NPHCDA

MODULE 8: NUTRITION SERVICE IN PRIMARY HEALTH CARE

April 2024

Module Overview of Nutrition in Primary Health Care

Components

8.1	Definition of Food and Nutrition
8.2	Nutrition Counselling
8.3	Adolescent, Maternal, Infant and Young Child Nutrition
8.4	Complementary Feeding
8.5	Food Demonstration
8.6	Prevention and Control of Micronutrient Deficiencies
8.7	Nutrition Assessment, Growth Monitoring and Promotion
8.8	Integrated Management of Acute Malnutrition
8.9	Data Tools

Learning Objectives

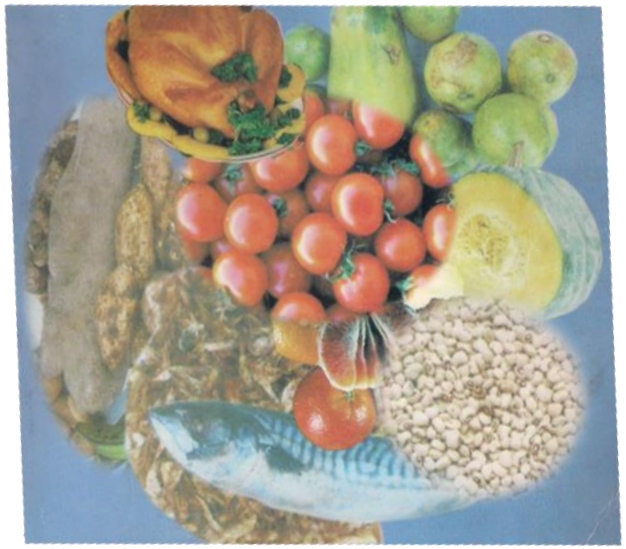
At the end of this training, participants should be able to:

- **Counsel** clients on adolescent, maternal, infant and young child nutrition practices using Counseling Cards and Key messages booklet
- **Know** the importance of breastfeeding and complementary feeding
- **Understand** food groups and how food demonstration is conducted
- **Plot** and **interpret** the child's growth card
- **Know** how to calculate Body Mass Index (BMI)
- **Understand** flow chart for identification of children with Acute Malnutrition
- **Understand** how to identify the 2 types of Severe Acute Malnutrition
- **Identify** MUAC Cut-offs for Acute Malnutrition
- **Identify** clinical signs of nutritional Oedema
- **Understand** treatment regime for Acute Malnutrition
- **Know** the data tools used in Nutrition service delivery

SESSION 8.1: Food and Nutrition







Session Overview

The overall objective of Nutrition service delivery at PHC is to improve and sustain the nutritional status of all Nigerians by:

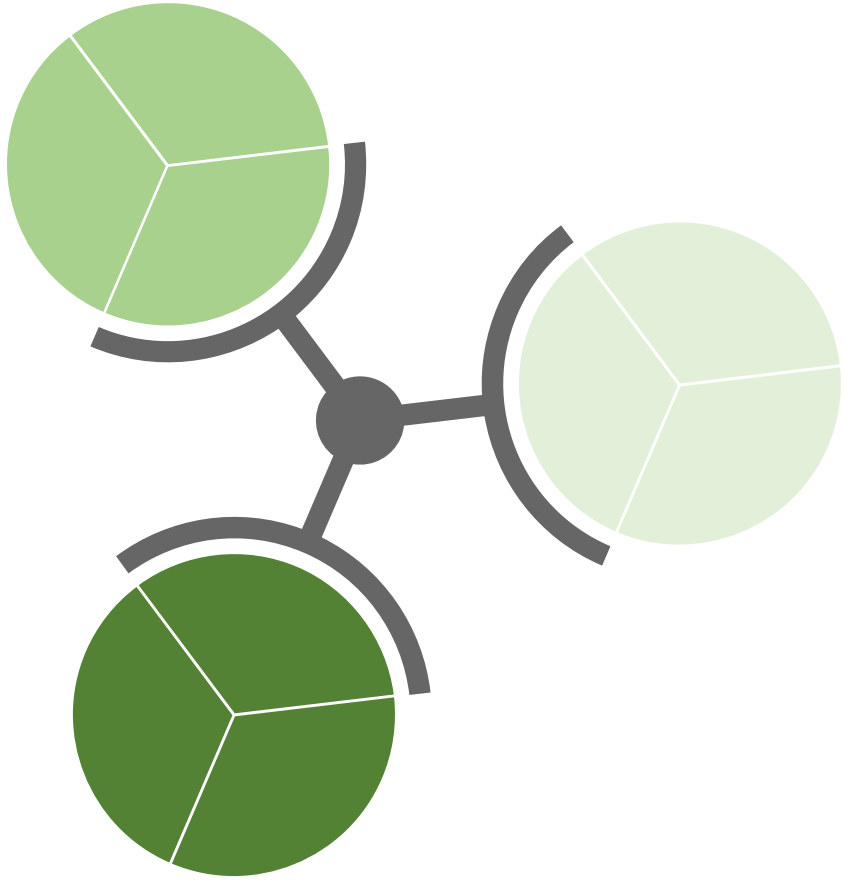
1. Identifying the food and nutrition problems in the Community
2. Analyzing the identified problems
3. Setting up appropriate ACTIONS to prevent, treat and manage identified problems
4. Mobilize key stakeholders for nutrition interventions

This session highlights what food is made of and how the body uses it

Learning Objectives

At the end of this training, participants should be able to:

1. Understand the difference between food and nutrients

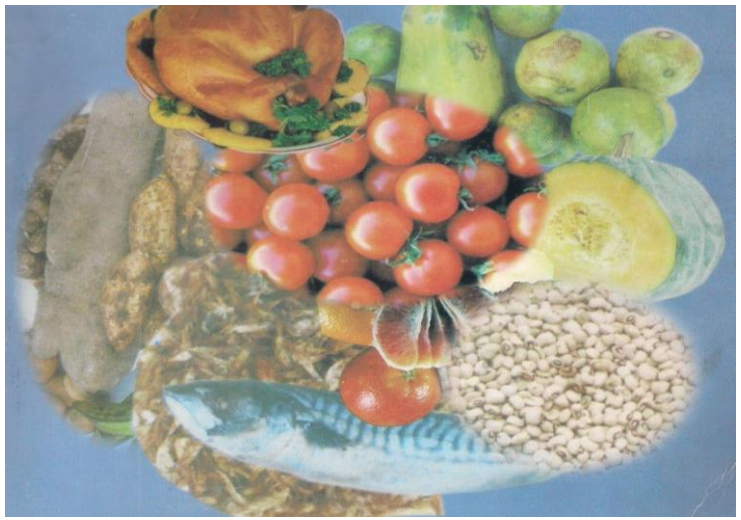


2. Know the food sources of nutrients

3. Know the food groups

What is Food?





Food is a basic human need.

It is a chemical substance, liquid or solid, plant or animal origin, which when consumed supplies the body with:

- Nutrients

- Provides nutritional support
- Provides the body with energy in form of calories to do work
- Provides materials used for growth, development, repair, maintenance and also for reproduction
- Protects the body against diseases
- Regulates body processes
- Aids removal of waste products not needed



Nutrients

Nutrients are essential chemical substances in food that nourish and protect the body for healthy living.

The **Six (6)** classes of nutrients in foods:

- Carbohydrates
- Proteins
- Lipids (Fats & Oils)
- Minerals
- Vitamins
- Water





Nutritional status is the state of health of an individual as a result of the use of nutrients

Exercise

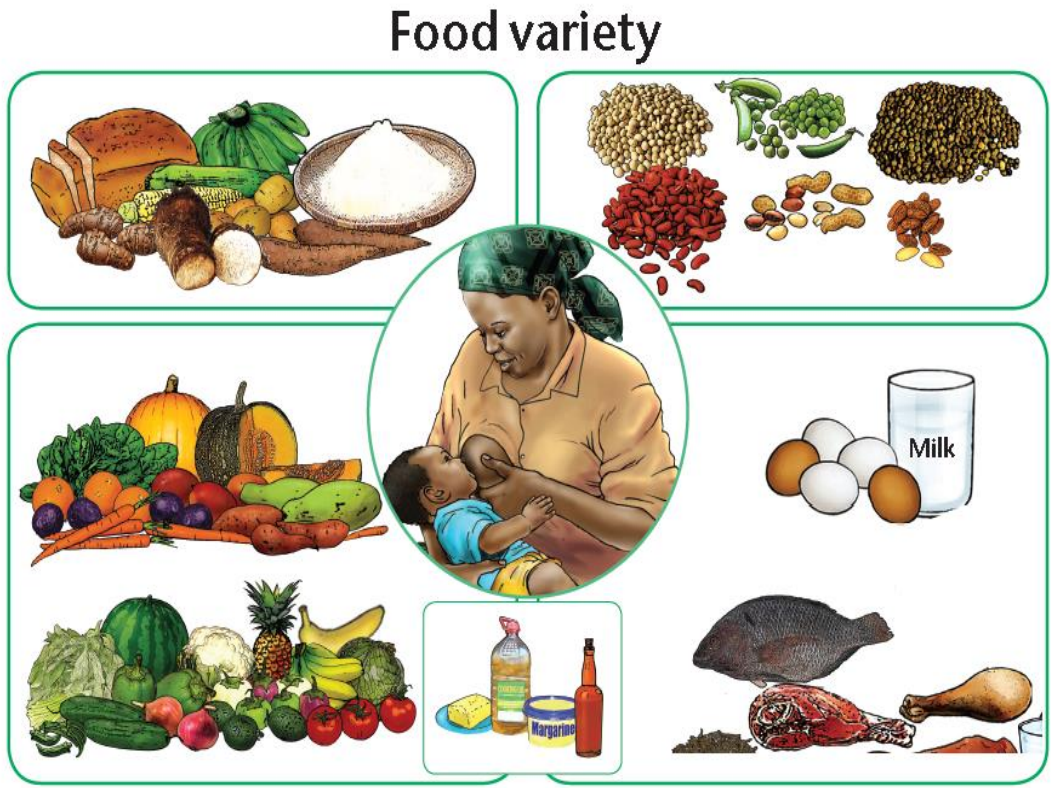


Name 5 different food items common in your communities and the nutrients they provide in the body



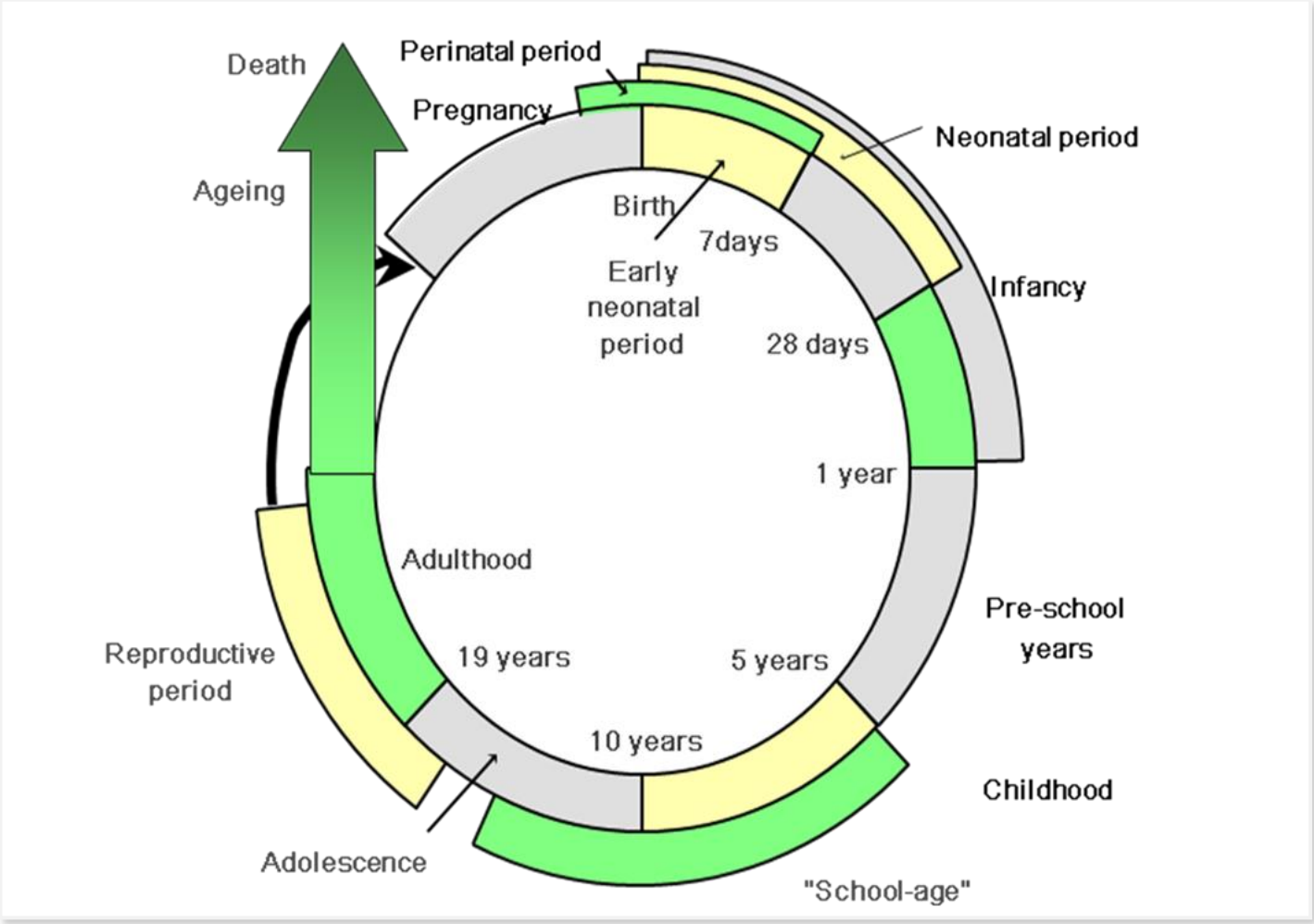
Food Groups

No food is self-sufficient (except breast milk for children 0 – 6 months), so an individual needs to consume at least 5 out of these 10 defined food groups daily/ in most meals for improved dietary diversity and nutritional status.



Food Groups	Examples
▪ **Staple: Grains, Roots, Tubers & Plantain**	Rice, Maize, Millet, Cassava, Yam and Plantain
▪ **Pulses (beans, peas and lentils)**	Cowpea, Soybean, Green beans, & Green pea
▪ **Nuts and Seeds**	Groundnut, Sesame, Wallnut, Ogbono, & Egusi
▪ **Dairy products (Milk and milk products)**	Milk, Yoghurt, & Cheese
▪ **Egg**	Egg
▪ **Flesh foods**	Beef, Poultry, Fish, & Snail
▪ **Dark green leafy vegetables**	Ugu, Spinach, & Broccoli
▪ **Vitamin A rich fruits and vegetables**	Carrots, Pawpaw, Mango, Pumpkins, Orange-fleshed sweet potato
▪ **Other Fruits**	Orange, Banana, Pineapple, Watermelon, Avocado, Garden egg
▪ **Other Vegetables**	Zogale, Ewedu, Tomato, Okro, Cabbage

Lifecycle Approach to Nutrition Services in Primary Health Care



KEY MESSAGES

Nutrition is a process of taking in food and converting it into energy and other vital nutrients required for life.



- How food is produced, processed, handled, prepared, shared, eaten, digested, absorbed and used in the body



- Adequate knowledge of the nutritional composition of foods will ensure proper combination of various foods into a meal that satisfies the body's needs

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Nutrition Counselling



Session Overview

Nutrition counselling helps:

1. Clients to make right decisions and take necessary actions required to improve their nutritional status
2. To take actions on dietary diversity, quality, amount, frequency and safety
3. To improve coverage, and healthy eating behaviour
4. To improve active listening and learning skills, skills for building confidence and giving support, and the use of counselling cards

Learning Objectives

After end of this session, participants should be able to:

1. Enumerate and explain the six active listening and learning skills
2. Give an example of each skill
3. Demonstrate the appropriate use of the skills when counselling on maternal, infant and young child nutrition



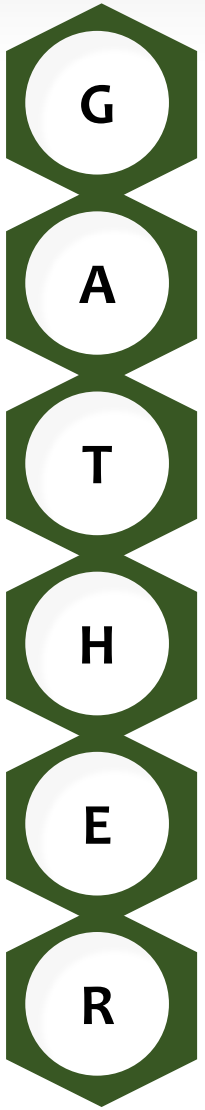
Counselling

Counselling is a way of working with people in which you try to understand how they feel and help them to decide what they think is best to do in their situation

Brainstorm:

Which of these responses is a command, and which is a suggestion?

- "You must feed [Musa] at least 10 times a day."
- "It might help if you feed [Bola] more often."



Greet

Ask

Tell

Help

Explain

Reassure/Return date

Exercise

- Pair participants.
- Ask them to tell a story to each other at the same time for 2 minutes.
- Ask how they feel talking to each other at the same time
- Repeat the activity, ask them to listen to each other actively and recall each other's story
- Ask the difference between the first event and the later
- What things did you do to make sure that your partner listened to you?
- Ask few participants to define counselling based on lessons learnt



Basic Counselling Skills



The Three-Step Counselling (Assess, Analyse, and Act)

1. **Assess:** ask, listen, and observe
2. **Analyse:** identify difficulty and if there is more than one – prioritize the Difficulties
3. **Act:** discuss, suggest a small amount of relevant information, agree on small doable actions

These steps will help you to counsel, problem-solve, and reach an agreement with mothers (or caregivers) about maternal, infant and young child nutrition

Basic Counselling Skills



Active Listening and Learning Skills

- Use helpful non-verbal communication
- Ask open-ended questions
- Use responses and gestures that show interest
- Reflect what the mother/caregiver says
- Empathize – show that you understand how the mother/caregiver feels
- Avoid using "judging" words

Basic Counselling Skills CONTD..

Skills for Building Confidence and Giving Support



1. Accept what the mother or caregiver thinks and feels.
2. Recognize and praise what a mother/ caregiver and child are doing correctly.
3. Give practical help.
4. Give a little relevant information at a time.
5. Use simple language that the mother/ caregiver will understand.
6. Make one or two suggestions, not commands.

Basic Counselling Skills

Role Play to Demonstrate How to Use the Counselling Tools



1. One participant plays the part of a MIYCN counsellor and the other the part of a breastfeeding woman with a 3 months old baby girl.
2. Her baby is not growing well and she feels she does not have enough milk in her breast.
3. She has come to see you to discuss the options for feeding her baby.
4. Role play this event, demonstrating how to provide positive counselling

Counselling Song

When you counsel (2 times)

Do not judge (2 times)

It will help you better (2 times)

Don't advice

Don't condemn

Don't command

Do suggest

Listen & Learn

When in Training (2 times)

Do not Dodge (2 times)

Do not Sleep (2 times)

It will pay you better (2 times)

Ask Questions

Don't Argue

Listen & Learn



KEY MESSAGES

Helpful Non Verbal Communication

1. Keep your head level with the mother/caregiver
2. Ensure positive facial expression
3. Pay attention
4. Remove physical barriers
5. 5. Take time/allow the mother or caregiver time to talk
6. 6. Use appropriate touch



KEY MESSAGES

Use of Counselling Cards



1. Counselling Cards were developed to help counsel mothers and other caregivers on maternal, infant and young child nutrition.
2. Used for active listening and learning skills as well as skills for building confidence and giving support.
3. Ask participants to observe the Counselling Cards and match the cards and key information
4. Ask participants to describe the main counselling points for discussion/messages that the Counselling Cards represent
5. 5. Ask participants to share their observations and counselling points for discussion/messages for the Counselling Cards and key messages booklet
6. 6. Ask participants to identify recommended practices through Counselling Cards

Module Overview of Nutrition in Primary Health Care

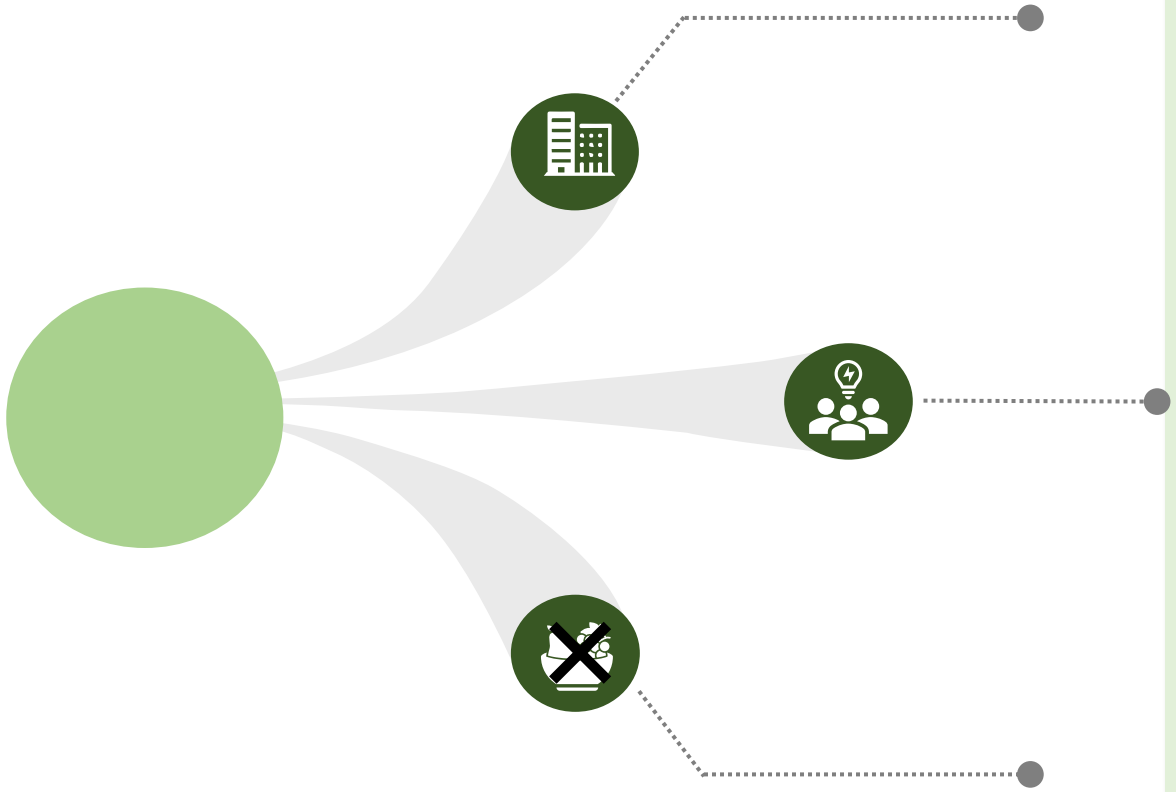
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Session 8.3: Adolescent and Maternal Infant and Young Child Nutrition



Session Overview



- This Session is important for optimal nutritional status
- It seeks to provide health workers information on why maternal nutrition is important as it affects mother's health, pregnancy, infant growth, and development, especially in the first 1000 days of life
- The session will also cover causes and consequences of malnutrition, nutrition interventions for adolescent girls, pregnant women, and breastfeeding

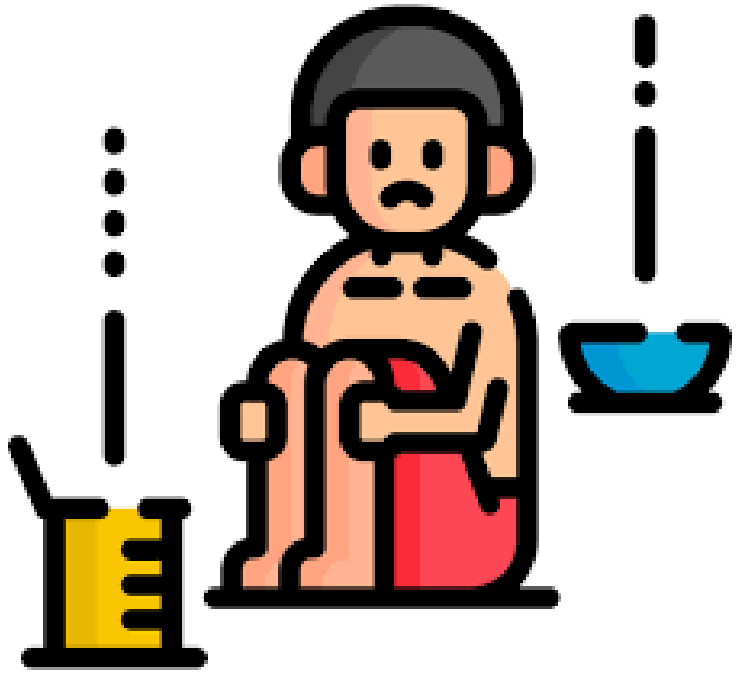
Learning Objectives



At the end of the session, participants should be able to:

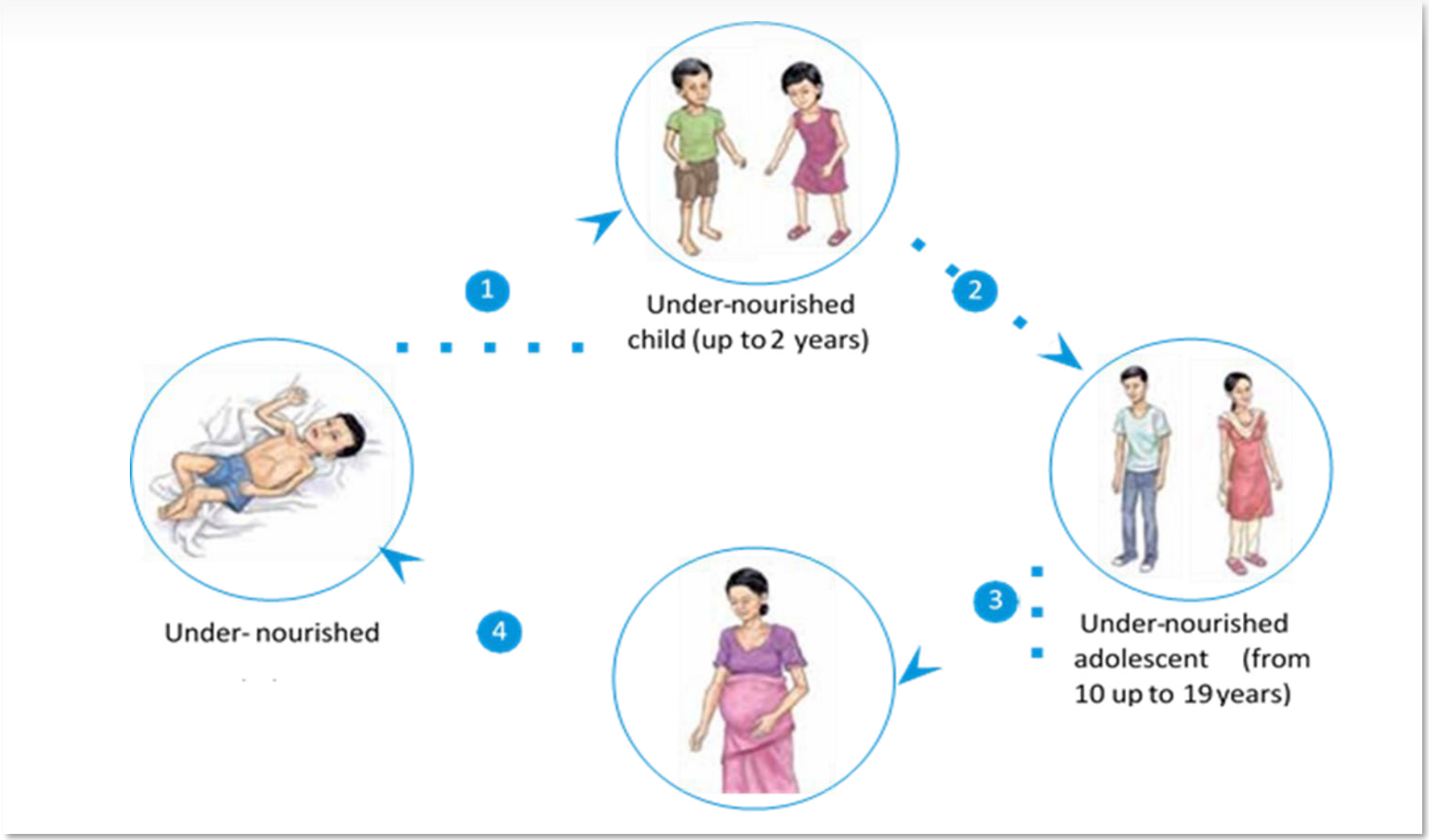
- Know the causes of malnutrition in adolescents, women, infant and young children
- Describe the consequences of malnutrition
- Understand how adolescents' and women's nutrition improve child survival.
- Understand how to prevent growth failure by optimal breastfeeding

Malnutrition



- Malnutrition is caused by not eating enough (undernutrition) or overeating or not eating enough of the right food to give the body the nutrients it needs.
- A contributory cause of more than half of under-five deaths in Nigeria
- Improper digestion, and poor absorption of nutrients, ill health due to dietary deficiency or imbalance and infections

The Undernutrition Cycle



Actions to Break the Cycle of Malnutrition



Adolescent girls

1. Delay first pregnancy until her growth is complete (usually 20 -24 years)
2. Increase the food intake
3. Provide variety of locally available healthy foods
4. Provide Iron and Folic acid (IFA) supplementation
5. Prevent malaria and other infections
6. Provide adolescent friendly services at health centers

Young women

1. Encourage consumption of different types of locally available healthy foods
2. Consume daily IFA or Multiple Micronutrient Supplement (MMS) when pregnant
3. Prevent and seek early treatment of infections
4. Space children
5. Prevent malaria and other infections.



Healthy and Unhealthy Snacks

Healthy Snacks

- Whole fruits such as banana, orange, Pineapple, and watermelon
- Vegetables such as cabbage, broccoli and pumpkins
- Locally homemade snacks such as bean cakes and moi moi
- Healthy drinks without addition of sugar such as kunu, soya milk, tigernut drink







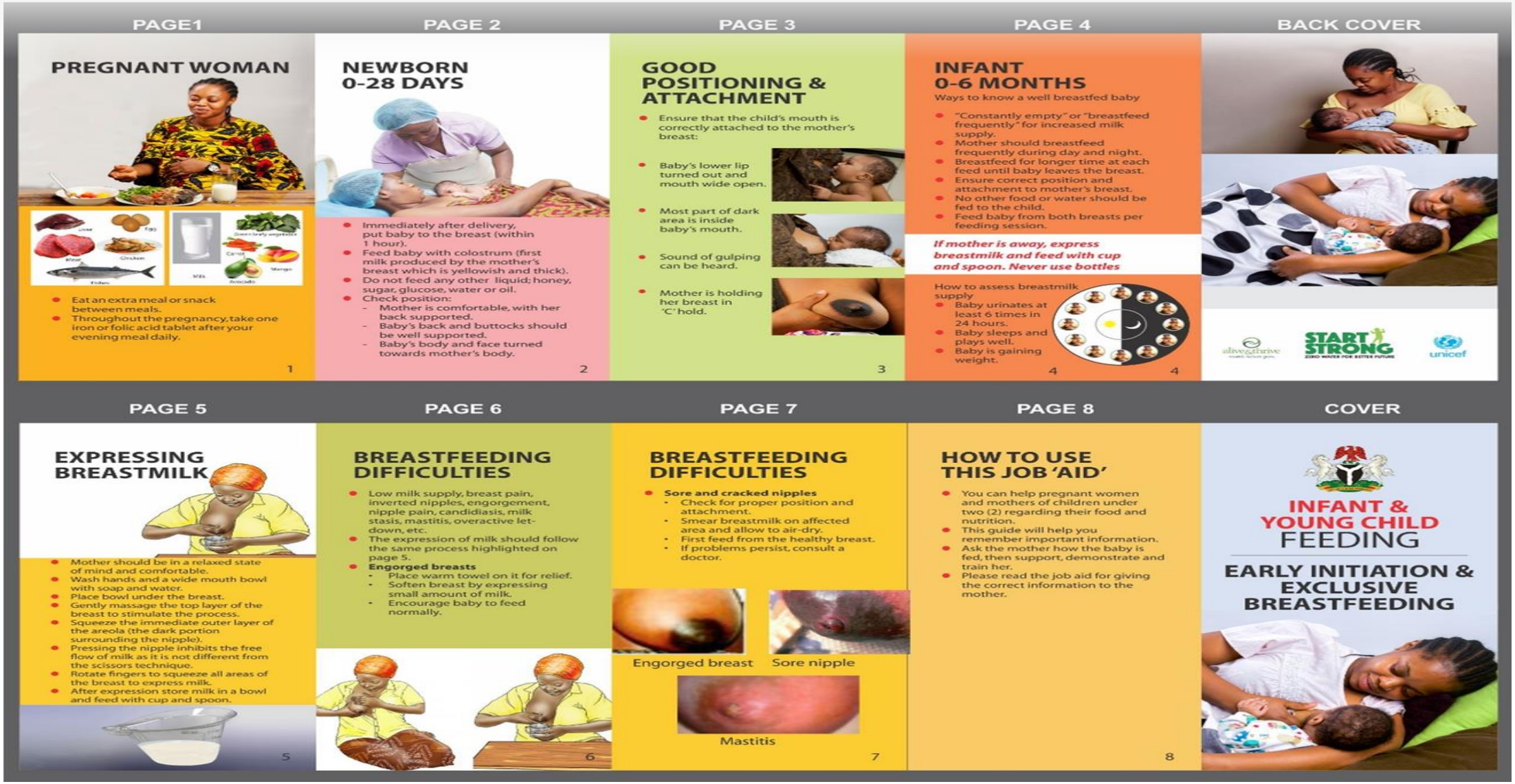
Unhealthy Snacks

- Sugary, salty and fatty fried snacks
- Homemade drinks with added Sweeteners





Early Initiation & Exclusive Breastfeeding Zero Water Flyers



Breastfeeding



Advantages of Breastfeeding

Breastmilk

- Perfect nutrients
- Easily digested
- Protects against infection
- Protects against long-term non-communicable diseases



Breastfeeding

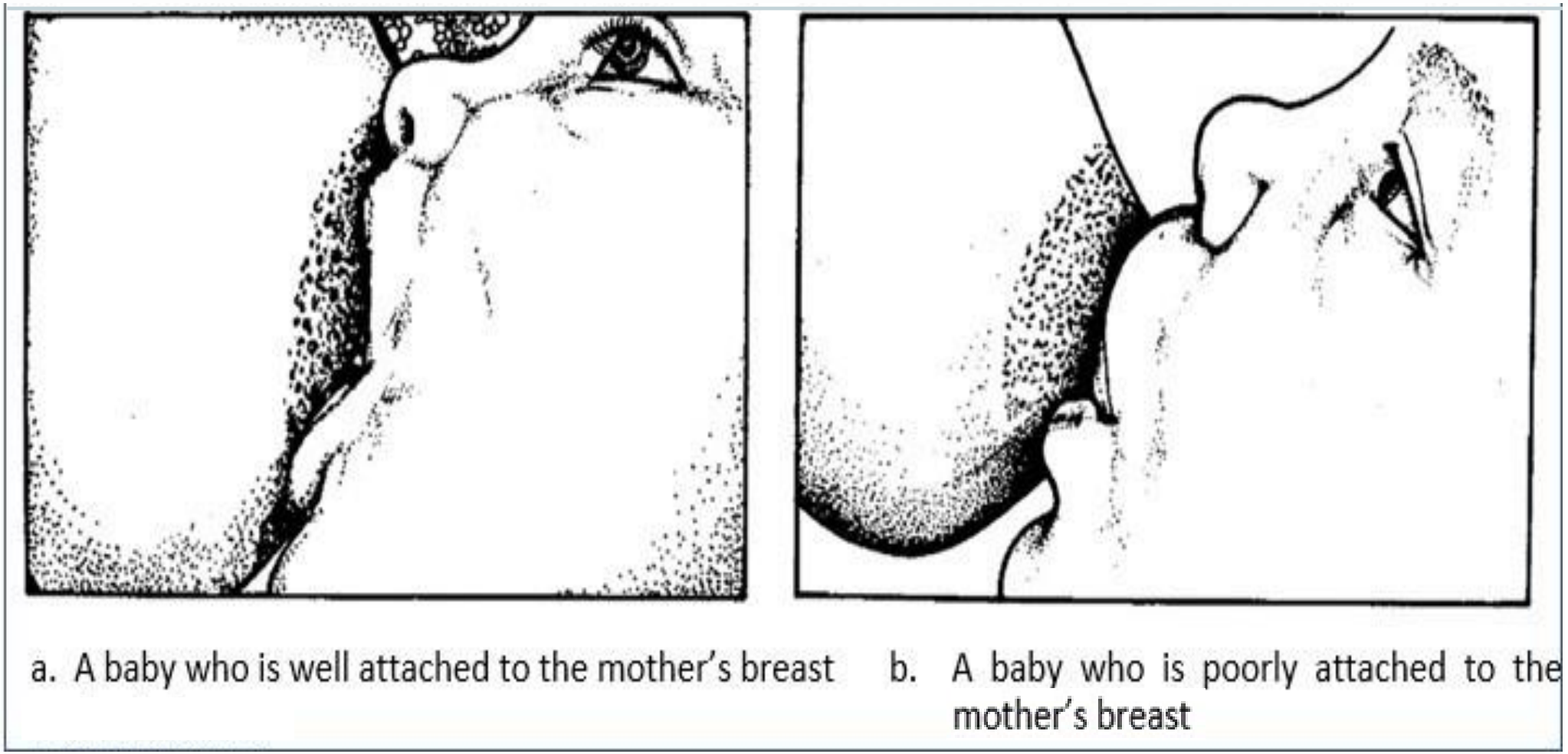
- Fosters healthy growth and development
- Enhances bonding and love
- Helps delay a new pregnancy
- Protects mothers' health
- No price tag, no preparation nor cooking

Summary of the Differences Between Different Milks

Component	Human Milk	Cow's Milk	Formula Milk
Protein	Right amount	Too much	Less
Fats	Easy to digest	Difficult to digest	Difficult to digest
Carbohydrate	EFAs present	No EFAs	Some EFA added
Lipase	Prence of Lipase	No lipase	No lipase
Lactose	Lactose – plenty Oligosaccharides (anti-infective)	Lactose – less Oligosaccharides not suitable	Lactose + sucrose Lacks oligosaccharides
Vitamins and minerals	Adequate if mother has enough	Low Vitamin A and C and iron	Vitamins/minerals usually added
Anti-infective factors	Presence of IgA, lactoferrin, lysozyme cells	None	None
Growth factors	Present	None	None

*EFA – essential fatty acid, IgA – immunoglobulin A

How is the Baby Attached to the Breast?



a. A baby who is well attached to the mother's breast

b. A baby who is poorly attached to the mother's breast

Breastfeeding Baby



Good Positioning and Attachment (1/2)

The 4 Signs of Good Positioning:

1. Straight, facing the breast, close, and supported
2. The baby's body should be straight, not bent or twisted, but with the head slightly back.
3. The baby's body should be facing the breast, close to mother, tummy to tummy and looking up into mother's face.
4. Support the baby's whole body, not just the neck and shoulders, with your hand and forearm.

Good Positioning and Attachment



Good Positioning and Attachment (2/2)

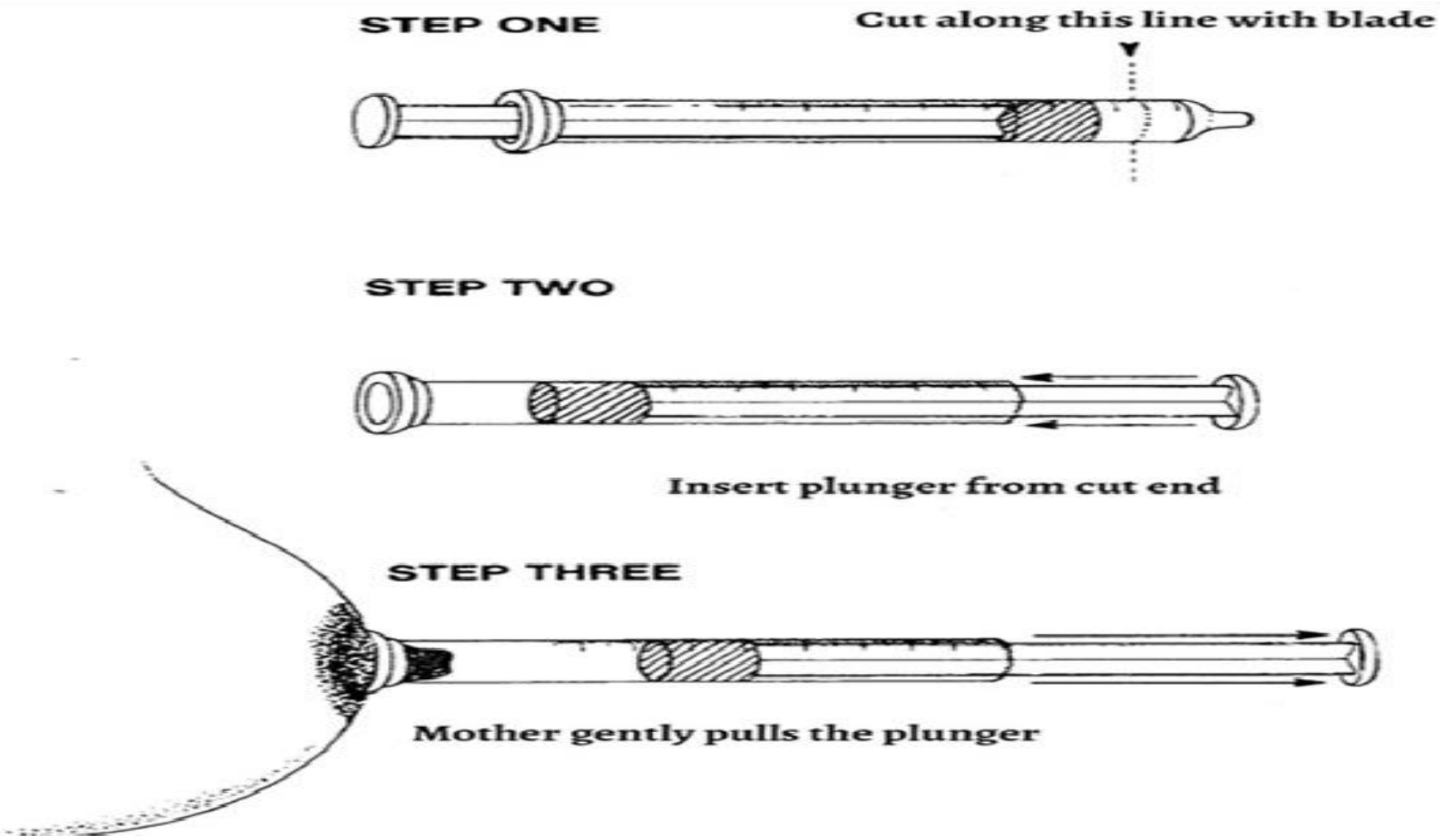
The 4 Signs of Good Attachment

1. Baby's mouth is wide open
2. More of the darker skin (areola) is seen above the baby's mouth than below
3. Baby's lower lip is turned outwards
4. Baby's chin is touching mother's breast



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Preparing and Using a Syringe for Treatment of Inverted Nipples



Exercise: Explain the Common Difficulties in Breastfeeding



Treatment of Blocked Duct and Mastitis

1. Most important – improve drainage of milk
2. Look for the cause and correct

Suggested treatments include:

- Frequent feeding
- Gentle massage towards nipple
- Warm compresses
- Breastfeed on the unaffected side, vary position
- Take antibiotics, analgesics, rest

Breastfeeding Positions



Underarm



Underarm



Cradle



Cross Cradle



Side Lying



Reclining

Underarm
This position is best used after a Caesarean section, if nipples are painful, when breastfeeding small babies and twins
Cradle
The most common breastfeeding positions. it encourages a more relaxed position and frees up arm
Cross Cradle
useful for newborns, small or weak babies, or any baby with a difficulty attaching
Side Lying
This position is more comfortable for the mother after delivery, helps her to rest while breastfeeding
The mother and infant are both lying on their sides facing each other
Reclining
Laid back, used for first time breastfeeding, for new babies and also for older children

How to Express Breastmilk by Hand



Place the first finger or first two fingers and thumb each side of the areola and press inwards towards the chest wall



Press behind the nipple and areola between your first finger or first two fingers and thumb



Press from the sides to empty all segments

Techniques for Hand Expression





Feeding a Baby by Cup



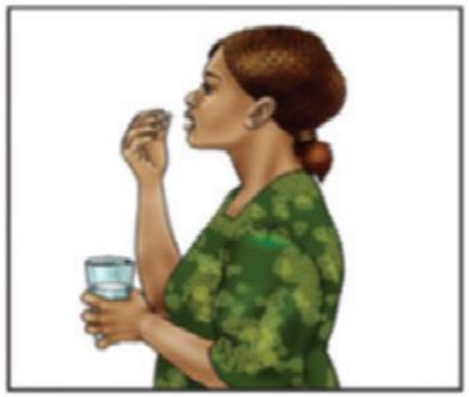


Exclusive Breastfeeding and Taking ARVs

Only Breastmilk



Use expressed breastmilk when away from baby





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Ten Steps to Successful Breastfeeding

1. Comply fully with the International Code of Marketing of Breast-milk Substitutes and relevant World Health Assembly resolutions; Have a written infant feeding policy that is routinely communicated to staff and parents; Establish ongoing monitoring and data-management systems.
2. Ensure that staff have sufficient knowledge, competence and skills to support breastfeeding.
3. Discuss the importance and management of breastfeeding with pregnant women and their families.
4. Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.
5. Support mothers to initiate and maintain breastfeeding and manage common difficulties.



Ten Steps to Successful Breastfeeding CONTD..

6. Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.
7. Enable mothers and their infants to remain together and to practice rooming-in 24 hours a day.
8. Support mothers to recognize and respond to their infants' cues for feeding.
9. Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.
10. Coordinate discharge so that parents and their infants have timely access to ongoing support and care.

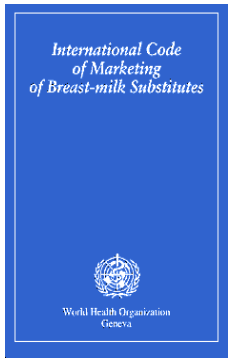


Actions To Protect, Promote and Support Breastfeeding







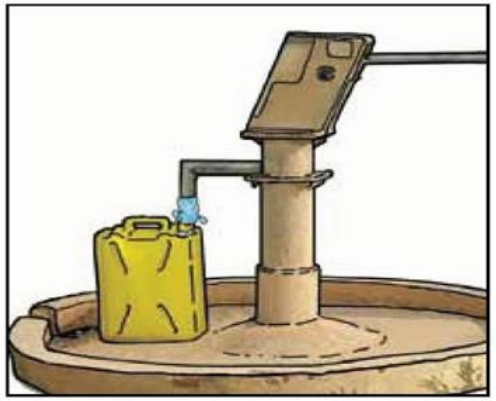
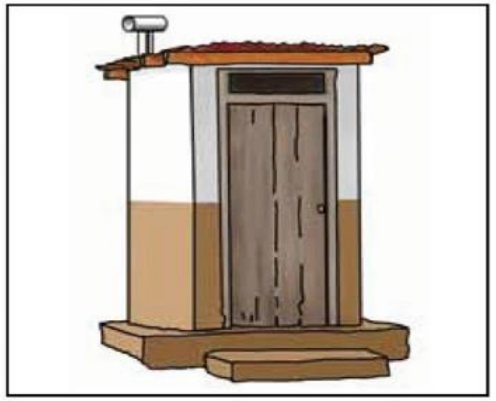


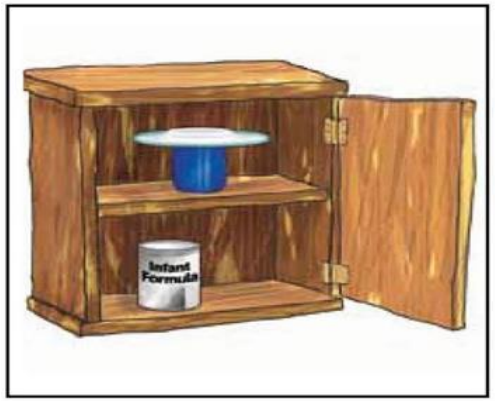
International Code of Marketing Breastmilk Substitute (BMS)

- BMS should not be advertised or otherwise promoted to the public.
- Free samples of BMS should not be given to mothers and health workers
- BMS marketers should not try to contact mothers or pregnant women or their families.
- The labels on products should not use words or pictures to idealize the use of the products.
- BMS manufacturers should not fund Nutrition programmes or give gifts to Health workers and caregivers
- Health workers should not be given samples of products, except for professional evaluation or research.
- All information should explain the benefits and superiority of breastfeeding.
- The health hazards of the use of infant formula should be explained.
- All products should be of a high quality and should be stored under refrigeration where they are used

Conditions Needed to Use Commercial Infant Formula (if replacement feeding is Acceptable, Feasible, Affordable, Sustainable and Safe (AFASS)









Breastfeeding Song

1.Feed me, Mama feed me with breastmilk (2 times)

- When you feed me with breastmilk
- I will grow to be strong
- I will grow to be the nation pride
- Mama feed me with breastmilk

2.Daddy, Daddy give mum your support (2 times)

- When you give mum your support
- She will feed me with breastmilk
- I will grow to be the nation pride
- Daddy give mum your support



KEY MESSAGES

- Breastfeeding should begin within the first one hour of birth
- Colostrum protects baby from illness and helps remove the first dark stool
- Breastfeeding frequently helps the breastmilk ‘come in’ and ensures plenty of breastmilk.
- Even during very hot weather, breastmilk will satisfy the baby’s thirst.
- Good positioning and attachment ensure adequate suckling, enhance good supply of breastmilk and prevent sore and cracked nipples.
- People responsible for marketing breastmilk substitutes should not try to contact health workers, mothers or pregnant women or their families to promote their products
- Conditions needed to use Commercial Infant Formula are if replacement feeding is Acceptable, Feasible, Affordable, Sustainable and Safe (AFASS)

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Complementary Feeding



Session Overview



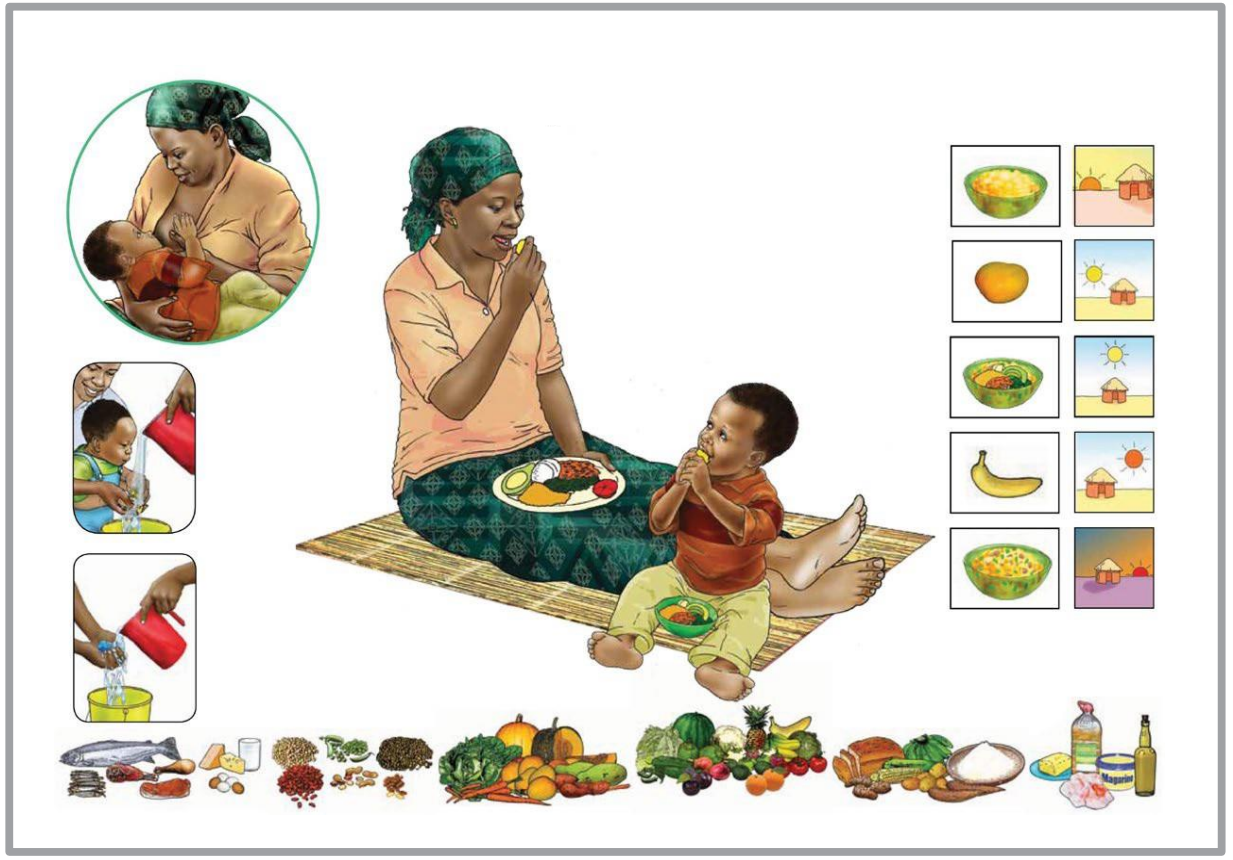
Optimal complementary feeding from 6 months of age until 2 years is of critical importance to a child's growth and development, when breastmilk is no longer sufficient to meet the nutritional needs of the child. Also, inadequate feeding predisposes young children of ages 2-5 years at risk of malnutrition.

The session will discuss Age-appropriateness, Frequency, Amount, Texture, Density, Variety, Active/responsive feeding, and Hygiene (AFATDVAH) of feeding practices.

What is Complementary Feeding

Complementary feeding means giving other foods in addition to breast milk.

The other foods are called complementary foods



Complementary Feeding Flyers



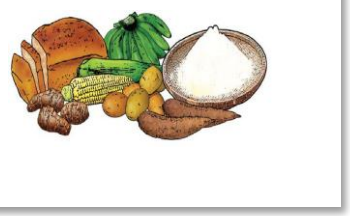
Principles of Complementary Feeding "AFATDVAH."



- **Age** of the Infant
- Feeding children more **Frequently** as they get older
- Increasing the **Amount** of food as children get older
- Increasing the **Thickness** of foods, feeding more solid foods.
- Increasing **Density** / mass
- Increase food **Variety** by adding foods from all food groups
- Feeding children **Actively** (slowly and patiently, making eye contact)
- Paying attention to **Hygiene**

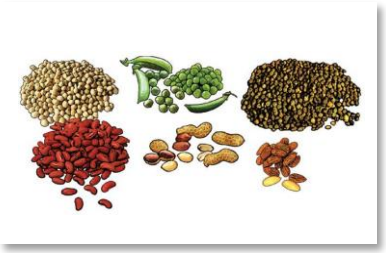
Planning a 5-Star Diet

Ranking Diets



Staples: Grains such as maize, wheat, rice millet, sorghum, roots and tubers such as cassava and potatoes

1 Star ★



Legumes/Nuts: such as beans, lentils, peas, groundnuts and seeds such as sesame

2 Star ★★



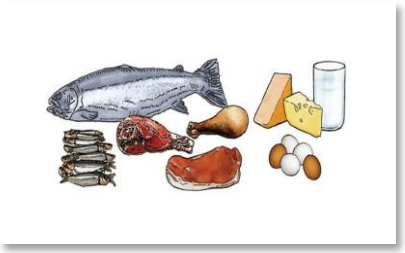
Vitamin A-rich fruits and vegetables: such as mango, papaya, passion fruit, oranges, dark-green leaves, carrots, yellow sweet potato, orange fleshed sweet potato and pumpkin

3 Star ★★★



Other fruits and vegetables such as banana, pineapple, avocado, watermelon, tomatoes, eggplant and cabbage

4 Star ★★★★



Animal-source foods including foods such as meat, chicken, fish, liver and eggs and dairy products

5 Star ★★★★★



Fats and Oil such as margarine, oil seeds, and butter improve the absorption of some vitamins and provide extra energy

Age Specific Complementary Feeding

Complementary feeding according to age

Age	Energy needed per day in addition to breast milk	Texture	Frequency	Amount to feed at each meal	Variety
6 – 8 months	200 kcal	Start with thick porridge and well-mashed soft fruits and vegetables. Continue with mashed family foods. Foods should be thick enough to be fed by hand or stay on a spoon.	2–3 meals per day plus 1–2 snacks if child has enough appetite	Start with 2–3 tablespoons per feed and increase gradually to 2/3 cup	Breastfeed as often as baby wants PLUS Meals should be made up of variety of food groups (5-star diet)
9 – 11 months	300 kcal	Finely chopped or mashed foods and foods that the infant can pick up.	3–4 meals per day plus 1–2 snacks if child has enough appetite	Increase gradually to ¾ cup	
12 – 24 months	550 kcal	Family foods, chopped or mashed if necessary	3–4 meals per day plus 1–2 snacks if child has enough appetite	1 cup	

KEY MESSAGES

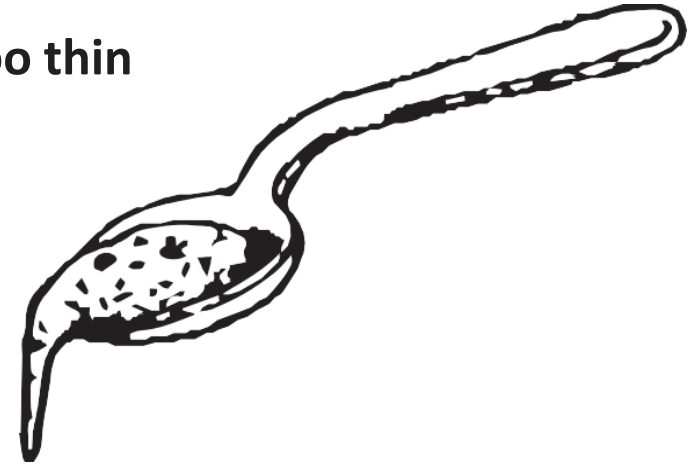
A child should eat at least five food groups (including breastmilk) from the following identified eight groups of food at every meal for optimal growth and development.

1. Breastmilk (compulsory)
2. Grains, roots, and tubers
3. Legumes and nuts
4. Flesh foods
5. Eggs
6. Dairy products
7. Vitamin A-rich fruit and vegetables
8. Other fruits and vegetables

Just Right



Too thin



Foods that are thick enough to stay on the spoon give more energy to the child.

Module Overview of Nutrition in Primary Health Care

Components

8.1	Definition of Food and Nutrition
8.2	Nutrition Counselling
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8.4	Complementary Feeding
8.5	**Food Demonstration**
8.6	Prevention and Control of Micronutrient Deficiencies
8.7	Nutrition Assessment, Growth Monitoring and Promotion
8.8	Integrated Management of Acute Malnutrition
8.9	Data Tools

Food Demonstration



Session Overview

- **Food Demonstration** is a platform where participants are thought how to prepare nutritious food while observing the necessary sanitation and hygiene rules
- Giving nutrition education to a target group through cooking and sharing nutritional tips as the demonstration is conducted

Purpose of Food Demonstration

- To discuss different available foods and how they can be used
- To show healthy cooking tips
- To convey key messages on complementary feeding and maternal nutrition
- To teach how to prepare nutritious, accessible and affordable meals in a hygienic way
- To provide clients the opportunity to cook and taste meals together
- To help mothers understand their children's acceptability of the meals cooked during the sessions

Learning Objectives

At the end of this session, Participants will be able to;

1. Define what is Food Demonstration
2. Know the target group for food demonstration at the health facility
3. Know how to conduct food demonstration
4. Explain how to prepare nutritious meal

Target Groups for Food Demonstration



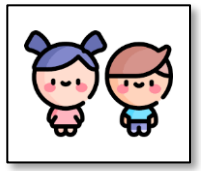
Pregnant women



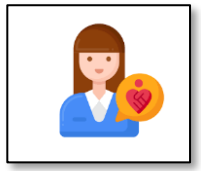
Breastfeeding mothers



Adolescent Girls and Adolescent mothers



Children (aged 6 – 8 months,9 – 11 months & 12 – 24 months)



Caregivers and community volunteers

Planning for Food Demonstration



- Food demonstration should be conducted weekly or monthly
- Determine the date of the food demonstration and remind members
- Engage community mobilizers for support, WDCs for contribution of different locally available food items or use the budgeted funds
- Identify and ensure that all the required ingredients and materials are in place
- Ensure that the required cooking utensils and materials are readily available
- Use appropriate recipes for different target groups
- Perishable items should be purchased a day before or on the day of the demonstration
- All food and supplies must be stored and displayed on a table at least 18 inches off the ground

Conducting Food Demonstration

Dress Appropriately



- Hair should be kept clean and covered
- Ensure nails are short and clean
- Do not apply nail polish/ nail dyes or artificial nails
- Avoid wearing rings, earrings and bangles
- Wear flat shoes

Prepare Before the Food Demonstration



- Arrive early and ensure things are in place
- Sweep demonstration site
- Ensure there is water for cooking, drinking and washing
- Set up the cooking station and preparation area
- Arrange the mats/chairs in a way that you will be seen by all
- Place recipe card on the table

Do Not Conduct Food Demonstration If you are unwell/sick, have a sore on your mouth, hands, fingers or legs

Conducting Food Demonstration

Welcome participants



- Food items should be displayed on a table and stored in appropriate containers
- All display wares should be stored in transparent containers with transparent lids.
- Two water points should be set up on either side of the display table for the demonstrator
- The water point closest to her is for cooking and must be in a container with a lid
- The other water point is for washing dishes

- Two drinking water points should be available on either side of the target groups
- Use about 5 minutes to explain key messages on complementary feeding & maternal nutrition
- Speak audibly and always make eye contact with the participants
- Demonstrate hand washing, explaining the benefits
- Allow them to see what you are doing

Conducting Food Demonstration

Explain each step of the recipe in detail



- Sharing tasks in the food preparation
- Have the participants taste the food
- Participants should bring their spoons, plates, and cups
- Serve a portion size appropriate to the age of the children and/or pregnant women

Ask for feedback



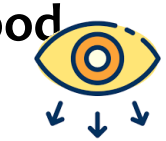
- Encourage them to prepare the recipe at home.
- Record the number of participants.
- Thank them for attending and fix the next meeting

Timing of the session



- The total timing for the food demonstration session should be approximately 2 hours

Supervision of food demonstration



- Quarterly supportive supervision is necessary to ensure standard and quality of food demonstration

Cooking of Vegetable Soup for a Pregnant Woman

Vegetable Soup is a soup predominantly prepared with plenty of leafy vegetables

- Widely eaten by many cultural and ethnic groups
- Well-absorbed, nutrient-dense and not energy-dense (should be eaten with rice/ tuwo/ eba/ amala)
- Has high satiety effect
- Sanitation and food safety measures must be emphasized
- Practice good personal and environmental hygiene with the aim of preventing spread of food borne illness
- Adequate weight gain is needed to ensure optimal foetal outcome
- Rapid weight loss or gains are not desirable during pregnancy



List of Ingredients



- Beef /Fish/Chicken
- Cray fish
- Stock fish (optional)
- Ugu leaves
- Water leaf
- Ukazi leaves (Optional)
- Periwinkles
- Pepper
- Salt
- Bouillon cube/dawadawa/iru/
- Red Oil

Preparation of Vegetable Soup



- Put clean pot on fire.
- Add water as desired
- Season beef, chicken, stock fish and fish appropriately and allow to soften
- Add oil, allow to boil in the stock, crayfish and other ingredients for about 15 minutes.
- Pluck, wash (with salt) and cut ugu leaves, water leaves or other green leafy vegetables separately.
- Add all the cut vegetables into the boiling stock.
- Allow to seamer for about 5 minutes.
- Ready to be served with rice/eba/tuwo/amala/pounded yam

Sample of a Cyclic Menu

Days	Breakfast	Lunch	Dinner
Monday	Mixed vegetable sardine sandwich (4 slice bread) spice Tea	Beef, vegetable soup, Eba/Amala/Semovita/ Pounded yam	Grilled Fish, Mixed Vegetable, Potato, Porridges
Tuesday	Moi Moi Pap or Quaker Oats	Meat, Miyan kuka Soup Tuwo Shinkafa, Meat, Jollof Rice, Suated Mixed Vegetable	Spiced Chicken Pepper Soup Boiled Yam Fruit in Season
Wednesday	Boiled Yam Egg Stew Mixed Vegetable	Meat/Fish Egusi Soup Foofoo	Okpa (Bambara Nut Pudding) Cereal of Choice
Thursday	Fresh Fish Pepper Soup Boiled Potato Agidi	Mixed Meat Bitter Leaf Soup Foofoo Fruit in Season	Grilled fish/Chicken rice Banana

Sample of a Cyclic Menu CONTD..

Days	Breakfast	Lunch	Dinner
Friday	Akara balls Pap or Quarter Oat	Dried Fish Mixed Vegetable Plantain Pottage (2 Fingers)	Fresh Fish Nsala Soup Agidi or Foofoo
Saturday	Mixed vegetables Omelet Boiled Plantain Tea or Pap	Fish Bean/Yam Porridge Cucumber	Grilled Beef Mixed Vegetable Spaghetti Porridge (Carrot, Cabbage, Green Beans and Green Pepper
Sunday	Bread Burger Spiced Pea (Ginger	Chicken Boiled Rice Stew Coleslaw	Fish/Meat Okoro Soup Agidi or Foofoo

- Fruits can be taken 2 times/day
- Swallow depends on region. It could be garri/foofoo/tuwon shikafa/tuwon masara/ amala
- These are interchangeable (potatoes/yam/plantain/)
- Egg should be one minimum, chicken/beef/fish – (90g cooked weight)
- Food should be served hot

KEY MESSAGES

To retain nutrients:

- Wash leafy vegetables before cutting
- Cook leafy vegetables for about 5 minutes or less
- Avoid using alkali (potash or kanwu) in cooking green leafy vegetables and legumes
- Bake, steam, roast, or boil foods rather than frying them
- Boil or steam food in its jacket (skin)
- Chill the water used in cooking meat then remove fat from the water
- Do not bleach palm oil
- Do not recycle oil, discard oil after frying to avoid intake of unhealthy trans fatty acids



Module Overview of Nutrition in Primary Health Care

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Learning Objectives

At the end of this session, Participants will be able to;

1. Identify micronutrient deficiencies
2. Identify appropriate supplement to prevent deficiencies
3. Explain the difference between IFA and MMS
4. Understand how to use Micronutrient Powders/SQ-LNS

Session Overview

The following content will be discussed in this session:

Provide participants with the knowledge, skills, and tools to effectively communicate to caregivers the importance of preventing micronutrient deficiencies, and use of Vitamin A MNP/SQ-LNS in the context of recommended MIYCN protocols

Provide information on Iron Folic Acid (IFA) and Multiple Micronutrient Powder (MMS)

Images of Micronutrient Deficiencies



Goiter
Iodine deficiency



Blindness
Vitamin A deficiency



Rickets
Vitamin D deficiency

IFAS Versus MMS

- Daily consumption of IFA or MMS prevents anaemia during pregnancy, protects the fetus and improve neonatal health
- In MMS, micronutrients are combined in one tablet, while IFA is a combination of two separate tablets
- IFAS: Iron and Folic Acid Supplementation Contains 30-60mg of iron and 400mcg of folic acid
- MMS: Multiple Micronutrient Supplementation
- Provides 13-15 micronutrients (minerals and vitamins), including iron and folic acid.
- MMS is different from MNP (micronutrient powders used for children)

IFA: Iron and Folic Acid



MMS: Multiple Micronutrient Supplementation

Different Brands of MMS



Micronutrient Powders (MNP) For Well Children 6 - 59 Months

1. Single-serving sachets containing a powdered mixture of 15 vitamins and minerals
2. Caregivers mix the MNP into their child's meal to provide their children with all the micronutrients essential for good health
3. In Nigeria, MNP is called Children's Vita-Min Powder or Sinadarin Bitamin Don Yara in Hausa

Micronutrients	Amount
Vitamin A	400 µg RE
Vitamin C	30 mg
Vitamin D	5.0 µg
Vitamin E	5 mg a-TE
Vitamin B1	0.5 mg
Vitamin B2	0.5 mg
Vitamin B6	0.5 mg
Vitamin B12	0.9 µg
Folic Acid	150 µg
Niacin	6 mg
Iron	10 mg
Zinc	4.1 mg
Copper	0.56 mg
Iodine	90 µg
Selenium	17.0 µg

Iron is an Important Mineral in Preventing Anaemia



- Makes food more nutritious
- Makes your child strong and active
- Helps prevent illness
- Improves your child's appetite
- Prevents shortage of blood (anaemia)

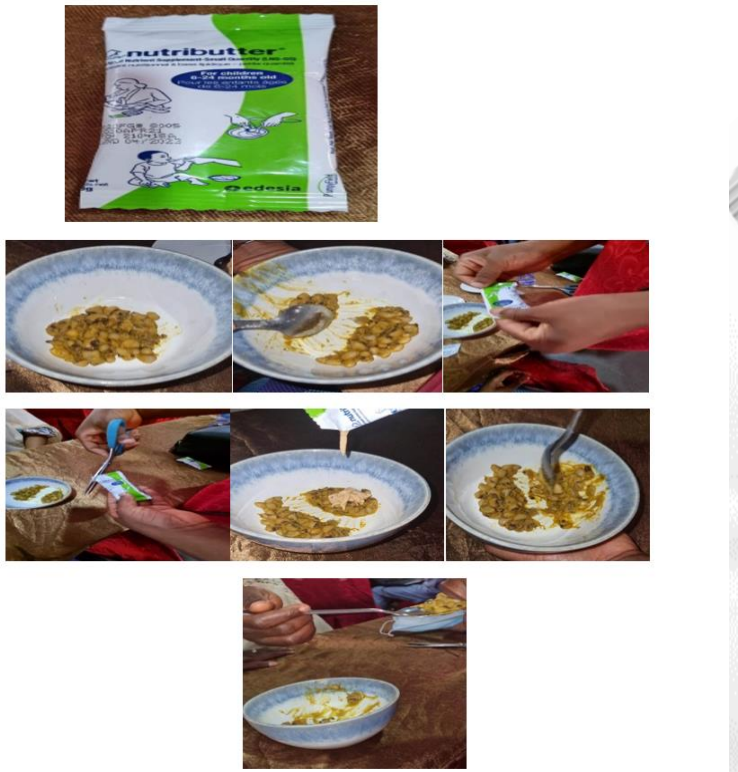


How to Use MNP



1. Wash hands with soap and clean running water before preparing food for the child.
2. Prepare soft or mashed food. Do not mix Children's Vitamin Powder with hot foods, liquids or liquid foods.
3. Pour and mix the entire sachet of Children's Vitamin Powder into a small portion of your child's meal.
4. Wash your hands and the child's hands with soap and clean running water before feeding the child
5. First feed the small portion with Children's Vitamin Powder to the child immediately and continue to feed the child the rest of the meal.

Small Quantity Lipid-Based Nutrient Supplement (SQ-LNS) For Children 6 – 23 Months





- Common commercial names for SQ-LNS include “Nutributter” and “Enov’Mum.”
- Consumed by mixing with other foods. One package contains one daily dose of 20g.
- A fortified lipid-based paste that is intended to complement the diet of children aged 6-23 months with essential nutrients.
- SQ-LNS combination of macro- and micro-nutrients prevents undernutrition, micronutrient deficiencies and stunting.
- NOT a breast-milk replacer but complementary to breastmilk and complementary foods.

Home Fortification of Complementary Foods with SQ-LNS

- Daily single serving sachet of 20g used to fortify a young child's food.
- Wash hands with soap and clean water
- Prepare cooked food–thick porridge, potato, and any soft, semi-solid, or solid food.
- Make sure that the food is at ready-to-eat temperature (**Do NOT add the SQ-LNS to very hot food)**
- **Do NOT add the SQ-LNS to any liquids** (water, tea or watery pap): in cold liquids it will lump and will not mix but float on top.
- Separate a small portion of the soft, semi-solid or solid cooked food within the child's bowl.
- Knead the unopened sachet to ensure that the mixture mixes well before opening the sachet.
- Pour the contents into the separated small portion of food.
- Mix the small portion of food containing the SQ-LNS very well so that the child eats all of the added SQ-LNS portion at first
- Feed the child the rest of the food.
- The food should be consumed immediately after mixing with the SQ-LNS.
- Do not give SQ-LNS and MNP to the same child when the two are available

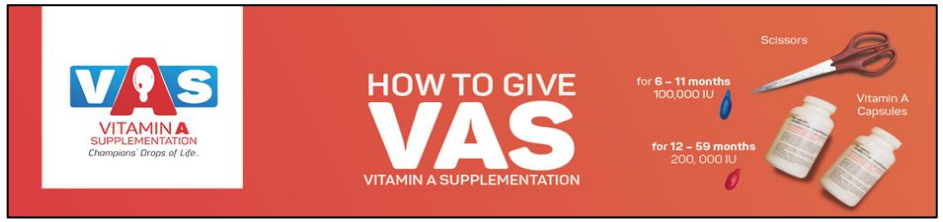
Vitamin A Supplementation



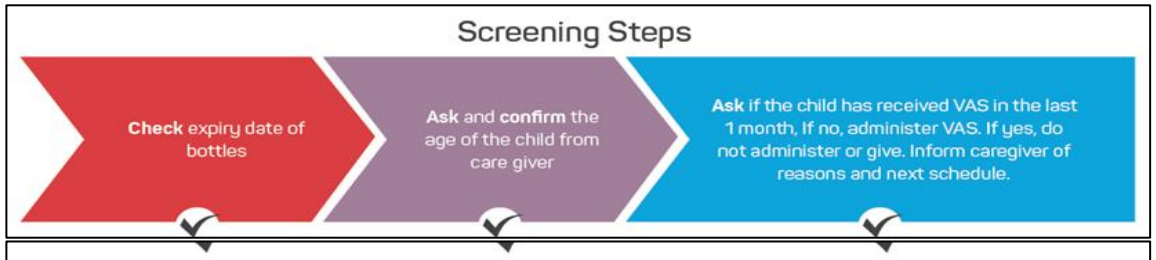
- Supports healthy immune system
- Protects eyes and eyesight
- Reduces new cases or incidence of diarrhoea and measles and prevents anaemia
- Promotes physical growth
- Infants 6 to 11 months of age should receive one 100,000 IU dose of Vitamin A twice a year
- Children 12 to 59 months of age should receive one 200,000 IU dose of Vitamin A twice a year

Pictorial Example of Vitamin A Administration

A



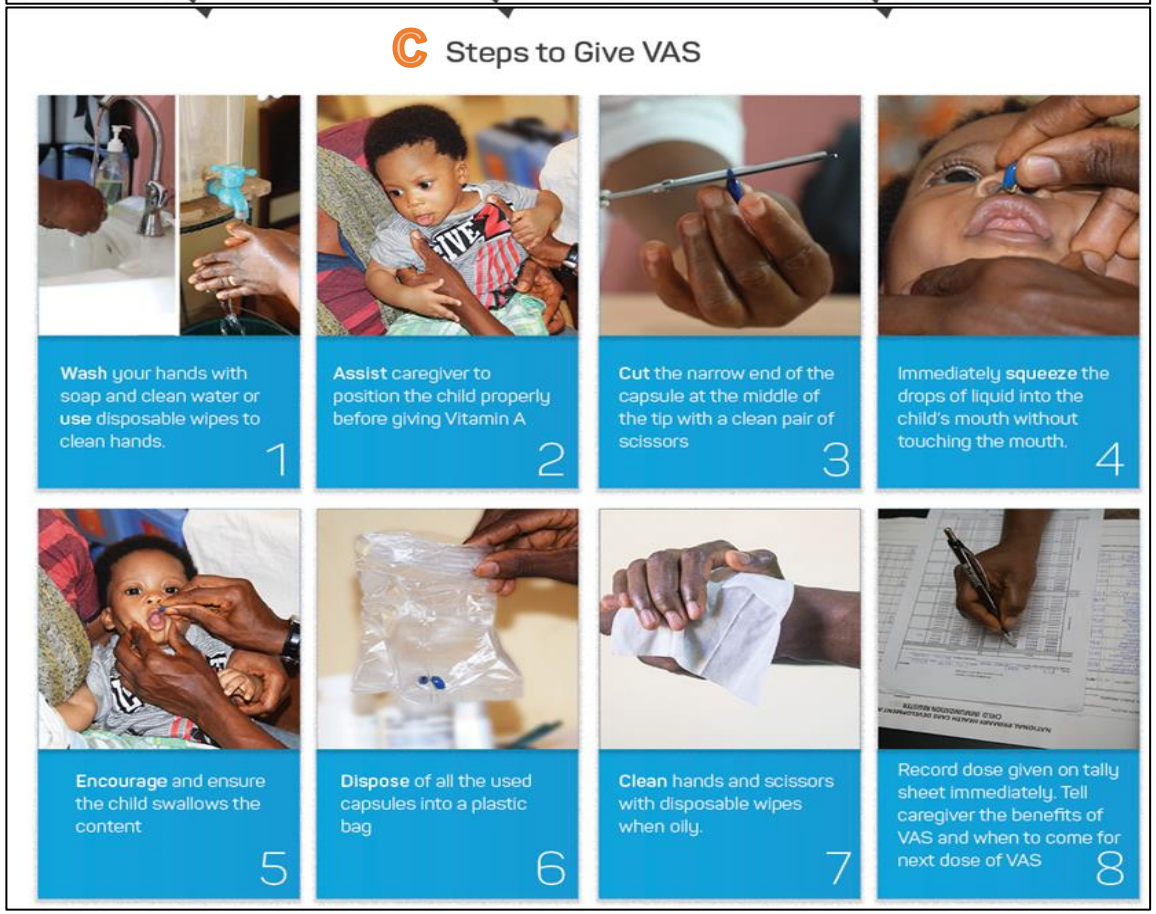
B



Materials Needed for Vitamin A Supplementation

- Vitamin A capsules
- Manpower
- Training materials
- SBCC materials
- Scissors
- Disposable wipes
- Plastic bags
- Child health cards
- Nutrition/GMP registers
- Tally sheets
- Pens, note pads
- Referral forms

C



KEY MESSAGES

- Daily consumption of IFA or MMS prevents anaemia during pregnancy, protects the fetus and improve neonatal heath
- In MMS, micronutrients are combined in one tablet, while IFA is a combination of two separate tablets.
- Do **NOT** add Children's Vita-Min Powder to liquids (e.g. water, tea, milk)
- Do **NOT** add Children's Vita-Min Powder to hot food
- Do **NOT** split the contents of 1 sachet over several meals
- Do **NOT** share food with Children's Vita-Min Powder
- Children's Vita-Min Powder improves appetite, prevents shortage of blood (anaemia) and prevents illnesses in children 6 – 59 months
- SQ-LNS can reduce the prevalence of stunting, severe wasting and micronutrient deficiencies in children 6 – 23 months
- Every eligible child 6 – 59 months should be given Vitamin A capsule every 6 months for improved immunity and eyesight

Module Overview of Nutrition in Primary Health Care

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Session Overview



This Session highlights different types of Nutrition assessments and practical demonstrations.

- Growth Monitoring and Promotion (GMP) are preventive activities comprised of growth monitoring (GM) linked with promotion that serves as the core activity in an integrated child health and nutrition programme.
- GMP is a MONTHLY measurement of a child's weight in relation to age in months and plotted on a chart to document growth.
- It can detect early changes in a child's growth

Other indicators include:

- Stunting (too short for age)
- Wasting (too thin for height)
- Under weight (too thin for age, combination of stunting and wasting)
- Obesity (too big for height)
- Micronutrient deficiencies

Learning Objectives

At the end of this session, Participants will be able to;

1. Measure, plot and interpret the growth chart
2. Know how to measure MUAC and interpret the result including BMI for Adults
3. Measure length and height of children and interpret the result
4. Counsel mothers and caregivers

How to Measure and Interpret Weight of a Child

- Step 1: Determine the correct age of the child
- Step 2: Accurately weigh the child
- Step 3: Plot the weight against the age accurately on a growth chart of appropriate gender
- Step 4: Interpret the direction of the growth curve, recognizing if the child is growing well or not growing well
- Step 5: Discuss the child's growth and follow-up action needed, with the caregiver

Direction of Child's Growth Curve



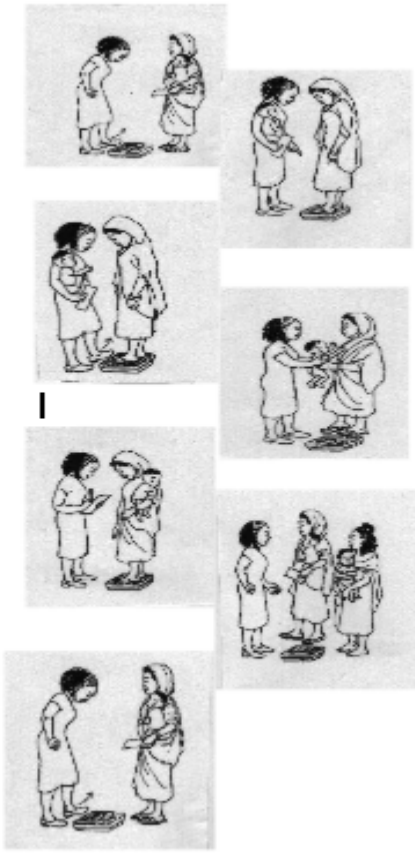
An upward growth curve (Good) showing adequate weight gain for the age of the child, indicates that the child is growing well and healthy.

A flat growth curve (Dangerous) indicates child has not gained weight and requires attention.

A downward growth curve (Very Dangerous) indicates loss of weight and requires immediate attention.

Weighing Children Held By Their Mothers

Weighing children who are held by their mothers



1. Turn on the scale. Move your foot across switch window.
2. Ask the mother to step on the scale by herself. She can give her child to you or another person to hold.

   Make sure her feet or clothes do not cover the switch window. You will see the mother's weight in the display, for example:

   58.3
3. With the mother on the scale pass your foot slowly across the switch window. Then wait a couple seconds.

   00.0
4. Ask the mother to step off the scale. You should see:

   --.-
5. Ask the mother to step back on the scale with her child. You should see the child's weight.

   5.4
6. Ask the mother to step off the scale. You should see:

   --.-
7. Pass your foot across the switch window to reset the scale before weighing the next other. You should see:

   0.0

SECA Scale 876

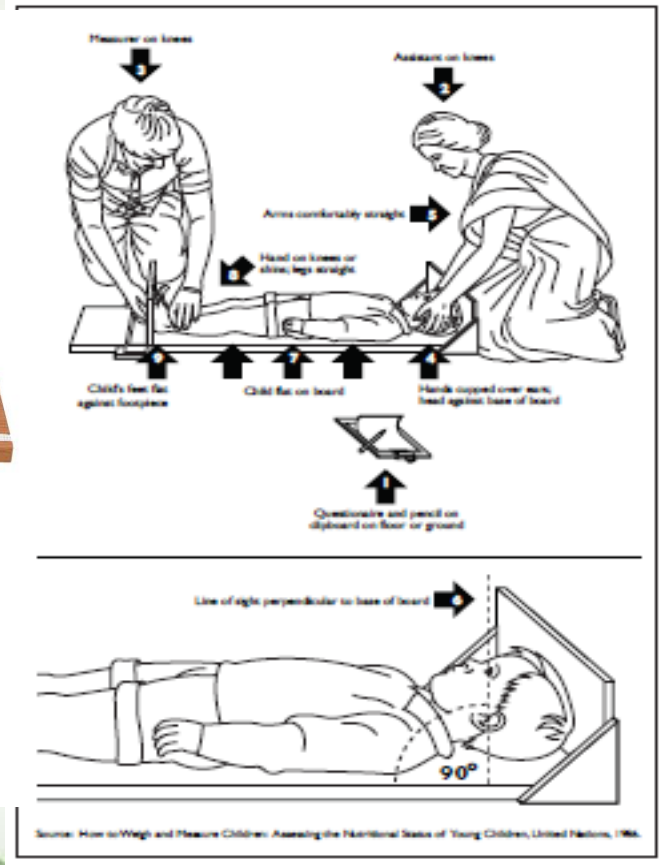


Measuring a Child's Length

For children less than 2 years old, the measuring board is placed on the ground.

- You will need two people to take a good measurement. If there is no assistant, the mother may help by holding the head straight.
- The child is placed lying down along the middle of the board and the shoes are removed.
- The assistant holds the sides of the child's head and positions the head until it firmly touches the fixed headboard with the hair compressed.
- The measurer places her hands on the child's legs, gently stretches the child and then keeps one hand on the thighs to prevent the child bending the leg.
- While positioning the child's legs, the sliding footplate is pushed firmly against the bottom of the child's feet.
- To read the length measurement, the footplate must be perpendicular to the axis of the board and vertical.
- The length is read to the nearest 0.1 cm.
- If a child less than 2 years old will not lie down for measurement of length, measure standing height and add 0.7 to convert to length



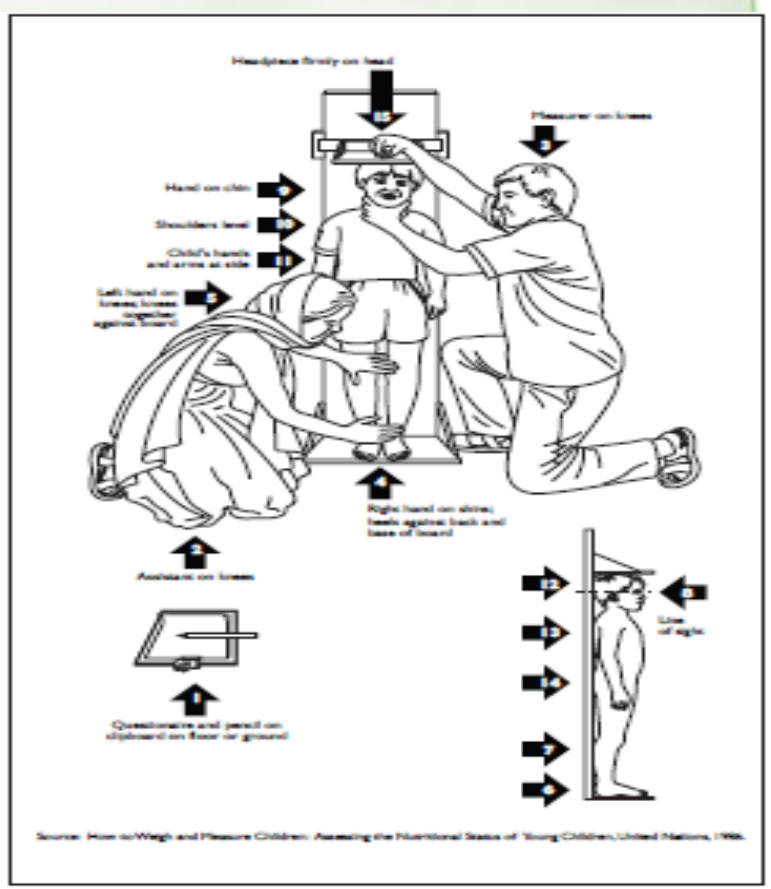


Measuring a Child's Height

For children aged 2 years or older the measuring board is fixed upright on level ground.

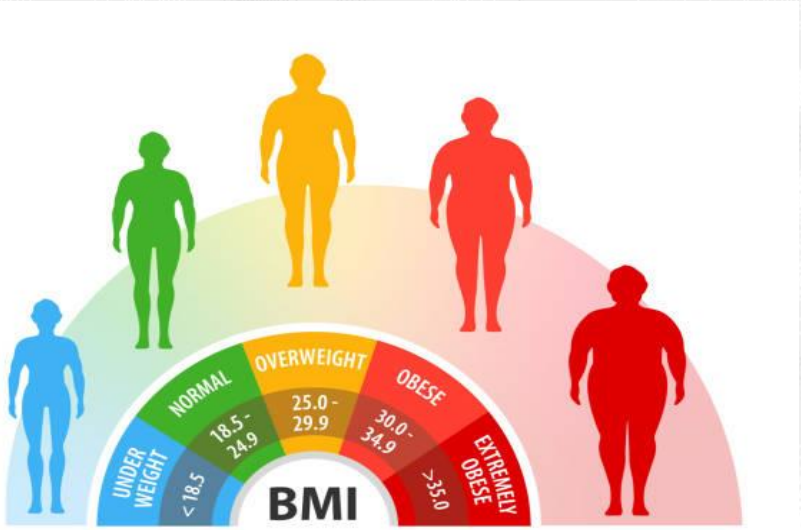
- The child stands, upright against the middle of the measuring board.
- The assistant holds the child's head, shoulders, buttocks, knees, and heels against the board removing the child's shoes.
- The measurer positions the head and the cursor.
- The height is read to the nearest 0.1 cm.
- The measurement is recorded immediately.
- If a child aged 2 years or older cannot stand, measure recumbent length and subtract 0.7cm to convert to height.





Body Mass Index (BMI) For Non Pregnant Adult

- BMI is body mass divided by the square of the body height, and expressed in units of kg/m^2.
- BMI = Weight in kilograms / height in meters squared
- Identifies body fat and the need to adjust food and health routine before they become risky.
- Factors such as body fat, fluid retention, visceral fat in the waist, cholesterol levels, blood sugar levels, bone density, and muscle mass play a role in people's BMI.



Measuring MUAC for Pregnant Women

- MUAC is a marker to assess nutritional status of pregnant women
- MUAC is a faster and quicker screening tool
- MUAC tracks risk and provide timely intervention to avoid adverse pregnancy outcomes
- MUAC has advantage over BMI due to simplicity of application
- MUAC does not require calculation
- MUAC is independent of pre pregnancy weight recall
- MUAC can be used reliably as an indicator and alternative to BMI
- There is strong positive correlation between MUAC and BMI
- Cut offs for Undernutrition: MUAC 22.9cm, BMI <18.5
- Cut offs for Obesity: MUAC 30.57cm, BMI >30

Colour Coding	Measurement	Indicator
Red	< 21.0 cm	Severe Acute Malnutrition
Yellow	21.5 - 22.9 cm	Moderate Acute Malnutrition
Green	≥ 23.0 cm	No Acute Malnutrition

KEY MESSAGES

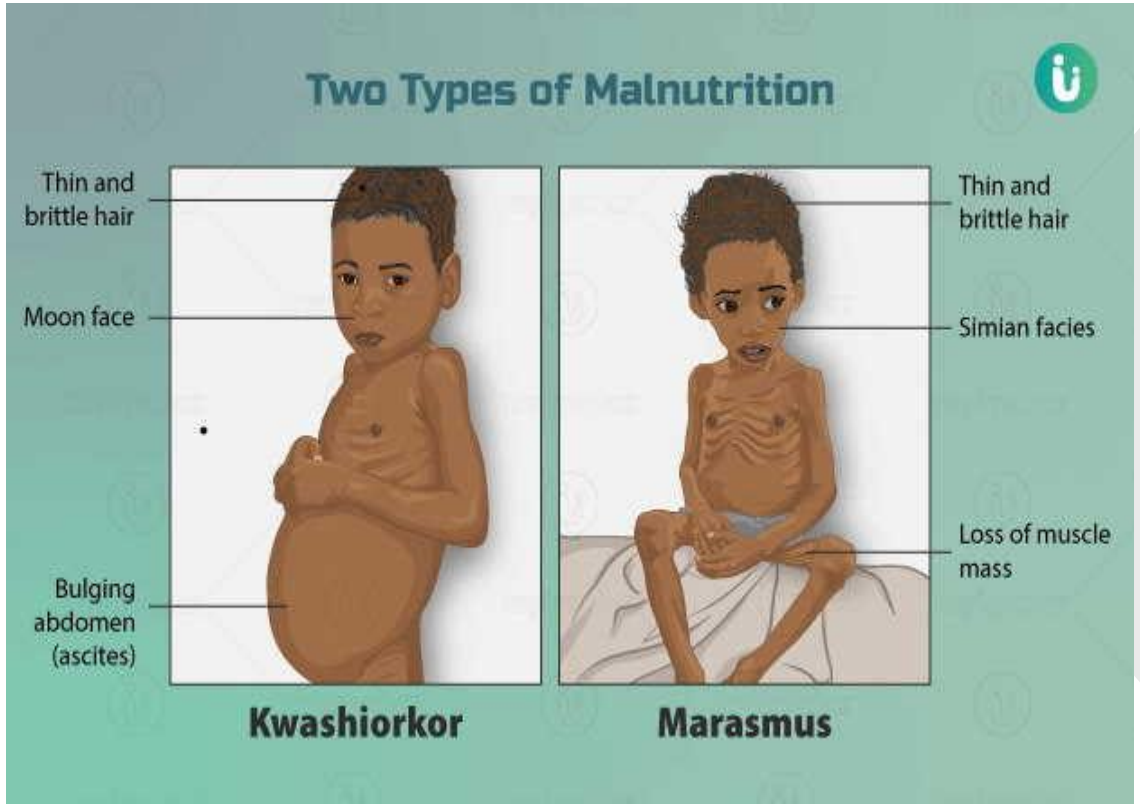
- The first sign that a baby is not growing well is growth failure
- It is important to monitor growth to ensure that a baby is growing well.
- Nutrition assessment should be conducted on every ANC visit, every child welfare clinic and monthly GMP sessions
- Optimal child growth occurs only with adequate food, caring, nurturing, social environment and absence of illness
- When a small baby gains weight, grows in height, begins to roll over, sit up and walk, the child is said to be developing and growing and well
- BMI identifies body fat and the need to adjust food and health routine before they become risky
- The higher your BMI, the higher your body fat

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Session Overview



Malnutrition is a state resulting from a deficiency of energy and/or excess of one or more essential nutrients.

Malnutrition is of two types, under-nutrition and over-nutrition.

Malnutrition contributes directly and indirectly to a great part of the illness (morbidity) and death (mortality) of infants

This Session will concentrate on under-nutrition, causes and treatment.

Learning Objectives

At the end of this session, Participants will be able to;

1. Define what is malnutrition
2. Explain the concept of IMAM
3. Know how to identify and classify children with acute malnutrition
4. Understand the treatment regime for acute malnutrition

Brainstorming

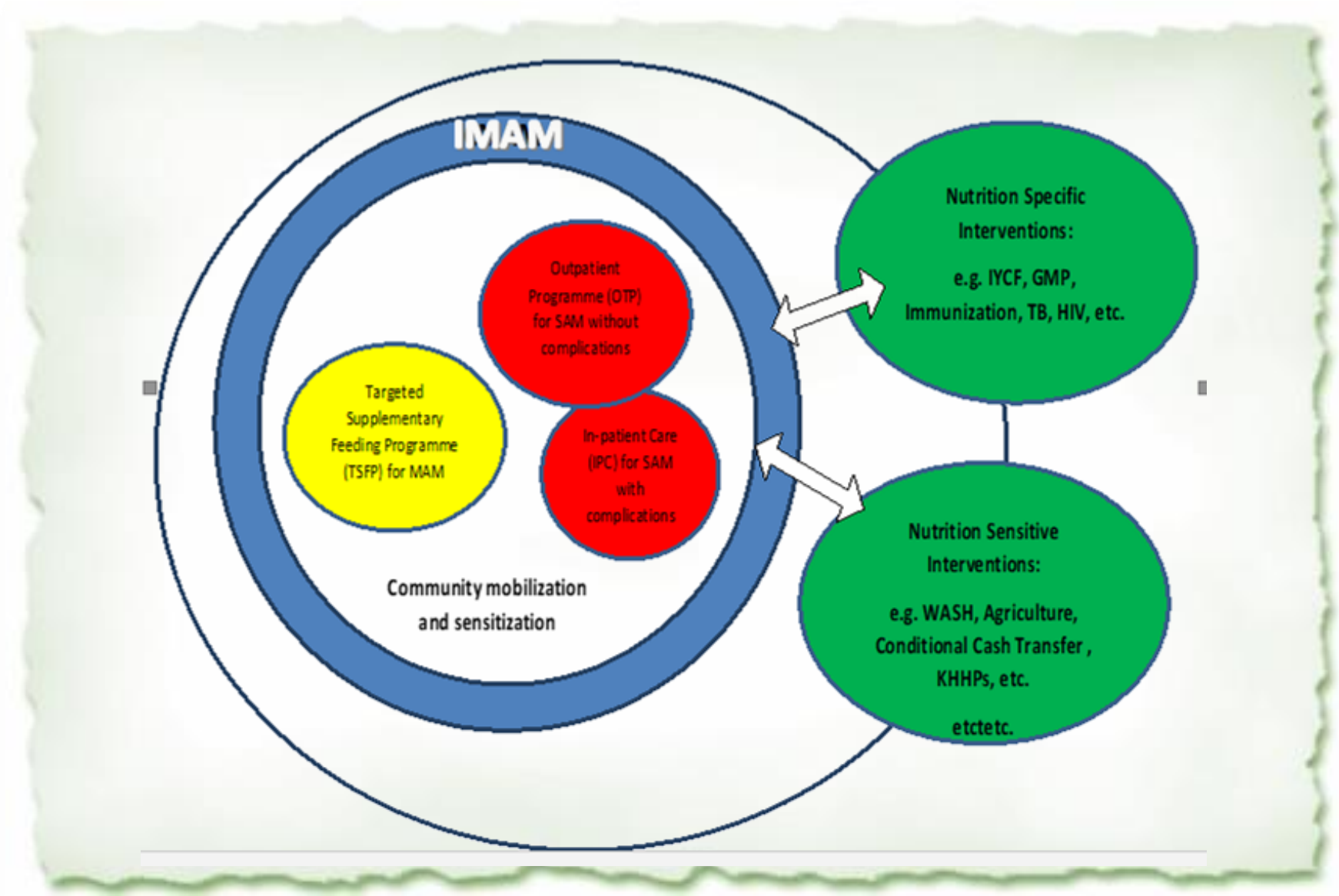
- Before Now, how many malnourished children do you see in your Health facility? Weekly/Monthly/Quarterly
- What did you do to treat them?
- How long did it take you to manage such children?

What is IMAM



- An integrated approach for controlling acute malnutrition
- Children 6-59 months with no medical complications are managed as outpatients at accessible and decentralised sites
  - Infants under 6 months and children 6-59 months with medical complications are treated as inpatients
  - Community outreach for community involvement and early detection and referral of SAM/MAM cases
- Preventive and promotive services against undernutrition among the vulnerable groups children 6 to 59 months.
- Nigeria has updated the CMAM Guidelines as '**Integrated Management of Acute Malnutrition (IMAM)'**

Core Components of IMAM



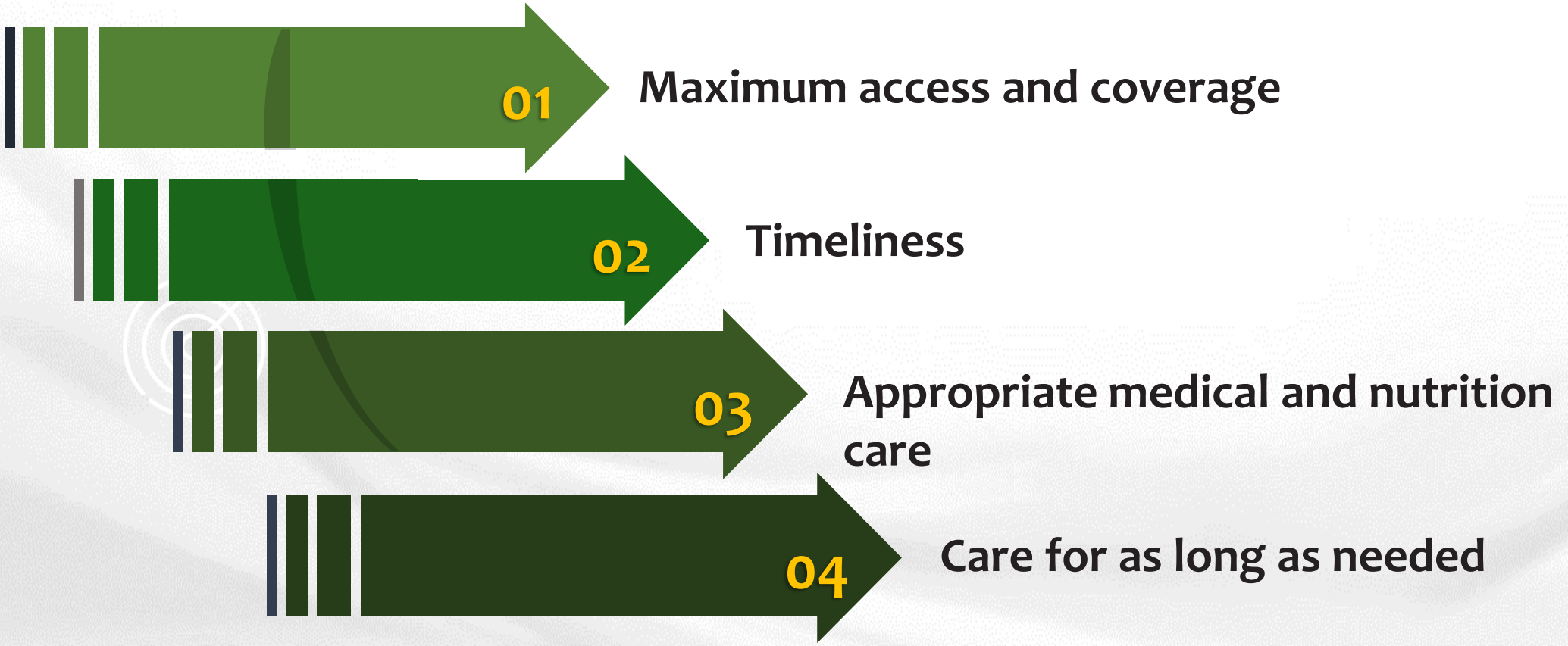
Core Components (1/2)

Component	Description
Community Mobilisation	▪ Community assessment ▪ Community participation and Ownership ▪ Community outreach workers - Early identification and referral of children with AM before the onset of serious complications using MUAC screening & assessment of Bilateral Pitting Oedema; Follow-up home visits for problem cases ▪ Community outreach to increase access and coverage
Outpatient care for children with SAM without medical complications at decentralised health centres and home	▪ Initial medical and anthropometry assessment with the start of medical treatment and nutrition rehabilitation on RUTF ▪ Continued nutrition rehabilitation with RUTF at home ▪ 90% of SAM cases can be treated in OTP facilities, if treatment protocols are adhered to
Inpatient Care (IPC) for children with SAM/MAM with medical complications or no appetite	▪ Child treated in IPC receive special therapeutic milks and RUTF to "stabilize" the abnormal nutritional and physiological status ▪ Child resumes outpatient care in OTP when complications are resolved

Core Components (2/2)

Component	Description
Targeted Supplementary Feeding Programme (TSFP) delivers both treatment and prevention for children 6 to 59 months with MAM	▪ Nutritional treatment uses specialised nutritious foods such as Ready-to-Use Supplementary Food
(RUSF) or fortified blended foods- Small Quantity Lipid Based Nutrient Supplements(SQ-LNS)	▪ If no TSFP, MAM cases receive nutritional counselling (MIYCN, MNDC) and verification of vaccination status with treatment of underlying infections; ▪ Blanket Supplementary Feeding Programme (BSFP) is for other vulnerable groups like Pregnant and Lactating Women in Emergency settings, and persons with chronic medical conditions. ▪ IMAM is an additional entry point to other nutrition-specific & nutrition-sensitive interventions ensuring opportunities for improved uptake of Key Household services (KHHPs) such as WASH, ITN. etc.

Principles of IMAM



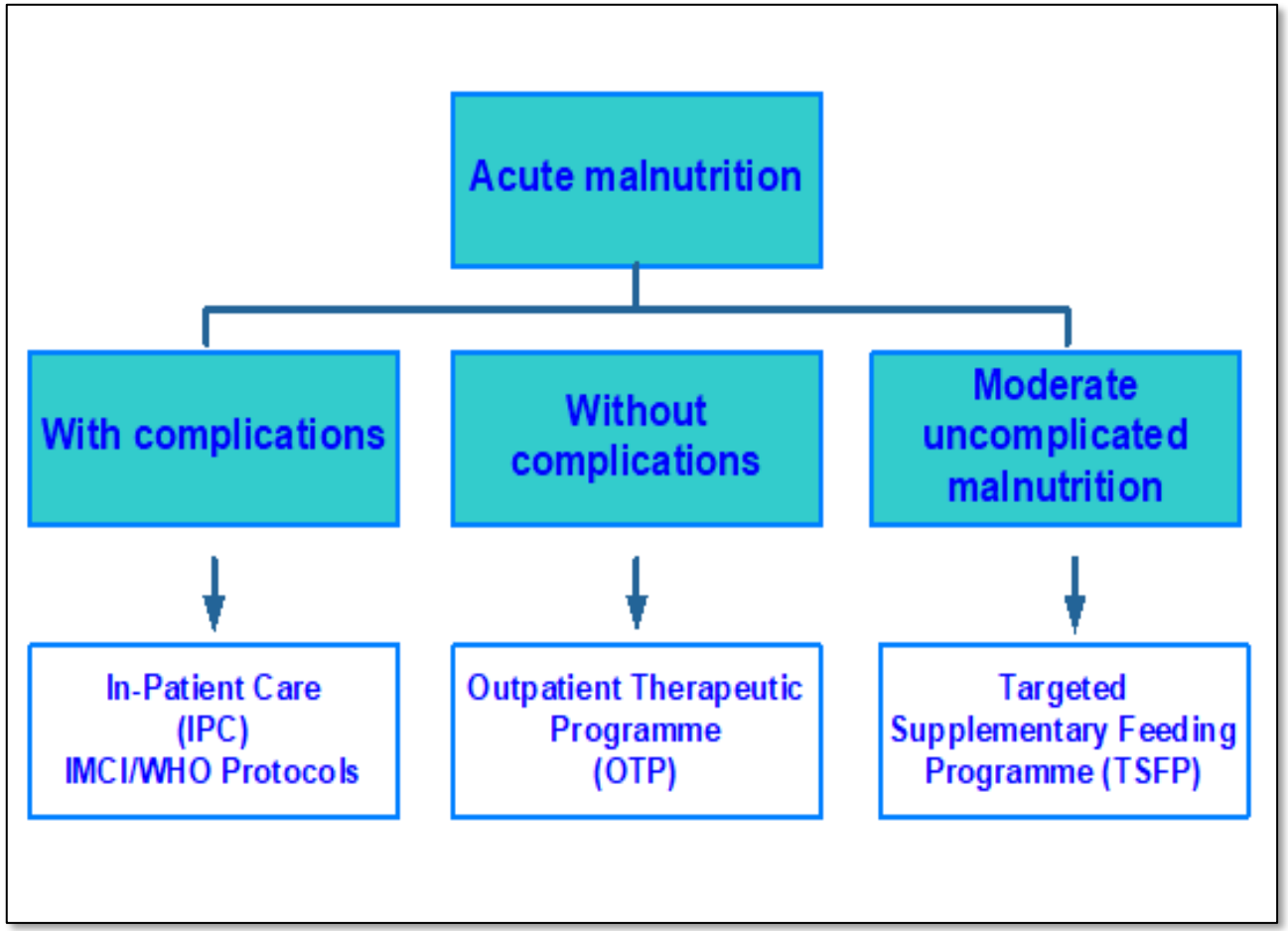
Following these steps ensure maximum public health impact





- Find children before SAM becomes serious and medical complications arise
- Good community outreach is essential
- Screening and referral by outreach workers like CHEWs and other community Volunteers

Classification of Acute Malnutrition



Complications

Complications: anorexia or no appetite, vomiting, convulsions, lethargy or not alert, unconsciousness, lower respiratory tract infection, high fever, severe dehydration, severe anaemia, hypoglycemia (low blood sugar), or hypothermia (low body temp, <35oC)

**Children with MAM and medical complications are not admitted to supplementary feeding but are referred to pediatric ward for treatment of medical complications

Types and Classification of Acute Malnutrition

	Severe Acute Malnutrition	Moderate Acute Malnutrition
1	Presence of bilateral pitting oedema	Mid-Upper Arm Circumference (MUAC) of 11.5-12.4 cm
2	Mid-Upper Arm Circumference (MUAC) of < 11.5 cm	Weight-for-Height (WFH) or Weight-for-Length (WFL) of ≥ -3 to < -2 z-scores
3	Weight-for-Height (WFH) or Weight-for-Length (WFL) of < -3 z-score	No oedema of nutritional origin

Two Types of Severe Acute Malnutrition

Wasting



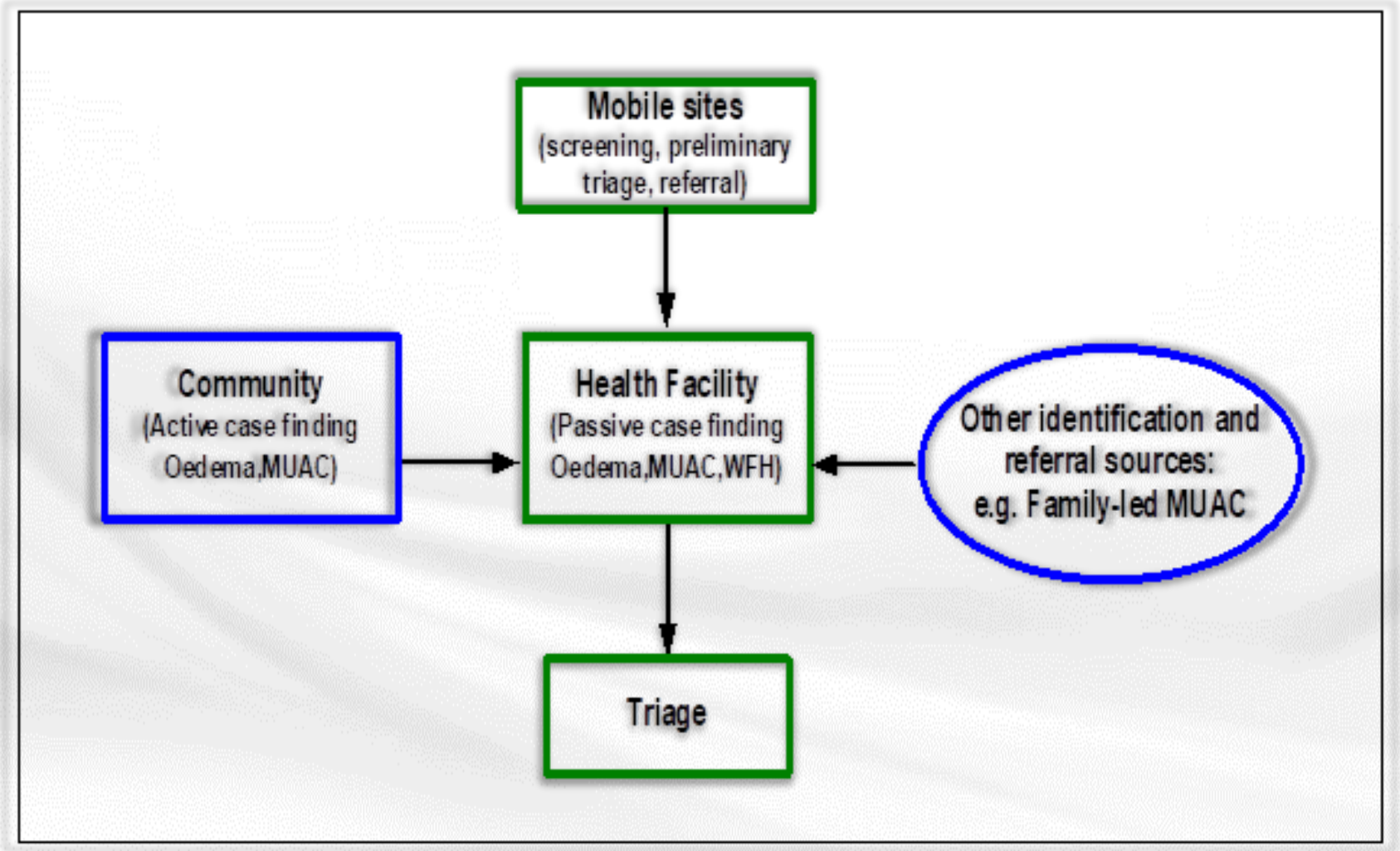
Loss of muscle and fat mass, resulting in low MUAC and/or low WFH. Emaciated with thin, flaccid skin and prominent scapulae, spine and ribs. Infections and behavioural changes (apathy and irritability).

Oedema

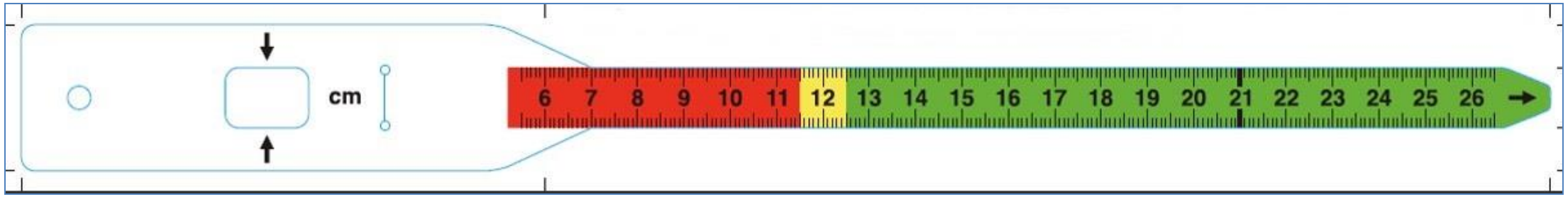


Accumulation of fluid in the body which causes the affected tissue to become swollen

Flow Chart for Identification of Children with Acute Malnutrition



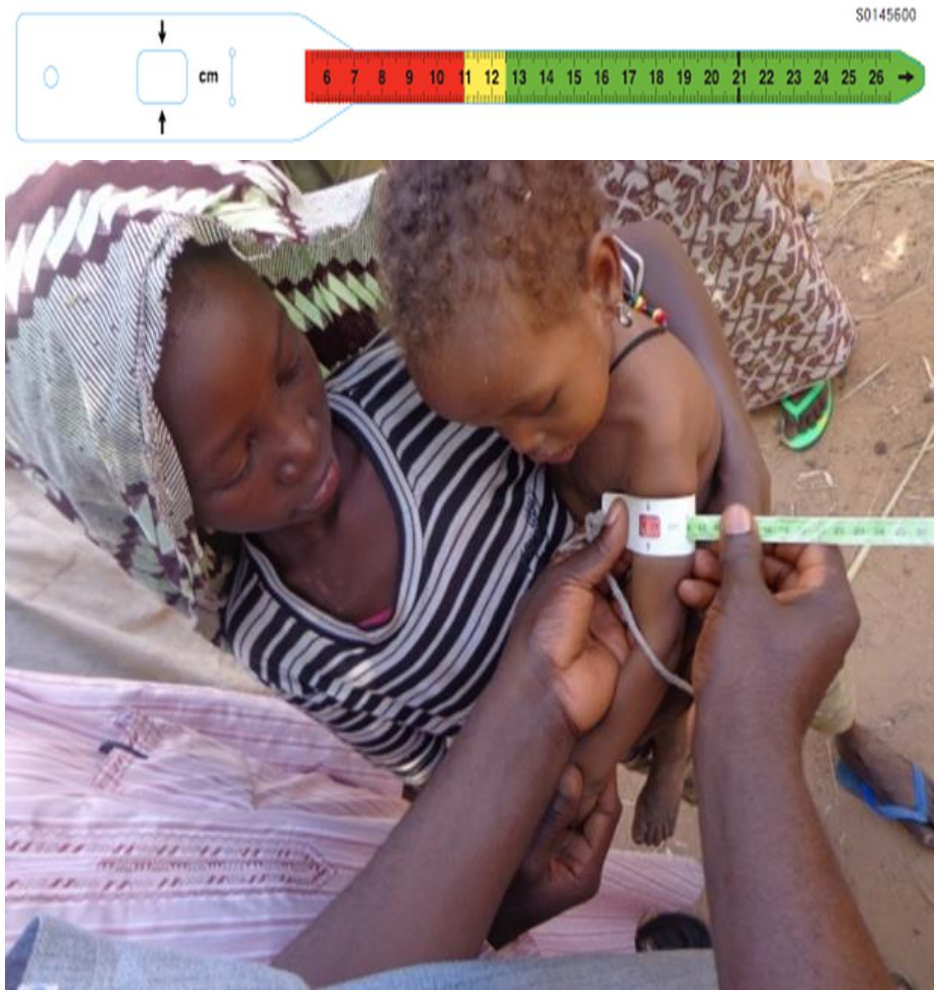
MUAC Cut-offs for Acute Malnutrition



- The Mid-Upper Arm Circumference is measured using a MUAC tape.
- The tape is numbered and colour coded.
- MUAC is used for children 6-59 months old to measure thinness.

Colour coding	Measurement	Indicator
Red	< 11.5 cm	Severe Acute Malnutrition
Yellow	11.5 - 12.4 cm	Moderate Acute Malnutrition
Green	≥ 12.5 cm	No acute malnutrition

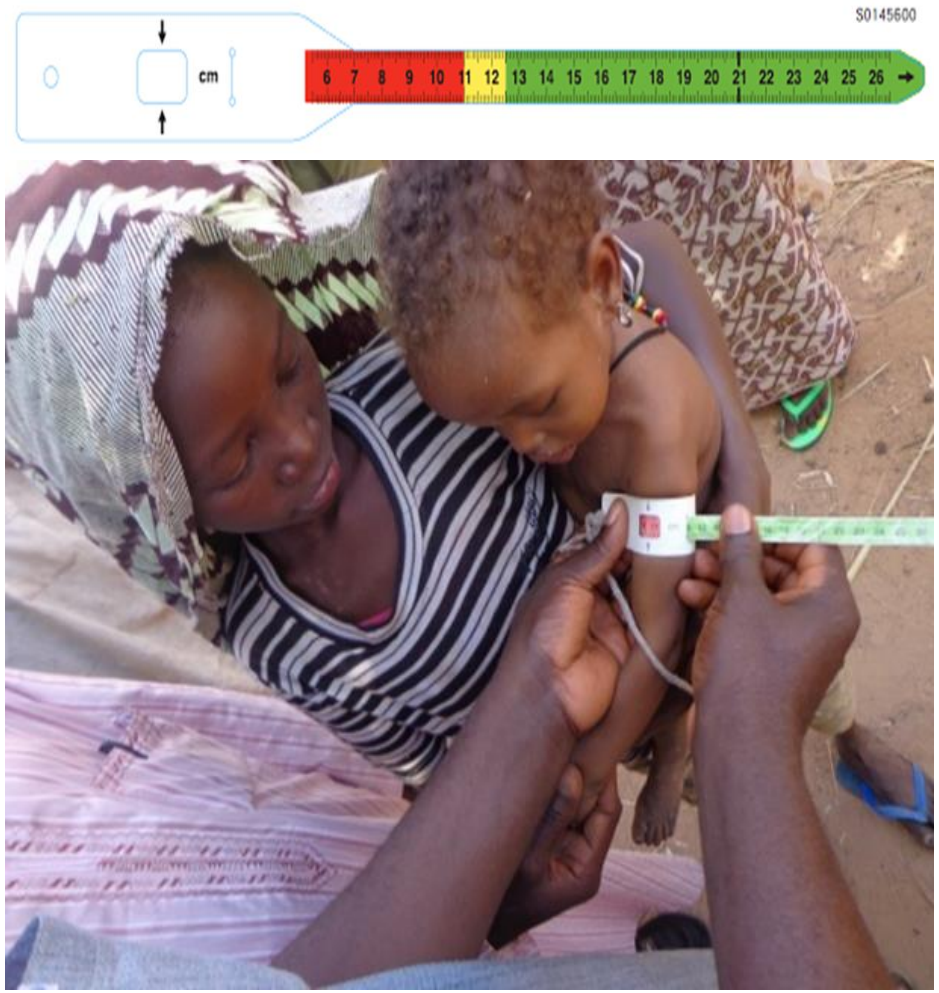
MUAC Measurement (1/2)



Exercise:

- Measure the arm that the mother spontaneously presents to you (left or right).
- Ask the mother to remove clothing that may cover the child's arm.
- Locate the tip of shoulder and elbow
- Bend elbow to make right angle
- Place tape at zero (bigger opening of the tape) on tip of shoulder

MUAC Measurement (2/2)



Exercise:

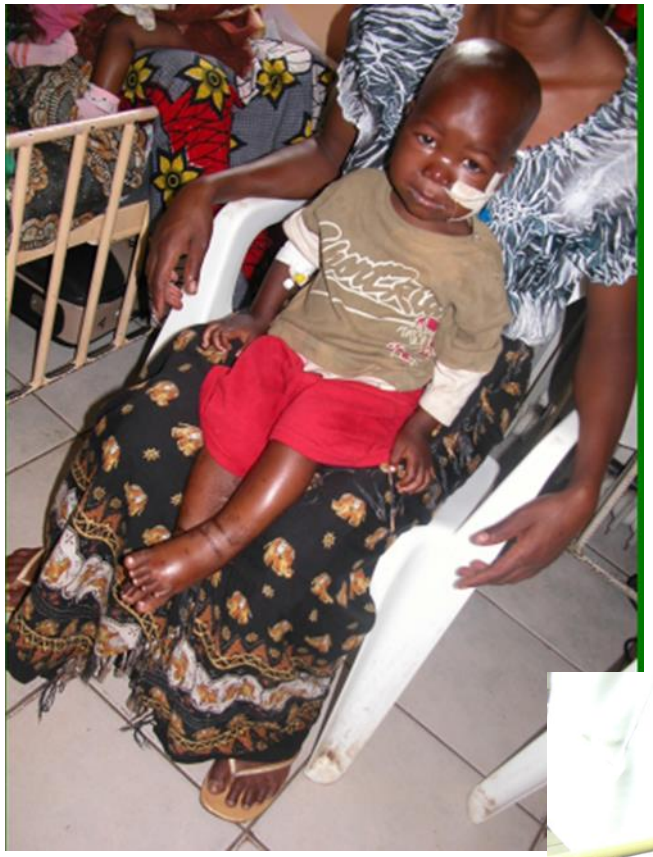
- Pull tape past tip of bent elbow
- Read the number at the tip of the elbow (Divide the number by 2 to estimate midpoint)
- Mark the midpoint with a pen on the arm
- Straighten the child's arm
- Wrap the tape around the arm at midpoint such that the entire tape is in contact with the child's skin, it should be neither too tight nor too loose

Oedema - Clinical Signs

- Bilateral pitting oedema is a clinical manifestation of SAM caused by an abnormal infiltration and excess accumulation of fluid.

  Oedema is nutritionally significant if it is present on both feet.

- However, bilateral pitting can also be caused by medical conditions such as nephrotic syndrome. Medical causes should be first ruled out before the diagnosis of nutritional oedema is made.





Identifying Oedema

- Apply gentle thumb pressure to both feet for 3 seconds. (count 101, 102, 103). Remove the thumbs.
- If a shallow print or pit remains on both feet when the thumb is lifted, then the child has nutritional oedema.
- Nutritional oedema always starts from the feet and extends upwards to other parts of the body.
- Oedema on feet : = +
- Oedema in both feet and legs extending to below the knees: = ++
- Oedema on both feet, legs, arms and sacral pad and eye lids: = +++

The Three Grades of Nutritional Oedema



Grade 1 (+)	Grade 2 (++)	Grade 3 (+++)
Mild: both feet/ankles	Moderate: both feet, plus lower legs, hands, or lower arms	Severe: generalized oedema including both feet, legs, hands, arms and face

Decision Making for Classification of Nutritional Status

Severe Acute Malnutrition	Moderate Acute Malnutrition	Normal
- Bilateral pitting oedema or 1. MUAC < 11.5 cm or - WFH < -3 z-scores	- No oedema - MUAC ≥ 11.5 - <12.5 cm or - WFH ≥ -3 and < -2 z-scores	- No oedema - MUAC ≥ 12.5cm WFH ≥ - 2 z-scores
Assess for: • Severe oedema +++* • Wasting with oedema • Medical complications • Appetite for RUTF	<u>If TSFP</u>: • Assess for medical complications <u>If no TSFP</u>: • Refer to BSFP (as available) • Refer to MIYCN services	1. Praise caregiver 2. Counsel for future nutrition needs to be sustained 3. Refer to MIYCN services

Discussions and Brainstorming



- How were you selected to participate in this training?
- What are the resources needed for the management of acute malnutrition in your various health facilities
- What are the criteria for admitting a SAM or MAM child
- What are lessons learnt through the rigorous process involved in this programme

Management of Children Under 6 Months

All children less than 6 months must be referred to in-patient care as RUTF is not suitable for children of this age.



Criteria for Referral of Children Less Than 6 Months to In-Patient Care

- WFH < -3 z-scores
- Bilateral pitting oedema
- Infant is not gaining weight on breast milk (despite counselling the caregiver on proper positioning and attachment)
- Infant is too weak to suckle effectively

Assessment in these cases may be more subjective relying on identification of visible wasting and recent history of weight loss. Signs of visible wasting in infants include "baggy pants" (reduced or absent buttocks), prominent ribs scapulae and spine, thin appearance and "old man's face".

Types of Admission to OTP

New Cases

New Admissions Child 6-59 months who meets the SAM admission criteria and has not been under treatment elsewhere for this episode of SAM

Relapse: Child 6-59 months re-admitted to OTP after having been successfully discharged as recovered within the last two months (this is a new episode of SAM).

A new OTP card / register entry should be completed but a post fix _2 should be added to the new SAM card number to differentiate it

Old Cases

Returned Defaulters: child who defaulted from treatment (absent for more than 3 consecutive weeks) before recovery returns to continue treatment within 8weeks

Referred from IPC: child who was managed in in-patient and transferred to OTP to continue treatment

Transfer from another OTP site: child transferred while still under treatment



Five Major Admission Procedures (1/2)

Waiting 1

- Triage the patients
- Nutrition Education
- Counselling
- If the child is obviously sick give 10% sugar solution.

Screening & Measurement 2

- MUAC reading
- Oedema classification
- Weight and height (when WFH criterion is used)
- Documentation

Appetite Test 3

- An appetite test is done for all SAM children to differentiate complicated SAM from uncomplicated SAM.
- Conduct the appetite test in a quiet separate area.
- Explain procedure to the caregiver
- Observe the child eating the RUTF during 30 minutes and decide if the child passes or fails the test.
- The child passes the Appetite Test if he eats at least one-third to half of a packet of RUTF (92g).
- The child fails the Appetite Test if he does not eat at least one-third to half of a packet of RUTF (92g)
- A child who fails the appetite test should be admitted to in-patient care

Five Major Admission Procedures (2/2)

Medical Examination and Treatment

4

- Diagnose any medical complications
- Analyse the findings (anthropometric measurements, appetite and medical complications)
- Decide type of treatment



Monitoring Progress

5

- Nutritional rehabilitation should be monitored at each visit;
- based on how the child responds to treatment, appropriate action will be taken, including home visit and referral to IPC.

- NOTE: Any child with generalized oedema (+++) and or severe wasting and any grade of oedema must be referred for IPC. In the absence of IPC, the child should be referred to the nearest Paediatric unit

Follow Up Activities

An essential element of support in the community is the follow-up of beneficiaries at home by Community Volunteers.

Follow up is requested by the health workers for the following reasons:

- Absenteeism
- Defaulting
- Death
- Children recently discharged from IPC
- Children not progressing as expected during treatment in OTP/TSFP
- Relapse

Nutritional Management with Ready to Use Therapeutic Food (RUTF)

- RUTF is a medicinal food
- High-energy
- Lipid based
- Micronutrient enriched combined food and medicine
- Made essentially from groundnut, vegetable oil, sugar, milk powder and vitamin and mineral mix.
- It is used in any cultural setting for the treatment of SAM
- The nutritional composition is like the traditional F-100 milk-based diet used in the in-patient care management of severe acute malnutrition with medical complications.
- RUTF comes in sachets of 92 g, each sachet contains 500 kcals of energy.
- Locally manufactured approved RUTF brand is already in the country.

RUTF Ration According to the Weight of the Child (Based on 92g Sachets)

Weight (in kg)	Sachets Per Day	Sachets Per Day
4 – 5.4	2	14
5.5 – 6.9	2 ½	18
7.0 – 8.4	3	21
8.5 – 9.4	3 ½	25
9.5 – 10.4	4	28
10.5 – 11.9	4 ½	32
≥ 12	5	35

The amount of RUTF needed per child per day and per week, calculated according to the child's weight at a dose of 200 kcal/kg/day is summarized in the table above

Schedule for Routine Medication in OTP

Medication	When
Antibiotic: Amoxicillin	At admission
Anti-malaria (refer to National Malaria Treatment Guide)	Test at admission and give if positive
Measles vaccination *(if not already given at 9 months)*	At admission
Deworming (Albendazole or Mebendazole)	Single dose 2nd visit
Note: Children who have been transferred from IPC should not receive routine medications that have already been administered during hospital stay	

Management of SAM in In Patient Care (IPC)

Stabilization Phase 1	▪ Treatment of infections ▪ Correction of electrolyte imbalance ▪ cautious feeding (F-75) ▪ Remains here until the appetite has recovered, medical complications and/or oedema are being resolved.
Screening & Measurement 2	▪ Prepared for discharge to OTP. ▪ The appetite for RUTF is first assessed and must be prioritised. ▪ Include F-100 until child can consume adequate RUTF daily ration. ▪ Before therapeutic milk is given, offer RUTF ▪ If > 75% of the RUTF daily ration is consumed, continue with RUTF and water only ▪ Observe child eating RUTF for 24 hrs minimum (>75%) and prepare for referral to OTP ▪ If < 75% of the RUTF daily ration is consumed, continue with therapeutic milk ▪ Continue to offer the RUTF to the child before each meal of therapeutic mil
Rehabilitation 3	▪ At this stage, the child is recovering and shall be referred to OTP. ▪ Only in exceptional circumstances will children remain as in-patient until complete recovery.

KEY MESSAGES

- Children weighing more than 12 kg should receive a maximum of 5 sachets of RUTF per day.
- Children > 6 months and < 4.0 kg should not receive RUTF they are to be referred to IPC.
- Empty packets do not necessarily mean that the SAM child has eaten, consumption should be compared with the weight gain for that week.
- For children who are breastfed, continue to breastfeed. Offer breast milk first before every RUTF feed.
- Do not give Iron to SAM child
- Do not give Vitamin A to SAM child with Oedema
- In Diarrhoea episode do not give loZnORS or ReSoMal at OTP
- Give RUTF, water and 10% (10g of sugar in 100mL water) sugar water while awaiting transfer to IPC



Images of RUTF





Module overview of nutrition in Primary Health Care

Components

8.1	Definition of Food and Nutrition
8.2	Definition of Food and Nutrition
8.3	Adolescent, Maternal, Infant and Young Child Nutrition
8.4	Complementary Feeding
8.5	**Food Demonstration**
8.6	Prevention and Control of Micronutrient Deficiencies
8.7	Nutrition Assessment, Growth Monitoring and Promotion
8.8	Integrated Management of Acute Malnutrition
8.9	**Data Tools**

Learning Objectives

This Session discusses the role of data and monitoring (by obtaining, compiling, sharing and helping to review, interpret and use data), to improve health workers performance and strengthening of Nutrition service delivery

At the end of this session, Participants will be able to;

1. Explain the importance of good data management
2. Understand the data flow and reporting
3. Discuss the different types of Nutrition data tools

Importance of Good Data Management and Tools

Effective data management ensures the accessibility, reliability, and timeliness of data to satisfy the needs of the data users

There are a variety of tools for different services

These tools must be filled correctly to ensure good quality data

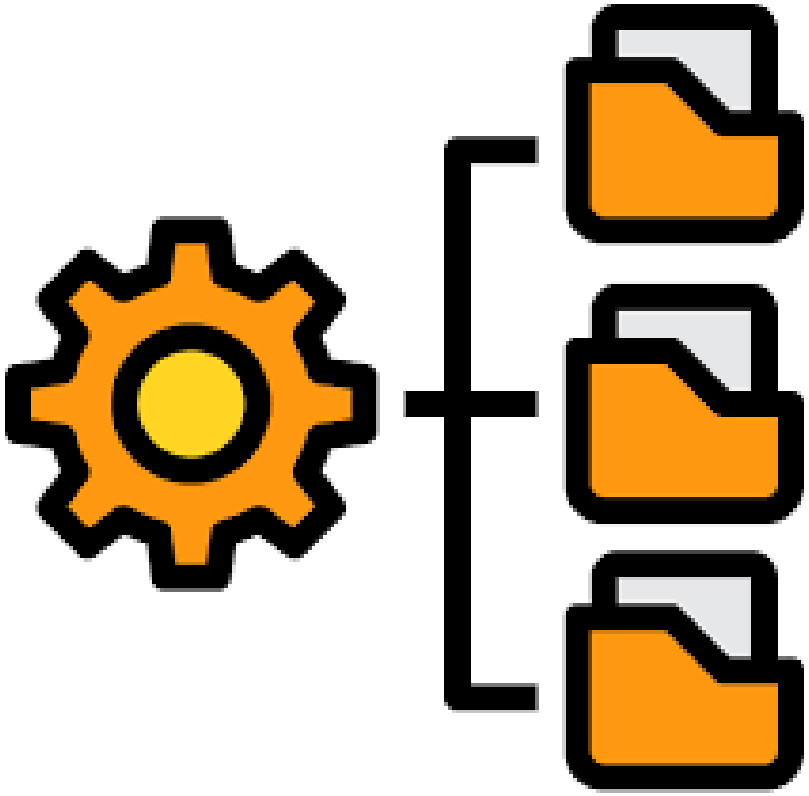
Nutrition data tools are used to collect data on services provided in the PHC facility by health workers.



Data Flow - Reporting

Federal	▪ Monthly summary for the Country on a quarterly basis (Jan-Mar at the end of April, etc.) ▪ Contact: *Department of Nutrition FMOH & NPHCDA*
State	▪ Monthly summary for the State to the FMOH by 15th of the following month ▪ Contact: *State Nutrition Officer*
LGA	▪ Monthly summary for the LGA to the State by the 10th of the following month ▪ Contact: *Nutrition Focal Person*
Health facility Community	▪ Weekly tally sheet report to be compiled monthly and sent to the LGA by 5th of the following month ▪ Contact: *Officer-In-Charge*

Examples Nutrition Data Tools



- ANC Register
- Nutrition & GMP Register (0-59 Months)
- Tally Sheets
- One-on-One Counselling Register
- Counselling Cards
- MIYCN Mother Support Group Register
- MIYCN Admission Cards
- IMAM Admission Cards
- Forms (record forms, referral forms)
- RUTF Ration Cards
- Monthly Summary Forms

KEY MESSAGES

Data tools are the relevant documents that are used to collect nutrition information.

- All Nutrition activities should be recorded using Nutrition data tools
- Reporting of service delivery nutrition activities is monthly basis from community, health facility, LGA, and State levels and quarterly to Federal Level.
- The reports are sent to the higher level through the NHMIS Monthly Summary Form (MSF).
- Each level (facility, LGA, State and Federal level) is required to analyze and use the information at their level for decision making and to guide programme improvement at the PHCs.




Thank
you