MATERNAL, INFANT AND YOUNG CHILD NUTRITION
FLIP CHART
1 Maternal Nutrition
Healthy Diet during Pregnancy
Key Messages

- A mother’s diet is crucial for building the unborn baby’s body and brain, and for preventing serious medical problems during the pregnancy and after delivery.
  - Protein, essential fats, vitamins, and minerals (micronutrients), and energy from carbohydrates/starchy foods are needed for building the unborn child’s bones, muscles, blood, organs (e.g., brain) and their normal function.
  - Pregnant and lactating women also need extra nutrients and energy for forming blood, to store nutrition reserves for recovering losses during childbirth, and to produce high quality breastmilk for supporting healthy growth in their infant with 6 months of exclusive breastfeeding.

- For mother and baby’s safety and health, pregnant and lactating women should consume daily:
  - One food item from at least five food groups out of ten designated food groups that are rich in nutrients.
  - One extra portion of food at each meal in the first trimester.
  - Two extra portions of food at each meal in the second trimester plus 1-2 healthy snacks between meals or before sleeping.
  - One extra meal in the third trimester plus 2-3 healthy snacks.
  - Two extra portions to all meals and 3-4 snacks during lactation.
  - Healthy snacks include boiled egg; glass of milk, cup of yogurt/curd, piece of cheese; fruits/vegetables such as papaw, mango, oranges, avocados, piece of cooked pumpkin; handful of peanuts.
Maternal Nutrition
Common Dietary Challenges During Pregnancy
### Common Dietary Challenges During Pregnancy

<table>
<thead>
<tr>
<th>Key Messages</th>
<th>Response to Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel like vomiting or feel dizzy</td>
<td>Take more frequent and smaller meals, eat favourite foods, eat slowly.</td>
</tr>
<tr>
<td>Stomach feels too full</td>
<td>Walk after each meal, take more frequent and smaller meals, eat slowly, chew the foods thoroughly before swallowing; do not drink water with the meals but in between meals.</td>
</tr>
<tr>
<td>Stools become dark and hard after taking iron</td>
<td>This is normal and will go away after the body becomes used to taking iron every day; when you start taking iron drink extra water and eat extra vegetables and fruits.</td>
</tr>
<tr>
<td>Some of these foods will be bad for the baby's development</td>
<td>Pregnant women in nearby areas have been consuming these foods and their babies are healthier and have better brain development; they prevent their child from getting sick often.</td>
</tr>
<tr>
<td>Extra food will rapidly increase the baby weight/size and prevent an easy delivery</td>
<td>Mother's health and strength will improve with these foods so she will be able to deliver more easily. All deliveries should be conducted by trained doctors, nurses/midwives or CHEWs in facilities to take care of difficulties during childbirth; babies born too small and weak will not be able to recover later.</td>
</tr>
<tr>
<td>These foods are too costly to buy every day</td>
<td>By saving money now you may be risking the future health and brain development of the child permanently and the mother’s life during childbirth. If you have not been eating any of the recommended food because they are costly, ensure you eat only recommended foods in season, when they are cheaper. Maybe some other expenses can be delayed for buying foods for the benefit of the unborn baby and mother, or maybe another family member can help. It is only for a short time.</td>
</tr>
</tbody>
</table>
Maternal Nutrition
Weight Management in Pregnancy
Key Messages

- Weight management during pregnancy is important for healthy growth of the baby and the health of the mother during pregnancy.

- Visit your healthcare provider for weight monitoring and management at LEAST TWICE A MONTH.

- Weight gain monitoring means comparing the previous weight with the current weight and considering how much time has passed between weighing.
  - Too little weight gain suggests that the mother is not consuming sufficient energy and nutrients to meet the needs of the growing unborn baby.
  - Too much weight gain is a danger sign for water retention or edema and eclampsia or pre-eclampsia that are life-threatening conditions of pregnancy.
  - Obesity is linked to high weight gain during pregnancy; this leads to serious chronic conditions such as diabetes and high blood pressure.

- Engage in activity/physical work for normal weight pregnant women is to continue as before pregnancy through the first trimester. Take two hours of rest in the middle of the day during the second and third trimesters.

- Maintain walking and light exercises throughout pregnancy but avoid carrying heavy physical loads in the second and third trimesters.
Maternal Nutrition
Anemia Prevention in Pregnancy
**Key Messages**

- Taking Iron Folic Acid (IFA) or multiple micronutrient supplement (MMS) will help prevent anemia during pregnancy.

- Take one IFA or, if available, MMS tablet each day throughout the pregnancy and for a minimum of 180 tablets during pregnancy.

- Continue taking IFA/MMS for three months after delivery to continue building iron stores that are depleted in pregnancy.

- MMS should not be taken together with IFA. If taking MMS during pregnancy or after delivery, do not take IFA.

- So as not to forget, set an alarm or reminder to take IFA/MMS daily and keep the bottle in a location where it is seen every day (and out of reach of children). Consider taking the supplement at the same time each day.

- Do not take IFA/MMS with tea or coffee or with calcium supplement.
Early Initiation of Breastfeeding
Early initiation of breastfeeding
Importance of early initiation of breastfeeding
Key Messages

- Begin breastfeeding within the first one hour of birth.
- Early breastfeeding helps the baby learn to breastfeed while the breast is still soft.
- Early initiation helps reduce post-delivery bleeding and helps eject the placenta.
- Hold your newborn skin-to-skin immediately after birth to keep the baby warm.
- Skin-to-skin contact will help baby breathe well and help him or her reach the breast easily.
- Skin-to-skin contact and breastfeeding helps you and your baby feel close.
- Early initiation ensures the baby takes Colostrum, (the thick yellowish milk).
- Colostrum helps protect your baby from illness and helps remove the first dark stool.
- Breastfeed frequently to help your breastmilk ‘come in’ and to ensure plenty of breastmilk.
Exclusive Breastfeeding
Exclusive Breastfeeding
Breastfeeding in the first 6 months
Key Messages

- Give only breastmilk during your baby's first 6 months. Give nothing else, not even water.
- Giving only breastmilk during your baby's first 6 months protects your baby from many illnesses, such as diarrhoea and respiratory infections.
- The advantages of exclusive breastfeeding - which means feeding your baby ONLY breastmilk for the first 6 months - are:
  - Breastmilk is always available.
  - Breastmilk provides all the food and water that your baby needs during the first 6 months of life. Even during very hot weather, breastmilk will satisfy your baby's thirst.
  - Exclusive breastfeeding helps to form a strong bond between mother and baby.
  - Exclusive breastfeeding saves money that would be spent on hospital bills and other expenses.
  - Exclusive breastfeeding builds strong families and communities.
Exclusive Breastfeeding
Dangers of mixed feeding during the first 6 months
Key Messages

- Giving your baby foods or any kind of liquids other than breastmilk, including infant formula, animal milks, or water before 6 months can damage your baby's stomach.
- This reduces the protection that exclusive breastfeeding gives, and all of the benefits that your baby gets from your breastmilk.
- Mixed feeding means feeding your baby both breastmilk and any other foods or liquids, including infant formula, animal milks, or water.
- Mixed feeding increases the chances that your baby will suffer from illnesses such as diarrhoea and pneumonia, and from malnutrition.
- Giving your baby anything besides breastmilk will cause him/her to suckle less often and will reduce the amount of breastmilk that you produce.
- You can give your baby medicines if they are recommended by your health provider.
Exclusive Breastfeeding
Breastfeeding Position & Good Attachment
Key Messages

Good positioning helps to ensure that your baby suckles well and helps you to produce a good supply of breastmilk.

- The baby's body should be straight, not bent or twisted, but with the head slightly back.
- The baby's body should be facing the breast, not held flat to your chest or abdomen, and he or she should be able to look up into your face.
- The baby should be close to you.
- You should support the baby's whole body, not just the neck and shoulders, with your hand and forearm.

There are different ways to position your baby:

- Cradle position (most commonly used).
- Cross-cradle position (good for small babies).
- Side-lying position (use to rest while breastfeeding and at night).
- Under-arm position (use after caesarean section, if your nipples are painful, or if you are breastfeeding twins or a small baby).

Good attachment helps to ensure that your baby suckles well and helps you to produce a good supply of breastmilk.

- Baby's mouth is wide open.
- You can see more of the darker skin (areola) above the baby's mouth than below.
- Baby's lower lip is turned outwards.
- Baby's chin is touching mother's breast.
Exclusive Breastfeeding
Breastfeeding and working mothers
Key Messages

- Working mothers and mothers in difficult circumstances can still breastfeed their babies exclusively.
- Express and store breastmilk before you leave your home so that your baby's caregiver can feed your baby while you are away (stored in a cool, covered place).
- Expressed breastmilk may be stored in a refrigerator (if available) or stored in an easy to wash cup with cover and put in a bowl containing water at a room temperature for up to 6 hours.
- Teach your baby's caregiver how to use a clean, open cup to feed your baby while you are away.
- If possible, carry the baby with you to your workplace (or anytime you have to go out of the home for more than a few hours).
- Take extra time to feed your baby before separation from baby and when you return home.
- Increase the number of times you feed while you are with the baby (including night and weekend feedings).
Exclusive Breastfeeding
Hand expressing breastmilk & cup feeding
Key Messages

- To express breastmilk, mothers should follow these steps:
  a) Wash hands and utensils with soap and water.
  b) Put thumb on top of the breast in areola area.
  c) Put the other finger on the underside of the breast.
  d) Gently press the areola until the milk starts to spurt out into the clean container prepared.
  e) Avoid rubbing the skin, which can cause bruising, or pressing the areola.
  f) Express one breast for about 3-5 mins until the flow slows down. Then express the other breast.
  g) Repeat the cycle after 5 minutes and start again after 30 minutes.

- Expressed breastmilk may be stored in a refrigerator (if available) or stored in an easy to wash cup with cover and put in a bowl containing water at a room temperature for up to 6 hours.

- Feed the baby with expressed milk using a clean cup slowly and gently.

- Bottles and cups with spouts are unsafe to use because they are difficult to wash and can be easily contaminated.
Complementary Feeding
Complementary Feeding 6-23 months
What to Feed Baby (6–23 months)
Key Messages

- Breastmilk only will no longer be adequate for proper growth and development of the child after 6 months.
- Babies 6-23 months need extra energy and nutrients, which should come from 5 nutrient-rich food groups that are part of the “5-star diet.”
- To provide children a “5-star” diet one must:
  - Continue breastfeeding.
  - Give more animal source foods, including fish, chicken and beef.
  - Increase the amount of animal source iron-rich foods in the diet, such as chicken liver or beef liver.
  - Give small soft fish, which are easily available and affordable.
  - Add soft meat/small fish/eggs (both white and yellow) to mashed potatoes/yams, mashed pumpkins, cooked mashed vegetables (ayoyo, spinach, etc.) and mashed pulses (beans, lentils).
  - Give fruits such as mashed papaw and avocados.
  - Add mashed small fish/eggs/meat to the baby’s food at least once a day.
Complementary Feeding 6-23 months
How to Feed Baby (6–23 months)
Children 6 to 23 months require adequate quantity of additional food in required frequency other than breastmilk for healthy growth and development.

Description below provides recommended age-appropriate dose and frequency for your child’s healthy growth and development.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Amount of Food (Use 250 ml feeding bowl)</th>
<th>How many times a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 - 8 months</td>
<td>Half of feeding bowl = 125ml</td>
<td>• Two times a day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Continue breastfeeding</td>
</tr>
<tr>
<td>9 - 11 months</td>
<td>Half of feeding bowl = 125ml</td>
<td>• Three times a day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Continue breastfeeding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One snack (e.g. piece of boiled egg, fruit or bread with nut paste)</td>
</tr>
<tr>
<td>12 - 23 months</td>
<td>One feeding bowl = 250ml</td>
<td>• Three times a day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Continue breastfeeding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Two snacks (pieces of ripe mango, pawpaw, banana, avocado, other fruits and vegetables, boiled potato, sweet potato and bread products)</td>
</tr>
<tr>
<td>Sick child</td>
<td>Continue feeding small quantities.</td>
<td>• Increase the number of breastfeeds and number of complementary feeds with soft foods</td>
</tr>
<tr>
<td></td>
<td>Increase quantity of food after recovery for two weeks</td>
<td></td>
</tr>
</tbody>
</table>

Key Messages

- Both the mother/caregiver and the child should wash hands with soap before feeding.
- Make sure all foods are soft and easy for the baby to chew.
- Modify the food by grinding, mincing, or cutting it into tiny pieces to enable the child to chew and swallow easily.
- Make feeding an enjoyable experience by teaching the child to feed by himself/herself and feed with love.
Complementary Feeding 6-23 months
Micronutrient Powders (for babies 6 months and above)
Key Messages

- A diet of foods with too few micronutrients will harm the health and development of young children from 6 up to 23 months of age.
- Micronutrient Powders are vitamin and mineral powders that can be added directly to soft or mushy semi-solid food prepared in the home to improve the nutritional quality of foods for young children.
- Every child from 6 months is qualified for MNP except children suffering from severe acute malnutrition (SAM) and is already on RUTF, the child is no longer qualified to take MNP.

Preparation

- Wash your hands with soap and water before preparing foods and feeding your baby.
- Mix the packet contents with small portion of cooked food, thick porridge, mashed potato, or any soft or mushy semi-solid.
- Give the child the small portion of food mixed with MNPs to finish, and then feed the child the rest of the food.
- You can add the entire packet of MNPs to any meal. However, only one packet of MNPs should be given during a day.

Dosage

- Give your baby one packet of MNP Daily for 3 months, the child will then have a break for 3 months and continue to take MNP again for another 3 months and the cycle continues.

Possible Reaction

- Your child may have darker or softer stools, or a mild form of constipation during the first four to five days after first starting to use MNP.
### Key Messages

If your baby does not like to eat food or your child is sick, follow the following recommendations:

<table>
<thead>
<tr>
<th>Feeding Problem</th>
<th>Recommendations</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child is sick</td>
<td>• Feed the child more frequently during illness.</td>
<td>• The child needs more nutrients during illness.</td>
</tr>
<tr>
<td></td>
<td>• Offer the child breastmilk more frequently.</td>
<td>• Breastfeeding boosts the child’s immunity and nutrient intake.</td>
</tr>
<tr>
<td></td>
<td>• Give the child more liquids (water, porridge) to ensure that the child is hydrated.</td>
<td>• The child loses lots of liquids and salts during illness, which need to be replenished through more feeding and increased fluid intake.</td>
</tr>
<tr>
<td></td>
<td>• Encourage the child to eat more.</td>
<td>• Fruits are natural appetite boosters.</td>
</tr>
<tr>
<td></td>
<td>• Give the child more whole fruits to improve his/her appetite.</td>
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</tr>
<tr>
<td></td>
<td>• If the child is unable to feed at all, seek advice from a healthcare provider.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• After illness, give more food than usual until the child is well and full of energy again.</td>
<td></td>
</tr>
<tr>
<td>Child does not like food</td>
<td>• Give variety of foods.</td>
<td>• When children eat a variety of food, they will be well-nourished, and their immunity will improve.</td>
</tr>
<tr>
<td></td>
<td>• Introduce one type of food at a time to avoid the child rejecting the food.</td>
<td>• If the food is delicious/tasty, the child eats easily and saves on time and wastage.</td>
</tr>
<tr>
<td></td>
<td>• Do not mix so many foods as this can look unpalatable.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• When feeding, present the food in an attractive way.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hide the disliked healthy foods in the preferred food.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Be creative while cooking and make the food delicious by varying cooking methods.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• When feeding a child, give food in small quantities.</td>
<td></td>
</tr>
</tbody>
</table>
Complementary Feeding 6-23 months
Good hygiene practices
Key Messages

- Good hygiene (cleanliness) is important to prevent diseases, including diarrhoea and other illnesses.
- Wash your hands with soap under running water before preparing foods and feeding baby.
- Wash your hands and your baby’s hands and face before eating.
- Wash your hands with soap and water after using the toilet and washing or cleaning baby’s bottom.
- Feed your baby using clean hands, clean utensils, and clean cups.
- Use a clean spoon or cup to give foods or liquids to your baby.
- Do not use feeding bottles, teats, or spouted cups since they are difficult to clean and can cause your baby to become sick.
- Store the foods to be given to your baby in a safe, clean place.

Complementary Feeding
16 Growth Monitoring and Promotion GMP
Basics of Growth Monitoring and Promotion (GMP)
Key Messages

- Growth monitoring and promotion (GMP) is the regular weighing and plotting of a child's weight on the growth chart.
- GMP is a chance to detect problems with the growth of the child and take appropriate actions.
- Attend GMP sessions regularly to make sure the baby is growing well.
- Take the baby for growth monitoring and promotion every month during the first two years.
- Subsequently, the child should attend GMP every other month until 59 months.

Recommendations for healthy growth
- Start your baby strong with early initiation, exclusive breastfeeding and continue to breastfeed for 2 years or beyond.
- Start appropriate complementary feeding at 6 months with healthy diets that is adequate in quantity and quality.
- Maintain good sanitation and hygiene especially hand washing with soap and water at critical times.
- Avoid bottle-feeding.
- Ensure you take your baby to the health facility for micronutrient supplementation at 6 months.
- Deworm your child twice yearly from the age of one year.