCa or health facility session in the last one month. If <50% of estimated targets attended session mark 0; if 50-80% of estimated target attended mark 5, and if more than 80% of estimated targets attended mark 10				10	5			2

2. Proportion of pregnant and lactating women who attended SuCa or Health Facility for health/nutrition screening within the last one month	Check attendance to the SuCa or health facility session in the last one month. If <50% of estimated targets attended session mark 0; if 50-80% of estimated target attended mark 5, and if more than 80% of estimated targets attended mark 10			10	5		2
3. Proportion of children 6-59 months who have been screened with MUAC in the last one month	Check what proportion of estimated children 6-59 attended the SuCa or health facility session in the last one month and were screened. If <50% of estimated targets were screened mark 0; if 50-80% of estimated target were screened mark 5, and if more than 80% of estimated targets were screened mark 10			10	5		2
4. Proportion of pregnant and lactating women screened with MUAC in the last one month	Check what proportion of estimated pregnant and lactating women attended the SuCa or health facility session in the last one month and were screened. If <50% of estimated targets were screened mark 0; if 50-80% of estimated target were screened mark 5, and if more than 80% of estimated targets were screened mark 10			10	5		2
5. Proportion of children 0-23 months who were weighed in the last one month	Check what proportion of estimated children 0-23 months attended the SuCa or health facility session in the last one month and their weight was measured. If <50% of estimated targets were weighed mark 0; if 50-80% of estimated target were weighed mark 5, and if more than 80% of estimated targets were weighed mark 10			10	5		2
6. Proportion of pregnant women screened for anaemia in the last one month	Check what proportion of estimated pregnant women from the SuCa attended the SuCa or health facility session in the last one month and were screened for anaemia. If <50% of estimated targets were screened mark 0; if 50-80% of estimated target were screened mark 5, and if more than 80% of estimated targets were screened mark 10			10	5		2
7. Proportion of children 6-59 months who received vitamin A supplementation least once in the last 6 months	Check SuCa or facility record/registers of 10 randomly selected children 6-59 months and determine what proportion received vitamin A supplement. If <50% of estimated targets received mark 0; if 50-80% of estimated target received mark 5, and if more than 80% of estimated targets received mark 10			10	5		2
8. Proportion of children 6-59 months who received deworming in at least once in the last 6 months	Check SuCa or facility record/registers of 10 randomly selected children 6-59 months determine what proportion received deworming at least once in the last 6 months. If <50% of estimated targets received mark 0; if 50-80% of estimated target received mark 5, and if more than 80% of estimated targets			10	5		2



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3. Proportion of pregnant and lactating women who have non-interrupted measure of MUAC in the Liso	Check SISCa or facility record/registers of 10 randomly selected pregnant and lactating women and determine what proportion have record of MUAC four times during pregnancy and every month until child is 6 months old. If <50% of estimated targets have uninterrupted record mark 0; if 50-60% of estimated targets have uninterrupted record mark 5; if 60-70% have mark 10, and if more than 80% of estimated targets have uninterrupted record mark 20			10	5					2
4. Proportion mothers of 0-12 months children who attended 4+ ANC in the last pregnancy	Check SISCa or facility record/registers of 10 randomly selected women having 0-12 months old child and determine what proportion had at least 4 ANC in the last pregnancy. If <50% of mark 0; if 50-60% 5, if 60-70% have mark 10, and if more than 80% mark 20			20	10					3
5. Proportion of malnourished children 6-59 months who are enrolled for therapeutic feeding and did not "default"	Check SISCa or facility record/registers of all cases of SAM identified in the last 6 months and determine what proportion did not default from treatment. If <50% of mark 0; if 50-60% 5, if 60-70% have mark 10, and if more than 80% mark 20			20	10					3
6. Proportion of malnourished pregnant and lactating women continuing attending follow up without "default"	Check SISCa or facility record/registers of all cases of malnutrition among pregnant and lactating women in the last 6 months and determine what proportion did not default from treatment. If <50% of mark 0; if 50-60% 5, if 60-70% have mark 10, and if more than 80% mark 20			20	10					3
Total score Continuous Utilization										
Domain-6: Effective Coverage										
Domain and Indicators	How to Check	Items to check	Observation/ finding		Total obtainable score	Score obtained site-1	Score obtained site-2	Score obtained site-3	Average Score obtained by municipality	
			Yes	No						

1. Proportion of severely malnourished children 6-59 months who have been discharged from the therapeutic feeding programme having reached the discharge criteria for "cured" or Cure rate of SAM in children	Check SISCa or facility record/registers of all cases of SAM in the last 6 months and determine what proportion were "cured". If <50% of mark 0; if 50-60% mark 5, if 60-70% have mark 10, and if more than 75% mark 20			20	10		3
2. Cure rate of MAM in Children	Check SISCa or facility record/registers of all cases of MAM in the last 6 months and determine what proportion were "cured". If <50% of mark 0; if 50-70% mark 5, and if more than 75% mark 10		10	5			2
3. Cure rate/discharge from treatment for pregnant and Lactating mothers with Malnutrition	Check SISCa or facility record/registers of all cases of maternal malnutrition cased in the last 6 months and determine what proportion were "cured". If <50% of mark 0; if 50-70% mark 5, and if more than 75% mark 10		10	5			2
4. Proportion of children 6-59 months who received vitamin A supplementation twice in the last one year	Check SISCa or facility record/registers of 10 randomly selected 6-59 months' children and determine what proportion have received two doses of vitamin A in the last one year. If <50% mark 0; if 50-80% mark 5, and if more than 80% mark 10		10	5			2
5. Proportion of children 6-59 months who received deworming in twice in the last one year	Check SISCa or facility record/registers of 10 randomly selected 6-59 months' children and determine what proportion have received deworming twice in the last one year. If <50% mark 0; if 50-80% mark 5, and if more than 80% mark 10		10	5			2
6. Proportion of mothers of 0-12 months children who received deworming at least twice in the last pregnancy	Check SISCa or facility record/registers of 10 randomly selected mothers of 0-12 months' children and determine what proportion had received deworming twice during the last pregnancy. If <50% mark 0; if 50-80% mark 5, if >80% mark 10		10	5			2
7. Proportion of mothers attending SISCa or facility session recalling key messages on breastfeeding	Conduct exit interview of 5 randomly selected mothers exiting SISCa or health facility. Ask her to recall messages she had received from SISCa or facility on breast-feeding. Mark 10 if four out of five mothers recall at least two messages, mark 5 if 3 out of five recall at least two messages and 0 if less than three recall 2 messages.		10	5			2

8. Proportion of mothers attending SISCa or facility session recalling key messages on complementary feeding	Conduct exit interview of 5 randomly selected mothers exiting SISCa or health facility. Ask her to recall messages she had received from SISCa or facility on breast-feeding. Mark 10 if four out of five mothers recall at least two messages, mark 5 if 3 out of five recall at least two messages and 0 if less than three recall 2 messages.			10	0				0
9. Proportion of mothers attending SISCa or facility session recalling key messages on maternal nutrition	Conduct exit interview of 5 randomly selected mothers exiting SISCa or health facility. Ask her to recall messages she had received from SISCa or facility on breast-feeding. Mark 10 if four out of five mothers recall at least two messages, mark 5 if 3 out of five recall at least two messages and 0 if less than three recall 2 messages.			10	0				0
Total score Effective Utilization				100	40				13

Source: Timor-Leste M&E Framework.

ANNEX 2: Lista supervisaun supportivu ba programa nutrisaun

Sub-distrito:	Facilidades da Saúde:
Distrito:	Data supervisaun:...../...../.....

1. Organizaasaun Servico Saúde			
1.1	Facilidades halao servico nutrisaun?	Los__	Lae__
1.2	Iha fatin nutrisaun nian ?	Los__	Lae__
1.3	Iha tur fatin ba inan ho oan?	Los__	Lae__
1.4	Pesoal saude fornese edukasaun saude kona ba programa nutrisaun?	Los__	Lae__
1.5	Iha pasiente baixa iha facilidades hodi hetan programa aihan terapiotika?	L / A__	Lae__
1.6	Iha programa hahan suplementario iha facilidades ne'e?	Los__	Lae__
1.7	Iha reportagem ruma konaba problema programa hahan suplementario ou distribusaun?	Los__	Lae__
1.8	Iha actividades ba programa JMAK iha facilidades ne'e fulan tolu liuba?	Los__	Lae__
1.9	Iha problema ruma konaba programa JMAK?	Los__	Lae__
Se karik iha descreve detalhes iha ne'e no fo espikasaun:		Tanba sa?	
1.10	Iha programa aihan terapeutika iha facilidades?	Los__	Lae__
1.11	Iha problema ruma ho programa aihan terapeutika?	Los__	Lae__
Se karik iha descreve detalhes iha ne'e:		Tanba sa?	
sekarik iha problema ruma relasiona ho fatin/sala nutrisaun, ainsaun saida maka presija halo? Desenvolve no aseguara hodi fo apoio mos ba planeamento			
Asaun husi responsavel programa:		Asaun supervisor:	

2. Staff klinika hetan ona treinamentu nutrisaun						
	# staff saude actual	# staff clinico hetan ona treinamentu nutrisaun	% staff clinico hetan ona treinamentu nutrisaun	# staff Simu refreshing treinamentu nutrisaun tuir module versaun foun	# staff clinico hetan FUAT / Supervisaun	
Staff saude						
2.1 Doutor						
2.2 Enfermeiro						
2.3 Parteira						
2.4 Nutrisionista						
Se karik iha problema ruma relasiona treinamentu nutrisaun nebe staff sira hetan, halo discussaun ho staff hotu no chefe nebe responsabiliza ba Centro da Saude hodi halo plano. Desenvolve no asegura hodi fo apoio mos ba planeamento. Fo recomendasaun iha nivel nasional ba pessoal nebee prezisa treinamentu/ refreshing treinamentu.						
Asaun supervisor:						
3. Gestaun kasu nutrisaun nebe qualificado						
Naran knar nain saude :						
Posisaun :						
Atendimentu ba Labarik						
Halo observasaun iha consulta fatin.						
3.1	Halao tetu ho lolos?				Los__	Lae__
3.2	Pessoal saude prence todan iha LISIO ho lolos?				Los__	Lae__
3.3	Halo interpreta todan iha livro registo ho los?				Los__	Lae__
3.4	Pesoal saude usa Flipchart haburas nutrisaun?				Los__	Lae__
3.5	Fo konselu konaba: - Labarik nia cresimentu?				Los__	Lae__
3.6	Fo konselu konaba Susu ben inan nian?				Los__	Lae__
3.7	Fo konselu konaba aihan komplementario?				Los__	Lae__
3.8	Fo konselu konaba aihan nebe diak no pratika fo han nebe los?				Los__	Lae__
3.9	Sukat liman kabun leten (LKL) ho los no interpreta resultadu ho lolos?				Los__	Lae__

3.10	Wainhira kresimentu ladiak, buka hatene tuir causa no fo solusaun:		Los__	Lae__
3.11	Moras (mear, isin manas, te ben no seluk tan)		Los__	Lae__
3.12	Husu informasaun konaba fo susu durante labarik moras		Los__	Lae__
3.13	Husu informasaun konaba fo han labarik durante labarik moras		Los__	Lae__
3.14	Refere (ITP, OTP ka PSH baseia ba kriteria)		Los__	Lae__
3.15	Hatene sinais perigozu ba malnutrisaun, oinsa halo tratamentu no referal?		Los__	Lae__
Atendimentu ba Inan isin rua ou Inan fo susu				
Halo observasaun iha fatin konsulta.				
3.16	Pesoal saude tetu ho lolos?		Los__	Lae__
3.17	Pesoal saude sukat LILA no interpreta ho lolos?		Los__	Lae__
3.18	Fo konselu usa material hanesan Flipchart haburas ba inan?		Los__	Lae__
3.19	Fo konselu ba inan isin rua konaba hahan nebe tenki han durante tempo isin rua?		Los__	Lae__
3.16	Buka hatene sinais anemia no fo konselu konaba problema anemia iha tempo isin rua?		Los__	Lae__
3.20	Fo konselu konaba importancia husi hemu tableta aumenta ran (feru/tableta folate durante periodo isin rua)?		Los__	Lae__
3.21	Fo konselu konaba aihan ba inan isin rua no oinsa produs susu ben barak?		Los__	Lae__
3.22	Fo koragem ba inan hodi fo susu lolos no esplika mensagem lima (5) konaba fo aihan ba bebe ou labarik?		Los__	Lae__
3.23	Halo perguntas fali ba inan nebe simu informasaun hodi hatene nia komprensaun?		Los__	Lae__
3.24	Esplika bainhira mak fila fali mai?		Los__	Lae__
3.25	Minutus halo konsulta?		____	minutus
Intervista husi supervisor ho kliente nebe hetan atendimentu				
3.26	Senti ksolok ho buat nebe ita foin hetan?		Los__	Lae__
3.27	Saida ita hetan husi esplikasaun konaba fohan nebe lolos		Los__	Lae__
Fo ponto 1 ba kada perguntas (quandu halo los) (Lalika konta 3.10, 3.25, 3.26 & 3.27)				
Skor konselho ba oan (3.1 – 3.11):				
Skor konselho ba inan (3.12 – 3.21):				
----- X 100=%		----- X 100=%		
14		10		

Fo hatete sai buat nebe maka hetan iha tempo observaun no halo discussaun ho knar nain sira. Kongratula ba buat nebe halo diak i halo discussaun ba frakeja sira atu oinsa bele halo diak. Husu sira iha problema sira hetan iha, tempo observaun baseia ba assessmentu, klasifikasaun, tratamentu, konselu, no follow up no sst, atu nune sira koko hodi halo para resolve ba problema nebe iha dau-daun. Tau nota kraik iha desijaun nebe foti ona hodi hadia knar nain nia matenek no kontinua halo pratica.

Asaun husi responsavel programa:	Asaun supervisor:						
4. Kualidade Rekorda (Review Documento)							
4.1	Sira haruka relatoriu fulan kotuk ka lae? Los___ Lae___ Husu atu hatudu arquivo relatoriu no determina fali data ba relatoriu tuir mai nian:						
4.2	Iha livro registro nutrisaun nebe arkivo no rai ho diak? Los___ Lae___						
4.3	Halo referral nebe necesario, inclui tratamentu iha nota referral nebe arkivo molok transferencia? Los___ Lae___						
4.4	Se Los, asesu iha livro registu. Hare kasu 5 nebe rekorda hela iha fulan kotuk:						
Hare iha Livru Registru							
Asesmentu	1	2	3	4	5	Total Los	%
Recorda todan lolos?							
Recorda klasifikasaun nutrisaun (Normal, Menu, Menu Aat Liu)?							
Interpreta LILA nebe los ba inan isin rua ou inan fo susu							
Fo Suplementa Vitamina A							
Fo Almoruk Lumbriga							
Rekorda referral?							
PSH							

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5. Jestaun Logistic (marka ▾ bainhira los)				
Logistiku	Simu	Restu	Presija tan	
LISIO				
Livru Regjstu Nutrisaun labarik				
Livru Regjstu ANC				
Formatu relatoriu mensal Nutrisaun nian				
Flipchart Haburas				
Pakoti ikipamentu tein nian ba aktividade iha fatin CS / SISCa				
Dasi tara ba labarik				
Dasi toba/Bebe				
Dasi hamrik				
Fita metro plastic toba < 2 years				
Kuadru sukat as				
Microtiose				
Fita LILA ba labarik				
Fita LILA ba feto				
Kartaun OTP				
Kartaun ITP				
Kartaun rasaun PSH				
Tabela BMI				
Aimoruk	Simu	Restu	Presija tan	
Vitamin A 50,000 IU				
Vitamin A 100.000 IU				
Vitamin A 200.000 IU				
Tableta feru				

Tableta folic acid			
Tableta feru / folic acid			
Tableta Zinc			
Tableta Pyrantel tablet			
Tableta Pyrantel syrup			
Tableta Albendazole 200mg			
Tableta Albendazole 400mg			
F 75			
F 100			
Plumpy Nut (HTM)			
PSH (Timor Vita)			
Resomal			
Micronutriente seluk:			
<i>Se ita hetan problema ruma relasiona ho aimoruk ou logistika, halo diskusaun, no suporta sira halo planu hodi resolve problema</i>			
Assaun husi responsavel programa :	Assaun supervisor:		
6. Supervisaun			
Iha supervisaun nutrisaun nian iha fulan tolu kotuk (quarter)?	Los..... Lae.....		
Husu sira atu fo relatoriu supervisaun ikus nian?	Data/...../..... Posisaun supervisor.....		
Progresu desizaun nebe foti ona durante visita liu ba?			



Data...../...../.....	
Asinatura ema nebe ita supervisa: _____	Koinesementu Husi Chefe CHC : _____
Asinatura supervisor: _____	
<i>Favor husik hela kopia ida husi relatoriu nebe asina tiha ona ba responsavel facilidade molok fila no haruka kopia ida ba distritu</i>	









National Directorate of Public Health
Nutrition Department
Ministry of Health
Rua de Caicoli
Dili, Timor-Leste

Supported by:

