



MATERNAL, INFANT, AND YOUNG CHILD NUTRITION IN TANZANIA

FORMATIVE RESEARCH SUMMARY REPORT

ENRICH

ENHANCING NUTRITION SERVICES TO
IMPROVE MATERNAL AND CHILD HEALTH

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BACKGROUND

The Enhancing Nutrition Services to Improve Maternal and Child Health (ENRICH) initiative in the Shinyanga and Singida regions of Tanzania aims to improve overall maternal, newborn and child nutrition (MIYCN) and health outcomes. ENRICH works through nutrition-specific and nutrition-sensitive interventions to reduce malnutrition in the first 1,000 days of life—from conception to 23 months of age. Increasing consumption of nutritious foods including biofortified orange flesh sweet potatoes (OFSP) as well as micronutrient supplements are essential practices at the household level and central to ENRICH success.

Tanzania has made considerable progress in the status of many health indicators, yet undernutrition remains a significant public health problem for women and children. In 2016-17, ENRICH conducted

a baseline study¹, which provided context for the formative research study. The baseline study yielded informative results, including:

- **Infants and children:** High levels of stunting and underweight, as well as sub-optimal feeding practices—particularly for aspects of complementary feeding; micronutrient powder (MNP) sachets had not yet reached the area (**Tables 1, 2**). Exclusive breastfeeding (EBF) of children under six months reached 72.8%.
- **Mothers of children <2 years:** Sub-optimal dietary practices and low iron and folic acid (IFA) supplement consumption during pregnancy (**Table 2**). This includes consumption of biofortified foods, specifically OFSP, which remains critically low in the region (6%).

TABLE 1. NUTRITIONAL STATUS OF CHILDREN FROM THE BASELINE ENRICH SURVEY

CHILDREN <5 YEARS	
31.5% Stunted (height for age)	15.3% Underweight (weight for age)

TABLE 2. SELECT FEEDING/DIETARY PRACTICES FROM THE BASELINE ENRICH SURVEY

CHILDREN 6-23 MONTHS OLD	MOTHERS OF CHILDREN < 2 YEARS OLD
Minimum dietary diversity = 28.7%	Minimum dietary diversity = 17%
Minimum meal frequency = 56.3%	Consumed ≥ 4 meals/day in last pregnancy = 8.6%
Minimum acceptable diet = 17.7%	>90 IFA consumption in last pregnancy = 11.4%

¹ Infants and young children (ages 0-23.9 months)

STUDY DESIGN AND PURPOSE

Formative research, conducted in the regions of Shinyanga and Singida in November 2017, was designed to better understand the current MIYCN practices within the local context and from multiple perspectives.

Specifically, the research explored:

- Current household IYC feeding and maternal dietary practices with an emphasis on barriers and opportunities within households and communities;
- Current routines and counseling related to nutrition within the health system—including health facility workers (HFW) and community health workers (CHW); and
- Feasibility and acceptability of several practices in household trials (HHT).

The formative research aimed to identify priority behaviours and key messages aligned with improving consumption of nutritious foods and micronutrient supplements by women and IYC, as well as to identify opportunities within the local context to promote these behaviours. These results have informed the development of a behaviour change intervention (BCI) strategy for ENRICH.

FIGURE 1. SHINYANGA AND SINGIDA REGIONS, TANZANIA.



Household trials (HHT), also known as trials of improved practices (TIPs), is a participatory research method used to pre-test practices or behaviors with a selected number of respondents before introducing it more widely. This provides insight into the barriers and enabling factors participants experience for adopting a new practice, allowing a potential intervention to be refined.



Site selection for the formative research included villages from five rural districts in two regions (ENRICH project areas), purposefully selected to represent the regions' geography and culture and to maximize sample diversity. A variety of qualitative methods engaged multiple respondents to explore topics in detail and provided rich data to triangulate (**Table 3**). After the initial analysis of formative research results, HHT tested the feasibility and acceptability of several proposed behaviours and permitted initial testing of messages to accompany behaviours.

TABLE 3. METHODS AND RESPONDENTS/DATA SOURCE

DATA COLLECTION METHOD	RESPONDENTS/DATA SOURCE
Free-listing of foods available and consumed locally	Village leaders; Women; Men
Market/shop survey of local nutrient rich foods available and accessible	Community markets and shops
Food attributes exercises of the perceptions of foods, barriers and opportunities for consumption	Lactating women; Caregivers of IYC
In-depth interviews including photo-projective exercises* about healthy pregnancy/IYC, dietary/feeding practices, influential household members and interactions with health workers	Pregnant and Lactating women; Caregivers of IYC; Fathers
Qualitative 24-hour dietary recall	Pregnant women; Lactating women; Caregivers of IYC
Home observation of feeding main meal to IYC	Caregivers of IYC
In-depth interviews about service provision and counseling, and nutritional problems encountered	Health facility workers; Community health workers
Health facility observations of the interactions between health facility workers and women/caregivers	Antenatal and IYC services
Exit interviews when leaving the health facility	Pregnant women; Caregivers of IYC
Household trials (HHT) to test the feasibility and acceptability of identified behaviours/practices	Pregnant and Lactating women; Caregivers of IYC

*A caregiver selects a photo of a woman or child and provides a narrative on health, diet, feeding, care, etc.





FINDINGS

Results from the formative research highlight important insights obtained on access, availability and attributes of local nutritious foods, maternal nutrition of pregnant women and lactating mothers, and IYC nutrition. Dietary/feeding practices and micronutrient consumption are addressed, as well as the role of health services and family influences on maternal and IYC nutrition.

Availability, access and attributes of nutritious foods

Results from market and shop surveys revealed the availability of a variety of diverse foods including animal source foods (ASF), milk, vitamin A rich vegetables and fruits, legumes, pulses and nuts. Biofortified OFSP were not found. While certain ASF were considered costly, such as beef and chicken, others were considered more affordable (e.g. eggs and fish), and in all communities small dried fish were both inexpensive, available and commonly found in the homes. Some vitamin rich foods, such as leafy greens, were widely available and considered inexpensive in the markets or produced at home. Fruits were often home produced, but were affected by seasonality (e.g. mango, papaya, orange). Bananas provided the exception, and were easily available and affordable throughout the year. Several types of legumes, groundnuts and peanuts were easily available in shops and markets.

For most foods, positive attributes outweighed the negative ones. Numerous favourable attributes were voiced about local ASF and vitamin A rich foods—those with the potential to increase dietary diversity. ASF helped to “build the body” and were a source of “vitamins and iron.” However, some caregivers cautioned against feeding children ASF too often, saying the child will crave the ASF and act badly or try to steal it if not available. While many positive comments were made about consuming eggs, a dominant belief about eating eggs during pregnancy included giving birth to a baby with a bald head, especially among those in the Shinyanga region. The range of specific attributes for select ASF provided by caregivers of IYC and their availability are provided in **Table 4**.

Vitamin A rich greens were associated with providing vitamins, minerals, energy and good taste. Pumpkin, another vitamin A rich food, was characterized as soft, tasty and easy to feed to IYC. Fruits were perceived as a source of vitamins, and children and women enjoyed eating them. Some cautioned about feeding too much mango to IYC, as this could result in diarrhoea. Caregivers reported exploring complementary foods with children starting when IYC were between six and eight months of age.

Together, results from the market survey and attributes exercise provided important local insights on foods, words to emphasize and associate with these foods in BCI messaging, preparations, and offer a range of possibilities to improve dietary diversity.

TABLE 4. PERCEIVED ATTRIBUTES OF SELECT ASF FOR IYC

FOOD TYPE	POSITIVE ATTRIBUTES	NEGATIVE ATTRIBUTES
Fish	<ul style="list-style-type: none"> • Tasty, children enjoy • Builds the body, adds vitamins and iron 	<ul style="list-style-type: none"> • Costly (in some areas) • Bones can harm child • Child will expect to eat fish, but not always available
Small dried fish (sardines)	<ul style="list-style-type: none"> • Builds body and strengthens bones • Increases iron and vitamins • Nutrients and energy for body • Anyone can eat 	<ul style="list-style-type: none"> • Difficult for children to chew sardines so broth made from them is fed to IYC • May cause ulcers if eaten often • Causes bloating • Sardines may rot quickly
Egg	<ul style="list-style-type: none"> • Strengthens health • Has vitamins and protein • Builds body, gives energy • Tasty 	<ul style="list-style-type: none"> • Makes children bad mannered, will steal eggs • Causes stomach-ache • Expensive
Milk	<ul style="list-style-type: none"> • Makes the child healthy • Adds vitamins and protein to the body • Tasty, children like milk 	<ul style="list-style-type: none"> • Quality of milk can be poor • Expensive • Too much protein

Maternal diet during pregnancy

During pregnancy, mothers consistently spoke about their aspiration “to deliver safely” and for the infant to “have good health.” A healthy pregnancy was associated with physical signs (e.g. body not weak, having good skin, having a stomach with good shape) and a favourable outlook (happy and smiling).

Good nutrition was perceived as central among the factors that determined a healthy pregnancy. Access and adherence to nutrition counseling, mental and social support, avoidance of heavy work, education and economic empowerment were all mentioned. “Good nutrition” was mentioned generally, but specific nutritious foods



were also listed by some and included mentions of meat, fish, eggs, milk, vegetables and fruits. Barriers to a healthy pregnancy included poverty and lack of food diversity.

Despite the importance placed on good nutrition during pregnancy, meal frequency and dietary diversity were found to be sub-optimal in those interviewed. Most pregnant women ate two or three times per day, and lack of dietary diversity was also common. Specifically, ASF and vitamin A rich fruits were lacking as was milk; dietary recall data showed only a few women consumed these foods. Consumption of staple foods such as ugali and porridge was standard, and importantly, a number of women also reported eating beans and/or nuts at least two to three times in the last week. These monotonous consumption patterns stand in contrast to

the answers provided about determinants of a healthy pregnancy but are common.

Husbands/partners discussed their role in supporting the diet and workload of pregnant women. In contrast, women reported support for diet/foods by their husbands, but not for household chores. One female health worker commented that sometimes men become “considerate and caring” during pregnancy.

A healthy diet during pregnancy contains adequate energy, protein, vitamins, and minerals obtained through the consumption of a variety of foods including green and orange vegetables, meat, fish, beans, nuts, pasteurized dairy products, and fruit.²

Maternal diet during lactation

Signs of a healthy lactating mother were readily conveyed and included both physical and emotional signs—smiling, peace in her heart, a settled mind. Nutrition was foremost in determining health for a lactating mother and diverse foods were mentioned.

Similar to pregnant women, meal frequency was most often reported as three times daily. Yet, mothers connected eating four times per day with good health and having sufficient milk for the baby. When asked about different foods such as ASF, milk and vitamin A rich foods, lactating mothers connected them to improving energy and health of the lactating mother rather than to breastmilk quality or production specifically. As one mother stated about vitamin A rich foods:

“

they are good, for example, when you eat food which contain vitamin A, I mean pawpaws, mangoes, vegetables, carrots and watermelon when breastfeeding you get energy and remove weaknesses from the body.

lactating mother

Despite describing the importance and positive qualities of diverse nutritious foods, lactating mothers' diets demonstrated poor diversity with little consumption of ASF or milk. In Shinyanga, all respondents consumed a vitamin A rich food, but not in Singida. As in pregnancy, most lactating mothers consumed either nuts and/or beans two to three times in the previous week. Biofortified OFSP are not well known or available during the research. Many people exert a high level of influence over the lactating mother including husbands, grandmothers, and neighbours with advice on breastfeeding and the mother's diet.

These results highlight a range of possibilities to improve diet and a base of knowledge to build on in terms of dietary diversity, as women and their partners link consumption of diverse nutritious foods to desired health for themselves during pregnancy and lactation. Opportunities to improve diet exist through defining doable actions for mothers to take to improve diversity and increase meal frequency, and counseling that addresses local concerns while stressing affordable and available nutritious foods. It is critical to translate known benefits of foods to actual meals within the home context.

Consumption of Iron and Folic Acid supplements

Few women were well informed about IFA and, among those interviewed, consumption during pregnancy was generally low, as found in the ENRICH baseline survey. The greatest obstacle voiced by women was unavailability of IFA, but negative side effects such as nausea and dizziness, as well as the bad smell of IFA, also deterred consumption. Benefits of taking IFA were also expressed by women, for example, "increasing blood quantity" and improving the baby's health. However, other women were unclear about why they were to take IFA. The following statements reflect this disparity.



I think it [IFA] is good, it builds up the body and makes the pregnant woman to be healthy.

pregnant woman



We are given the pills but we are not told what pills they are.

pregnant woman

During interviews, HFWs discussed their role in dispensing IFA and advising pregnant women to take the supplements. However, health facility observations and exit interviews revealed inconsistent practices around IFA and limited advice given. These findings, together with consistent stocking of IFA at health facilities, highlight opportunities to improve adherence by counseling on how to take to reduce unpleasant side effects and emphasizing the real benefits for both the woman and baby—in words that speak to caregiver concerns around energy for daily routines, overall health during pregnancy and a safe delivery.

Daily oral iron and folic acid supplementation with 30–60 mg of elemental iron and 400 µg folic acid is recommended for pregnant women to prevent maternal anaemia, puerperal sepsis, low birth weight, preterm birth, and neural tube defects.²

A summary of select maternal nutrition practices around diet and IFA for pregnant women and lactating mothers, along with their approximate frequency based on the formative research, is provided in **Table 5**.

TABLE 5. POTENTIAL PRIORITY PRACTICES FOR PREGNANT WOMEN AND LACTATING MOTHERS AND THE EXTENT TO WHICH PRACTICES EXIST

NO PRACTICE	INFREQUENT PRACTICE	LIMITED BUT SOME PRACTICE
<ul style="list-style-type: none"> • Eat biofortified orange-fleshed sweet potato 	<ul style="list-style-type: none"> • Eat at least 4 meals/day • Take IFA daily • Eat sardines • Eat eggs • Drink milk 	<ul style="list-style-type: none"> • Eat green vegetables • Eat fruit between meals

Household trials

Based on initial findings from the formative research analysis, several recommendations were identified to test in the HHT (see **Table 6**) with pregnant (n=12) and lactating women (n=6) over six days. Field researchers encouraged women and provided initial messages to motivate and promote the practices. All women selected one or two dietary practices to test, and in addition, pregnant women tested IFA consumption. Findings demonstrated that all women recalled the practices tested and most were able to implement on at least some of the days. All practices were deemed highly acceptable and women planned to continue them. Detailed findings follow in **Table 6**.

TABLE 6. RESULTS FROM THE HHT–PREGNANT WOMEN AND LACTATING MOTHERS

HHT PRACTICE	NUMBER OF WOMEN WHO IMPLEMENTED	FINDINGS
Consume IFA daily	11 of 12	Benefits for both women and infants were voiced, one no longer felt dizzy and several women mentioned support from their husband. No side effects were mentioned.
Eat 4 meals daily	5 of 6	Many positive comments such as feeling satisfied and not hungry, better strength, and good for breastmilk production, but cost and preparation were barriers. Preparing extra food in the morning and taking groundnuts to the field were options implemented.
Add eggs, sardines or milk daily	15 of 18	Women were satisfied to have several options. Affordability was a barrier for some, but cultural taboos were not mentioned (e.g. eggs) and the behaviour was supported by husbands and family.
Add green leafy vegetables daily	6 of 7	Green vegetables were seen as easy to add to meals and to obtain from home gardens or markets and were associated with vitamins and energy and improved breastmilk production.
Eat fruit between meals daily	9 of 11	Fruits were equated with vitamins and nutrition and good taste. Expense and seasonality mentioned as a barrier to more frequent (daily) consumption by some.

Nutrition for IYC

Parents expressed high aspirations for their children, equally for boys and girls, including healthy physical and cognitive growth, and long-term success in school, work and life. Actions parents could take to achieve children's health and future aspirations included breastfeeding, feeding nutritious foods and providing care. Fathers played an influential role in the household primarily through supporting mother's actions—which extended to supporting care of the child.

Breastfeeding

Parents are knowledgeable about EBF; however, actual practices demonstrated that some children were started on complementary feeding before six months. Health workers cited challenges such as mothers feeling their milk is not adequate or giving water or tea to quench "thirst" for infants. The health, strength and energy of the lactating mother were closely tied with consumption of nutritious foods including sufficient frequency of meals. The emphasis on the mother's diet for effective lactation is telling and speaks to the need to focus not only on the infant's needs to receive exclusive breastmilk, but also the mother's needs for good dietary practices. Continued breastfeeding was common in these communities.

The WHO recommends exclusive breastfeeding until 6 months at which point complementary (solid) foods are introduced, with continued breastfeeding up to 2 years of age or beyond.⁴



Complementary feeding

Women caregivers are charged with feeding and care of children. Fathers are the main income earners and provide money for food, and are the main decision-makers in households. Feeding practices reflect a largely monotonous diet of staple foods such as porridge and ugali. Porridge was sometimes enriched with groundnuts and/or legumes but added diversity in terms of ASF, milk, or vitamin A rich fruits and vegetables was variable

The WHO recommends practicing responsive feeding (feeding slowly and patiently, encouraging children eat but not forcing them, talking to the child, and maintaining eye contact).⁴

and sub-optimal. No biofortified foods were fed. More children ate a sufficient number of meals in the day than ate a diverse diet, similar to findings from the ENRICH baseline survey.

Barriers to feeding specific foods most often included expense and seasonality. Nonetheless, sardines were commonly found in homes and green vegetables were often produced at home. The beliefs and general knowledge conveyed by parents about nutritious foods during interviews did not always translate into actual feeding practices in the home. Making these links explicit and advising on doable changes to improve IYC feeding are needed. Health workers concurred, citing lack of dietary diversity as a main problem, especially for younger children. For older children, health workers described more problems with inadequate food quantity and lack of responsive feeding.

Use of micronutrient powders (MNP)

None of the children had consumed MNP as availability was limited in ENRICH communities to date. Despite this, some mothers reported hearing positive comments about MNP. HFWs expressed familiarity with MNP, and in several cases were observed to dispense them to mothers. However, these mothers received no counseling on how to mix and feed the MNP to their children.

Responsive feeding

Caregivers discussed feeding style, reporting that about half of the younger children (6-11 months) were helped or encouraged to eat during meals, while this did not occur for older children (12-23 months). Home observations matched these findings; as children became older and more independent, mothers' interactions tended to decline during mealtime. Instead, caregivers used this time to carry out the many household chores requiring their attention. The positive encouraging behaviours observed included mothers talking to their children and clapping hands. However, a number of mothers breastfed before feeding complementary foods, potentially diminishing children's appetite for these foods. During breastfeeding, some mothers appeared settled and attentive to their babies, while others were preoccupied with additional tasks, giving little attention to the child.

A summary of select complementary feeding practices for IYC along with an approximate frequency, based on the formative research, is provided in **Table 7** and provided guidance for the HHT.

TABLE 7. POTENTIAL PRIORITY PRACTICES FOR IYC 6-23 MONTHS AND THE EXTENT TO WHICH PRACTICES EXIST

NO PRACTICE	INFREQUENT PRACTICE	LIMITED BUT SOME PRACTICE	MODERATE PRACTICE
<ul style="list-style-type: none"> • Eat biofortified orange-fleshed sweet potatoes 	<ul style="list-style-type: none"> • Give child eggs • Give child sardines • Give child milk • Give child MNP 	<ul style="list-style-type: none"> • Give child green vegetables • Give child fruit 	<ul style="list-style-type: none"> • Breastfeed child after eating • Be close and encourage child to eat at every meal

Household trials

Based on the initial findings from the formative research analysis, seven recommendations were identified to test using HHT for IYC. Each caregiver tested MNP and selected one or two additional feeding practices over six days. Findings demonstrated that all caregivers recalled the practices tested and most were able to implement on at least some of the days. All practices were deemed highly acceptable and caregivers planned to continue the practices. Details on several practices tested follow in **Table 8**.

TABLE 8: RESULTS FROM THE HHT—IYC

HHT PRACTICE	NUMBER OF CAREGIVERS WHO IMPLEMENTED	FINDINGS
Give MNP 3 days per week	17 of 18	MNP were easy to add to food, children ate well and were happy with no side effects observed. Fathers supported the practice and neighbours with children were very interested. In one household, rats ate the MNP packets.
Feed eggs, sardines or milk daily	11 of 13	Most children liked ASF and were happy. ASF were associated with multiple nutrients for children's health. Fathers supported practice. Among ASF, sardines were more affordable and available.
Feed fruits daily	11 of 11	Children were happy and enjoyed eating them, fruits provided vitamins for health, and eating fruit was also advised by health workers. Expense and seasonality were barriers.
For every meal, be close and encourage the child to eat	4 of 4	The baby enjoyed the food, eating more than previously, and became attentive when the mother was close during the meal. Finding the time to stop other domestic chores to feed the child responsively was challenging.

Use of health care services

Attending antenatal clinic (ANC) was common practice; the ENRICH baseline survey found 54 percent of women attended four or more times. However, many made their first appointment later in pregnancy than guidelines advise. During most ANC visits, health workers weighed women; however, commenting on weight gain or providing advice based on the weight was uncommon.

Nutrition counseling occurred, but was variable, with some women receiving advice on number of meals and specific foods to eat while others received no advice. Suggestions to improve ANC visits from women included more nutritional counseling and reveals an opportunity for better engagement between HFWs and women. As one pregnant woman stated:

The WHO recommends a minimum of eight antenatal care contacts to reduce perinatal mortality and improve women's experience of care.⁵



They should tell us everything that we are supposed to know, because I do not know anything and I can't ask what I know not so they should regularly explain to us everything related to pregnancy.

pregnant woman

Lactating mothers attended health facility services as needed. Some received advice on breastfeeding, but advice for their own diet was lacking.

Community health workers (CHW) visit pregnant and lactating women as part of their role to provide education and follow-up to the health facilities. Yet, findings showed a number of women never received a CHW visit—consistent with the low percentage of CHW visits found in the ENRICH baseline survey. For those women visited by a CHW, some expressed satisfaction with the advice given.

For IYC, health facility observations revealed busy, under-resourced health workers attending many caregivers. Growth monitoring consisted primarily of child weighing; length measurements

were infrequent as was explanation of growth. From observations and exit interviews with mothers leaving the health facility, counseling occurred in some cases—more often on breastfeeding than complementary feeding practices and usually without job aids. The child's age, nutritional status or home situation were not necessarily considered during counseling. Nonetheless, mothers valued the opinion and advice of health workers and recommended that more counseling occur to improve visits. For caregivers, pregnant and lactating mothers, education sessions on a variety of health topics were commonly delivered to the group before individual consultation began. This provides an opportunity to include sessions on nutrition and micronutrients (IFAs, MNP).

CONCLUSION AND KEY MESSAGES

Formative research and HHT led to a better understanding of the current MIYCN practices within the local context of the Shinyanga and Singida regions and identified many opportunities for improving MIYCN at the household level. Engaging pregnant women and lactating mothers, caregivers of IYC and families has great potential for influencing improved MIYCN. Healthcare workers require capacity building to take on a greater role in MIYCN counseling. Recommendations to improve MIYCN dietary diversity and consumption of micronutrient supplements include the following specific behaviours:

PREGNANT WOMEN AND LACTATING MOTHERS

PRIORITY BEHAVIOURS:

- IFA consumed daily during pregnancy and for 6 weeks after birth
- ASF—specifically the promotion of eggs, sardines and milk—consumed daily or as often as possible
- Consumption of 4 meals daily during pregnancy and lactation
- Biofortified OFSP—consumed several times during the week

BEHAVIOURS TO REINFORCE:

- Leafy green vegetables—from home gardens or market—consumed daily or as often as possible
- Fruits—seasonal fruits or bananas—daily or as often as possible
- Breastfeeding—exclusive for 0-6 months, continued breastfeeding from 6 months

INFANTS AND YOUNG CHILDREN

PRIORITY BEHAVIOURS:

- MNP once every 3 days, according to Tanzania government guidelines, mixed into the child's food and fed to IYC from 6 months.
- ASF—specifically the promotion of eggs, sardines and milk—consumed daily or as often as possible
- Biofortified OFSP—consumed several times during the week

BEHAVIOURS TO REINFORCE:

- Leafy green vegetables—from home gardens or market—consumed daily or as often as possible
- Fruits—seasonal fruits or bananas—daily or as often as possible
- Responsive feeding and hygiene during mealtime for all ages of IYC (cross-cutting messages across all behaviours)

To position these priority behaviours, the ENRICH research team identified important guiding principles reflective of the formative research findings as follows:

- Identify key messages to focus and unify the BCI strategy, improve coverage and exposure
- Position behaviours with clear motivations and doable actions relevant to families
- Include the important role of partners/fathers in supporting women and children
- Recognize the starting point of behaviours (e.g. MNP are new to project areas vs. ASF which are familiar) to guide activity planning and implementation
- Develop participatory and enjoyable activities to learn and practice priority behaviours
- Promote priority behaviours at multiple levels: community, health system, interpersonal
- Recognize the challenges and opportunities within the health system to prioritize activities

REFERENCES

- University of Toronto. (2017). Enhancing Nutrition Services to Improve Maternal and Child Health in Africa and Asia (ENRICH) Baseline Study Report TANZANIA.
- World Health Organization e-Library of Evidence for Nutrition Actions (eLENA). Nutrition Counseling during pregnancy. Available at: https://www.who.int/elena/titles/nutrition_counselling_pregnancy/en/
- World Health Organization e-Library of Evidence for Nutrition Actions (eLENA). Daily iron and folic acid supplementation during pregnancy. Available at https://www.who.int/elena/titles/guidance_summaries/daily_iron_pregnancy/en/
- World Health Organization. (2020). Infant and Young Child Feeding. Available at: <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>
- The WHO Reproductive Health Library; Geneva: World Health Organization. World Health Organization. (2018). Available at: <https://extranet.who.int/rhl/topics/improving-health-system-performance/who-recommendation-antenatal-care-contact-schedules>