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MOTHERS' INFANT AND YOUNG CHILD FEEDING PRACTICES AND THEIR DETERMINANTS IN AMHARA AND OROMIA REGIONS

A report on formative research findings and recommendations for social and behavior change communication programming in Ethiopia

April 2014

ENGINE: Empowering New Generations to Improve Nutrition and Economic opportunities
A project supported by the Feed the Future and Global Health Initiatives

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THE MANOFF GROUP

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USAID/Empowering New Generations to Improve Nutrition and Economic opportunities (ENGINE) is a five-year integrated nutrition program whose goal is to improve the nutritional status of women, infants and young children through sustainable, comprehensive, coordinated, and evidence-based interventions, enabling them to lead healthier and more productive lives. In its support of the National Nutrition Program, ENGINE's mandate includes a robust learning agenda and innovations in implementation that contribute to large-scale, evidence-based social and behavior change communication (SBCC) for nutrition.

ENGINE is implemented under the leadership of Save the Children, with cooperation from Tufts University, Land O'Lakes, Valid International, and The Manoff Group.

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Abbreviations

AEW	Agriculture Extension Workers
ANC	Antenatal Care
DHS	Demographic and Health Survey
ENGINE	Empowering New Generations to Improve Nutrition and Economic opportunities
HEW	Health Extension Worker
IFA	Iron and Folic Acid
IYCF	Infant and Young Child Feeding
SBCC	Social and Behavior Change Communication
SNNPR	Southern Nations, Nationalities, and Peoples' Region
USAID	United States Agency for International Development

Glossary of Foods

Local Name	Description
Alicha (wot)	Usually made with turmeric, which gives the sauce (wot) a light yellow color
Ambasha	Round, white, wheat flour flat bread (about two inches thick). The top of the bread is decorated using a knife for easy portion control, similar to pizza slices. Originated in the Tigray region, where everyone eats ambasha for breakfast, usually with tea.
Areke	Local alcoholic beverage, clear white in color
Atmit	Thin gruel made of whole grain flour
Awaze	Red chili pepper powder mixed with water and areke or tej (honey wine), a condiment that accompanies meat and or injera
Bula	False banana bi-product A white flour cooked with milk or water; similar to thick semolina
Enset	False banana plant from which bula and kocho is made; builds the body
Fafa	Local baby food combining soy and whole grain flour; locally factory made baby food.
Firfir	Fried onions, oil/spiced butter, berbere (red chili pepper powder) and salt. Water is added to the thick sauce and simmered. Small, dry pieces of injera are combined with the sauce. Salt is added liberally to this spicy dish. It is popular because it is easy to make and requires few ingredients. Considered a morning or breakfast food. Also perceived to increase breast milk production.
Fitfit	Similar to firfir, but made with sauce. A mild sauce is made with onions and either meat (if available) or potatoes and carrots. A lot of water is added to make a thin/watery sauce. Pieces of injera are soaked in the sauce and fed to children 6 months of age and older.
Gomen	Collard greens, a dark green leafy vegetable. Can be found in the "environment." Gomen is not allowed for pregnant women and babies in some places for 2 to 3 months. Some mention growing it in their backyard. Believed to contribute to health and contain vitamins, but also to cause cramps and diarrhea in breastfed infants, so traditionally avoided. Can be eaten during fasting. Considered food for poor people.
Injera	Thin teff flour pancake eaten with everything, often as a starch accompaniment to stew or other "wot"/sauce.
Keneto	Non-alcoholic barley beverage believed to help with breast milk production- same as keribo. Keneto is the Christian name of this beverage.
Keribo	A non-alcoholic barley beverage- same as keneto; helps with breast milk production. Keribo is the Muslim name of this beverage.
Kita	A dry flat bread with a chew consistency similar to a chewy pretzel (but without the salt topping). Sometimes mixed with sugar and fed to children; used to train children how to eat.

Kocho	A false banana derivative, cooked in a pan like flat bread. Has a rubbery consistency. Is traditionally eaten with collard greens, minced meat and dry cottage cheese. A staple food for SNNP region; mentioned as something that is easily acquired and available. Commonly eaten during fasting time. Babies should not eat it until they are more than 1 year old. Women generally harvest kocho.
Kolo	A whole barley grain, dry roasted in a pan, sometimes mixed with peanuts. A popular local snack, kolo is described as a food that babies can tolerate; associated with "poor" people; may also increase breast milk production.
Miten	A word used to describe a variety of different grains used to make the gruel flour; for example, miten flour or miten shiro.
Muk	A thin smooth gruel made with whole grain flour and water; also called atmit.
Nifro	Any boiled cereals and legumes.
Shiro	Chickpeas or dry peas with spices, a little red chili powder, and garlic ground into flour. Shiro flour is cooked with water, oil and onions into a wot (sauce) and eaten with injera as shiro wot. Can be cooked with oil, onion, etc. Some women describe it as unappealing during pregnancy. Can be suitable for babies. Described as an inexpensive food. May be a substitute for meat.
Teff	Teff flour is mixed with water, fermented for a few days, and cooked into a flat pancake known as injera, the staple food of Ethiopia. Prepared for consumption and sale. Perceived as helping with breast milk production. Besides use in injera, may be used to make gruel for a baby at least 6 - 7 months old.
Tella	Germinated barley brew with alcoholic content. Very commonly mentioned as something that can contribute to production of breast milk. Some say it's not for babies; others that it is may be an early drink for babies.
Tella Kita	Tella kita consists of roughly ground corn, sorghum, teff, and barley, which is later baked, torn into pieces and mixed into the tella during the last stage of preparation to complete the fermentation. Kita made for tella is not eaten and different from the kita eaten as bread.
Tsewa	A local alcoholic beverage, tsewa is the Tigrigna name for tella, a religious name used by Orthodox Christians to describe the symbolic ‘blood’/wine that Jesus gave to his disciples at the last supper. Since wine is expensive, a group of friends, neighbors or relatives traditionally meet once a month on a chosen feast day of an angel or St. Mary to eat/break bread together, pray, and drink ‘tsewa’ (usually tella). The name is understood to mean ‘local brew’ but has additional religious connotations.
Wot	A sauce. There are several different types of wot: shiro wot, meat wot, misir (lentil) wot, alicha wot, potato wot, doro (chicken) wot.

Executive Summary

1. Background

ENGINE is a five-year (2011-2016) integrated nutrition program funded by the United States Agency for International Development (USAID) through the Feed The Future Program, and led by Save The Children International. The program's overall objective is to improve the nutritional status of women and young children in Ethiopia through sustainable, comprehensive, coordinated, and evidence-based interventions, including social and behavior change communication (SBCC) programming.

In 2013, ENGINE conducted formative research in the four regions in Ethiopia in which the program implements nutrition SBCC activities: Amhara, Oromia, Tigray and SNNP. The purpose of the research was to increase the understanding of current knowledge, practices, and behavioral influences related to infant and young child nutrition (IYCN) at household and community levels in the project's geographic areas.

Recent (2010) qualitative research findings on infant and young child feeding beliefs and practices in Tigray and SNNP regions have already been documented and disseminated under another USAID-funded program[1]. This report therefore contributes to the evidence base by focusing on findings and recommendations related to infant and young child feeding (IYCF) knowledge, practices and behavioral influences among mothers in only the Amhara and Oromia regions. The findings reported here are based on the analysis of transcripts of eight focus group discussions (FGDs) and sixteen in-depth interviews (IDIs) conducted with breastfeeding mothers of children less than two years of age in both regions. Mothers participating in the research were purposively selected to be representative of the primarily smallholder farming communities served by ENGINE in both regions.

2. Findings on Breastfeeding Practices

The research findings suggest that mothers of infants and young children in Amhara and Oromia regions have high levels of awareness about the recommended practice of exclusive breastfeeding. While most mothers engage in exclusive breastfeeding for the first six months of their children's lives, there are nevertheless exceptions to this general practice. These include sometimes giving newborns butter, *tela*, or sugar water as a traditional first offering, before breast milk. In addition, some mothers in both regions reported perceiving colostrum as dirty or unhealthy (particularly because of its yellowish color) and consequently discarding it rather than giving it to their newborns. Some mothers also believe that their breast milk is insufficient in quantity, or that their infants are thirsty for water, and may consequently provide water, cow's milk, gruels or *injera* to supplement their breast milk before the child reaches six months

[1] Alive & Thrive. Practices, IYCF practices, beliefs, and influences in Tigray Region, Ethiopia. Addis Ababa, Ethiopia; Alive & Thrive; 2010; and Alive & Thrive. Practices, IYCF practices, beliefs, and influences in SNNP Region, Ethiopia. Addis Ababa, Ethiopia; Alive & Thrive; 2010

of age. Perhaps the most concerning finding about breastfeeding practices is that some mothers reported exclusively breastfeeding their children for much longer than six months- in some cases for eight, nine or even ten months.

3. Findings on Complementary Feeding Practices

First foods: Mothers in both regions primarily give cow's milk, and cereal-based gruels and porridges, as first foods for their young children, beginning at the age of six months and in some cases as late as eight, nine or ten months. Gruels and porridges are prepared to be watery and thin, which mothers believe will reduce the risk of choking and will also help the baby get used to foods other than breast milk.

Diet diversity/Types of foods given: Generally, mothers believe that- with the exception of breast milk and first foods (gruels and porridges) - young children should eat what the rest of the family eats. Mothers do not report preparing foods differently or specially for their children, and explain that their children just eat whatever is available in the home. The exception to this general rule is that mothers will try to avoid giving their children spicy foods that the rest of the family may eat.

Similar to the diets of their family members, young children's diets consist primarily of grains and legumes, with only infrequent consumption of animal source foods and nutrient-dense vegetables and fruits. Eggs and cows' milk are the most common animal source foods consumed by young children, while meat is limited to holiday feasting times. Even at these times, many mothers reported avoiding giving their young children meat because they believe it is too "heavy" and can cause the child to choke. A few mothers, however, did mention that they sometimes dry and pulverize meat into a powder, which they then add to their children's porridge.

The research findings did not yield sufficient information to yield reliable conclusions regarding mothers' practices in terms of increasing quantity and frequency of complementary foods given to young children.

Feeding during illness: Mothers of young children are aware of the importance of continuing to breastfeed during illness, and most also expressed awareness of the seriousness of diarrhea with regards to fluid loss and dehydration. Practices regarding complementary feeding for the sick child varied, however. While some mothers reported making an effort to buy special, more expensive foods for their sick children to eat, others reported not attempting to feed their sick children at all. The majority of mothers reported taking their sick children to a health facility, and appeared to prioritize assuring that these children receive and take medicine; they appeared to place less importance on continuing to give their sick children breast milk or other foods.

4. Findings on Religion, Fasting and IYCF Practices

Infant and young child feeding practices during fasting were not addressed directly in the interview and discussion guide questions. Some mothers in Amhara region provided some information about their feeding practices during this time, and reported that children under the age of two years are not expected to fast and may eat foods without religious restrictions on diet.

5. Barriers to mothers' improved IYCF practices

Mothers face important barriers in adopting or maintaining improved IYCF practices, particularly with regards to their ability to get adequate nutrition and rest for themselves when their children are young.

The main barriers are:

- **Socio-economic constraints and women's limited access to other resources** that would enable them to obtain a diversity of nutrient-dense foods for their children.
- **Limited time, heavy workloads and other obligations** to their families, farms, and children that prevent women from having enough opportunities to breastfeed, prepare diverse nutrient-dense foods, and feed their children sufficient frequency to their children.
- **Insufficient understanding about optimal infant and young child feeding practices** in spite of general awareness of nutrition recommendations. While mothers do consider some animal source foods- particularly cow's milk and eggs- as "ideal" foods for young children, mothers consider meat to be a food to avoid giving young children. Many mothers believe that meats and other "heavy" foods should be avoided because they may choke a young child. While mothers did report occasionally giving their young children fruits and vegetables, these were not considered as ideal foods for young children. Some mothers continue to exclusively breastfeed their children well beyond six months, believing that their children are not ready to eat other foods until they reach eight, nine or ten months of age. When they do introduce other foods, which are often gruels and porridges, these tend to be thin and watery, rather than thick. Mothers are less aware of recommended complementary feeding practices for sick children.

6. Motivators and Influencers for mothers' improved IYCF practices

- **Happy, healthy, intelligent children.** Mothers love their children and take their caregiver roles seriously. Having healthy, happy infants and young children who gain weight and are intelligent is a major motivator for mothers in both regions (Amhara and Oromia) to improve their IYCF practices.
- **Husband support**. The majority of mothers participating in the research consider their husbands to be their most important source of support during the first two years of

their children's lives, particularly in regards to the provision of food and decision making about meals.

- **Older female relatives in Amhara region, but not in Oromia, motivate mothers for improved practices.** Similar to mothers' reports in SNNP and Tigray regions[2], mothers in Amhara region often cited their older female relatives as important sources of information and support for their current IYCF practices. The findings suggest that mothers and mothers-in-law could be targeted as secondary audiences/key influencers on mothers in these regions. In Oromia region, however, the research findings indicate that older female relatives have less influence on mothers of infants and young children. Traditional practices such as feeding infants butter were generally not accepted by mothers in Oromia, who ascribed these customs to the older generations.
- **Aspiring to be modern and progressive.** The findings indicate that mothers in both regions (Amhara and Oromia) do aspire to adopt lifestyles that they perceive to be modern and progressive. Pasta ("macaroni") was frequently cited by mothers as an ideal food for young children because they perceive it to be modern, progressive, and nutritious.
- **Health Extension Workers.** Mothers consider Health Extension Workers (HEWs) as generally trustworthy sources of information regarding infant and young child nutrition and feeding, hygiene, and childcare, particularly regarding disease and illness. Mothers also noted clear gender divisions in the extension services provided by government frontline workers: HEWs interact primarily with women, while Agriculture Extension Workers (AEWs) and Development Assistants (Das) interact primarily with men.

7. Recommendations

Target Audiences

The research findings confirm that mothers of children under two, and fathers of children under two are the priority target audiences for IYCF social and behavior change communication programming in Amhara and Oromia regions. SBCC messages, materials and strategies should target mothers and fathers separately, as well as targeting them together as couples to promote couple communication and joint decision-making about the nutrition and feeding of their infants and young children.

Although mothers in Amhara identified older female relatives as having some influence over their IYCF practices, mothers in Oromia did not. In both regions, however, women's husbands exert high influence over their ability to access diverse and quality foods for their children, because it is men who control the household finances and other resources, and who are the

[2] Alive and Thrive, 2010.

primary decision-makers for the family, even when it comes to deciding what the family will raise, grow, earn, buy, or cook to support the nutrition of their children.

Breastfeeding

Mothers in Amhara and Oromia regions are generally practicing exclusive breastfeeding, and so SBCC messages, materials and strategies should focus only on addressing the gaps identified through this research. These include:

a. **Promote colostrum.** Reassuring mothers and their families that the yellowish color of colostrum, which is perceived to mean that the milk is "dirty" and should thus be discarded, is highly nutritious. The yellowish color may need to be addressed through creative concepts that promote a positive image (i.e. combat the visual association with dirt). While ceremonial practices of providing the newborn with butter, sugar water, or tela were occasionally reported by mothers in both regions, these practices appear to be gradually disappearing in both regions thanks to the nutrition recommendations provided by the Health Extension Workers, but they are still present in some areas. SBCC messages and materials should recognize the importance of tradition in terms of ritual offerings to newborns and encourage mothers to give colostrum as the ideal ritual gift. Programming can consider positioning and testing colostrum as "the best gift", "the first gift", or "the gift of love" to replace the ritual first gifts (e.g. butter, sugar water, tela, etc.) to welcome newborns into the world.

b. **Reassure mothers that breast milk alone during first 6 months is all baby needs, quenches baby's thirst, and satisfies baby's hunger.** SBCC strategies should encourage mothers to avoid the temptation to introduce water, cow's milk, or foods earlier than six months.

c. **With breastfeeding experts, develop technically sound and culturally appropriate nutrition communication and recommendations to address mothers' concerns about having insufficient breast milk due to their own diets.** Mothers frequently expressed the belief that their own diets are negatively impacting their ability to produce sufficient quantities of breast milk, and of sufficient quality. For this reason, some mothers may attempt to supplement breast milk during the first six months by giving their children other foods.

Complementary Feeding

a. **Encourage mothers to introduce thick enriched porridges and other nutrient-dense foods at six months, and reassure them that babies will not choke and are ready for other foods in addition to breast milk.** Mothers already offer their children gruels and porridges, but they are thin and watery. SBCC programming should focus on providing recipes that help mothers to prepare thick nutrient-dense porridges for young children. Some mothers continue to exclusively breastfeed their children until they are eight, nine or ten months old, because they believe they are too young to eat other foods. Recipes and cooking

demonstrations (video or live) should include showing young children eating the thick porridges and other foods, as a way to convince mothers that young children can swallow these easily, and without choking.

b. **Help mothers and their families learn to plan and discuss together more frequent, diverse meals for their young children.** While information on quantity, diversity and frequency of complementary foods was insufficient to generate reliable conclusions, the apparent lack of discussion on these topics indicates that SBCC messages, materials and strategies to help mothers plan daily menus for their children, with increasing quantity and diversity of nutrient-dense foods, would help improve complementary feeding practices. An interactive menu planning game that encourages mothers to identify nutritious foods and portions, and to make realistic choices for daily meals and snacks given their economic constraints, is an example of an activity that could be promoted through small groups (e.g. enhanced "Community Conversations") and home visits conducted by HEWs.

c. **Promote improved feeding practices for sick children.** SBCC communication should encourage mothers to continue the good practice of timely care-seeking for sick children. Messages, materials and strategies should emphasize the importance of encouraging sick children to continue to breastfeed and to eat small, frequent nutrient-dense complementary foods.

<u>Dietary Diversity</u>

SBCC programming seeking to improve dietary diversity should:

a. **Join with livelihoods programs and other interventions to strategically support mothers and families to increase their access to animal source foods and to provide these more frequently to children 6-24 months of age**. Any promotion of dietary diversity and improved complementary feeding practices in Amhara and Oromia must address both real and perceived economic constraints and limited access to quality foods among families.
   - Mothers in both regions reported eggs and cows' milk as the most common animal source foods in the diets of their young children. The positive practices of providing young children with these animal source foods should be affirmed and supported to make it easier for mothers to provide dairy products and eggs more frequently (e.g. ideally, on a daily basis). Since other research conducted by ENGINE suggests that chickens, eggs and dairy products are perceived to be within the domain of women and are consequently controlled primarily by women[3], strategic behavior change communication tied to increasing the consumption of these animal source foods should

[3] Gender Analysis and Gender Audit Report. USAID-ENGINE; Addis Ababa, Ethiopia; June 2013.

reinforce livelihoods interventions that increase women's access to and control over them.

- SBCC strategies should address mothers' fears of their young children choking on meat and other "hard" foods by offering recipes and demonstration videos. In addition, enabling technologies should be identified and promoted through HEWs, AEWs and SBCC materials to reinforce and diffusing the good practices of some mothers who occasionally dry, pulverize, mince, chop, or soften meat (when it is available) to make it easier for young children to eat.

b. **Promote locally available nutrient dense vegetables and fruits as "modern" and "progressive" foods for children's daily diets.** Fruits and vegetables are currently infrequently consumed by young children, and while sometimes they are perceived by mothers as having good qualities, they are not prioritized in children's diets. In contrast, many mothers in both regions mentioned aspiring to feed their children macaroni because they perceive this food to be "modern" and associate modernity with high quality. SBCC programming should therefore develop and test the positioning of nutrient-dense vegetables and fruits for young children as icons of a modern and progressive lifestyle, as well as a means to help children be healthy and happy (other motivators for mothers). It is important to strategically link SBCC to agriculture extension services that help families to grow, preserve and store local fruits and vegetables so that they are more readily accessible and available throughout the year.

c. **Foster women's increased self-efficacy, couple communication, and increased joint decision-making in homes.** Although women are generally aware of nutrition recommendations related to improved IYCF practices, the findings indicate that women feel powerless to change the diets of their infants and young children because of their limited access to or control of household resources and decision-making. Women in Amhara and Oromia alike reported their dependence especially on husbands for financial support and to provide them with food sources. The research findings indicate that husband support is therefore vital for improved IYCF practices, and consequently SBCC messages, materials and strategies will need to emphasize couple communication and joint decision-making about the use of household finances and other resources to procure diverse, nutrient-dense foods for children 6-24 months old. SBCC programming should also include strategies and join forces with livelihoods interventions (income-generation, savings, credit or loans) that enhance women's self-efficacy in managing money and resources, and support them to plan and negotiation budgets and the allocation of household resources with their husbands and families.

Chapter 1: Background and Overview of Methods

1.1 Background

Malnutrition is one of the main health problems faced by women and children in Ethiopia. Nutritional status indicators show that the country has the highest rate of malnutrition compared to many Sub-Saharan African countries. Forty-four percent of children less than five years of age are stunted- the highest prevalence of stunting in Africa, after Burundi and Malawi. The prevalence of wasting among children under five in Ethiopia is 10%.[4]

The government of Ethiopia has identified the need to strengthen interventions tailored to groups that are highly vulnerable to malnutrition and its long-term negative effects. These groups include infants, children under five, and pregnant and breastfeeding women.[5] In line with national policies and strategies of the Ministry of Health (MoH), different international organizations have joined efforts to change the nutritional status of the country.

Empowering New Generations to Improve Nutrition and Economic Opportunities (ENGINE) is one such initiative. ENGINE is a five-year (2011-2016) USAID funded integrated nutrition program led by Save The Children International. The program's overall objective is to improve the nutritional status of women and young children through sustainable, comprehensive, coordinated, and evidence-based interventions, including social and behavior change communication (SBCC) programming.

1.1 Purpose and Objectives

ENGINE conducted formative research to develop an understanding of current knowledge, practices, and behavioral influences related to infant and young child feeding (IYCF), at household and community levels, across four regions of Ethiopia. The analysis of the data generated through this research is intended to inform recommendations for social and behavior change communication (SBCC) programming to improve IYCF behaviors, particularly among mothers of children under 2 years of age, as well as among fathers and grandmothers of children less than 2 years of age. The analysis is also intended to support decision-making to enhance the role of agriculture at household level in improving maternal nutrition, and enhancing effective program interventions linking maternal and child nutrition social and behavior change communication to the health and agriculture sectors

[4] ICF International Inc. (2013) Trends in Demographic and Reproductive Health Indicators in Ethiopia

[5] FDRE (2008) Program Implementation Manual of National Nutrition Program (NNP), Addis Ababa

Recent (2010) qualitative research findings on infant and young child feeding beliefs and practices in Tigray and SNNP regions have already been documented and disseminated under another USAID-funded program[6]. This report contributes to the evidence base by focusing on findings and recommendations related to infant and young child feeding (IYCF) knowledge, practices and behavioral influences among mothers only in Amhara and Oromia regions. The findings reported here are based on the analysis of transcripts of eight focus group discussions (FGDs) and sixteen in-depth interviews (IDIs) conducted with breastfeeding mothers of children less than two years of age in both regions.

1.2 Methods

1.2.1 Data Collection Methods

The Focus Group Discussions (FGDs) and In-Depth Interviews were conducted by facilitators using semi-structured guides. Facilitators were previously qualified and underwent five days of training, and then conducted a field test intended to allow them the opportunity to practice with the structured guides and address any problems with the research materials.

The interview guides and focus group discussion guides have 4 main sections:

Storytelling and discussion included questions and probes about ante-natal and maternal nutrition, and infant and young child feeding. The story provided a hypothetical scenario revolving around Selamawit, a pregnant woman, to which participants could respond. Participants were also given the opportunity to interject their own experiences into the discussions by facilitators. Selamawit's story was intended to assist in mapping the bigger picture, providing common ground for participants to discuss freely, and simplifying analysis through the use of uniform 3rd person responses.

- Following the storytelling and discussion, facilitators conducted a **photo elicitation on micronutrient rich foods**. This simplified discussion about micronutrients by saving time (as questions are asked after showing the pictures) and by encouraging discussion on micronutrients not the foods themselves.
- Discussions then moved to **fortified foods and supplements.** This section started with an explanation of what is meant by fortified foods and supplements, and after ensuring that all participants had a common understanding, the topic was discussed.
- Finally, facilitators conducted a **barrier and solution identification** game, carried out though the implementation of a "Yes, but" and "Yes, and" game which began with reading advice on different issues of MIYCF behaviors. Barriers were then explained after

[6] Alive & Thrive. Practices, IYCF practices, beliefs, and influences in Tigray Region, Ethiopia. Addis Ababa, Ethiopia; Alive & Thrive; 2010; and Alive & Thrive. Practices, IYCF practices, beliefs, and influences in SNNP Region, Ethiopia. Addis Ababa, Ethiopia; Alive & Thrive; 2010

"yes but" and motivators after "yes and." This was designed to capture reasons why individuals do or do not practice positive behaviors.

At the end of the FGDs or IDIs, participants were given the opportunity to ask questions on any topic of their choosing.

1.3 Participants and Sampling Methodology

1.3.1 Participants and Sample Size

This report presents findings and recommendations based on the analysis of data from a total of sixteen In-Depth Interviews (IDI) and a total of eight Focus Group Discussions (FGD) conducted with breastfeeding mothers of children under two years of age in the Amhara and Oromia regions of Ethiopia. The selected study sites are presented in Table 1 below.

Table 1: Research Study Sites, In-Depth Interviews and Focus Group Discussions

AMHARA	WOREDAS	KEBELES	IN-DEPTH INTERVIEWS	FOCUS GROUP DISCUSSIONS
	Efratana Gidim	Kore Meda	2	1
	Debre Elias	Abeshem	2	1
	Metema	Meka	2	1
	Bahir Dar	Zenzelma	2	1
OROMIA	Wayu Tuka	Migna Kura	2	1
	Hidabu Abote	Sire Morese	2	1
	Munesa	Doba Ashe	2	1
	Gomma	Teso Sedecha	2	1
TOTALS	**8**	**8**	**16**	**8**

Information about the number of participants in each FGD, and the total combined number of all FGD participants is not available in the dataset.

1.3.2 Sampling and Selection Methodology

Study communities were purposively selected by choosing zones in Amhara and Oromia regions and subsequently choosing *woredas,* or districts. Four *woredas* were selected in each region. Within each region, geographic location, crop type, agro-ecological zone and religion were considered during the selection of the *woredas*, with the intention of maximizing variation among participants. *Kebeles* with the same characteristics of the *woredas* were then chosen, although selection of *kebeles* also included variables such as road conditions, market day, and location of the marketplace within the community.

The sampling procedure involved selecting study communities, followed by recruiting study participants. Geographic location, crop type, agro-ecological zone and religion were the attributes considered during selection of the study communities. Selecting the "best fitting"

participants underlies sampling in qualitative research.[7] The sampling strategies used included maximum variation and extreme or deviant case methods. These methods help minimize the challenges associated with encompassing all variations of interest to the research.

The maximum variation sampling method was also used for recruiting study participants. The variation attributes used were age, marital status and literacy level. The selection of participants was done purposively in collaboration with health extension workers, teachers, community informants and local administrators. Lists of breastfeeding mothers with a child under two were obtained from the health centers and provided the basis for selection.

Group discussion participants were also selected from the list using the same attributes. Those who refused to participate were replaced by a participant with similar attributes. In-depth interview participants were selected using the same procedures as focus group discussion participants.

1.4 Ethical Considerations

Ethical issues critical for safeguarding the study participants were given due consideration. Institutional review board approval was obtained from the Johns Hopkins University Bloomberg School of Public Health and the respective regional health bureau. Local authorities were informed about the study. Informed consent was obtained from each study participant. For adolescents, parental consent was obtained. Interviewers and moderators informed participants of the confidentiality of the process and that no personal identifiers would be recorded. Participants were clearly informed about their right to refuse to take part or even terminate the interview or discussion at any point. The interviews and discussions were conducted in settings that ensured privacy.

1.5 Data Management and Analysis

The audio of FGDs and IDIs were recorded in local languages and subsequently summarized into English. An independent group of verifiers reviewed one-third of the translations against the transcriptions and audio recordings for accuracy. Analysis of the data from Amhara and Oromia regions was conducted by different teams. FGD and IDI data from Amhara was managed and coded by a research team using *Nvivo* 7, while FGD and data from Oromia was managed and coded by a research team using *Atlas.ti 6.2*. The data coding was conducted using an open, iterative process that generated specific, abstract codes related to participants' experiences with pregnancy, maternity, food, agriculture, nutrition, health, and information. Individual codes were later placed into one or more of these topics, or code families for review and

[7] Maxwell JA. (2005), Qualitative Research Design: An Interactive Approach, Second Edition, New York: Sage Publications, Inc.

thematization. Iteration, in which review of previously coded transcriptions with newly revised and refined codes, was conducted once the number of new codes generated by the process declined to one or two per new transcription. This iterative process allows for greater coherency across transcriptions and codes.

Once code families were populated with associated codes, preliminary themes or conclusions were proposed and compared with the quotations within the code families.

1.5.1 Strengths and Limitations of the Data Set, and Constraints in Data Analysis

Strengths

The research locations and participants were selected to be as representative of ENGINE's geographic coverage areas and beneficiary populations as possible. The research design included four *woredas* as study sites for each region, with significant efforts to diversify the geography, socio-economic status and religious profiles of the communities through a careful selection of kebeles. This sampling design increases the validity of the research findings drawn from this data, since the areas and individual participants are sufficiently diverse and representative of the four regions in which ENGINE operates. The research team sought to bolster data quality by using audio-recordings for IDIs and FGDs and by assuring an independent review of randomly selected transcripts to verify the information. These efforts also supported both the validity of the findings.

Limitations and Constraints

While the research had many strengths, there were nevertheless a few limitations and constraints in the design, data collection and analysis. First, the findings, conclusions and recommendations are based on qualitative research methods. As is the case with virtually all qualitative research protocols, this study was not designed to be analyzed using quantitative methods, and the findings are therefore not statistically significant in spite of the relatively large dataset. The diversity of geographic locations, and the careful selection of respondents who were representative of ENGINE's general beneficiaries, however, generated reliable findings in that they would be similar to those of other studies with similar populations. The length of the interviews and discussions (sometimes lasting more than four hours) led to occasional interviewer and respondent fatigue which in some instances caused incomplete questions or responses. The dataset, while rich, was also large and complex dataset, consisting of more than 3000 pages of text that were analyzed in a relatively short amount of time (4 weeks). Finally, the IDI and FGD transcripts did not include labels to identify the age, education, income or religion of the participants; nor was it possible for the analysis to identify the age of the children of the majority of the mothers who participated in IDIs and FGDs.

In spite of the limitations and constraints encountered, the research design and data have yielded valid and reliable findings, and important recommendations for IYCF social and behavior change communication programming in Amhara and Oromia regions. These are reported in the following pages of this report.

Chapter 2: Infant and Young Child Feeding Knowledge and Practices among Breastfeeding Mothers in Amhara Region

2.1 Breastfeeding Knowledge and Practices

2.1.1 Breastfeeding Frequency

Most of the mothers participating in the Amhara interviews and group discussions reported that they breastfeed their infants on demand. While some mothers reported that breastfeeding should ideally occur as often as twelve times a day, the most common frequency for breastfeeding was eight to nine times a day.

> *In total she (a mother) has to breastfeed the baby twelve times a day. She breastfeeds every hour or every two hours and at night whenever she wakes up from her sleep, she will feed her.* (FGD-Mother, Zenzelma)

Frequency of feeding is influenced by the mother's daily routine. The workload of some mothers results in barriers to feed as frequently as needed. For example, shopping days and harvest times were reported to limit breastfeeding frequency.

2.1.2 Exclusive Breastfeeding

Findings regarding exclusive breastfeeding were mixed. While some mothers reported that they exclusively breastfed for the first six months, others reported giving their infants foods in addition to breast milk over this timeframe. For example, mothers from the IDIs revealed that they sometimes give their infants cow's milk, infant formula, or gruel because they believe that their breast milk alone is not sufficient for the infant.

There were reports of cultural practices from at least three of the four sites (Zenzelma, Kore Meda and Abesheb) that might interfere with exclusive breastfeeding. For example, breastfeeding mothers reported the importance of giving butter to newly born babies before starting breastfeeding, as a way of "soothing" the baby's digestive system. Some reported giving butter or a drop of *tela* to the baby as part of the Christening ceremony[8]. These practices are considered to be an important part of culture, tradition and religion.

[8] In the Orthodox Christian Church tradition, time for Christening is determined by the sex of the baby. Boys are Christened 40 days after birth, while girls are Christened 80 days after birth.

> *I've witnessed that it is our customary practice and our norm to breast feed without giving any additional food even after six months, unless the mother is sick. But we do give a drop of tela the day the child is baptized as it is the cultural practice in our area. Aside from this practice, we don't even give the child water until he/she is six months old.* (IDI-Mother, Abesheb)

> *Immediately after I gave birth I did give them breast milk without any additional foods up to their Christening, after which I gave them raw butter to swallow and cow's milk to drink.* (IDI- Mother, Zenzelma)

While some mothers reported continuing this practice, others suggested that making newborns swallow butter no longer occurs in their communities.

2.2 Complementary Feeding Knowledge and Practices

2.2.1 Initiation of Complementary Feeding

With the exception of the ceremonial feeding of butter and *tela* at christening events or as prelacteal feeds, most mothers reported starting complementary feeding when their children are six months old. Many mothers attributed their decision to wait for six months to the education they received from health extension workers, and indicated that they understood that their children risked getting sick if water or other food were introduced before six months.

Nevertheless, some mothers reported waiting longer than this (i.e. 7 to 10 months).

> *I am giving her nothing except nursing my breast milk. There are of course children who are eager and start to eat solid foods early. But in my case most of my children started at the age of ten months or a year.* (IDI- Mother, Zenzelma)

Other mothers initiate complementary feeding before their children are six months old. These mothers explained that they believe that their breast milk production was insufficient. Mothers who reported giving their children water to drink during the first six months said it was because they believed that their children were thirsty and needed water to drink.

> *Since my breast was not producing enough milk then, I gave him gruel and cow's milk until he got diarrhea and [then] I took him to the health center where they told me not to give him any kinds of food again before his six month.* (IDI-Mother, Meka)

> *Traditionally, they give water with sugar before the baby starts to suck his mother's breast. They [discard] the colostrum since they think that its yellow color is poison. After the child starts breastfeeding, they again give him water*

before he reaches six months because they say that breast milk makes babies thirsty [for water]. (IDI- HEW, Kore Meda)

I gave him foods before he was six months old because I need him to focus on foods rather than nagging me for breastfeeding, and I also believe that the foods help him not to be starved, to gain weight and grow. (IDI- Mother, Meka)

2.2.2 Types of Complementary Foods

Once complementary feeding starts, the most frequently mentioned first foods among mothers are gruel, porridge and boiled cow's milk. Gruel and porridge are prepared to be watery and thin, which mothers believe will reduce the risk of choking and will also help the baby get used to food other than breast milk. One mother explained that her baby's first food was decided by her baby: after seeing her baby trying to taste *injera* she decided to feed him *injera*. Table 2 below lists all the first foods mentioned in the IDIs and FGDs in Amhara, by site. Since this list is based on qualitative reports, frequency or amount cannot be classified. Among all communities, cow's milk is commonly used, along with gruels and porridges made from grains.

Table 2: Summary of first foods mentioned by site

Kore Meda	**Zenzelma**	**Abesheb**	**Meka**
Cow's milk	Cow's milk	Cow's milk	Cow's milk
Gruel (made from a mix of pea, rice, bean and sorghum)	Gruel (Variations: Unspecified; made from a mix of wheat, oat, and barley and sugar; made from white flour; made from oats)	Gruel (Variations: Unspecified; made from oats)	Gruel (Variations; Unspecified; made from Teff; made from oats; made from red sorghum and millet; made from red Teff with sugar; made from wheat)
Porridge (made from barley)	Porridge (made from Teff and barley)		Porridge (made from Teff)
Biscuit soaked in tea		Egg fried with Shiro	Infant formula
Cerifam with milk or tea		Orange Juice	Water boiled with curry/ fenugreek
Injera			

Based on the results from the IDIs and FGDs, young children between the ages of 6 and 24 months of age in the study communities are given gruel and porridge prepared from different

cereals, grains, or legumes. These porridges are made with either a single ingredient or by mixing two or more of the following ingredients: *teff*, oats, barley, millet, maize, wheat, sorghum, rice, mashed pea, and ground lentils. Spices may also be added in the preparation of gruel, including black or white spices, *fenugreek*, or *Dimbilal* (coriander seed). Other commonly used complementary foods were *injera* with *shiro*, scrambled *shiro*, scrambled egg, fruits such as banana and orange, boiled potato, bread with tea, and fortified foods such as *Fafa*[9] and *Cerifam*[10]. A mother from Zenzelma reported using fortified milk powder.

Table 3 lists all the complementary foods mentioned in the IDIs and FGDs by site for children between the ages of 6 – 24 months. Since this list is based on qualitative reports, frequency or quantity cannot be classified.

Table 3: Types of complementary foods given to children (listed alphabetically)

Anebaberu (Teff bread)	Kale
Banana	Macaroni
Biscuits	Mango
Boiled potato	Meat Firfir
Bread and tea	Milk
Cerifam (fortified baby food)	Milk and gruel
Cow's milk	Orange
Diluted soft drink	Papaya with sugar
Dried meat powder	Pastini
Eggs	Porridge (prepared from barley)
Fafa (fortified flour)	Porridge prepared from 7 types of cereals
Fenugreek with water and sugar	Porridge with butter
Fortified milk powder	Potato
Gruel (unknown ingredients)	Rice
Gruel prepared from barley, ginger, fenugreek, and honey	

[9] Faffa is prepared from cereals and legumes, milk powder, dry skim milk powder to increase the protein and is fortified with vitamins A, C, D, B_1, B_2, B_6, B_{12}, Niacin, Folic Acid, Iodized Salt, Calcium, Iron, Sugar.
10 Cerifam is pre-cooked meal prepared from cereals, legumes, milk and soya.

Gruel prepared from red Teff and sugar Injera with Shiro stew	Scrambled egg Scrambled Shiro Spaghetti

A large majority of the items are primarily carbohydrates, including gruel, rice, potato, porridge, including grains and legumes such as s*hiro* and *injera*. Among the animal source foods in young children's diets, cow's milk is the most common, with eggs given to children whose households have chickens. Meats are rarely provided, and mothers only infrequently mentioned giving their children fruits and vegetables.

As detailed information was not obtained regarding portion size during focus groups or in-depth interviews, it is difficult to assess the overall adequacy of the diet in terms of diet composition including animal source foods, nutrient-dense fruits and vegetables, or oils and fats. Many times during the discussion of progression of complementary feeding, foods were described in general terms rather than specific increases in portion size or the exact months when foods were introduced.

> *The amount will increase, if we use to give her ¼ now, we will increase it. We give the baby what is available, it could be porridge, and it could be injera with shiro sauce, or milk.* (IDI- Mother, Zenzelma)

When exploring practices related to feeding animal source foods to children between the ages of six and twelve months, one mother reported feeding meat in the seventh month and a few reported giving dry meat powder as part of complementary feeding. These mothers described feeding meat at this age as requiring special preparation, including cutting or mincing the meat into small, soft portions.

> *And whenever I find meat I mince the meat and make it juicy with no hot spice then put pieces of injera and mash it and feed her.* (IDI- Mother, Meka)

Although most mothers didn't mention meat as a commonly provided food during complementary feeding, the data collection for this research began the day after the Easter holiday. As part of the holiday festivity, families consume meat more frequently for an extended period of time. Slaughtered sheep, goat or ox will last the family for days to weeks. While this practice of occasional feasting is likely to encourage increased meat consumption by children, the research identified several barriers that reduced the likelihood of children benefiting from this opportunity as much as they might do so otherwise.

Different reasons were cited for children not eating meat, even when it is available. One mother from Debra Elias felt that meat stock should not be provided because it may make the child sick if given infrequently. Another from Zenzelima emphasized that giving meat when the child is too young is a choking hazard, which was echoed by mothers in Abeshem and Kore Meda. One mother from Abeshem discouraged feeding the child meat stock believing that it causes diarrhea. Lastly, two mothers classified meat as a "heavy" and "strong" food that should not be provided to young children.

Most mothers indicated that they believed that the consumption of meat (if available), either alone or combined with other foods, is only acceptable once the child is one year old. Frequency and variation of meat intake by children over one year of age generally reflected the availability of meat within the household. Mothers consistently described the child's diet as being determined by whatever foods are available at home. With the exception of the gruels and porridges mentioned earlier as introductory foods, special foods for young children are generally not prepared or provided in addition to what the family eats, as explained by this mother from Zenzelma and father from Abesheb:

> *She will do what is best for her child. If she has milk she will give her milk, if she has an egg, she will give her an egg, if she has meat, she will give her meat. If she does not have these foods she will give her what is available in the house. She will feed her lentils, potato, beans. Otherwise, if she has tela she will drink it and breastfeed her child.* (FGD- Mother, Zenzelma)

While meat is provided only rarely, mothers nevertheless cited meat, eggs, pasta, and fruits such as banana, papaya, and vegetables as ideal foods for children six months to two years of age.

> *When she starts eating I would buy her macaroni if I could afford it because I want her to not be hungry and to grow very well. There is a difference between injera and other foods. These foods are more valuable than injera, because they protect children from different diseases.* (IDI-Mother, Zenzelma)

2.2.3 Ideal Foods for Young Children and Foods to Avoid Feeding Young Children

Mothers were asked to report on foods that are important for children under two years old to eat and foods they thought should be avoided. Gruel and porridge are the most commonly mentioned important foods for a baby between six and twenty-four months old. These foods are considered important because they are thought to make the baby grow faster and to stay healthy.

In both in-depth interviews and focus group discussions mothers gave a number of suggestions for types of foods that would improve the diet of young children in their community. Most suggestions included fruits such as orange, banana, and papaya, vegetables such as beetroot and carrots, and eggs, pasta, and meat. One mother from Kore Meda described the types of foods she would like to add to her child's diet and then named a barrier in achieving this:

> *..what I think is it would be better if he got fruit such as banana, papaya, macaroni and gruel made from cereals such as bean, sorghum and teff…It (his diet) is not sufficient because it is determined by our standard of living. We wish to eat a variety of food, but our economic background does not allow us.* (IDI- Mother, Kore Meda)

Only one mother diverged from this desire to add additional foods to her child's diet; this was because she felt what she currently provides is sufficient:

> *I have never thought of changing his food. I don't think he needs any additional food. I feel that what I feed him is enough… I am feeding him all the necessary foods now.* (IDI- Mother, Zenzelma)

She described her son's intake as including what is available in the house and added:

> *Even if I give him more now he is not going to eat. In the future when he starts to eat I will give him egg, chicken and meat.*

Mothers reported avoiding giving their children certain foods because they believed these foods presented a choking hazard, or were too spicy or too "heavy" for young children. Mothers also reported giving their children foods that are not fresh (i.e. avoiding foods prepared the previous day), foods that are dirty, and alcoholic beverages. However, large variations in opinion about specific foods aside from alcohol and red (spicy) pepper became evident. For example, while some mothers consider Injera and Shiro to be important for a child's diet, others reported that these should be avoided because they believe Injera and Shiro are difficult for younger children to digest. The following comments from a focus group discussion with mothers of children less than two years of age from Abesheb exemplifies the variety of opinions about what young children should and should not eat:

> *She (a young child under two years old in a story) should not drink tela, and coffee. And it is preferable if she doesn't eat shiro and injera.*
>
> *It's ok if she eats shiro. But she should not eat meat and drink tela. She should not also eat grains and Kolo because how can she chew it?*

Since she doesn't have teeth to chew and eat so she should not eat sugarcane, it is not recommended. Besides this she should not drink alcohol.

She should not eat Peach (a carbonated soft drink) and sugarcane. She should not eat banana if there is no one to properly peel and prepare banana and feed her. The seeds of an orange might also put her in to danger unless there is someone to make the juice remove the seeds. But she can eat shiro. They should take care if they give her banana and orange as these may put her in danger.

She should not eat raw foods, grains and meat, boiled cereal, and she should not drink tela and alcohol. But she can eat orange, egg and drink tea.

We don't have to feed her injera, meat or anything that came in contact with meat stew, grains, and also we should not make her drink coffee and alcohol.

We shouldn't give them (young children) alcohol and also boiled cereals and millet will choke them. And the other thing is we should not give them red pepper because it's very hot for them. We should not also give them alcohol and grains. We should not give them red pepper until they are 1 year old because it will be very hot for them.

There are two types of spices; one is [salt] - what we put it in every food we make, like in the gruel, bread and Shiro. The other one is the red pepper. We don't give them this since it's hot. She can eat Kolo.

Table 4 below provides the list of ideal complementary foods and foods to avoid, as identified by mothers.

Table 4: Mothers' list of ideal complementary foods and foods that should be avoided for children between 6-24 months (listed alphabetically)

Ideal Foods	**Foods to Avoid**
Bread	Alcohol
Bread with tea	Boiled grains
Butter	Coffee
Cerifam	Gibto
Chicken stew	Injera
Dry meat	Kale
Egg	Kolo
Gruel	Meat
Macaroni	Peach (Coke/soft drink)
Meat stew	Pepper
Milk	Salty foods
Pastina	Shiro and Injera
Porridge	Sugarcane
Porridge with butter	Tela
Potato	
Powdered milk	
Shiro	
Soft drink	
Spaghetti	

2.2.4 Consistency of Foods

Regarding consistency of food given, most mothers gave descriptions of foods that are watery, especially during the early stages of complementary feeding. When describing food consistency, one mother reported that the food should neither be too thick or too thin and then reported on how she mixes a precooked fortified food with water, which has instructions on how to prepare the food on the packaging.

I boiled water and I put it in a clean bowl and I put the Cerifam powder and then I mixed it with a spoon not too thin not too thick. Then I let it cool and I fed him. (IDI- Mother, Kore Meda)

It appears that for prepackaged foods mothers feed their children based on the instructions provided. Gruel and porridge are widely considered to be liquid foods.

2.2.5 Frequency of Feeding Complementary Foods

Regarding frequency of feeding, most mothers reported feeding their young children three to four times a day in addition to breastfeeding. Although there was one mother who fed her child five times a day, most said four as the maximum number of times children are fed. Feeding frequency was often determined by how busy the mother is.

If she can prepare food four times a day for her child I believe she is brave and I will admire her. I don't think you can prepare more than four times though. (FGD- Mothers, Abesheb)

2.2.6 Duration of Breastfeeding for Children over 6 Months Old

All mothers reported continuing to breastfeed their babies after they are six months old, and after starting complementary foods. Some mothers may continue breastfeeding their children until they are three years old.

In our community some mothers stop breastfeeding early. Some will stop when the baby is one year old. I will only breastfeed her until she turns two because I want to. But there are also some mothers who breastfeed until their baby is 3 years old. I believe mothers who stop earlier are those who have little knowledge, they say it is enough for their baby and they think it doesn't have any benefit to breastfeed after that age. (IDI- Mother, Meka)

Another mother, also from Meka, differentiated length of breastfeeding based upon the child's gender:

While I raise my children I always breastfeed them up until two years for daughters and up to three years for the boys. It is believed that two years is enough for girls. But in our tradition, we breastfeed boys for 3 years to make them strong- it is believed that they required a lot.

2.2.7 Feeding During Fasting

Infant and young child feeding practices during fasting were not addressed directly in the interview and discussion guide questions. Some mothers in Amhara region provided some information about their feeding practices during this time, and reported that children under the

age of two years are not expected to fast and may eat foods without religious restrictions on diet. Although it could be assumed that these mothers are Orthodox Christians, since this is the predominant religion in the Amhara region, their religions, were nevertheless not confirmed or recorded by the research teams.

> *There is no restriction about what to eat because even religion doesn't prevent little babies from eating fasting foods or other foods that have more protein and fat like meat, egg, milk.* (IDI-Mother, Zenzelma)

> *There is no food taboo for the child and for us. In our religion there is fasting but we do not consider it to be an obstacle.* (IDI- Mother, Kore Meda)

2.2.8 Feeding During Illness

Mothers consider breastfeeding during illness to be standard practice; however, nearly all mothers reported that their children reduce their food and liquid intake, and will not breastfeed at all when they are sick. Despite the reduction in their children's appetite, most mothers reported persisting in their attempts to breastfeed their children and to give them other food and liquids.

> *When they get sick I buy them a variety of foods to encourage them to eat. When they are sick I give them [food] now and then in small amounts… When he is sick he refuses to breastfeed.* (IDI-Mother, Zenzelma)

Specific foods that mothers provided included bread with tea, gruel made from sorghum or barley, crusty foods with low water content, non-oily foods and foods with less spices. Nevertheless, a few mothers reported that they do not give any other food to their sick children, and will just breastfeed them.

All mothers appeared to recognize the importance of taking their sick children to the health center either immediately or when there were signs that the child was not improving. Some mothers emphasized that they focus on assuring that medicine is taken, with less emphasis on giving their children foods or breast milk. This is because they believe that the medicines will help their children regain their health- after which they will feel well enough to begin eating again.

> *Whenever she gets sick I don't make any change in her diet, rather I give her the medication. When she gets sick she eats little and especially she doesn't take liquid foods at all. She also stops breastfeeding.* (IDI-Mother, Abesheb)

> *Once she is better, [a mother] can give her baby the balanced diet she is used to eating. [When my] baby is sick she might not eat anything, even gruel. Therefore I will give her the medicine little by little and give her my breast milk. I will breastfeed her. When she gets better, I will feed her food.* (FGD-Mother, Kore Meda)

Some mothers do make extra efforts to entice a sick child to eat.

> *We change his diet when he gets sick and buy those expensive (and healthy) foods only when he gets sick. But we do that only until he becomes healthy. When he gets well, we will be back to the normal situation. When he is sick, he only eats a little. We feed him healthy (and expensive) foods when he is ill. But if we had practiced this earlier he would have not been sick at all.* (IDI- Mother, Meka)

The foods that this mother named as feeding her child during a time of illness were chicken, gruel, boiled egg, soft drinks, spaghetti and macaroni. In terms of liquid, many mothers emphasized providing liquids in the form of gruel, cow's milk, or water. Some mothers suggested giving less liquid if the child has diarrhea. This is believed to help the baby cope with the disease by controlling the diarrhea. A mother in Meka suggested giving Oral Rehydration Solution (ORS) while at the same time emphasizing the importance of giving crusty foods with low water content such as bread.

2.3. Factors Influencing Complementary Feeding Practices

2.3.1 Motivations and Barriers for Improving Young Children's Diets

Through the "yes but, yes and" game, mothers in focus groups provided additional insight into motivations and barriers to providing their child older than six months with a variety of foods and providing additional foods after a child recovers from illness.

Main Motivators

1. Healthy, Growing, Strong Children

Mothers demonstrated high ownership for the care of their children. They are motivated to help their children be healthy and strong, and to protect them from disease. In the interviews, most mothers emphasized the importance of good diet on child health. In describing ideal foods, mothers frequently attributed ideal foods as helping their children grow strong and healthy. Weight gain was also mentioned by mothers as something they look for, and positively perceive, in the development of their infants and young children.

Mothers with children under two associate their children's diet, as well as their own maternal diet, with the health of their children. It is believed that when the mother gets ill, the child will also become ill from drinking the mother's breast milk. Hygiene during food preparation was emphasized as an important practice for the health of both the mother and the child.

2. Supportive Husbands

The majority of mothers regarded their husband's support as the most important factor for changing their baby's diet. Currently, the support provided by husbands is mainly financial. However, it is possible that having a better understanding of the health consequences of diet on both women and their children could stimulate more involvement from the husband.

Women explained the role of the husband as providing for the wife and child, with the woman being primarily responsible for requesting specific food items, purchasing foods, and feeding and caring for the child. However after learning information about diet changes, the wife discusses with her husband first and if the husband can provide financially, then a change in diet can be made. This sentiment was generally reflected by most mothers.

> *…for example I learn something from this discussion I will go home and tell my husband and if we agree with it and if we think it is useful for our child we will make it practical.* (FGD-Mother, Kore Meda)

Main Barriers

1. Women's workload and limited time to rest, eat and breastfeed.

Women's obligations on their farms and in their homes can be constraints on their ability to get the nutrition and rest they require to produce adequate quantities of milk. To address this issue, women may vary their diet or increase their intake of specific foods perceived to increase their production of breast milk.

2. Access to and availability of nutrient-dense foods

Barriers to providing a diversity of nutritious foods appear mostly to focus on limited access to and availability of these foods, particularly in terms of financial constraints and the cost of certain foods. Little information was gained on barriers to feeding children more food during times of illness recovery.

3. Lack of Husband Support

A few mothers mentioned that lack of couple communication and support from their husbands can present barriers to improved IYCF practices.

> *They both have to discuss and do the things they thing is right. If they have money constraints it might affect her decision. There are some husbands who are not supportive; they don't even look as if it's their child. He would agree in what she wants to do for her baby but when she asks him the money he would tell her to get away. (FGD-Mother, Kore Meda)*

4. Fear that young children cannot swallow or digest foods

Some mothers believe that their young children, six months and older, are still too young for foods other than breast milk, and expressed the fear that their children would have difficulty swallowing, choke or be unable to digest food. Some mothers also mentioned foods that they consider to be too spicy or too "heavy" for young children.

Chapter 3: Infant and Young Child Feeding Knowledge and Practices among Breastfeeding Mothers in Oromia Region

3.1 Breastfeeding Knowledge and Practices

In general, breastfeeding is a routine and highly valued part of raising children in Oromia region; all women participating in both the focus group discussion and in-depth interviews reported that they were breastfeeding.

3.1.1 Breastfeeding Frequency and On Demand

While all mothers in the FGDs and IDIs reported breastfeeding their children on demand, they found it difficult to quantify how often they breastfeed. Typical responses to how often a mother provides the breast would include whenever the child cries, while the child is sleeping, when the child wakes from a nap, or as often as necessary to make the child happy. Mothers reported that the frequency of breastfeeding decreases as their children grow.

> *As I have told you, if I am at home he breastfeeds continuously as he likes, but if I am not at home he breastfeeds two or three times per day…at the time of birth he breastfed more frequently and as his age increases his frequency becomes reduced, but he takes (greater quantities of) breast milk at a time.* (IDI- Mother, Sire Morese, Hidabu Abote)

3.1.2 Duration of Breastfeeding

Generally, participants report that they intend to breastfeed their children until they are between two and three years of age. However, there are a number of factors, including temperament of the child, the child's ability and desire to incorporate family foods, and the mother's health, that can influence a woman's ability to breastfeed for a specific duration, as indicated by this FGD participant from Doba Ashe, Munesa:

> *I will not withhold breast feeding when the child starts eating adult food, but the timing is difficult to generalize because the child may be the kind of child that does not want to sleep, or a difficult child to manage…after six months as the child grows he will decrease breast feeding based on how he becomes familiarized and his stomach accepts the food I give him. If the child is healthy I will decrease breast feeding because feeding may affect me.*

3.1.3 Feeding Immediately after Birth

There were few specific mentions of "colostrum" among participants in this research. The few mothers who mentioned colostrum noted that they provide this to their child after delivery, rather than traditional post-delivery foods such as butter.

> *I have learnt up to grade seven and I have some information from what I have learned from science books information, like, don't give butter for child at birth but he/she must get the colostrum at birth time, and I have got also from health centers of the woreda and health workers of our kebele.* (IDI- Mother, Hidabu Abote, Sire Morese)

> *…during his early age, up to six months I feed him only my breast milk, even the colostrum.* (IDI- Mother, Gomma Teso, Sedecha)

Other foods given immediately after birth include sugar; a small number of mothers reported that a sugar solution was used when the mother's milk was not available immediately after birth. For example, this mother from Munesa (Doba Ashe) reported:

> *My breast didn't produce milk in the first two days until I drank soup, coffee and other hot drinks. She didn't have my breast milk for the first two days. The one that assisted me in delivery gave the child dissolved sugar in hot water but traditionally they give newborns butter to swallow. They consider butter to be good for children, we are not practicing that now, and we've got education. Now we are feeding sugar which is dissolved by boiled water for two days.*

Although feeding a newborn butter is still practiced among some communities, most participants who discussed immediate post-delivery feeding reported that their child received breast milk (and the associated colostrum) or a sugar solution, if their breast milk was not available. Exclusive breastfeeding is widely accepted as the correct diet for infants less than six months of age.

3.1.4 Exclusive Breastfeeding

The majority of mothers who participated in this research report that children under six months of age should be exclusively breastfed, indicating awareness of the importance of the practice. Many mothers reported that this is their current practice; however, there are a few who reported that they, or someone else, supplement breastfeeding with water. This may be done because the mother perceives that the child is thirsty, or because she is not available for breastfeeding. In some cases, when a mother is not available for breastfeeding other members of the family will give cow's milk to the child. If a mother is not producing adequate breast milk, cow's milk may be substituted, although this was not widely reported in the data for Oromia.

I also think that babies before six months should eat porridge, banana, gruel and the like. As the baby grows up she can eat slice bread (Kita) and injera later on. (IDI-Mother, Sire Morese, Hidabu Abote)

Most mothers report that they practice exclusive breastfeeding (EBF) until their children are six months of age. Training and education from HEWs and others has had an effect on the willingness of mothers to practice EBF. For example, mother referred to being influenced by science, Islamic law and education on their breastfeeding patterns:

Until the child gets strong, I do not go far away from home. And until six months, I do not give them anything [but] breast milk. Years ago, mothers used to give children under six month various liquids, but now with science these things are banned (also Sharia). I do not go far away from home, but if I do, we give the child gruel or boiled milk with sugar. The milk will be mixed water. Yes, I am still breastfeeding. (IDI-Mother, Gomma Teso, Sedecha)

Before we received training we used to give a child butter. Before the child reached the age of two or three months we used to give freshly milked cow milk, but after we received the training we never give anything to the child before he/she reaches the age of six months. After six months of age we are giving the children a porridge prepared from mixed /different types of crops. (IDI-Mother, Wayu Tuqa Migna Kura)

These quotes indicate that training and education around exclusive breastfeeding is having a positive effect in Oromia region.

3.1.5 Barriers Encountered during Breastfeeding

There are a number of important barriers women face when breastfeeding their children, particularly during the first six months, because of the need to feed the child on demand with no other food to satisfy the child. These barriers are similar to those faced by breastfeeding mothers in Amhara region.

1. <u>Financial constraints and socio-cultural influences lead to breastfeeding women not getting enough food to eat themselves, which they perceive as having a deleterious effect on the quality and quantity of their breast milk.</u>

In spite of wide agreement among participants that a breastfeeding woman's intake of nutritious food should be increased in order to improve the quality and quantity of their breast milk, many reported that there was no difference between what different members of their families eat. There are two important reasons for this. First, most participants in this study reported that financial constraints affected their ability to change their food intake during pregnancy or breastfeeding. One of the most common answers to questions prompting answers related to barriers/motivators (the yes, but questions) was "I cannot afford additional

food when I am pregnant or breastfeeding". Second, it is customary for families to eat the same foods, together. A mother from Wayu Tuka (Migna Kura) noted:

> *I eat what I have with my family, even if there is not enough food I give them and I leave it…there is not any difference in our diet; no mother prepares different food for her family and also prepares and eats additional meals (different from] her family.*

A comment such as this one is typical of the mothers participating in the research in Oromia. Although many women in this study reported that they would eat special foods to increase milk production, they are constrained by the custom of eating the same food they prepare for their families, and this precludes their ability to attain either more or different foods than others members of their families.

2. Women's workload and limited time to rest, eat and breastfeed.

Women's obligations on their farms and in their homes can constrain their ability to have time to breastfeed their children with optimal frequency and sufficiency. Breastfeeding mothers explained that they are often expected to continue with the same amount of work they did prior to becoming pregnant, such as maintaining a household or working on the farm. In this context, women often struggle to find the time to breastfeed their child as often as they would like, and to get sufficient rest.

In an effort to address their concerns about having sufficient breast milk for their children, some women try to increase their intake of specific foods that are perceived to help them produce sufficient quantities of breast milk. For example, a mother from Munesa, Doba Ashe, explained:

> *When I eat breakfast with coffee- even if it is with roasted cereals (kolo)- and drink water my breasts produce much milk; when I ignore food my breasts do not give milk. At that time my child does not get milk, she simply sucks my breast. When I eat those foods my breasts become full of milk, I think those in the community may have similar experience with me.*

3.2. Complementary Feeding Knowledge and Practices

Complementary feeding refers to the provision of food to infants beginning at six months of age in addition to breastfeeding.

3.2.1 Introduction of First Foods

Most mothers in the FGDs and IDIs from Oromia have high levels of awareness regarding the importance of exclusive breastfeeding, and usually reported that they begin complementary feeding at 6 months of age. As indicated in previous sections, some mothers said that their children being eating other foods earlier than six months, and explained that this is mainly to supplement breast milk when the mother is not at home. Overall, porridge and gruel are the

most widely reported first foods, with potatoes, eggs, and fruits being introduced less frequently. Because many participants are subsistence farmers raising cereals, these are the basis of either porridge or gruel. The food that was reported as being appropriate for children over six months of age was most often porridge, made from whatever cereals might be available in the area. Eggs were the most commonly reported additional foods given to young children, after cow's milk, gruels and porridge.

> *Boiled milk and porridge is given until the baby starts to eat injera. The porridge is made from different cereals such as barley, wheat, beans, teff and hanchiro.* (FGD-Mothers, Teso Sedecha Gomma).

> *For my child? Yes, after porridge which was prepared from teff I gave him egg and then porridge which was prepared from different crops like beans, millet, and others. He ate these and he started his tenth month and now he is eleven months old and can eat what we eat and can leave when the food is not comfortable to him and he wants to get breast milk.* (FGD-Mothers, Teso Sedecha Gomma).

In some cases, gruel rather than porridge was reported as the preferred first food. Cow's milk is also generally perceived as appropriate for children over six months in age. In other *woredas*, participants also reported that they would give their young children complementary foods such as potatoes, eggs, and porridge together with sliced bread (also called *kita*). These data suggest, as in the previous section, that the ideal practice of introducing complementary foods at 6 months of age is widespread among mothers in Oromia.

3.2.2 Consistency of Foods

While the consistency of first foods was a question included in the in-depth interview guides, mothers did not generally respond with useful information related to the quality of the porridges and gruels. When gruel is given, it is may be given with a bottle. Providing gruel that can be drunk from a bottle or cup is relatively common in discussions with mothers. Mothers also frequently mentioned giving porridge, using a spoon or other utensil.

3.2.3 Transition to Family Foods

Making the transition to family foods can lessen the burden on mothers who previously would have prepared special foods such as porridge or gruel for their children. While some children are fed the same foods as the rest of the family upon their transition to complementary feeding (e.g. *injera*), most mothers reported that they prepared some type of gruel or porridge specifically for their children, starting at about six months of age. For some children, the transition to family foods starts as soon as six months; for others, it occurs later, usually between nine to twelve months of age, and generally no later than a year. By this age, the child eats what the family eats.

3.2.4 Frequency and Quantity of Feeding

Complementary feeding is understood by many to supplement, rather than substitute for, breastfeeding, at least until the child has fully adjusted to eating the same food as the rest of the family.

> *If I am capable of feeding him I feed him whenever he wants. If my child does not want to eat I feed him breast milk.* (Mother, Teso Sedecha, Gomma)

When a child begins eating complementary foods, they will usually eat with the family, although they are eating specially prepared foods such as porridge or gruel. Depending on the family's financial situation, this usually means either 2 or 3 meals per day (at breakfast, lunch, and dinner) and in some cases with the addition of an afternoon snack. Rarely, mothers reported that their children would eat more frequent, small meals (e.g. FGD, Teso Sedecha, Gomma). Mothers reported that it can be challenging to be sure that their children have been given enough food; for example, a mother from Migna Kura (Wayu Tuka) said:

> *Her food is not enough but I feed her as I can, since I have no options to give her enough food daily. If I try to give enough food to her the others may face a shortage [in their own] diet, so I gave her when I have something.*

3.2.5 Food Quality and Diversity

Information about the types of foods provided to children on a daily basis suggest that financial factors play a large role in influencing the diversity of foods available for young children, as well as for families in general. Mothers aspire to improve their family's nutritional outlook through the feeding of greater quantities of meat, fruits, vegetables, and other items not provided by the family farm. Nevertheless, their inability to pay for more nutritious foods has become a barrier for them to do so. For example, a mother from Sire Morese, Hidabu Abote, had this to say about the financial constraints she faced in making changes in her child's diet:

> **Interviewer: If you could, what changes would you like to make (if any) in your child's diet?**
>
> *P: What can I say? I don't have. I try to feed them.*
>
> **Interviewer: Think, assume that you can do what you want for your baby what could you do?**
>
> *P: I can't think that way. I don't have, what I think is what I told you now.*
>
> **Interviewer: OK, tell me what those who have would do?**

P: Those who have prepare vegetables, different items. "Fafa" prepared for baby gruel made of it and feed their baby but since we don't have the money to do that, we don't wish it.

For this participant, the lack of resources for food (and other things) makes it difficult to consider the ways in which her child's diet could be improved. Communication with individuals in these situations needs to be responsive to such issues and find ways to promote self-efficacy within the constraints of limited financial resources, challenging agricultural conditions, and perceived lack of support from the community and government expressed by some participants.

3.2.7 Complementary Feeding during Child Illness

When discussing feeding during illness, many participants reported that they would not change their feeding practices as long as the child was less than 6 months of age. During this time, they would continue to breastfeed the child as frequently as the child desired, sometimes force the child to take the breast, and would also take the child to a health center or hospital for evaluation. This mother from Doba Ashe (Munesa) reported:

We do not give her anything. I only breastfeed her, even if she is sick. I take her to health facilities if she is severely sick, they will give her injection and various tablets. I feed her only breast up to six months.

When considering illness of children between 6 months and 2 years of age, participants reported a variety of practices. For example, a participant in an FGD from Teso Sedecha (Gomma) noted:

We give her ORS within the first twenty four hours the diarrhea started and after that we keep her dishes clean and wash our hands before feeding her.

Regarding curing an illness such as diarrhea, a participant from Sire Morese, Hidabu Abote, reported:

Vegetables can cure such diseases. This can be garlic, green pepper and lemon which can be found in the backyard garden.

When their children are ill, women reported that they prefer to get information about the illness from a health care professional, such as a Health Extension Worker (HEW) or a doctor at a clinic. There was also an expectation that an HEW or other health care professional would provide some medicine that would stop diarrhea or help cure the illness.

Overall, mothers of young children less than six months old were aware of the importance of continuing to breastfeed during illness, and most also expressed awareness of the seriousness of diarrhea with regards to fluid loss and dehydration. While some reported that they would

take the child to the hospital or clinic if things became serious, others noted that the hospital would just "send them home" if they came with a sick child. Many mothers reported that Health Extension Workers or health workers are a reliable source of information regarding an illness of a young child.

When their children recover from an illness, particularly in the case of diarrhea, mothers reported several specific practices to help the child regain her strength. For example, participants in an FGD from Teso Sedecha (Gomma) reported:

> *P1: When the diarrhea stops, we peel the skin of cooked potatoes, mix with butter and feed her with a spoon.*
>
> *P2: The diarrhea drains the fluids in her body. And it is replaced by giving her more fluids than ever. She will also need salts. Therefore we have to make sure she drinks lots of water and fluids.*

Likewise, a participant from Sire Morese, Hidabu Abote, noted:

> *If the diarrhea stops, the child should be given food to get strength. The child should take vegetables, beetroot juice, porridge and slice of bread to stop diarrhea.*

Mothers did not discuss in detail the duration of their children's illness beyond the end of a particular episode of diarrhea. Therefore, it is difficult to determine whether there are additional practices related to recovery from illness.

3.3. Factors Influencing Complementary Feeding

3.3.1 Barriers to Complementary Feeding

1. Financial constraints

As was the case for mothers who are breastfeeding during their children's first six months, financial constraints- real or perceived- constitute the most important barrier mothers face for improved complementary feeding practices. Many reported that although they would like to change their child's diet, they are unable to do so because they don't have the resources. This mother from Migna Kura (Wayu Tuka) said:

> *I wish by myself but I can't. I have a great wish to feed my child more by changing her diet. I see children of my relatives who live in town and I want to feed my child same as them but I have no enough resources to feed my child as I would wish.*

2. Workloads

Mothers' heavy workloads, and the need to spend time farming, attending to household chores such as carrying wood or water, and preparing meals, are another important barrier to

improved IYCF practices. Women explained that their young children may not eat as frequently as they would like them to eat because they do not have enough time to prepare special meals or feed their children.

3. Knowledge

In some cases, mothers do not have the knowledge they need to practice optimal complementary feeding. For example, as noted earlier, there are many mothers who prepare thin gruel for their children instead of porridge as a first or early food. Mothers indicated that gruels may be given if a mother feels that her child is thirsty, when a child is sick, or because the mother believes that the child is still too young to eat "heavy" foods.

3.3.2 Motivators and Facilitators for Complementary Feeding

1. Healthy, strong, intelligent child

A child's health, physical strength and intelligence were all identified as the main motivators for mothers to improve their complementary feeding practices.

> [I introduce certain foods] "*to have a child who is strong, full capacity, healthy and improve his mental capacity more strong, to correct his blood condition and also for others."* (Mother, Sire Morese, Hibabu Abote)

Mothers identified a number of people whose support they consider to be important for improved complementary feeding practices.

2. Support from Husbands

The main source of support that pregnant women and mothers expect is from their husbands. When discussing the situation of Selamawit, a participant in a focus group discussion from Migna Kura (Wayu Tuqa) said:

> *She is alone and engages in home activities, and wanders here and there. She has nobody with her who can support her. She gave birth 6 months back so she may not have time to prepare food for the child. Also, she may not eat adequate food even though the food is there in the home. She may engage in home and outside home activities. She will have plenty of chores to perform and face a lot of problems and may not have time to breast feed her child.*

When asked what role Solomon should play in supporting complementary feeding, participants from Sire Morese (Hidabu Abote) noted:

> *His (Solomon's) responsibility is to facilitate the preparation of foods like gruel, porridge, banana, eggs and milk.*

More often, however, women expected their husbands to provide food, rather than prepare it. If the family owned and worked a farm, this is the method by which the husband should provide food; employees of companies or government should purchase at the market and give to their wives. In addition to what they grow, farmers are expected to provide commodities such as oil, onions, and high protein foods such as eggs and meat if he has the financial capability to do so. In some cases women reported that they had no support systems; in one case, this was due to a domestic dispute between a husband and wife, which left the mother bereft of any support.

3. Support from other family members

Mothers also count on other family members, including children's grandparents, aunts and uncles, for social support. Grandmothers in other regions were noted to play a very important childcare role. In Oromia, mothers did not highlight these older female relatives as major sources of support. However, grandmothers were often called upon to feed the child when the mother was away.

> *If I am not home, his grandmother would give him what I prepare. He cries unless there is a person who remembers him.* (Mother, Sire Morese, Hidabu Abote)

Chapter 4: Recommendations for Infant and Young Child Feeding SBCC programming targeting Mothers in Amhara and Oromia Regions

4.1 Target Audiences

Priority target audiences for IYCF social and behavior change communication programming in Amhara and Oromia regions are:

- mothers of children less than two years old,
- fathers of children less than two years old;
- couples/parents of children less than two years old.

SBCC messages, materials and strategies should target mothers and fathers separately, as well as targeting them together as couples to promote couple communication and joint decision-making about the nutrition and feeding of their infants and young children.

Although mothers in Amhara identified older female relatives as having some influence over their IYCF practices, mothers in Oromia did not. In both regions, however, women's husbands exert high influence over their ability to access diverse and quality foods for their children, because it is men who control the household finances and other resources, and who are the primary decision-makers for the family, even when it comes to deciding what the family will raise, grow, earn, buy, or cook to support the nutrition of their children.

4.2 Breastfeeding

Mothers in Amhara and Oromia regions are generally practicing exclusive breastfeeding, and so SBCC messages, materials and strategies should focus only on addressing the gaps identified through this research. These include:

a. **Promote colostrum.** Reassuring mothers and their families that the yellowish color of colostrum, which is perceived to mean that the milk is "dirty" and should thus be discarded, is highly nutritious. The yellowish color may need to be addressed through creative concepts that promote a positive image (i.e. combat the visual association with dirt). While ceremonial practices of providing the newborn with butter, sugar water, or tela were occasionally reported by mothers in both regions, these practices appear to be gradually disappearing in both regions thanks to the nutrition recommendations provided by the

Health Extension Workers, but they are still present in some areas. SBCC messages and materials should recognize the importance of tradition in terms of ritual offerings to newborns and encourage mothers to give colostrum as the ideal ritual gift. Programming can consider positioning and testing colostrum as "the best gift", "the first gift", or "the gift of love" to replace the ritual first gifts (e.g. butter, sugar water, tela, etc.) to welcome newborns into the world.

b. **Reassure mothers that breast milk alone during first 6 months is all baby needs, quenches baby's thirst, and satisfies baby's hunger.** SBCC strategies should encourage mothers to avoid the temptation to introduce water, cow's milk, or foods earlier than six months.

c. **With breastfeeding experts, develop technically sound and culturally appropriate nutrition communication and recommendations to address mothers' concerns about having insufficient breast milk due to their own diets.** Mothers frequently expressed the belief that their own diets are negatively impacting their ability to produce sufficient quantities of breast milk, and of sufficient quality. For this reason, some mothers may attempt to supplement breast milk during the first six months by giving their children other foods.

4.3 Complementary Feeding

a. **Encourage mothers to introduce thick enriched porridges and other nutrient-dense foods at six months, and reassure them that babies will not choke and are ready for other foods in addition to breast milk.** Mothers already offer their children gruels and porridges, but they are thin and watery. SBCC programming should focus on providing recipes that help mothers to prepare thick nutrient-dense porridges for young children. Some mothers continue to exclusively breastfeed their children until they are eight, nine or ten months old, because they believe they are too young to eat other foods. Recipes and cooking demonstrations (video or live) should include showing young children eating the thick porridges and other foods, as a way to convince mothers that young children can swallow these easily, and without choking.

b. **Help mothers and their families learn to plan and discuss together more frequent, diverse meals for their young children.** While information on quantity, diversity and frequency of complementary foods was insufficient to generate reliable conclusions, the apparent lack of discussion on these topics indicates that SBCC messages, materials and strategies to help mothers plan daily menus for their children, with increasing quantity and diversity of nutrient-dense foods, would help improve complementary feeding practices. An interactive menu planning game that encourages mothers to identify nutritious foods and portions,

and to make realistic choices for daily meals and snacks given their economic constraints, is an example of an activity that could be promoted through small groups (e.g. enhanced "Community Conversations") and home visits conducted by HEWs.

c. **Promote improved feeding practices for sick children.** SBCC communication should encourage mothers to continue the good practice of timely care-seeking for sick children. Messages, materials and strategies should emphasize the importance of encouraging sick children to continue to breastfeed and to eat small, frequent nutrient-dense complementary foods.

4.4 Dietary Diversity

SBCC programming seeking to improve dietary diversity should:

a. **Join with livelihoods programs and other programs to strategically support mothers and families to increase their access to animal source foods and to provide these more frequently to children 6-24 months of age**. Any promotion of dietary diversity and improved complementary feeding practices in Amhara and Oromia must address both real and perceived economic constraints and limited access to quality foods among families.
   - Mothers in both regions reported eggs and cows' milk as the most common animal source foods in the diets of their young children. The positive practices of providing young children with these animal source foods should be affirmed and supported to make it easier for mothers to provide dairy products and eggs more frequently (e.g. ideally, on a daily basis). Since other research conducted by ENGINE suggests that chickens, eggs and dairy products are perceived to be within the domain of women and are consequently controlled primarily by women[11], strategic behavior change communication tied to increasing the consumption of these animal source foods should reinforce livelihoods interventions that increase women's access to and control over them.
   - SBCC strategies should address mothers' fears of their young children choking on meat and other "hard" foods by offering recipes and demonstration videos. In addition, enabling technologies should be identified and promoted through HEWs, AEWs and SBCC materials to reinforce and diffusing the good practices of some mothers who occasionally dry, pulverize, mince, chop, or soften meat (when it is available) to make it easier for young children to eat.

b. **Promote locally available nutrient dense vegetables and fruits as "modern" and "progressive" foods for children's daily diets.** Fruits and vegetables are currently infrequently consumed by young children, and while sometimes they are perceived by

[11] Gender Analysis and Gender Audit Report. USAID-ENGINE; Addis Ababa, Ethiopia; June 2013.

mothers as having good qualities, they are not prioritized in children's diets. In contrast, many mothers in both regions mentioned aspiring to feed their children macaroni because they perceive this food to be "modern" and associate modernity with high quality. SBCC programming should therefore develop and test the positioning of nutrient-dense vegetables and fruits for young children as icons of a modern and progressive lifestyle, as well as a means to help children be healthy and happy (other motivators for mothers). It is important to strategically link SBCC to agriculture extension services that help families to grow, preserve and store local fruits and vegetables so that they are more readily accessible and available throughout the year.

c. **Foster women's increased self-efficacy, couple communication, and increased joint decision-making in homes.** Although women are generally aware of nutrition recommendations related to improved IYCF practices, the findings indicate that women feel powerless to change the diets of their infants and young children because of their limited access to or control of household resources and decision-making. Women in Amhara and Oromia alike reported their dependence especially on husbands for financial support and to provide them with food sources. The research findings indicate that husband support is therefore vital for improved IYCF practices, and consequently SBCC messages, materials and strategies will need to emphasize couple communication and joint decision-making about the use of household finances and other resources to procure diverse, nutrient-dense foods for children 6-24 months old. SBCC programming should also include strategies and join forces with livelihoods interventions (income-generation, savings, credit or loans) that enhance women's self-efficacy in managing money and resources, and support them to plan and negotiation budgets and the allocation of household resources with their husbands and families.

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