

**Key behaviours for optimal breastfeeding,  
complementary feeding and maternal nutrition  
at critical stages in the life cycle  
of women and children**

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## Introduction

This booklet presents messages on the Essential Nutrition Actions that are important for good nutrition at critical stages in the life cycle of children and women. It targets frontline practitioners from government and non-government organizations within the health sector and beyond (agriculture, education, welfare, etc.) to equip them with information on recommended behaviours for optimal breastfeeding, complementary feeding and maternal nutrition. Supportive messages are also provided to explain or reinforce the recommended behaviour.

Mothers and other family members need to receive consistent advice and nutrition support from the many different information sources that exist at community level. For positive behavior change to take place and to lead to optimal nutrition practices, advice should be mutually reinforcing and not conflicting.

Some messages will need to be added or adapted appropriately to the local situation to ensure their relevance to the audience. However, the substance of the key behaviour should not be altered.

# 1. Key Behaviours 0 to 6 months of age: Exclusive breastfeeding

RECOMMENDED BEHAVIOURS	SUPPORTIVE MESSAGES
Mother initiates breastfeeding within one hour of birth to ensure a healthy beginning for the baby.	<p>Putting the baby to the breast within 60 minutes after delivery helps the mother to expel the placenta and reduce the bleeding.</p> <p>Immediate breastfeeding helps the milk come in more rapidly.</p> <p>Skin-to-skin contact keeps newborn warm and helps creating a strong and loving bond between the mother and the child.</p>
Mother gives the first thick yellow milk (colostrum) to protect the baby from illness.	<p>The first thick yellow milk (colostrums) helps clean the baby's stomach and eliminate the first black stools.</p> <p>The first thick yellow milk (colostrums) is the first vaccination for the child. It helps protect the child from infection.</p> <p>The first thick yellow milk (colostrums) is not spoiled or dirty as some people believe.</p> <p>Pre-lacteal feeds such as water, herbal preparations and glucose/sugar water interfere with good breastfeeding practices and can be a source of infection to the newborn baby.</p>
Mother breastfeeds frequently day and night for the baby to grow healthy and strong (at least 8 times).	<p>Allow the baby to breastfeed on demand means (as often as he/she wants). This means feeding every 2-3 hours (8-12 times per 24 hours) or more frequently if needed, especially in the early months.</p> <p>Breastmilk is perfectly adapted to the baby's small stomach size because it is quickly and easily digested.</p> <p>Let the baby suckle more frequently and longer each time if you believe you don't have enough milk. This will increase milk production.</p> <p>Babies experience growth spurts (growing very quickly). During those times he/she may cry more and want to feed more often. This is normal and temporary. Feeding more often will increase the mother's milk supply to keep up with the baby's needs. Do not give other things to eat or drink till your baby is 6 months.</p> <p>Breastfeeding helps to create a strong and loving bond between you and your baby.</p> <p>Almost all mothers can produce enough breastmilk irrespective of breastsize.</p>
Mother gives <b>only</b> breastmilk for the first six months (no water or other fluids and foods) to prevent diarrhea, respiratory, and ear infections	<p>Breastmilk contains all the water and nutrients that a baby needs to satisfy hunger and thirst. Approximately 90% of breastmilk is water. If you think that your baby is thirsty, you should breastfeed him or her more often to quench the baby's thirst</p> <p>Babies that are exclusively breastfed are likely to have fewer diarrhea,</p>

RECOMMENDED BEHAVIOURS	SUPPORTIVE MESSAGES
	<p>respiratory, and ear infections.</p> <p>Exclusive breastfeeding helps space births by delaying the return of fertility.</p> <p>Giving water or other fluids and foods to the baby interferes with breastfeeding. As the baby feels satisfied, he/she will suckle the breast less and therefore less milk will be produced.</p> <p>In the event a breastfeeding mother gets pregnant again, she can continue breastfeeding her child, especially if he/she is less than six months old.</p>
<p>Mother completely empties one breast before offering the second so that the baby gets the rich part of the milk deep in the breast.</p>	<p>The milk at the beginning of a feed - the fore milk - is lighter and helps to quench the baby's thirst. Toward the end of a feed the milk becomes richer and thicker. This helps to satisfy the baby's hunger.</p> <p>Babies need both the fore milk - beginning of a feed - and the hind milk - end of a feed - to grow better and be more easily satisfied.</p> <p>Give the baby the time he/she needs to feed. Try not to interrupt or stop the baby from nursing to do something else when he/she settles down to breastfeed. You will know when the baby has finished with the breast because he/she will come off by him/herself and the breast will feel light.</p> <p>Allow the baby to release the first breast before offering the second breast so that the baby receives both "fore" milk (which has a high water content to quench the baby's thirst) and "hind" milk (which is rich in fat and nutrients).</p>
<p>Mother positions and attaches infant correctly to the breast to ensure appropriate milk supply and prevent breast problems</p>	<p>Proper positioning and attachment helps the baby remove the milk effectively from the breast. This is very important for a good milk supply.</p> <p>Proper positioning and attachment helps prevent breast problems such as sore and cracked nipples, engorgement and mastitis.</p> <p>Mothers with nipple and breast problems should seek immediate care from a health worker. You should not stop breastfeeding when problems appear.</p> <p><b>Signs that baby is properly positioned:</b>  Baby's whole body is facing the mother and is close to her.  Mother holds baby's entire body, not just the neck and shoulders.</p> <p><b>Signs that infant is properly attached:</b>  Mother brings baby toward her breast, not the breast toward her infant.  Infant's mouth is open wide.  Infant's lips are curled outwards.  Infant's chin touches mother's breast.  Mother's entire nipple and a good portion of the areola (dark skin around the nipple) are in infant's mouth. More areola is showing above rather than below the nipple.</p>
<p>Mother continues breastfeeding when either she or the baby is sick to prevent loss of weight and/or</p>	<p>If <u>mother</u> is sick with a cold, flu, or diarrhea, she may continue to breastfeed because breastmilk still protects the baby against illness.</p>

RECOMMENDED BEHAVIOURS	SUPPORTIVE MESSAGES
<p>ensure fast recovery.</p>	<p>If <u>baby</u> is sick, mother may breastfeed more often (or express her milk if the infant cannot breastfeed) so that baby recuperates faster.</p> <p>Breastmilk replaces needed water and nutrients that are lost through frequent loose stools and is the most easily digestible food for the sick infant.</p> <p>Breastmilk is the safest and most important food you can offer your baby to regain his health and weight.</p>
<p>In areas with endemic prevalence of malaria, breastfeeding mother and baby sleep under an insecticide treated net (ITN), to prevent mosquito bites.</p>	<p>Malaria can be fatal if not treated immediately. In case of fever, you should seek immediate treatment from a community medicine distributor or the nearest health facility.</p> <p>Malaria causes anaemia which impairs adequate child growth and development.</p> <p>All family members should sleep under an insecticide treated net (ITN). However, pregnant/breastfeeding women and young children should be given priority if availability of nets in the household is limited.</p>

## **BENEFITS OF BREASTFEEDING AT A GLANCE:**

### **FOR THE MOTHER:**

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

### **FOR THE FAMILY:**

- No expenses in buying formula, firewood or other fuel to boil water, milk or utensils. The money saved can be used to meet the family's other needs.
- No medical expenses due to sickness that formula could cause. The mothers and their children are healthier.
- As illness episodes are reduced in number; the family encounters few emotional difficulties associated with the baby's illness.
- Births are spaced thanks to the contraceptive effect.
- Time is saved.
- Feeding the baby reduces work because the milk is always available and ready.

### **FOR THE COMMUNITY/NATION:**

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

## 2. Key Behaviours 6 to 24 months of age: Optimal complementary feeding with breastfeeding, including micronutrients

RECOMMENDED BEHAVIOURS	SUPPORTIVE MESSAGES
<p>Mother continues to breastfeed the baby until two years or beyond as breastmilk will continue to protect the child from infection.</p>	<p>Breastmilk continues to be a major source of energy and a key source of nutrients such as fat, vitamin A, calcium and riboflavin.</p> <p>From 6 to 9 months continue to breastfeed your baby as often as he/she wants for at least 8-10 times in 24 hours.</p> <p>From 9 to 24 months continue to breastfeed your baby as often as he/she wants.</p>
<p>At six months, mother introduces complementary foods in addition to breastmilk for the baby to grow healthy and strong.</p>	<p>From six months onwards, breastmilk alone does no longer provide all the energy and nutrients the baby needs to sustain optimal growth.</p> <p>From six months onwards, the baby's body is ready to take soft and semi solid foods in addition to breastmilk.</p>
<p><b>Frequency:</b> From 6-12 months, mothers or caregiver feeds the baby 3 times a day or more in addition to breastfeeding. If not breastfed, mother or caregiver feed the baby at least 5 times a day.</p> <p>From 12 to 24 months, mother or caregiver feed the baby at least 5 times (3 meals and 2 snacks) a day.</p> <p><b>Amount:</b> At six months, mother or caregiver starts with 2-3 table spoons for each meal and increases quantity as the child grows older.</p>	<p>The baby's stomach is still small and can only receive small quantities of food each time. To ensure the child gets all the needed energy and nutrients, he/she needs to eat more often than an adult.</p> <p>Introduce nutritious 'finger foods' as snacks 1-2 times each day. These finger foods can include bread, biscuits, soft fruits such as bananas, pawpaw, ripe mango or avocado.</p>
<p><b>Density:</b> Mothers or caregiver gives the child soft foods or thick porridge that have been enriched with milk, ghee, oil, groundnuts, peas or beans, egg or sugar to make it more nutritious.</p>	<p>Thin watery gruels are not healthy for the baby as they fill the stomach without providing enough energy and nutrients.</p> <p>Thicken the porridge as the baby grows older, but make sure that he/she can still easily swallow it without choking.</p> <p>Mash potatoes, cassava or rice and <i>add</i> mashed green vegetables, fish, milk, egg, groundnuts, oil or ghee to make it more nutritious. A small amount is enough to cover the child's need</p>
<p><b>Use of foods:</b> Mother or caregiver feeds a variety of different foods to the child each day to ensure he/she gets all the nutrients to grow well.</p>	<p>There is no single food that has all the nutrients the body needs. Eating a variety of foods is the best way to make sure the baby gets enough of everything.</p> <p>Fruits and vegetables contain a lot of vitamins. Dark green leafy vegetables,</p>

RECOMMENDED BEHAVIOURS	SUPPORTIVE MESSAGES
	<p>carrots, avocado, mango, pawpaw, banana, orange and pineapple can be mashed or squeezed as juice and given to the child with meals.</p>
<p><b>Active feeding:</b> Mother or caregiver serves food to the baby in a separate bowl and feeds or supervises the child during feeding to ensure he/she eats the food prepared for them.</p>	<p>Children eat slowly and need sufficient time to eat enough. Putting the portion in a separate plate helps to determine how much the child actually eats.</p> <p>Interact with the child during feeding to help the child eating and to stimulate his/her verbal and intellectual development.</p> <p>Be patient and encouraging but do not force the child to eat.</p> <p>Try different food combinations, tastes, textures, and ways to encourage child who refuses foods. Minimize distractions during meals if the child loses interest easily and keep eye contact. Sing songs, use games, or tell stories to make feeding enjoyable.</p> <p>Until 12 months, feed the child directly. From 12 months onwards, a child may start to feed by himself/herself. It is important to continue helping the child to eat the served amount of food.</p>
<p>Mother or caregiver washes her/his hands and the hands of the child with water and soap before eating. Also ensures that the food is hygienically prepared to prevent illness.</p>	<p>Good hygiene and sanitation is important to prevent diarrhea, intestinal worms and infections.</p> <p>Wash cooking utensils and dishes in safe water and dry them on a clean surface to reduce contamination from germs and bacteria.</p> <p>Food should be served immediately after preparation to prevent contamination from germs and bacteria.</p>
<p>Mother or caregiver continues breastfeeding when child is sick and encourages the child to eat <b>during and after illness</b> to prevent loss of weight and ensure fast recovery.</p>	<p>Keep breastfeeding and feeding complementary foods to the child during illness to help the child fight illness, maintain the strength and reduce the weight loss.</p> <p>Give one additional meal for two weeks after recovery to help the child regain the lost weight.</p> <p>If the child has diarrhea, seek immediate treatment from a community medicine distributor or the nearest health facility. Provide low osmolarity ORS and ZINC supplementation for 10-14 days.</p> <p>Visit immediately the health facility if your child is visibly losing weight during illness and/or is not regaining weight after illness.</p>
<p>When the child is six months old, he/she should receive <b>Vitamin A</b> supplementation every six months to help fight diseases.</p>	<p>Vitamin A helps the body to resist and fight diseases. Improving vitamin A status reduces the severity of childhood illnesses and increases their survival chances.</p> <p>Vitamin A capsules can be obtained from health facilities as part of routine services or during Child Days (twice a year).</p> <p>Give foods naturally rich in vitamin A: green leafy vegetables, carrots, pumpkin, mango, pawpaw, eggs, liver and ghee. The addition of fats/oils to Vitamin-A rich foods helps absorption of Vitamin A.</p>

RECOMMENDED BEHAVIOURS	SUPPORTIVE MESSAGES
<p>When the child is one year old, he/she should receive <b>De-worming</b> medicine every six months to help prevent anemia.</p>	<p>Intestinal worms can cause anemia which leads to tiredness and poor health. Anemia in children leads to impaired growth and development and reduced school performance.</p> <p>Deworming tablets can be obtained from health facilities as part of routine services or during Child Days (twice a year).</p>
<p>In areas with endemic prevalence of malaria, breastfeeding mothers and infant sleep under an insecticide treated net (ITN), to prevent mosquito bites.</p>	<p>Malaria can be fatal if not treated immediately. In case of fever, you should seek immediate treatment from a community medicine distributor or the nearest health facility.</p> <p>Malaria causes anaemia which impairs adequate child growth and development.</p> <p>All family members should sleep under an insecticide treated net (ITN). However, pregnant/breastfeeding women and young children should be given priority if availability of nets in the household is limited.</p>
<p>All family food is cooked using iodized salt.</p>	<p>Iodine deficiency is the world's single most common cause of preventable mental retardation and brain damage.</p> <p>The body needs <i>little</i> quantity of iodine every day because it can not store it well. However, do not add too much salt or spices in the child's food because they place an enormous strain on child's kidney that is not developed enough to cope.</p> <p>Iodized salt is the best way to provide the body with the iodine required for optimal functioning.</p>

**NOTE: Babies should eat a variety of nutrient-rich foods, including animal products, legumes, fruits and vegetables. Because it is usually not possible for babies to consume sufficient quantities of animal foods to meet the needs for iron, zinc, or calcium, a fortified food or micronutrient supplement should be considered if economically feasible or if available from national health programs.**

### 3. Key Behaviours

## Women's Nutrition: Diet and Micronutrients

RECOMMENDED BEHAVIOURS	SUPPORTIVE MESSAGES
<p>Pregnant woman eats one additional meal every day to maintain her strength.</p> <p>The husband and other family members should ensure that the pregnant woman gets one additional meal every day to maintain her strength and that she reduces her workload.</p>	<p>A pregnant woman should gain 10-12 kg during the course of pregnancy for the delivery of a well-nourished and full-term baby. Increased energy consumption (food intake) and decreased energy expenditure (physical activity) will help you achieve this.</p> <p>Eating more during pregnancy will not increase the head size of the baby, which is the part of the baby that can make a delivery difficult. If both mother and baby are well-nourished and strong, they have a better chance of surviving the delivery.</p> <p>When pregnant, eat a variety of foods including animal products (meat, fish, milk, eggs), fruits and vegetables.</p>
<p>As soon as woman is pregnant, she starts taking iron and folic acid supplements to prevent anemia and maintain your strength.</p>	<p>Pregnant women have increased needs for iron because of the additional needs of the unborn baby and for replacing the blood loss during child birth.</p> <p>Inadequate iron intake will lead to anemia, which will make you unwell and tired. It also increases the risk of premature birth, low birth weight baby and maternal death.</p> <p>The usual diet cannot meet the iron requirement of a pregnant woman. One tablet of iron/folic acid should be taken for at least six months during pregnancy.</p> <p>Iron/folic acid supplementation can continue also after delivery if the recommended amount was not taken during pregnancy or if advised by the health worker.</p> <p>Intake of iron/folic acid tablet should be accompanied by food to reduce common side effects such as nausea, abdominal pains and constipation. Iron/folic acid tablets should not be taken with tea or coffee as they make the iron unavailable for absorption. Iron/folic acid tablets should be taken with foods that contain vitamin C such as oranges, passion fruit, mango or pineapple to assist absorption of iron.</p> <p>Foods rich in iron include red meat, liver, fish, poultry, millet, beans, groundnuts and green leafy vegetables.</p> <p>Dark stools are normal when taking iron tablets.</p>
<p>In areas with high prevalence of malaria, pregnant woman takes malaria prevention treatment (Fansidar) during the 2<sup>nd</sup> and 3<sup>rd</sup> trimester to prevent yourself and your unborn baby from malaria.</p>	<p>Malaria causes anemia, which will make her unwell and tired. It can also cause babies to be born dead or weak.</p> <p>Malaria can be unseen but still affect the unborn child. Do not keep the medicine until you feel sick, but swallow it to prevent malaria.</p>
<p>In areas with high prevalence of</p>	<p>Pregnant women and young children suffer most from malaria. It is especially</p>

RECOMMENDED BEHAVIOURS	SUPPORTIVE MESSAGES
<p>malaria, pregnant woman sleeps under an insecticide treated net (ITN) to prevent mosquito bites.</p>	<p>important for them to sleep under a net to prevent mosquito bites.</p> <p>In case of fever, family members should immediately seek treatment from a community medicine distributor or the nearest health facility.</p>
<p>Pregnant woman takes deworming medicine in order to prevent anemia.</p>	<p>Intestinal worms can cause anemia which leads to tiredness and poor health.</p> <p>Deworming tablets can be taken twice, after the 1<sup>st</sup> trimester.</p>
<p>Breastfeeding woman eats two extra meals a day to maintain her health and the health of the baby.</p> <p>The husband and other family members should ensure that the breastfeeding woman gets one additional meal every day to maintain her strength and reduces her workload.</p>	<p>Undernourished women may breastfeed adequately, but at the expense of their own health.</p> <p>When breastfeeding, eat a variety of foods including animal products (meat, fish, milk and eggs), fruits and vegetables.</p> <p>Plenty of fluids are important for sufficient breastmilk production.</p> <p>You can continue breastfeeding even when pregnant. Ensure you have adequate food intake and rest to maintain your health.</p>
<p>Breastfeeding woman takes vitamin A supplementation within 8 weeks after giving birth to the baby to protect the baby from illness.</p>	<p>Giving a vitamin A capsule to breastfeeding mothers improves the quality of breastmilk, giving extra protection to the baby.</p> <p>Eat foods naturally rich in vitamin A: green leafy vegetables, carrots, pumpkin, mango, pawpaw, eggs, liver and ghee. The addition of fats/oils to Vitamin-A rich foods helps absorption of Vitamin A.</p>
<p>All family food should be cooked using iodized salt.</p>	<p>Iodine deficiency is the world's single most common cause of preventable mental retardation and brain damage.</p> <p>The body needs <i>little</i> quantity of iodine every day because it can not store it well.</p> <p>Iodized salt is the best way to provide the body with the iodine required for optimal functioning.</p>
<p>All family members practice hand-washing with water and soap or ashes before cooking, eating and when feeding a child to prevent infections.</p>	<p>Good hygiene and sanitation is important to prevent diarrhea, intestinal worms and infections.</p> <p>Wash kitchen utensils and dishes with safe water and dry them on a clean surface to prevent contamination from germs and bacteria.</p> <p>The food should be served immediately after preparation to prevent contamination from germs and bacteria.</p>
<p>Breastfeeding woman uses family planning methods to delay the next pregnancy so that she can recover from the previous birth.</p>	<p>It is safest for mother and baby if babies are born 2-3 years apart. The mother's body can recover from the previous birth and the baby can get good care and enough breastmilk.</p> <p>There are many ways to space births. Health workers can provide information and supplies. It is good to involve the partners in the discussion and in the decision on the family planning method.</p>

RECOMMENDED BEHAVIOURS	SUPPORTIVE MESSAGES
	<p>Lactational Amenorrhea Method (LAM) is a 98% effective family planning method for as long as</p> <ul style="list-style-type: none"> <li>• the mother has not started her periods;</li> <li>• the baby is exclusively breastfed;</li> <li>• the baby is less than 6 months old;</li> </ul> <p>As soon as one condition is no longer met, another family planning method should be used to prevent getting pregnant again too early.</p>

## NOTE

**Because of the risk of HIV transmission from mother-to-child during breastfeeding, it is recommended for a breastfeeding woman to:**

- 1) Go for HIV Individual Counselling and Testing (ICT).**
- 2) Agree with her husband/partner on a suitable way to prevent HIV infection (ABC: Abstain, Being faithful, Condom).**