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A New Sweet Potato for an Old Problem: An Education Curriculum to Increase the Nutrition Benefits of An Agriculture Project Promoting Orange Fleshed Sweet Potato in Ethiopia

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A New Sweet Potato for an Old Problem: An Education Curriculum to Increase the Nutrition Benefits of An Agriculture Project Promoting Orange Fleshed Sweet Potato in Ethiopia

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Abstract

A New Sweet Potato for an Old Problem: An Education Curriculum to Increase the Nutrition Benefits of An Agriculture Project Promoting Orange Fleshed Sweet Potato in Ethiopia

By: Emma Waugh

Background: Chronic undernutrition and micronutrient deficiencies have serious lifelong consequences for young children. In Ethiopia, 38% of children are stunted, a reflection of chronic undernourishment and an estimated 38% of the population has subclinical vitamin A deficiency. The first 1,000 days—the period from conception to a child's second birthday—are crucial for growth and development; consequences of undernutrition during this period are largely irreversible. Much of this window of opportunity encompasses the period of complementary feeding (6-24 months) making it imperative that nutrition interventions focus on this period. Nutrition-sensitive agriculture, and in particular orange-fleshed sweet potato (OFSP) interventions have great potential to improve child health outcomes.

The Project: The Quality Diets for Better Health project is a four-year nutrition sensitive agriculture project that seeks to introduce a reliable, bioavailable source of vitamin A and energy into the food supply to improve the quality of diets of young children and their families. Groups of 30 households will come together to form Healthy Living Clubs (HLCs), around which dissemination of OFSP planting material, training in OFSP farming and nutrition education will be organized.

Methods: Qualitative formative research to identify barriers and facilitators to optimal infant and young child feeding practices was conducted to inform the design of this curriculum. Additionally, a social and behavior change communication strategy was developed.

Curriculum: The final product of this special studies project is a nine-session participatory nutrition education curriculum focusing on maternal nutrition, complementary feeding, and incorporating orange-fleshed sweet potatoes into families' diets. Each session includes a review of the previous session, a discussion of goals attempted over the previous month, an interactive activity, and goal setting for the subsequent month.

Conclusion: Complementary feeding (CF) is a series of complex behaviors that exist within a web of societal structures, environments and cultures. This CF curriculum, embedded within a nutrition sensitive OFSP project, addresses knowledge, skills and opportunity through the introduction of a bioavailable source of vitamin A, to improve CF practices in rural, southern Ethiopia. Reducing stunting and the burden of undernutrition require investments in CF behavior change interventions that address the multitude of factors that influence CF.

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Table of Contents

Chapter I: Introduction 1
List of Definitions and Abbreviations 3

Chapter II: Comprehensive Literature Review 4
Undernutrition & Stunting: Causes and Consequences 4
Complementary Feeding (CF) 6
Table 1: Guiding Principles for Infant and Young Child Feeding 7
Vitamin A 8
Orange Fleshed Sweet Potatoes (OFSP) & Nutrition Sensitive Agriculture 10
Community Nutrition Education 13
Social & Behavior Change Communication 15
Adult Learning Theory 18
The Quality Diets for Better Health (QDBH) Project 19

Chapter III: Methods 22
Table 2: Desired Changes by Audience Segment 24

Chapter IV: Results 27
Table 3: HLC Session Topics 29
Table 4: HLC Activities and Tools Descriptions 31
Table 5: Activities & Tools used in HLCs and Associated Behavior Change Techniques, Theoretical Domain Frameworks, and COM-B Domains 32

Chapter V: Discussion, Recommendations and Conclusion 33
Discussion 33
Recommendations 36
Table 6: Potential Reporting Requirements for Behavior Change Interventions 36
Conclusion 38

References 40

Appendix 1: Healthy Living Club Curriculum 44
Appendix 2: HDA Session Guides……..……..96
Appendix 3: Sample Monitoring Tool……..……...111
Appendix 4: Pictorial HLC Tools……...114

Chapter I: Introduction

Access to food is a basic human right, and yet malnutrition in its many forms affects millions of men, women and children around the world (United Nations, 1948). Child undernutrition is particularly appalling because of its long-term and irreversible consequences. It is an underlying cause of 45% of deaths among children under five (Black et al., 2013). Chronic malnutrition in the form of stunted growth in the first 1,000 days—the period from conception to a child's second birthday has been linked with lifelong declines in economic productivity and less education (Martorell et al., 2010). Additionally, micronutrient deficiencies reflecting lack of diversity in the diet can have severe consequences for children. Vitamin A deficiency has been linked to increased morbidity and mortality in children under 5 and is responsible for 4% of child deaths (Black et al., 2013). The burden of undernutrition is almost exclusively carried by low and middle-income countries where 28% of children under 5 are stunted. East Africa has among the highest rates of stunting in the world where 42% of children under 5 are stunted (Black et al., 2013). Ethiopia has a long history of undernutrition spurred by frequent droughts and subsequent famines (USAID, 2016).

Undernutrition is the result of a myriad of complex underlying factors including everything from the availability and quality of food in markets to poverty to crop yields and agricultural productivity; the solution to the world's nutrition problems do not lie exclusively in one sector. Renewed attention was brought to the persistent problem of malnutrition in 2010 with the development of the Sustainable Development Goals and the Scaling Up Nutrition movement (SUN). The SUN movement, now including Ethiopia and over 60 other countries, envisions a

world free of malnutrition by 2030, a goal they believe can be accomplished through multi-sectoral approaches to nutrition. They work to engage these varied sectors in participating countries, such as education, water and sanitation, and agriculture to become more aware of how their work impacts nutrition and institute projects, policies and programs that will benefit nutrition (termed nutrition sensitive) (Scaling Up Nutrition, 2015). Ethiopia joined the SUN movement in 2010 and has developed a multi-sectoral National Nutrition Program to combat malnutrition within its borders (Federal Democratic Republic of Ethiopia, 2016)

Nutrition sensitive agriculture in particular is an important multi-sectoral intervention for nutrition. Nutrition sensitive agriculture programs can positively impact families' food security directly—through increased crop production and indirectly—through additional income cash crops generate (Ruel & Alderman, 2013). Successful nutrition sensitive agriculture programs often include a nutrition education component (Berti, Krasevec, & FitzGerald, 2004). One of the most well researched nutrition sensitive agriculture programs with proven results is biofortification of orange-fleshed sweet potato (OFSP) to increase calorie and vitamin A consumption (Ruel & Alderman, 2013). In Ethiopia where chronic food insecurity is high and vitamin A deficiency is a problem of public health significance, biofortified OFSP has potential to be a highly impactful intervention.

The curriculum developed for this special studies project is embedded within a four-year nutrition-sensitive OFSP project to improve Vitamin A intake and overall CF practices in the Southern Nations, Nationalities and People's Region (SNNPR) of Ethiopia. The materials developed will be used during Healthy Living Club meetings, where groups of families with

children under 24 months come together to learn about nutrition and agriculture. It is a culmination of qualitative formative research conducted May-August 2017 identifying current child feeding practices including barriers and facilitators to optimal practices, and a social and behavior change strategy (SBCC) developed in August-October 2017.

List of Definitions and Abbreviations

CF: Complementary Feeding

FGD: Focus Group Discussion

HDA: Health Development Army Volunteer

HEW: Health Extension Worker

HLC: Healthy Living Club

Kebele: Administrative unit in Ethiopia equivalent to a village, town or municipality

KII: Key Informant Interview

OFSP: Orange-Fleshed Sweet Potato

QDBH: Quality Diets for Better Health Project—a 4-year OFSP and child-feeding project in SNNPR, Ethiopia.

SNNPR: Southern Nation, Nationalities and People's Region

ToT: Train-the-trainer

Woreda: Administrative unit in Ethiopia equivalent to a county

Zone: Administrative unit in Ethiopia equivalent to a group of counties or district

Chapter II: Comprehensive Literature Review

Undernutrition & Stunting: Causes and Consequences

Undernutrition is an underlying cause in 3.1 million, or 45% of all deaths among children under 5 years as well as 35% of the disease burden in this population (Black et al., 2013). Malnutrition can be either acute, caused by a lack of food during a brief period of time or chronic, a result of prolonged food insecurity. Acute malnutrition, or wasting, is measured as weight-for-height Z score more than two standard deviations below the median weight of the WHO reference population. Chronic malnutrition, or stunting, is measured as height/length-for-age Z score more than two standard deviations below the median weight of the WHO reference population (UNICEF). Acute malnutrition can be remedied by increasing a child's caloric intake through therapeutic foods. Chronic malnutrition is a complex problem with fewer immediate solutions. Causes of chronic food insecurity span multiple sectors and require a multitude of stakeholders to address. Chronic malnutrition, or stunting, has lifelong consequences for children.

Stunting in the first 1,000 days—the period from conception to a child's second birthday—is largely irreversible. Differences in height observed at this age remain until adulthood (Victora et al., 2008). Stunting has been associated with shorter adult height, reduced economic productivity and, for women, lower offspring birth weight (Victora et al., 2008). Additionally, childhood stunting has been associated with nearly a full year of schooling lost and is a significant predictor of grade failure. This loss of schooling is estimated to result in a 10% decline in lifetime income (Martorell et al., 2010). Furthermore, stunted children have higher odds of overall mortality and mortality from diarrhea, pneumonia and measles. (Black et al., 2008).

Globally, stunting affects 25% of children under 5 and is responsible for 15% of all child deaths. (Black et al., 2013). 42% of children in the UNICEF East Africa Region, which includes Ethiopia are stunted (Black et al., 2013). In Ethiopia 38% of children under 5 are stunted and 18% are severely stunted. Extreme disparities exist between rural, where 40% of children under 5 are stunted and urban areas where 25% of children are stunted (Central Statistical Agency & ICF, 2016).

Understanding the etiology of stunting is imperative for understanding how to effectively target interventions to address it. Analysis of data from 39 low and middle-income countries show that at birth, infants length-for-age is roughly the same as the worldwide WHO growth standards (i.e. children aren't stunted at birth) (Shrimpton et al., 2001). Length-for-age Z scores begin to decline soon after birth and decrease steadily until 24 months of age, the end of the 1,000-day window of opportunity for intervention. After this point, declines in length-for-age Z scores level off and lost growth is rarely recovered (Black et al., 2008; Shrimpton et al., 2001; Victora et al., 2008).

A child's nutritional status is a result of a number of factors outside of simply the food they ingest. Proximal factors that influence a child's nutritional status include food intake, access to safe water, adequate sanitation facilities, caretaker's knowledge of adequate feeding practices, and access to care and medical services (Bhutta et al., 2008). Unsafe water and inadequate sanitation can lead to enteric conditions (ex: diarrhea) that themselves further exacerbate malnutrition. A child who is sick will not eat as much and will be unable to absorb nutrients as

well on a molecular level, exacerbating their malnourishment. Distal factors include agricultural trends and their impact on the availability (or lack of) diverse foods, economic factors that influence food prices and family income, and the political forces that impact trade, security and economies (Stewart, Iannotti, Dewey, Michaelsen, & Onyango, 2013)

Complementary Feeding (CF)

In the absence of adequate nutrition, growth deficits, leading to stunting, accumulate rapidly after birth and continue through 24 months of age, including during the complementary feeding (CF) period of 6-24 months (Shrimpton et al., 2001). The end of this 24 month period also marks the end of the first 1,000 days after which stunting is largely irreversible (Victora et al., 2008). To mitigate these losses and promote improved child health and nutrition, it is imperative to ensure optimal CF. Starting at 6 months of age, breast milk alone does not provide enough calories or nutrients to fulfill a child's nutritional demands. In 2003, WHO synthesized current evidence and released a set of guiding principles for CF of the breastfed child, summarized in Table 1.(Dewey, Lutter, Martines, & Daelmans, 2001)

Based on these guidelines, WHO identified CF indicators to help measure, monitor and evaluate CF interventions. These indicators, including: continued breastfeeding at 1 year, introduction of solid, semi-solid or soft foods, minimum dietary diversity, minimum meal frequency, and minimum acceptable diet are often used incorporated into the design of CF interventions. They are not meant to serve as the source of caregiver messages on CF (WHO, 2007). These indicators have been criticized because they are not highly sensitive or specific measures of diet quality and are not consistently associated with improved nutrition outcomes (A. D. Jones et al., 2014).

The Ethiopian government recognized the importance of maternal and child health and has developed a national strategy for infant and young child feeding in 2004. They recognize that current child feeding practices are sub-optimal and identified areas for priority intervention including: optimal CF, care for children during and after illness, women's nutrition, anemia, Vitamin A and iodine deficiency (Ethiopian Strategy on IYCF). Indicators to assess these actions have been integrated into their National Nutrition Program to be implemented 2016-2020 (Federal Democratic Republic of Ethiopia, 2016)

Table 1: Guiding Principles for Infant and Young Child Feeding (Dewey et al., 2000; WHO, 2007)

Guiding Principles for Complementary Feeding of the Breastfed Child
1. Introduce complementary foods at 6 months of age while continuing to breastfeed.
2. Continue frequent, on-demand breastfeeding until 2 years of age or beyond.
3. Practice responsive feeding.
4. Practice good hygiene and proper food handling.
5. Start as 6 months of age with small amounts of food and increase the quantity as the child gets older.
6. Gradually increase food consistency and variety as the infant gets older, adapting to the infant's requirements and abilities.
7. Increase the number of times that the child is fed complementary foods as he/she gets older.
8. Feed a variety of food to ensure that nutrient needs are met.
9. Use fortified complementary foods or vitamin-mineral supplements for the infant as needed.
10. Increase fluid intake during illness, including more frequent breastfeeding and encourage the child to eat soft, varied, appetizing favorite foods.

Despite this commitment to child nutrition, sub-optimal CF persists. Nationally, 7% of children meet the standards for a minimally acceptable diet (adequate diversity and meal frequency), 14% for minimum dietary diversity and 45% for minimum meal frequency (Central Statistical Agency & ICF, 2016). Within SNNPR food insecurity is common and CF practices are poor, even in studies that show that mothers have knowledge of the importance of CF (Gibson et al., 2009; Henry, Whiting, & Regassa, 2015). Dietary diversity is particularly poor with only 13% of

children 6-23 months in SNNPR meeting minimum dietary diversity recommendations and only half had consumed a vitamin A rich fruit or vegetable in the 24-hours prior to being surveyed (Central Statistical Agency & ICF, 2016). Furthermore, data show that CF practices have largely remained the same over the past 5-10 years (Henry et al., 2015).

Vitamin A

Vitamin A is an essential micronutrient necessary for normal functioning of the visual, immune and reproductive systems; it also plays an integral role in cell growth, epithelial integrity, and red blood cell production (WHO, 2009). Vitamin A can be consumed in vitamin A rich foods, as a supplement or through fortified products (WHO, 2009). Vitamin A deficiency (VAD) develops when the body's stores of vitamin A are depleted and serum retinol falls below 0.7μmol/L (WHO, 2009). VAD can manifest on a clinical or subclinical level depending on the severity of the deficiency (Sommer, Davids, Annecy Accords). Severe deficiency ultimately leads to death; recent estimates indicate 4% of deaths among children under 5 are attributable to vitamin A and zinc deficiencies (Black et al., 2013). Other extreme consequences include xerophthalmia, Bitot's spots and night blindness (WHO, 2009). Milder deficiency can lead to anemia, increased risk of infection and mortality (Alfred Sommer, Hussaini, Tarwotjo, & Susanto, 1983; WHO, 2009).

Because of its role in growth, immune system function and reproduction, VAD is particularly concerning for preschool age children and pregnant women. VAD affects an estimated 90 million preschool age children (33%) and 19 million (15%) of pregnant women globally (Black et al., 2013). The WHO classifies VAD as a problem of severe public health significance when

more than 20% of the population has serum retinol levels below the VAD threshold (0.7μmol/L) (WHO, 2009); an estimated 38% of the Ethiopian population has subclinical VAD (Demissie, Ali, Mekonen, Haider, & Umeta, 2010; EHNRI, 2008). VAD has long been a problem in Ethiopia. In 1962, the Ethiopian Nutrition Institute was founded to address the widespread issue of VAD.

VAD can be addressed through dietary diversification, food fortification or supplementation (WHO, 2009). Supplementation has been proven effective in combating vitamin A deficiency and reducing mortality among children 6-23 months of age by 23% (Beaton, 1993). It is also the most commonly used intervention to address VAD (A. Sommer & Davidson, 2002). Supplementation programs provide supplements twice a year for children under five. Despite adoption of universal supplementation in Ethiopia in 1995, a 2010 survey found that only 23% of children in Ethiopia had received a vitamin A supplement in the previous six months (Demissie et al., 2010).

Diet diversification is theoretically the optimal solution to addressing VAD (A. Sommer & Davidson, 2002). Interventions such as animal husbandry or the introduction of vitamin-A rich crops offer a sustainable solution that do not require repeated visits to a health facility or reliance on an external supply chain, limitation that often hamper supplementation programs. However, dietary diversification interventions require extensive resources and time and are challenging to successfully implement. Furthermore, because of the carotenoid to retinol conversion ratio (12:1), it is particularly difficult to ensure an adequate vitamin A intake based solely on plant-based foods (A. Sommer & Davidson, 2002; WHO, 2009)

Biofortification is the process of improving the nutritional quality of crops through agronomic processes including plant breeding and biotechnology (WHO, 2016). Successful biofortification not only requires increased concentrations of the desired micronutrient, but also require its retention and bioavailability to be upheld during production and preparation and that the adoption rates by targeted farmers are high (Ruel & Alderman, 2013). Biofortification of orange fleshed sweet potatoes have been successful in improving vitamin A status in children (Low et al., 2007).

Orange Fleshed Sweet Potatoes (OFSP) & Nutrition Sensitive Agriculture

White sweet potatoes have long been a staple crop across much of sub-Saharan Africa. It is a calorically dense, resilient crop that is not labor intensive, making it an excellent food security crop. Biofortified OFSP are similar to white sweet potato in these regards, but OFSP also contains significant quantities of vitamin A. A 5-year-old only needs a half cup of OFSP to meet his or her recommended daily allowance (Jenkins, Byker Shanks, & Houghtaling, 2015). A quasi-experimental trial in Mozambique found that in households where OFSP was introduced children were significantly more likely to consume vitamin A and serum retinol increased (Low et al., 2007).

OFSP-based interventions, or more broadly nutrition sensitive agriculture has great potential to improve child nutrition (Ruel & Alderman, 2013). Unlike nutrition-specific interventions (supplementation, promotion of exclusive breastfeeding, etc.) that address immediate determinants of undernutrition, nutrition-sensitive interventions address more basic determinants of undernutrition. They focus on sectors complementary to health and nutrition such as

agriculture, water, and education, among others and include interventions such as school feeding and social protection programs (UNICEF, 2015). Nutrition-sensitive interventions, when implemented at scale, have great potential to increase the effectiveness of nutrition-specific interventions (Ruel & Alderman, 2013).

Nutrition sensitive agriculture interventions are particularly appealing because they can affect a family's food security directly—increasing the food available within a household and indirectly—increased income generated from additional crops produced. Furthermore, nutrition-sensitive agriculture can be a practical way to help households deal with changes caused by changing climate patterns (FAO, 2014; Ruel & Alderman, 2013). Promoting resilient crops and sustainable agriculture practices can help families weather droughts, other natural disasters as well as manmade conflict (Ruel & Alderman, 2013).

Ensuring that agriculture programs are nutrition-sensitive and have the intended effect on the target population is a complex task. All agriculture programs must convince farmers to adopt a new crop or agricultural process. Additionally, nutrition-sensitive agriculture programs must also convince program participants of the nutritional benefit of the innovation and how to utilize it in a way to optimize nutrition. Evidence of the effectiveness of targeted agriculture programs on nutrition outcomes is limited, largely due to poor evaluation designs (Girard, Self, McAuliffe, & Olude, 2012); an exception is OFSP and vitamin A (Ruel & Alderman, 2013). The introduction of biofortified OFSP has been shown to increase vitamin A intake in women and children and improve vitamin A status in children (Hotz et al., 2012; Low et al., 2007). They have also been shown to reduce the incidence and duration of diarrhea in children under 3 years (K. M. Jones &

de Brauw, 2015). A program to integrate nutrition education and OFSP promotion activities with ante- and postnatal care for pregnant and lactating women in Western Kenya found that the intervention increased vitamin A intakes and improved vitamin A knowledge among pregnant and lactating women (Girard et al., 2017). Despite numerous studies showing the promise of OFSP-nutrition projects and the great promise of nutrition-sensitive agriculture in improving nutrition outcomes, there is little consensus on the best approaches to implementing such programs (Berti et al., 2004).

Berti et al utilized the Sustainable Livelihoods Framework to analyze 30 nutrition-sensitive agriculture interventions, 19 of which had a positive effect on nutrition. The Sustainable Livelihoods Framework defines 5 types of capital necessary for positive livelihood outcomes—natural (natural resources), physical (tools/equipment), social (social network), human (knowledge/labor), and financial (savings/income) Sustainable Livelihoods (Harvard Humanitarian Initiative, 2014). Generally, interventions that focused on more types of capital saw more positive health and nutrition outcomes (Berti et al., 2004). Additionally, the majority of interventions that included specific nutrition objectives saw positive results (Berti et al., 2004). Gender is also an important consideration in any nutrition-sensitive agriculture program (Berti et al., 2004; Ruel & Alderman, 2013)Nutritional effects are more likely to occur when women or women's empowerment activities are included (Ruel & Alderman, 2013).

Of programs that had successful nutrition outcomes, nearly all included a nutrition education component (Berti et al., 2004). However, it was unclear from the design of these studies if nutrition education was the driving component for their successes, with the exception of one

trial. The trial, conducted in Kenya, compared groups that received OFSP planting materials with and without nutrition education to understand the effect nutrition education had on their program. They found that children under 5 in areas that received OFSP planting materials and nutrition education consumed vitamin A rich foods more frequently than their peers in areas that only received OFSP planting materials. They concluded that OFSP alone was not enough to improve nutritional outcomes (Hagenimana et al., 2001).

Community Nutrition Education

Nutrition education is a necessary component of nutrition-sensitive agriculture. When nutrition-sensitive agriculture includes outcomes related to children between 6-24 months, this education will need to be focused on CF; education on CF has been shown to improve child nutrition outcomes (Lassi, Das, Zahid, Imdad, & Bhutta, 2013). Additionally, community-based platforms, such as health posts, farmer training centers, or community organizations, may be the optimal delivery platform for this education as they can be effective in reaching a large segment of the desired population (Bhutta et al., 2013).

Providing education on CF has been shown to improve height-for-age and weight-for-age Z scores, reduce stunting rates and increase the uptake of recommended food. In food insecure population, the provision of complimentary foods with or without accompanying CF education has been shown to reduce stunting by 67% (Lassi et al., 2013). Education interventions to improve CF most benefited food secure populations; in food insecure populations most benefits were seen when education was combined with food supplements or provision of complementary foods (Bhutta et al., 2008).

In chronically food insecure populations, community nutrition education, paired with the provision of food via sustainable nutrition-sensitive agriculture has great potential to improve child health. Available evidence on what makes a successful community nutrition education intervention on CF is lacking. It is recognized that there is no universal, one-size-fits-all package of CF education that will work in all contexts (Osendarp & Roche, 2016), but little is known about what components of such interventions are most effective.

A review of 29 CF interventions, nearly all of which used a community-based platform, found those which were most effective conducted formative research to inform the design of the curriculum and had hypothesized a program impact pathway (Fabrizio, Liere, & Pelto, 2014). Only half of the programs reported on the intensity of the education; reported frequencies of education sessions ranged from 4 two-hour sessions to twice weekly sessions for 3 months (Fabrizio et al., 2014). Nutrition education initiatives should be focused on a small number of practical behavioral objectives (Osendarp & Roche, 2016); programs in the review included anywhere from 4-18 behavioral messages (Fabrizio et al., 2014). Most programs integrated principles of adult learning into their program and effective programs utilized learning strategies such as active learning, recipe demonstrations, memory aids and negotiation. In an attempt to institutionalize program activities, many programs used the existing health system infrastructure to deliver their intervention activities. However, then programs were limited by the capacity and reach of the existing health system; additionally, the effectiveness of programs also depended heavily on the facilitation skills of the group leader (Fabrizio et al., 2014).

Many CF education interventions only target mothers and neglect other potentially influential

audiences (Judi Aubel, 2012). While mothers are often physically feeding children, her decisions are based within her family, community, and larger sociocultural environment. Grandmothers, often respected for their age and experience, have roles in ensuring that cultural norms and beliefs are passed on, a role that becomes particularly salient after the birth of a new child (Judi Aubel, 2012). Additionally, in cultures where traditional gender roles are strictly enforced, men have a lot of control over household resources, which in turn influences resources available for child feeding. Ignoring those surrounding mothers that influence her behaviors, neglect the broader context within which CF occurs.

Generating demand, creating an enabling environment and ensuring an adequate supply of resources are necessary for the adoption of CF behaviors (Lamstein et al., 2014; Osendarp & Roche, 2016) When implemented well, nutrition-sensitive agriculture can increase resources. Nutrition education, when designed effectively and implemented well, creates awareness, knowledge and motivation, which generate demand. (Lamstein et al., 2014). Social and behavior change communication approaches can be a good way to ensure that nutrition education campaigns are increasing knowledge and motivating individuals.

Social & Behavior Change Communication

Social behavior change communication (SBCC) is defined as "behavior centered approach to facilitating individuals, households, groups and communities in adopting and sustaining improved health and nutrition related practices" (Lamstein et al., 2014)SBCC activities can be roughly divided into 3 categories: interpersonal communication, including counseling and group education, media, including small-mid (posters, local radio, etc.), mass and social medias, and

community or social mobilization. Interpersonal communication in the form of group education is one of the most common SBCC strategy utilized (Lamstein et al., 2014). Interventions utilizing interpersonal communication have shown significant improvements in dietary diversity, supplementation, meal frequency and responsive feeding outcomes (Lamstein et al., 2014)

Interventions with an underlying behavior change theory are most effective (Fabrizio et al., 2014). A range of behavior change frameworks exist, but few are comprehensive and even fewer are oriented towards application on a programmatic level. The COM-B model and Theoretical Domains Framework is a comprehensive behavior change model developed by synthesizing 19 existing frameworks for behavior change (Michie, Atkins, & West, 2014). The model includes three components—capability, opportunity and motivation (COM)—that are all required for successful lasting behavior (-B) change. Each component of the model (C, O, M) is further subdivided into theoretical domain frameworks. The model also specifies 9 intervention functions and 7 policy categories, identified by literature review and expert consensus, encompassing the vast majority of intervention functions. Each theoretical domain framework is linked to a particular intervention function that is most appropriate to addressing barriers to behavior change linked to that domain. This allows for mapping of very targeted behaviors to their relevant theoretical domain framework. These can then be associated with an appropriate intervention function, allowing for a systematic review of all intervention options to understand what approaches are most appropriate for the desired behavior change (Michie et al., 2014).

Designing an SBCC strategy can be a useful way to incorporate behavior change theory into a program and to inform the design of program materials. A comprehensive SBCC strategy starts

with a detailed analysis of the context and target audiences. This then informs the development of communication objectives, strategic approaches and positioning statements, which can all be specifically tailored to the context and audiences (Health Communication Capacity Collaborative, 2017). Several successful SBCC campaigns on CF have been conducted in Ethiopia.

Alive & Thrive, funded by the Bill & Melinda Gates Foundation began conducting SBCC activities in 2009 in Bangladesh, Ethiopia and Vietnam. Their initiative in Ethiopia, called "Smart and Strong Family" sought to raise community awareness of the importance of improved feeding practices and involved the entire family. They utilized "community conversations" CF demonstrations and TV/radio spots. The campaign focused on 7 key actions that family members could take to improve CF. They relied on trusted messengers to deliver their messages. They worked closely with the Ethiopian government and aligned their approach closely with government approaches (Alive & Thrive, 2014). The program has reached two million mothers of children under 24 months, 48% of which were able to remember one of the child feeding messages. A process evaluation of the program in 2013 found that the program had significantly improved dietary diversity (6% to 15%) and minimum meal frequency (5% to 12%) (Alive & Thrive)

Another successful approach to improved CF in Ethiopia is ENGINE (Empowering New Generations to Improve Nutrition and Economic Opportunities). They used an SBCC approach with behavior-centered programming. Nutrition was posed as "a family affair" and attempted to engage mothers, fathers and grandmothers in nutrition programming. They convened community

conversations to talk about complementary feeding, maternal nutrition, water, sanitation and hygiene, and agriculture. Men and women were invited to these groups, but only 2% of participants were men (ENGINE, 2016). A series of audio stories featuring relatable characters were used to convey the CF messages as well as games, hand-outs, and songs. ENGINE program areas saw significant decreases in stunting, improved dietary diversity for mothers and children (Save the Children, USAID, 2016).

SBCC is a useful way to integrate theory into program messaging and develop the overall communication approach of a program. However, integrating an SBCC approach into a nutrition education curriculum for adults also requires the consideration of adult learning theories.

Adult Learning Theory

Many learning pedagogies are geared towards children who are naturally primed for learning and willingly engage in directive learning. Adults have unique needs, desires and intentions for learning. Accordingly, pedagogical approaches to education designed for children are not appropriate for adult learners, who are the target of CF education and associated SBCC. Adult learning theory, or andragogy, lays out 6 key principles that are most important to consider when planning curriculum for adult learning (Northern Arizona University, 2010).

Firstly, adults need to know why they are learning (Bryan, Kreuter, & Brownson, 2009). They are autonomous entities who are responsible for their own decisions and don't accept directions like children (Northern Arizona University, 2010). Identifying compelling reasons for adult learners to engage with the material motivates them to fully engage with the content (CDC,

2009). This can be achieved by contextualizing learning to their situation. When the material is focused on problems relevant to learners' lives, they will see that there is a valid reason to invest their time and energy in learning (Bryan et al., 2009). Clearly stating learning objectives that convey these points sets the tone for the curriculum and engages adults (Caffarella, 2013). Learning should be problem based; adults become readier to learn when they have a specific problem to solve (Bryan et al., 2009).

Lastly adults bring a wide range of experience into any educational experience. This can be a great asset—sharing of experiences among peers can generate new knowledge for all, but it can also be a challenge—if will be hard to teach material that fits all experience levels if learners. Additionally, when adults feel like they are experts in a particular field, instruction may have little impact on their knowledge or behavior. (Northern Arizona University, 2010). These issues can be addressed by using a variety of learning styles, including active learning, discussions, demonstrations and other experiential learning techniques (CDC, 2009).

The Quality Diets for Better Health (QDBH) Project

The QDBH project is a four-year nutrition sensitive agriculture project that seeks to introduce a reliable, bioavailable source of vitamin A and energy into the food supply to improve the quality of diets of young children and their families. With funding from the European Union (EU), the International Potato Center (CIP) is partnering with People In Need (PIN), Emory University, and other local stakeholders to implement the project in two culturally distinct zones (Sidama and Gedeo) in SNNPR.

Groups of 30 households will come together to form Healthy Living Clubs (HLCs), around which dissemination of OFSP planting material, training in OFSP farming and nutrition education will be organized. HLCs will be led by Health Development Army volunteers (HDAs). HDAs are lay women from the community that have received training from HEWs. They are considered a "model families" and oversee five additional families and make up what is known as the one-to-five network (Teklehaimanot & Teklehaimanot, 2013).

The program will specifically target families with pregnant women and children under 24 months and nutrition education will primarily focus on maternal nutrition and complementary feeding. Additionally, in the first year of the project the added benefit of an innovative feeding toolkit will be tested. The toolkit includes a bowl with demarcations of the appropriate amounts to feed children of various ages and a slotted spoon to visually demonstrate the appropriate consistency of food for children; food that has high water content and low caloric density will fall through the spoon. It will be distributed along with a counseling card that pictorially depicts the appropriate way to use the toolkit.

In the first year, the project will be implemented with 780 households in 13 villages (kebeles) in three districts (woredas) across the two zones, with scale up to over 15,000 households in 41 kebeles occurring over the course of implementation. HLCs in half of the initial 13 kebeles will incorporate the feeding toolkit and child-feeding outcomes will be compared to HLC participants in the other kebeles where nutrition education will be conducted without the use of the toolkit. All kebeles will receive the same OFSP intervention activities.

This purpose of this special studies project was to design the curriculum for HLCs. The main topics covered include basic complementary feeding practices such as meal frequency, amount, consistency, dietary diversity as well as incorporating OFSP into young children's diets. It incorporates elements of adult learning theory and uses experiential learning methods such as cooking demonstrations, practice feeding sessions and audio stories. The curriculum includes findings from formative research, SBCC approaches, and adult learning theory.

Chapter III: Methods

Qualitative formative research was conducted from May-August 2017. The objectives of this work were as follows:

- Identify current infant and young child feeding practices.
- Identify barriers and facilitators to optimal infant and young child feeding behaviors.
- Understand current knowledge of vitamin A and perceptions of OFSP
- Assess acceptability of nutrition education groups in the form of Healthy Living Clubs.
- Assess feasibility and acceptability of the feeding toolkit.

Focus group discussions (FGDs) were conducted with mothers of infants under 9 months, mothers of infants and young children 9 to 23 months, pregnant and lactating women, fathers of children under 2 years, and grandmothers of children under 2 years. Dividing mother-specific questions into three FGDs allowed for the coverage of the range of topics necessary to meet the stated objectives in sufficient detail, while still keeping FGDs at a reasonable length to minimize respondent burden and fatigue. Key informant interviews were conducted with health extension workers (HEWs), ministry of health officials and community leaders who offered deeper insights into community norms and structures that influence child-feeding practices.

23 FGDs were conducted each with 7-15 participants in five kebeles, in three woredas across Sidama and Gedeo zones; 9 key informant interviews were conducted in the same areas. Kebeles were purposively selected from the 13 kebeles where program activities will be carried out in the first year of project implementation. They represented variability in agricultural conditions, distance to major markets and had a health post with a minimum of two HEWs.

FGDs focused on breastfeeding, complementary feeding, men's role in family and community, meal and food norms, sources of information on CF, OFSP, vitamin A knowledge, the feeding toolkit and Healthy Living Clubs. Topics covered in the interviews included: current nutrition programs operating in the communities, sources of information on infant and young child feeding, current sweet potato production and potential for OFSP in the communities, perceptions of the feeding toolkit; prior successful partnerships for nutrition programs, and appropriateness of the proposed HLC model.

Data were collected by three facilitators who either hold or are pursuing a graduate degree in agriculture, nutrition, or a related field, and who are fluent in English, Amharic, and the local language of either Sidama or Gedeo. All four facilitators completed a four-day training, which included orientation to the QDBH project, an overview of qualitative research methods, research ethics training, an introduction to the research tools, and translation of informed consent and all research tools from English to Amharic. This project was deemed exempt by Emory's Institutional Review Board.

All FGDs and interviews were recorded. Data quality was assured through periodic detailed debriefs and daily debriefs which involved a section-by-section review of the FGD that had transpired that day. Focus groups and interviews were translated and transcribed verbatim. Whenever possible the same facilitator who led the discussion translated and transcribed the recording. Codes were developed deductively from the original FGD and interview guides and

inductively from the first 3 completed transcripts. All transcripts were then coded and analyzed using MaxQDA.

The results of this formative research were used to develop an SBCC strategy (Waugh, 2017) . Mothers of children <2 years were identified as the primary audience because formative research revealed they are the primarily responsible for child feeding. Secondary audiences included: fathers who often control family resources, grandmothers/mothers-in-law who dictate their daughters-in-law actions with regards to child feeding, health extension workers (HEWs) and health development army volunteers (HDAs) who will be tasked with delivering the intervention. Specific key complementary feeding and supporting behaviors were identified by target audience. These desired changes are listed in Table 2.

Table 2: Desired Changes by Audience Segment (Waugh, 2017)

Desired Change	
Mothers of Children <2 years	**Grandmothers /Mothers-in Law**
Feed children 6 to 23 months vitamin A-rich foods, especially OFSP, at least 5-6 days/week.	Advise mothers to follow recommended practices.
Feed children 6 to 23 months with age- appropriate meal frequency and volume.	If giving advice to their daughters-in-law, it reflects HEW counseling.
Feed children 6 to 23 months energy dense complementary foods (adequate thickness).	Support daughters-in-law with household chores, meal preparation, and/or child feeding
Do not use bottles to feed children.	**HEWs**
Feed children 6 to 23 months foods from at least 4 food groups daily.	Counsel women on recommended complementary feeding practices
Practice active, responsive feeding	Provide supportive supervision to volunteers leading HLCs
Fathers of Children <2 years	**HDA Volunteers**
Produce, purchase, or provide money for other household member to purchase necessary quantities of nutritious foods for home consumption.	Counsel mothers on recommended complementary feeding practices during Healthy Living Club sessions.
Commit to keeping some OFSP for family consumption.	Conduct individual follow up with participants from the Healthy Living Clubs.
Encourage mothers to follow recommended practices.	
Fathers prioritize young children and women for consumption of vitamin A-rich foods	

Barriers and facilitators to each desired change were identified based on the formative research and existing literature and were developed into problem and solution trees. Since HLCs had yet to start, and the HEWs/HDAs had never participated in HLCs before, hypothetical barriers to their desired changes were outlined. Problem trees elucidated determinants for each behavior that are necessary for it to be carried out. Solution trees envision how those determinants lead to the desired behavior being carried out. Each determinant was then linked to the appropriate COM-B domain and theoretical domain framework. The COM-B model for behavior change includes three components—capability, opportunity and motivation (COM)—that are all required for successful lasting behavior (-B) change. Each component of the model (C, O, M) is subdivided into theoretical domain frameworks. The COM components and theoretical domain frameworks are further linked with particular intervention functions that are most appropriate for addressing barriers to behavior change linked to that domain (Michie et al., 2014). Using those intervention functions, hypothetical curriculum activities were outlined within the identified functions.

From this information, key messages, program positioning and the overall strategic approach were developed. The overall strategic approach highlights the roles that all members of a family play in child feeding; similar to it takes a village to raise a child, it takes a family to feed a child. The program sought to highlight how the desired changes will lead to benefits the audience will appreciate—a healthy, happy baby.

From this work, the final HLC curriculum was developed. In addition to the SBCC, the design of the curriculum was guided by the principles of adult learning. It incorporated dynamic, interactive teaching methods, tailored content to the local context, incorporated goal setting

activities where participants create actionable goals to include in their daily routines, and highlighted the most salient benefits of the proposed changes.

Chapter IV: Results

The final product of this special studies project can be found in Appendix 1. It is a curriculum document written for HEWs, PIN Community Facilitators, where were hired to support the implementation of this program, and HDAs who have advanced literacy. The curriculum will ultimately be delivered by HDAs. A train-the-trainer (ToT) approach was utilized to train HEWs and PIN Community Facilitators Two, five-day ToTs covering CF principles, participatory methods and the curriculum were held in December 2017 and January 2018. HEWs and PIN Community Facilitators were responsible for training HDAs and monitoring HLCs. A sample monitoring tool can be found in Appendix 3. Following the ToT, HEWs and PIN Community Facilitators conducted monthly trainings with HDAs to introduce them to the month's HLC session including technical information, session activities and facilitation skills.

Training of HDAs proved particularly challenging because the majority of HDAs had only basic literacy and HEWs are unfamiliar with participatory teaching methods; didactic teaching methods are common in their training. To address this barrier, we developed one-to-two page session checklists for HEWs, PIN Community Facilitators and HDAs that provide step-by-step guidance on the session activities and facilitation instructions. These checklists can be found in Appendix 2. The checklists were used to support training of HDAs by HEWs and PIN Community Facilitators. They are also used by HDAs facilitate the sessions in a manner that retained curriculum fidelity.

The curriculum includes seven nutrition sessions, and a graduation ceremony. The first HLC session was focused on agriculture and was developed by CIP agriculture experts; it is not included as part of this special studies project. An overview of each session can be found in Table 3. Each session lasts between one and two hours and includes a review of the previous session, a discussion of goals attempted over the previous month, an interactive activity, and goal setting for the subsequent month.

Adult learning theory posits that adults learn best through experiential techniques. Accordingly, practical application of skills were incorporated into the curriculum wherever possible including cooking demonstrations, feeding practices and audio stories without an ending (J. Aubel, 2017). More detailed descriptions of the curriculum activities can be found in Table 4. Additionally, the COM-B model of behavior change was used as a framework when developing the curriculum. This helped ensure that a wide range of behavior change techniques were included and that they were most well suited to address the desired behavior changes. Table 5 outlines the behavior change techniques, theoretical domain frameworks and COM- B domains that each activity addresses.

The curriculum as written includes instructions for kebeles receiving the feeding toolkit and those without. Instructions specific to feeding toolkit kebeles are indicated in red in the version of the curriculum included in Appendix 1. Separate versions of the curriculum were prepared for the intervention implementation.

Table 3: HLC Session Topics

HLC Session	Session Goal	Who Should Attend	Activities & Tools
1. Agriculture and HLC Introduction	Introduce participants to the Healthy Living Club, begin developing positive group dynamics, and motivate continued participation.	▪ Mothers ▪ Fathers	▪ OFSP Planting Materials
2. Maternal Nutrition for Exclusive Breastfeeding	Discuss the importance of maternal nutrition during lactation and its implications for baby and the family; address mothers' and grandmothers' concerns and perceived barriers of exclusive breastfeeding. *Toolkit bowls and counseling cards distributed. (Toolkit Kebeles Only)*	▪ Mothers ▪ Fathers ▪ Grandmothers	▪ Audio Story ▪ *Counseling Card (Toolkit Kebeles only)* ▪ *Feeding Toolkit Bowls (Toolkit Kebeles only)* ▪ Goal Cards
3. Complementary Feeding— Texture	Discuss the importance of feeding thick, enriched porridge for children 6-23 months. *Toolkit spoons distributed to families with ≥5.0-month-old infants (Toolkit Kebeles only)*	▪ Mothers ▪ Fathers	▪ Diet Diversity Wheel ▪ Consistency Demonstration ▪ Child Taste Testing ▪ *Toolkit Spoons (Toolkit Kebeles only)* ▪ Goal Cards
4. Complementary Feeding— Frequency and Volume	Discuss the importance of meal frequency and volume for children 6-23 months.	▪ Mothers ▪ Fathers ▪ Grandmothers	▪ Audio Story ▪ Meal Frequency & Amount Supplemental ▪ Goal Cards
5. Responsive Feeding and Feeding During Illness	Introduce parents to the idea of responsive feeding, provide them with responsive feeding strategies and discuss appropriate feeding of children during and after illness.	▪ Mothers ▪ Fathers ▪ Grandmothers	▪ Audio Story ▪ Responsive Feeding Practice ▪ Goal Cards
6. Vitamin A and Orange Fleshed Sweet Potatoes for the Family	Identify the benefits of vitamin A and introduce participants to ways to prepare and the taste of orange fleshed sweet potato.	▪ Mothers ▪ Fathers	▪ Diet Diversity Wheel ▪ Cooking Demonstration with OFSP ▪ Goal Cards

7. Orange Fleshed Sweet Potato Recipes for Complementary Feeding & Dietary Diversity	Reinforce vitamin A messages, with a particular emphasis on children and dietary diversity	▪ Mothers ▪ Fathers ▪ Grandmothers (if desired)	▪ Dietary Diversity Wheel ▪ Cooking Demonstration with OFSP ▪ Goal Cards
8. Complementary Feeding as Children Age and Maternal Nutrition	Describe complementary feeding practices for older children and maternal nutrition during pregnancy	▪ Mothers ▪ Fathers	▪ Audio Story ▪ Meal Frequency & Amount Supplemental Page ▪ Goal Cards
9. Graduation	Congratulate families on completing the HLC and encourage parents to continue practicing new behaviors as children age, new children are born.	▪ Mothers ▪ Fathers ▪ Grandmothers (if desired) ▪ Other Community Leaders	▪ Graduation Ceremony

Table 4: HLC Activities and Tools Descriptions

Activities & Tools	Description
Audio Stories	A series of four stories following the lives of a young family as they learn how to feed their growing infant daughter. They learn about child feeding from their friends, a family with older children who have experience in feeding young children. The stories end with a conflict or decision point to facilitate group discussion about the recommended practice.
Child Taste Testing	An activity for parents to feed their children new foods with thicker consistency and with OFSP to convince them that their child is able to eat these foods
Consistency Demonstration	A demonstration involving showing porridge of 3 different consistencies—thin and watery, mid-thickness and appropriate thickness. This will be used to help explain why children need thick food.
Diet Diversity Wheel	A pictorial tool showing the six food groups with commonly available examples of each. One copy will be distributed to each family and they will be encouraged to display this in their home to serve as a reminder to feed their children a variety of foods. This tool can be found in Appendix 4.
Feeding Toolkit (Bowl and Spoon)	A bowl with demarcations indicating the appropriate amount to feed children of varying ages. The number of marks also indicate the number of times per day a child of that age should be fed. It also includes a slotted spoon to test the consistency of food; food that is too thin and watery and does not provide enough nutrients or calories for young children will fall through the holes. The feeding toolkit will only be distributed to kebeles participating in the full intervention (OFSP activities, HLCs and feeding toolkit).
Feeding Toolkit Counseling Card	A card to accompany the feeding toolkit explaining in pictures how to use the toolkit. The feeding toolkit will only be distributed to kebeles participating in the full intervention (OFSP activities, HLCs and feeding toolkit). Cards will be distributed to families and they will be encouraged to display them in their homes to serve as a reminder to use the feeding toolkit. This tool can be found in Appendix 4.
Goal Cards	Small images depicting various feeding actions that families can choose to set as their goal for the month following each HLC. Cards will be distributed to families and they will be encouraged to display them in their homes to serve as a reminder to take the specified action. This tool can be found in Appendix 4.
Graduation Ceremony	A ceremony to bring the HLC to a close and recognize families for their participation in HLCs.
Meal Frequency & Amount Supplemental Page	A pictorial tool showing the appropriate amount of food and frequency of feeding for children 6-11 months and 12-24 months. One copy will be distributed to each family and they will be encouraged to display this in their home to serve as a reminder to feed their children appropriately. This tool can be found in Appendix 4.
OFSP Cooking Demonstration	A participatory demonstration where families will have the chance to prepare local dishes incorporating OFSP and OFSP leaves.
OFSP Planting Materials	OFSP planting materials will enable families to grow their own OFSP.
Responsive Feeding Practice	An activity for parents to practice responsive feeding techniques with their children that are introduced in the HLC

Table 5: Activities & Tools used in HLCs and Associated Behavior Change Techniques, Theoretical Domain Frameworks, and COM-B Domains (Michie et al., 2014)

Activities & Tools	Sessions Used	Behavior Change Techniques Employed	Theoretical Domain Framework	COM-B Domain
Audio Stories	2, 4, 5, 8	6.2 Social Comparison	Social Influences	Social Opportunity
Child Taste Testing	3	8.1 Behavioral practice/rehearsal	Skills	Physical Capability
Consistency Demonstration	3	6.1 Demonstration of Behavior	Social Influences	Social Opportunity
Diet Diversity Wheel (One given to each family)	3, 6, 7	4.1 Instruction on How to Perform a Behavior	Knowledge	Psychological Capability
		7.1 Prompts/Cues	Environmental Context and Resources	Physical Opportunity
Feeding Toolkit (Bowl and Spoon)	2, 3	12.5 Adding Objects to the Environment	Environmental Context and Resources	Physical Opportunity
Feeding Toolkit Counseling Card	2	4.1 Instruction on How to Perform a Behavior	Knowledge	Psychological Capability
		7.1 Prompts/Cues	Environmental Context and Resources	Physical Opportunity
Goal Cards	2-8	1.1 Goal Setting (behavior)	Goals	Reflective Motivation
		7.1 Prompts/Cues	Environmental Context and Resources	Physical Opportunity
Graduation Ceremony	9	10.4 Social Reward	Social Influences	Social Opportunity
Meal Frequency & Amount Supplemental Page	4, 8	4.1 Instruction on How to Perform a Behavior	Knowledge	Psychological Capability
		7.1 Prompts/Cues	Environmental Context and Resources	Physical Opportunity
OFSP Cooking Demonstration	6, 7	6.1 Demonstration of Behavior	Social Influences	Social Opportunity
OFSP Planting Materials	1	12.1 Restructuring the Physical Environment	Environmental Context and Resources	Physical Opportunity
Responsive Feeding Practice	5	8.1 Behavioral practice/rehearsal	Skills	Physical Capability

Chapter V: Discussion, Recommendations and Conclusion

Discussion

The curriculum developed for this special studies project aims to improve maternal diet, exclusive breastfeeding and CF practices through group nutrition education for mothers and fathers of young children. Grandmothers were also actively encouraged to participate in specific sessions. Nutrition education is a common approach to improving CF and it is often a part of successful nutrition-sensitive agriculture projects (Berti et al., 2004). While there have been many successful CF interventions, little research has been done to assess how these programs create impact and what approaches are most likely to lead to success. It is recognized that no single optimal package of CF interventions exists (Osendarp & Roche, 2016), but few programs are designed to empirically test the effects of particular aspects of their intervention. This curriculum builds on previous research where possible, incorporating adult learning and behavior change theories. However we acknowledge there is limited research in the area of area behavior change approaches for nutrition in resource poor settings.

One challenge to systematically assessing effects of nutrition education interventions or particular approaches to education is that outcomes across CF behaviors are not standardized between programs and difficult to measure consistently. While standardized WHO indicators exist for ten CF behaviors, few programs report on these indicators (Lamstein, et al., 2014). This complicates comparisons across programs and further hinders research efforts to better understand specific program impact pathways that lead to desirable outcomes. Standardized WHO CF indicators will be used to evaluate the QDBH project.

Showing that nutrition-sensitive agriculture, education or other multi-sectoral programs can positively impact child health at scale in a sustainable manner will become increasingly important as nutrition moves further into the multi-sectoral arena. However, data on cost effectiveness, sustainability and scalability of CF behavior change interventions are almost never collected or reported (Fabrizio et al., 2014). The global drive to end malnutrition in all its forms by 2030, led by the Scaling Up Nutrition movement, will not be successful if the cost-effectiveness, sustainability and scalability of programs cannot be demonstrated.

Effectiveness research notwithstanding, information on basic CF behavior change program design is shockingly sparse. In a systematic review of 29 CF behavior change interventions, only about half reported the intervention intensity, (the length and duration of nutrition education sessions), an incredibly basic component of all interventions (Fabrizio et al., 2014). More involved details—messages disseminated, activities included, curriculums developed etc. are even harder to locate. In designing this curriculum, I sought to build upon previous work, but found this nearly impossible. Curriculum documents from similar programs are non-existent to external audiences. Useful details regarding program design, including how program designers bridge formative research findings or behavior change theory into program design and implementation are rarely reported in the peer reviewed literature, especially related to nutrition education in low income settings (Fabrizio et al., 2014).

Two large-scale CF behavior change programs have been implemented previously in Ethiopia—ENGINE (Save the Children) and Alive & Thrive. Program reports and technical briefs provide detailed information on program monitoring and evaluation, but only general information on the

process of program design or details of program implementation. Although both programs provided much more information then what is typically found in academic literature, my efforts to build upon their work were still limited by the sparseness of information available on their curriculum, additional education materials, and program implementation. How can future programs build upon prior successes and learn from previous failures if neither are adequately documented and disseminated?

One potential approach to address the limited information available is through the explicit use and documentation of the behavior change theories used in program design. Interventions with underlying behavior change theory are most effective (Fabrizio et al., 2014). The COM-B model/ theoretical domains framework for behavior change is unique in that it is comprehensive, encompassing 19 other behavior change theories, and is designed for application at the program level. The theory specifies precisely 93 behavior change techniques that are evidence based, well defined and encompass nearly all behavior change approaches (Michie et al., 2014). This model offers a strong theoretical grounding for research moving forward and can be used to test effectiveness of different delivery approaches—studies could be designed testing different combinations of behavior change techniques to see which methods or combination of methods are most successful at accomplishing behavior change objectives. It also offers a simple, understandable and, most importantly, concise mechanism for reporting on how programs are designed. Even within the word limits of an academic article, authors could report on the BCTs employed, giving readers deeper insights into their program activities.

Nutrition-sensitive agriculture has great potential to sustainably improve populations' nutritional status around the world. However, without addressing these limitations in the documentation and

dissemination of program implementation, taking these interventions to scale will prove challenging.

Recommendations

1. Make all program documents, including formative research reports, social and behavior change communication strategies and curriculum documents publically available.

If this program is successful, then future CF behavior change programs in Ethiopia should draw on the work of this program, rather than reinventing entirely new programming. If the program is not successful, then future program planners can learn from its mistakes. The best way to make this possible is to make program documents widely available to whoever may benefit from seeing them. Establishing reporting requirements for behavior change interventions could also help ensure that intimate details about programs become available for future programs to build upon. Potential reporting requirements, adapted from *Fabrizio et al,* are laid out in Table 6. Including information on these areas through publicly available program documentation, will give future program planners deep insight into the current program and its successes and failures.

Table 6: Potential Reporting Requirements for Behavior Change Interventions (Adapted From: Fabrizio et al., 2014)

1. Provide an outline of any formative research conducted, including key insights and how they informed the strategic approach, key messages and communication channels.
2. Outline the program impact pathway.
3. Detail the specific key messages that were disseminated.
4. Publish all program communication materials (handouts, flipcharts, media, etc.).
5. Provide details of intervention implementation including: number and length of sessions, attendance, facilitator training, assessments of of fidelity, etc.
6. Share evidence for the intervention's impact compared with other evidence-based interventions.
7. Provide any available evidence on cost-effectiveness, scalability, and sustainability of the program.

2. Address the limitations of existing health infrastructure if using the health system as the platform for program delivery.

The curriculum developed as part of this special studies project functions nearly entirely within the existing health system, utilizing HEWs and the Health Development Army as a means of program delivery. This is a common approach to institutionalizing program activities and ensuring sustainability of programming (Fabrizio et al., 2014). However, this limits the program to the strength and capacity of the existing health infrastructure. HEWs are overburdened by work and the quality of HEWs and HDAs vary considerably by kebele. Ensuring their commitment to this project, and motivating their involvement, outside of monetary incentives is important to ensuring a high quality delivery of the intervention. The ToT model used—where HEWs train HDAs—needs to include continued engagement, training and monitoring. HEWs are used to being trained, and training others in a didactic manner. Achieving the participatory approach to training desired in the HLC requires that it be modeled in every step of the training chain. More time and resources should be invested in training HEWs and HDAs to ensure high quality facilitation, not didactic teaching, within HLCs.

Furthermore concerns over the literacy of the HDAs should not be taken lightly. If they are to serve as primary message bearers they need to be well-trained and well-equipped to do so. Otherwise, the fidelity of the intervention and the quality of nutrition education will suffer. If written materials are not the best way to share information with them, then full commitment needs to be made to producing materials and teaching methods that are most appropriate for them. Steps that have been taken in this curriculum to address these issues include the use of pictorial tools and audio stories. Pictorial tools allow HDAs to remember and communicate key messages to HLC members. Recorded audio stories were used to ensure consistent messaging across all HDAs, even if they are illiterate or do not remember key messages. Furthermore, the

stories end before a resolution is reached, allowing participants to engage and discuss the stories. Facilitators do not need to be literate to lead a discussion around the stories.

3. Create nutrition education curricula that can be adapted to fit variable agricultural cycles. Nutrition-sensitive agriculture programs often include nutrition education (Berti et al., 2004). With this curriculum, the two are linked very closely; several sessions rely on the availability of OFSP for CF demonstrations. This is particularly important for this project because it is introducing a new crop and there are existing norms that keep families from feeding children sweet potatoes (Faerber, 2017). It is important that families have a chance to see OFSP prepared and fed to children in a supportive group environment. However, if the sessions must be presented in a particular order, OFSP may not be available the specific month that the curriculum calls for a demonstration. The session ordering should be flexible to account for this, allowing agriculture sessions and nutrition sessions with OFSP to be introduced when the time is most appropriate. Future HLCs will reorder the nutrition education sessions in this curriculum to align with the OFSP agricultural cycle. If nutrition education is an integral part of nutrition-sensitive agriculture, such considerations must be accounted for in curriculum design.

Conclusion

CF is a series of complex behaviors that exist within a web of societal structures, environments and cultures. This CF curriculum, embedded within a nutrition sensitive OFSP project, addresses knowledge, skills and opportunity through the introduction of a bioavailable source of vitamin A, to improve CF practices in rural, southern Ethiopia. Reducing stunting and the burden of undernutrition require investments in CF behavior change interventions that address the

multitude of factors that influence CF. Doing so necessitates multi-sectoral approaches to nutrition, including nutrition sensitive agriculture. As nutrition moves further into the multi-sectoral arena, more needs to be done to demonstrate effectiveness and document implementation of such approaches.

References

Alive & Thrive. Alive & Thrive: Ethiopia.

Alive & Thrive. (2014). *Overview of the approach for mobilizing families and communities in Ethiopia to adopt seven feeding actions*. Retrieved from Addis Ababa, Ethiopia:

Aubel, J. (2012). The role and influence of grandmothers on child nutrition: culturally designated advisors and caregivers (Vol. 8, pp. 19-35). Oxford, UK.

Aubel, J. (2017). *Stories Without an Ending: An Adult Education Tool for Dialogue and Social Change*. Retrieved from

Beaton, G. H. (1993). *Effectiveness of Vitamin A supplementation in the control of young child morbidity and mortality in developing countries*: Toronto, Ont., Canada: International Nutrition Program, Dept. of Nutritional Sciences, Faculty of Medicine, University of Toronto ; Geneva, Switzerland: International Nutrition Program, Dept. of Nutritional Sciences, Faculty of Medicine, University of Toronto.

Berti, P. R., Krasevec, J., & FitzGerald, S. (2004). A review of the effectiveness of agriculture interventions in improving nutrition outcomes. *Public Health Nutrition, 7*(5), 599-609. doi:10.1079/PHN2003595

Bhutta, Z. A., Ahmed, T., Black, R. E., Cousens, S., Dewey, K., Giugliani, E., . . . Shekar, M. (2008). What works? Interventions for maternal and child undernutrition and survival. *The Lancet, 371*(9610), 417-440. doi:10.1016/S0140-6736(07)61693-6

Bhutta, Z. A., Das, J. K., Rizvi, A., Gaffey, M. F., Walker, N., Horton, S., . . . Black, R. E. (2013). Evidence- based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *The Lancet, 382*(9890), 452-477. doi:10.1016/S0140-6736(13)60996-4

Black, R. E., Allen, L. H., Bhutta, Z. A., Caulfield, L. E., de Onis, M., Ezzati, M., . . . Rivera, J. (2008). Maternal and child undernutrition: global and regional exposures and health consequences. *The Lancet, 371*(9608), 243-260. doi:10.1016/S0140-6736(07)61690-0

Black, R. E., Victora, C. G., Walker, S. P., Bhutta, Z. A., Christian, P., de Onis, M., . . . Uauy, R. (2013). Maternal and child undernutrition and overweight in low- income and middle- income countries. *The Lancet, 382*(9890), 427-451. doi:10.1016/S0140-6736(13)60937-X

Bryan, R. L., Kreuter, M. W., & Brownson, R. C. (2009). Integrating Adult Learning Principles Into Training for Public Health Practice. *Health promotion practice, 10*(4), 557-563. doi:10.1177/1524839907308117

Caffarella, R. S. (2013). *Planning programs for adult learners a practical guide* (3rd ed.. ed.). San Francisco: San Francisco : Jossey-Bass.

CDC. (2009). *Simply Put: A guide for creating easy-to-understand materials*. Retrieved from Atlanta, GA:

Central Statistical Agency, & ICF. (2016). *Ethiopia Demographic and Health Survey*. Retrieved from Addis Ababa, Ethiopia

Rockville, Maryland, USA:

Demissie, T., Ali, A., Mekonen, Y., Haider, J., & Umeta, M. (2010). Magnitude and Distribution of Vitamin A Deficiency in Ethiopia. *Food and Nutrition Bulletin, 31*(2), 234-241. doi:10.1177/156482651003100206

Dewey, K. G., Lutter, C., Martines, J., & Daelmans, B. M. E. G. (2001). *Guiding Principles for Complementary Feeding of the Breastfed Child*. Retrieved from

EHNRI. (2008). *Ethiopian National Vitamin A Deficiency Survey Report*. Retrieved from Ethiopia:

ENGINE. (2016). *Integrated Social Behavior Change Communication to Improve Maternal, Infant, and Young Child Nutrition Practices: ENGINE Technical Brief*. Retrieved from

Fabrizio, C. S., Liere, M., & Pelto, G. (2014). Identifying determinants of effective complementary feeding behaviour change interventions in developing countries. *Maternal & Child Nutrition, 10*(4), 575-592. doi:10.1111/mcn.12119

Faerber, E. W., E.; Girard, A. (2017). *Infant and Young Child Feeding in Southern Nations, Nationalities and People's Region, Ethiopia: Results of Formative Work*. Retrieved from

FAO. (2014). *Nutrition-Sensitive Agriculture.* Paper presented at the Second International Conference on Nutrition.

Federal Democratic Republic of Ethiopia. (2016). *National Nutrition Programme II*. Addis Ababa, Ethiopia.

Gibson, R. S., Abebe, Y., Hambidge, K. M., Arbide, I., Teshome, A., & Stoecker, B. J. (2009). Inadequate feeding practices and impaired growth among children from subsistence farming households in Sidama, Southern Ethiopia. *Maternal & Child Nutrition, 5*(3), 260-275. doi:10.1111/j.1740-8709.2008.00179.x

Girard, A. W., Grant, F., Watkinson, M., Okuku, H. S., Wanjala, R., Cole, D., . . . Low, J. (2017). Promotion of Orange- Fleshed Sweet Potato Increased Vitamin A Intakes and Reduced the Odds of Low Retinol- Binding Protein among Postpartum Kenyan Women. *The Journal of nutrition, 147*(5), 955. doi:10.3945/jn.116.236406

Girard, A. W., Self, J. L., McAuliffe, C., & Olude, O. (2012). The Effects of Household Food Production Strategies on the Health and Nutrition Outcomes of Women and Young Children: A Systematic Review. *Paediatric and Perinatal Epidemiology, 26*, 205-222. doi:10.1111/j.1365-3016.2012.01282.x

Hagenimana, V., Low, J., Anyango, M., Kurz, K., Gichuki, S. T., & Kabira, J. (2001). Enhancing Vitamin A Intake in Young Children in Western Kenya: Orange- Fleshed Sweet Potatoes and Women Farmers Can Serve as Key Entry Points. *Food and Nutrition Bulletin, 22*(4), 376-387. doi:10.1177/156482650102200407

Harvard Humanitarian Initiative. (2014). Sustainable Livelihoods Framework.

Health Communication Capacity Collaborative. (2017). Designing a Social and Behavior Change Communication Strategy.

Henry, C., Whiting, S., & Regassa, N. (2015). Complementary Feeding Practices among Infant and Young Children in Southern Ethiopia: Review of the Findings from a Canada- Ethiopia Project. *Journal of Agricultural Science, 7*(10), 29-39. doi:10.5539/jas.v7n10p29

Hotz, C., Loechl, C., Lubowa, A., Tumwine, J. K., Ndeezi, G., Nandutu Masawi, A., . . . Gilligan, D. O. (2012). Introduction of β- carotene- rich orange sweet potato in rural Uganda resulted in increased vitamin A intakes among children and women and improved

vitamin A status among children. *The Journal of nutrition, 142*(10), 1871. doi:10.3945/jn.111.151829
Jenkins, M., Byker Shanks, C., & Houghtaling, B. (2015). Orange- Fleshed Sweet Potato: Successes and Remaining Challenges of the Introduction of a Nutritionally Superior Staple Crop in Mozambique. *Food and Nutrition Bulletin, 36*(3), 327. doi:10.1177/0379572115597397
Jones, A. D., Ickes, S. B., Smith, L. E., Mbuya, M. N. N., Chasekwa, B., Heidkamp, R. A., . . . Stoltzfus, R. J. (2014). W orld H ealth O rganization infant and young child feeding indicators and their associations with child anthropometry: a synthesis of recent findings (Vol. 10, pp. 1-17).
Jones, K. M., & de Brauw, A. (2015). Using Agriculture to Improve Child Health: Promoting Orange Sweet Potatoes Reduces Diarrhea. *World Development, 74*, 15-24. doi:10.1016/j.worlddev.2015.04.007
Lamstein, S., Stillman, T., Koniz-Booher, P., Aakesson, A., Collaiezzi, B., Williams, T., . . . Anson, M. (2014). *Evidence of Effective Approaches to Social and Behavior Change Communication for Preventing and Reducing Stunting and Anemia: Report from a Systematic Literature Review*. Retrieved from Arlington, VA:
Lassi, Z. S., Das, J. K., Zahid, G., Imdad, A., & Bhutta, Z. A. (2013). Impact of education and provision of complementary feeding on growth and morbidity in children less than 2 years of age in developing countries: a systematic review. *BMC Public Health, 13 Suppl 3*, S13. doi:10.1186/1471-2458-13-S3-S13
Low, J. W., Arimond, M., Osman, N., Cunguara, B., Zano, F., & Tschirley, D. (2007). A food-based approach introducing orange- fleshed sweet potatoes increased vitamin A intake and serum retinol concentrations in young children in rural Mozambique. *The Journal of nutrition, 137*(5), 1320.
Martorell, R., Horta, B. L., Adair, L. S., Stein, A. D., Richter, L., Fall, C. H. D., . . . Victora, C. G. (2010). Weight gain in the first two years of life is an important predictor of schooling outcomes in pooled analyses from five birth cohorts from low- and middle- income countries. *The Journal of nutrition, 140*(2), 348. doi:10.3945/jn.109.112300
Michie, S., Atkins, L., & West, R. (2014). *The Behaviour Change Wheel: A Guide to Designing Interventions*. Great Britain: Silverback Publishing.
Northern Arizona University. (2010). Adult Learning Theory (Andragogy).
Osendarp, S. J. M., & Roche, M. L. (2016). Behavioral Change Strategies for Improving Complementary Feeding and Breastfeeding. *World review of nutrition and dietetics, 115*, 184. doi:10.1159/000442104
Ruel, M. T., & Alderman, H. (2013). Nutrition- sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition? *The Lancet, 382*(9891), 536-551. doi:10.1016/S0140-6736(13)60843-0
Scaling Up Nutrition. (2015). Ethiopia.
Shrimpton, R., Victora, C. G., de Onis, M., Lima, R. C., Blössner, M., & Clugston, G. (2001). Worldwide timing of growth faltering: implications for nutritional interventions. *Pediatrics, 107*(5), E75. doi:10.1542/peds.107.5.e75
Sommer, A., & Davidson, F. (2002). Assessment and control of vitamin a deficiency: The annecy accords. *Journal Of Nutrition, 132*(9), 2845S-2850S.

Sommer, A., Hussaini, G., Tarwotjo, I., & Susanto, D. (1983). INCREASED MORTALITY IN CHILDREN WITH MILD VITAMIN A DEFICIENCY. *The Lancet, 322*(8350), 585-588. doi:10.1016/S0140-6736(83)90677-3

Stewart, C. P., Iannotti, L., Dewey, K. G., Michaelsen, K. F., & Onyango, A. W. (2013). Contextualising complementary feeding in a broader framework for stunting prevention. *Maternal & Child Nutrition, 9*, 27-45. doi:10.1111/mcn.12088

Teklehaimanot, H., & Teklehaimanot, A. (2013). Human resource development for a community- based health extension program: a case study from Ethiopia. *Human Resources for Health, 11*(1). doi:10.1186/1478-4491-11-39

UNICEF. Nutrition: Definitions of the Indicators.

UNICEF. (2015). *UNICEF's Approach to Scaling Up Nutrition*. Retrieved from New York, USA:

United Nations. (1948). *Univesal Declaration of Human Right*. Retrieved from

USAID. (2016). Ethiopia: Nutrition Profile.

Victora, C., Adair, L., Fall, C., Hallal, P., Martorell, R., Richter, L., . . . Maternal And Child Undernutrition Study, G. (2008). Maternal and child undernutrition: consequences for adult health and human capital. *371*(9609), 340-357. doi:10.1016/S0140-6736(07)61692-4

Waugh, E. F., E.; Girard, A. (2017). *Promoting Orange Fleshed Sweet Potato in SNNPR: A Social Behavior Change Communication Strategy*. Retrieved from

WHO. (2007). *Indicators for assessing infant and young child feeding practices*. Retrieved from Washington D.C., USA:

WHO. (2009). *Global prevalence of vitamin A deficiency in populations at risk 1995-2005. WHO Global Database on Vitamin A Deficiency*. Retrieved from Geneva:

WHO. (2016). eLibrary of Evidence for Nutrition Action: Biofortification of Staple Crops.

Appendix 1: Healthy Living Club Curriculum

Quality Diets for Better Health: Healthy Living Clubs Curriculum

A Manual for Health Extension Workers and PIN Community Facilitators (Toolkit)

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December 2017

PEOPLE IN NEED CZECH REPUBLIC

CIP INTERNATIONAL POTATO CENTER
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Table of Contents

Instructions for Using this Manual 1

HDA Training—Opening Monthly Training Sessions 3

Curriculum Overview 6

Session 1: Agriculture and HLC Introduction 8

Session 2: Maternal Nutrition for Exclusive Breastfeeding 10

Session 3: Complementary Feeding—Texture 13

Session 4: Complementary Feeding—Frequency and Volume 16

Session 5: Responsive Feeding and Feeding During Illness 19

Session 6: Vitamin A and Orange Fleshed Sweetpotatoes for the Family 22

Session 7: Orange Fleshed Sweetpotato Recipes for Complementary Feeding and Dietary Diversity 26

Session 8: Complementary Feeding as Children Age and Maternal Nutrition 29

Session 9: Graduation 31

Appendix I: Technical Nutrition Information for HDAs by HLC Session 32

Appendix II: Audio Story—Maternal Nutrition for Exclusive Breastfeeding 37

Appendix III: Audio Story—Complementary Feeding 39

Appendix IV: Audio Story—Responsive Feeding 42

Appendix V: Audio Story—Nutrition During Pregnancy 44

Appendix IV: HLC Materials List 47

Instructions for Using this Manual

This manual is written for PIN Community Facilitators and Health Extension Workers (HEWs) to aid them as they train Health Development Army volunteers (HDAs) to facilitate Healthy Living Clubs (HLCs).

PIN Community Facilitators and/or HEWs should convene HDAs monthly, 2-5 days before the HLC is scheduled to occur. Each training session should include the relevant information from the section HDA Training: Opening Monthly Training session and the appropriate HLC session.

Each HLC session is broken up into several parts as described below:

Session Goal: The main focus of the HLC session.

Who's in Attendance: Who should attend each HLC session.

Specific Objectives: Exact items that will be covered during the HLC session.

Materials Needed: What is needed for the HLC session. Be sure that HDAs know how to use all materials. **PIN Community Facilitators are responsible for bringing all the necessary items to the HLC.**

Session Catch Phrase: Each session will have a catch phrase to help participants remember the main message from the HLC. Emphasize this catch phrase to HDAs

Session Schedule: The general outline the HLC session will follow. You should go through the session schedule as close to how it will happen during the real HLC as possible. This should be a practice version of the HLC where HDAs are participants. This will help HDAs remember what happens in the sessions.

Session Opening & Goals recap (15 minutes): Instructions for opening the HLC session. At the end of each session participants choose a new behavior to practice until the next session. Session openings include a discussion of the goals they selected during the previous session. Participants break up into pairs/trios of families to discuss how their goal went.

Activity (30-50 minutes): The main part of the HLC will be an activity to engage participants and provide an opportunity to discuss and / or practice a new skill or behavior. When reviewing an HLC session at monthly HDA trainings, you should facilitate the activity and let HDAs take part as HLC participants.

Goal Setting (10 minutes): This is when families decide which new behavior they will try over the next month. Each session has 1-4 feeding goals for families to choose from. Families then take home a goal card where they circle which feeding goal they have chosen. The goal card helps remind them to practice the new behavior at home.

MESSAGE RECAP, CONCLUSION, AND INSTRUCTIONS FOR NEXT SESSION (10 MINUTES): At the end of each session, recap:

- Session catch phrase
- Overall HLC message (It takes a family to feed a child well)
- Communicate instructions for the next session (who should attend, what to bring, etc.)

Additional technical nutrition information for each HLC session can be found in **Appendix I: Technical Nutrition Information for HDAs by HLC Session.**

During training, give HDAs ample time to ask questions. If possible, you should follow up with HDAs by phone or in person 10-15 minutes before the HLC to ensure that they remember what the session is about, key messages, how to use all materials and anything else they need to review.

HDA Training—Opening Monthly Training Sessions

Below are guidelines for the monthly training sessions with HDAs. These are meant to be a guide for how to conduct these trainings and can be adjusted as you need. Make sure these points are covered, but you can change the order, add additional information, or present it in a different way then what is recommended to meet the needs of your HDAs.

The following information should be covered during your first meeting with HDAs:

- Overview of the Quality Diets Better Health Project.
    - Four-year project funded by the European Union and implemented by the International Potato Center, People in Need and Emory University.
    - Goals: Introduce orange fleshed sweetpotato and improve the diets and health of children under 2, women and families.
    - This will be accomplished through a variety of agriculture and nutrition activities including Healthy Living Clubs.

- Overview of Healthy Living Clubs (HLCs).
    - HLCs are groups of approximately 30 families, most with children under two years.
    - HLC members will attend eight education sessions focusing on nutrition and agriculture.
        - The main message of all HLCs is: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
        - Mothers and fathers are invited to all HLC sessions and grandmothers are invited to a few of the sessions.
    - Each HLC session should include an opening, activity, goal setting exercise and a conclusion. It should last between 60-90 minutes.
    - ***HDAs will use several materials to help them facilitate HLCs; they will be taught how to use these for each session. One of the first tools they will use is the healthy baby toolkit. Show HDAs how to use the toolkit and counseling card.***

- Roles and responsibilities of the HDA.
    - They are not teachers, but facilitators. Their goal isn't to tell people what to do.
    - HDAs will spend around 4 hours per month on HLCs
        - Monthly training (2 hours)
        - Preparation for HLC (setting up the space, materials, etc.) (15 min)
        - Facilitating the HLC (1.5 hours)
        - Post-session debrief with HEW/PIN staff and clean up (15 min)
    - HDAs are volunteers and will not be paid. Be very upfront about whatever incentives they will receive.

- Roles and Responsibilities of PIN Community Facilitators/HEWs
    - PIN Community Facilitators/HEWs are there to support the HDAs and will attend HLCs in a supportive role. They will take note of what's happening during the session and

provide feedback to the HDAs. They are not judging or ranking the HDAs, but trying to help them improve their skills.
    - PIN Community Facilitators/HEWs are a resource for HDAs. They can answer more difficult nutrition or agriculture questions that HDAs have. Encourage HDAs to ask questions of you.
    - Share phone numbers with one another if the HDA has a phone and is comfortable sharing their phone number.

The following information should be discussed during <u>all</u> meetings with HDAs. Do not lecture or tell these things to HDAs. Instead, ask them to draw on their past experience and facilitate a discussion about these topics.

- Ask about how the previous HLC went.
    - Which parts did participants seem to enjoy the most or least?
    - Which messages were confusing or difficult for participants to understand?
    - Were participants engaged? Did men <u>and</u> women and grandmothers talk?
    - Did you experience any problems with the demos, tools, etc.?
    - What part(s) do you think could be changed? Improved?
    - How did you feel facilitating the group?

- Tips for Teaching Adults—Adults learn best if:
    - They know why it is important for them to learn the new ideas.
    - They can see how the ideas they are learning are useful in their daily lives.
    - Learners are able to "learn-by-doing"
    - Learners feel that what they are learning is worthwhile and important.
    - Facilitators recognize that adults have a lot of experience from their own lives that will influence how they think and also can be beneficial in furthering learning points. Facilitators must also recognize that adults are responsible for their own decisions and treat them with respect.

- Tips for Effective Facilitation:
    - Don't use facial expressions or comments that could make participants feel judged.
    - Sit/bend down to the same level as participants when talking.
    - Sit in a circle with participants.
    - Don't be in a hurry when answering/asking questions.
    - Use responses and gestures that show you are interested in what participants have to say. (ex: "That was an interesting question" leaning in, eye contact as appropriate)
    - Praise and thank participants who make an effort
    - Ask open questions that cannot be answered with only a "yes" or "no" answer
    - Make suggestions not commands (Have you considered….? Could you….? What about trying…?)
    - Rephrase what participants say to show that you are listening and that you understand what they are saying.

- Review the information for next HLC session.

- Review nutrition information and recommendations related to the HLC. See **Appendix I: Technical Nutrition Information for HDAs by HLC Session** for more guidance on what information to go over with HDAs.
- Take participants through the session schedule like it was a real HLC. Giving the HDAs practice as "HLC participants" will help them be better facilitators.
- Remind them of the materials they will need for the HLC
- Brainstorm with HDAs on ideas to keep men engaged.

Curriculum Overview

#	HLC	Session Goal	Activities & Tools	Who Should Attend
1	Agriculture and HLC Introduction (Dec)	Introduce participants to the Healthy Living Club, begin developing positive group dynamics, and motivate continued participation.	• Develop a group song	• Mothers • Fathers
2	Maternal Nutrition for Exclusive Breastfeeding (Dec)	Discuss the importance of maternal nutrition during lactation and its implications for baby and the family; address mothers' and grandmothers' concerns and perceived barriers of exclusive breastfeeding *Toolkit bowls and counseling cards distributed*	• Develop Group Song • Audio Story • Counseling Card	• Mothers • Fathers • Grandmothers
3	Complementary Feeding— Texture (Jan)	Discuss the importance of feeding thick, enriched porridge for children 6-23 months. *Toolkit spoons distributed to families with ≥5.0-month-old infants*	• Diet Diversity Wheel (1 per family) • Consistency Demonstration and Taste Testing • Toolkit Spoons	• Mothers • Fathers
4	Complementary Feeding—Frequency and Volume (Feb)	Discuss the importance of meal frequency and volume for children 6-23 months. *Toolkit spoons distributed to families with ≥5.0-month-old infants who have not yet received one.*	• Audio Story • Meal Frequency & Amount Supplemental Page (on back of Dietary Diversity Wheel)	• Mothers • Fathers • Grandmothers
5	Responsive Feeding and Feeding During Illness (March)	Introduce parents to the idea of responsive feeding, provide them with responsive feeding strategies and discuss appropriate feeding of children during and after illness. *Toolkit spoons distributed to families with ≥5.0-month-old infants who have not yet received one.*	• Audio Story • Responsive Feeding Practice	• Mothers • Fathers • Grandmothers
6	Vitamin A and Orange fleshed sweetpotatoes for the Family (April)	Identify the benefits of vitamin A and introduce participants to ways to prepare and the taste of orange fleshed sweet potato	• Diet Diversity Wheel	• Mothers • Fathers

		Toolkit spoons distributed to families with ≥5.0-month-old infants who have not yet received one.	• Cooking Demonstration with Orange Fleshed Sweetpotatoes and Leaves	
7	Orange Fleshed Sweetpotato Recipes for Complementary Feeding & Dietary Diversity (May)	Reinforce vitamin A messages, with a particular emphasis on children and dietary diversity *Toolkit spoons distributed to families with ≥5.0-month-old infants who have not yet received one.*	• Dietary Diversity Wheel • Cooking Demonstration with Orange Fleshed Sweetpotatoes and Leaves	• Mothers • Fathers • Grandmothers (if desired)
8	Complementary Feeding as Children Age and Maternal Nutrition (June)	Describe complementary feeding practices for older children and maternal nutrition during pregnancy *Toolkit spoons distributed to families with ≥5.0-month-old infants who have not yet received one.*	• Audio Story • Meal Frequency & Amount Supplemental Page (on back of Dietary Diversity Wheel)	• Mothers • Fathers
9	Graduation	Congratulate families on completing the HLC and encourage parents to continue practicing new behaviors as children age, new children are born.	• Graduation Ceremony	• Mothers • Fathers • Grandmothers (if desired) • Other Community Leaders (HDAs, HEWs, Kebele Officials, Ministry of Health Staff)

Session 1: Agriculture and HLC Introduction

Session Goal:

Introduce participants to the Healthy Living Club, make them feel welcome and begin developing positive group dynamics.

Who's in Attendance:

Mothers, Fathers

Specific Objectives:

By the end of the session, participants will:

1. Be able to explain the purpose of HLCs
2. Know that all the family needs to be involved to feed a child well and that each family member has a unique role to play in ensuring children are fed well.

Materials Needed:

- Recorder

Session Schedule

SESSION OPENING (30 MINUTES)

1. Welcome participants to the session. If it doesn't happen automatically, ask participants to sit in a big circle so that everyone can see each other. The HDA should be a part of that circle as well.
2. Ask husbands introduce their wives and children. Ask wives (or husbands if wives are uncomfortable speaking) to tell the group one new thing their child can do or one thing their child really likes.
3. Explain the purpose of the Healthy Living Clubs.
    a. A child is part of his/her mother and his/her father, they are part of a family. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
    b. Healthy Living Clubs are for mothers, fathers, and sometimes grandmothers to come together to hear about child feeding and the roles each family member plays in child feeding, learn about agriculture practices, practice their skills, ask questions, and set goals for their family.
4. Explain the HDA role.
    a. The HDA is not an expert and is not their teacher.
    b. Their job is to guide the group through a series of activities and tools to facilitate learning.
    c. The best way to learn is to practice. The sessions are meant to be interactive and give participants a chance to practice new skills.

    d. They have received some additional training from HEW and from People in Need, but are not experts. They can answer some questions, but more importantly can find out the answers to any questions.
5. Discuss group ground rules. Rules should include:
    a. Be respectful of all participants and their ideas. Try not to talk when others are talking. The facilitator can help ensure that everyone has the opportunity to talk.
    b. There are no dumb or silly questions. Everyone is here to learn and we should support one another in that task.
6. Remind participants that HLCs are all about child feeding, agriculture, learning about orange sweet potatoes and the roles each family member plays in child feeding. Create a short group song including some of these themes that can be sung at the start/end of every session.
    a. Encourage participants to shout out ideas. Help facilitate the flow of ideas. Try to create a fun environment.
    b. Use example created during HDA training if participants are having a hard time coming up with a song.
    c. Record the song so you can remember it for future sessions.

Activity (30 minutes)

7. Conduct agriculture activities

Goal Setting (10 minutes)

8. Explain goal setting. Each family should pick <u>one</u> feeding goal that will be their goal for the following month. They may try more than one, but they should pick one in particular to attempt.
9. Have families discuss and pick one goal to practice for the next month.
10. Give each family a goal card. Have them circle the goal they want to practice for the next month. Encourage them to hang up the card in their houses or somewhere they can see it often. Ask them to bring the card back at the next session.

Message Recap, Conclusion, and Instructions for Next Session (10 minutes)

11. Participants recap what was discussed. Give them a chance to ask questions. Remind them of the session catchphrase.
12. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
13. Tell them when the next session is and that it is for mothers, fathers and grandmothers.

Session 2: Maternal Nutrition for Exclusive Breastfeeding

Session Goal:

Discuss the importance of maternal nutrition during lactation and its implications for baby and the family

Who's in Attendance:

Mothers, Fathers, Grandmothers

Specific Objectives:

By the end of the session, participants will:

3. Be able to explain why mothers need extra/special food while lactating
4. Know one action specific to their family role (mother, father, grandmother) that they can do to support exclusive breastfeeding for their child.

Materials Needed:

- Audio Story File
- Mp3 player or HDA phone
- Extra batteries/speakers as needed
- Session 2 Goal Cards & Marker
- Session 2 Quality Standard Checklist
- Feeding bowls (30, one per family) and counseling cards (30, one per family)

Session Catch Phrase:

Mothers' milk is baby's food, water and medicine. It is all a baby needs up to 6 months.

Session Schedule

SESSION OPENING (35 MINUTES)

1. Welcome participants. Have participants to sit in a big circle so that everyone can see each other. The HDA should be a part of that circle as well.
2. Ask husbands to introduce their wives and children. Ask wives (or husbands if wives are uncomfortable speaking) to tell the group one new thing their child can do or one thing their child really likes.
3. Explain the purpose of the Healthy Living Clubs: for mothers, fathers, and grandmothers to come together to learn about child nutrition, practice new skills, ask questions and set goals for the family.
    a. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.

4. Explain the HDA role. Introduce the PIN Community Facilitator/HEW.
5. Set group ground rules. Give participants the chance to come up with their own rules / group guidelines. Rules should include at a minimum:
    a. Be respectful of all participants and their ideas. Try not to talk when others are talking.
    b. There are no dumb or silly questions. Everyone is here to learn and we should support one another in that task.
6. ***Group Song (15 minutes):*** Create a group song about: child feeding, agriculture, orange sweet potatoes and the roles each family member plays in child feeding to sing at the start of every HLC.
    a. Create a fun environment and encourage all participants to actively shout out ideas.
    b. Record the song so you can remember it for future sessions. Play it back to the participants so they can hear it and enjoy it.
7. Introduce the session topic: families' roles in exclusive breastfeeding.

ACTIVITY: AUDIO STORY (35 MINUTES)

14. Introduce and play the audio story.
15. Mothers, fathers and grandmothers split up into small groups each of fathers only, mothers only, and grandmothers only.
16. Groups discuss the following questions:
    a. What should the characters do next? Why?
    b. What do they agree with?
    c. What did they find strange?
    d. What questions do they have?
    e. How are the characters and the actions they take different or similar to their own experience?
17. Move between groups and listen to what people are saying.
18. As one group, ask participants to summarize the story and their discussion. Make sure the following points are discussed:
    f. Mothers need extra food while breastfeeding so they have the strength and energy to exclusively breastfeed their children.
    g. Children should be given only breastmilk for six months. It is their food, water and medicine for the first six months.
    h. A mother cares for a child with her breastmilk, but every family member plays a role in helping mothers to exclusively breastfeed.
19. Discuss: What is the role of a father/mother/grandmother in ensuring a mother is able to give only breastmilk for the first 6 months?
    i. If no women will volunteer, share yourself what you heard them discussing.
    j. Examples: (from A& T Small Doable Actions)
        i. **Mothers:** Try to eat two extra meals or snacks every day. Share the benefits of exclusive breastfeeding with family members that believe infants need more than breastmilk
        ii. **Fathers:** Bring home extra food for his wife, talk with family members about committing to breastmilk only for the baby's first 6 months, help his wife with child care and household chores so she can take time to breastfeed babies

iii. **Grandmothers:** Help with child care and chores so the mother can take time to breastfeed; refrain from giving water or other liquids or foods to babies under 6 months; talk with family members, about committing to breast milk only for the baby's first 6 months.

20. Introduce the bowl as a tool to help mothers remember to eat the extra food they need to have the energy to exclusively breastfeed. Use the counseling card to help explain the bowl.

k. Emphasize that the bowl is for mothers to take two ***additional*** meals each day (those in addition to the meals she usually takes when not breastfeeding).

l. Explain the symbols and that once the baby reaches 6 months, then the family can use the bowl to feed the baby.

21. Give each family one bowl and one counseling card and review how to use bowl / card.

Goal Setting (10 minutes)

22. Explain goal setting. Each family should pick one feeding goal in addition to using the toolkit that will be their goal for the following month. They may try more than one, but they should pick one in particular to attempt.
23. Have families discuss and pick one goal to practice for the next month. All families should use the toolkit and then select an additional goal.
    m. Mothers try to eat two extra meals every day using the bowl as a guide.
    n. Mothers share the benefits of exclusive breastfeeding with a family member who is uncertain of her decision to exclusively breastfeed.
    o. Father brings home extra food for his wife 3 times over the next month.
    p. Fathers or Grandmothers help out with one family chore to give the mother more time to breastfeed.
24. Give each family a goal card. Have them circle the goal they want to practice for the next month. Encourage them to hang up the card in their houses or somewhere they can see it often. Ask them to bring the card back at the next session.

Message Recap, Conclusion, and Instructions for Next Session (10 minutes)

25. Participants recap what was discussed. Give them a chance to ask questions. Remind them of the session catchphrase.
26. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
27. Tell them when the next session is and that it is for mothers and fathers. There will be a taste demonstration for children so they should bring the toolkit bowl provided during this session and a spoon for children to eat from. Thank participants for coming.

Session 3: Complementary Feeding—Texture

Session Goal:

Discuss the importance of feeding thick, enriched porridge for children 6-23 months.

Who's in Attendance:

Mothers, Fathers

Specific Objectives:

By the end of the session, participants will:

1. Be able to explain the need to feed children thick porridges because of their small stomachs.
2. Know what an enriched porridge is and be able to prepare an enriched porridge with thick texture for their children.
3. Identify one action mothers and one action fathers can take to support feeding children thick, enriched porridge.

Materials Needed:

- Diet Diversity Wheels, one for each family
- 3 bags of premeasured flour with pictorial instructions for how much water to add to each to make a thin, medium, and thick porridge.
    - Enough thick porridge needs to be prepared so that all participants can try it if desired.
- 2 feeding bowls + 1 large bowl (for preparing thick porridge)
- 3 feeding spoons
- 1 coffee cup or other standardized measuring cup
- 4L of Clean/Bottled Drinking Water + Water for Handwashing
- Soap
- Mixing Utensil
- Supplies to heat water with (pot, pot stand, firewood, fire starter…)
    - **Begin heating water before the session begins.**
- 4-5 locally available ingredients to enrich porridge with (examples include avocado, orange fleshed sweetpotatoes pulses, dark green leaves, milk)
- Waste container and materials for cleaning up afterwards.
- Session 3 Goal Cards & Marker
- Session 3 Quality Standard Checklist
- 10 Feeding bowls (Extra in case participants don't bring theirs.)
    - **These bowls are not for participants. Be sure they are returned.
- 32 Toolkit Spoons to distribute to participants whose children are >5.0 months

Session Catch Phrase:

Thick and enriched porridge for enriched children. To enrich your children, feed them thick, enriched porridge beginning at 6 months!

Session Schedule

BEFORE SESSION STARTS: Begin heating water for texture demonstration.

SESSION OPENING & GOALS RECAP (15 MINUTES)

1. Welcome participants and tell them the session will be about the texture of food and enriching porridge.
2. Sing group song. Play recorded song if necessary.
3. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
4. Have families split up into pairs or trios and discuss how their previous feeding goal went.
5. Bring group together and ask for 1-3 families to share how their feeding goal went.
    a. If no one will talk emphasize that no one is perfect and that it was probably difficult to accomplish the goal. Share your own story about your goal and emphasize what was difficult for you. Ask again if anyone would like to share.
    b. When families share, be sure to complement something they did well.

ACTIVITY: DEMONSTRATION AND PRACTICE (50 MINUTES)

6. Explain that a child's stomach is small and will fill up quickly. Because a child's body and mind are growing very rapidly, it is important that they have enough of the right foods.
    a. If you go to the market and fill up a bag with [useless item] your bag will be full, but you won't have what you need. You can't get what you need because your bag is full and you won't be able to carry it. When you feed your children food that runs/pours/looks like water (thin foods) you are filling their stomach up with [useless item] and their body won't have what it needs. A child's stomach is very small and gets full quickly. You should make sure that what goes in their stomach includes the nutrients that they need.
7. ***Consistency Demonstration***
    a. Ask participants what foods they normally put in porridge for children.
    b. Mix together the 3 containers of premeasured flour with the specified amount of water. (thin, medium, and thick)
    c. Use the slotted spoon to show how the porridges are different. Use the shopping bag metaphor to explain that the thin porridge will fill up an infant's stomach with [useless item], not the energy and vitamins they need. The middle porridge is better, but still has a lot of [useless item] and won't provide all the energy/vitamins the infant needs.
    d. Pass each porridge around and have participants look at the different consistencies. Ask participants not to eat the porridge or feed it to their children yet.
8. Pass out the dietary diversity wheel, 1 per family. Explain that different foods provide different benefits for children's bodies so it is important they eat different kinds of food. Ask if anyone knows what kinds of benefits certain foods provide. Explain what each group is for.
9. Explain that enriching porridge means: Adding one special ingredient that is good for their bodies and mind. Brainstorm potential enriching foods.
    a. Examples include: lentils, beans, banana, gomen, meat/powdered meat, eggs, milk, boiled orange fleshed sweetpotato or avocado.

10. Demonstrate proper handwashing practices. Encourage all participants to wash their hands with soap before preparing food and feeding children.
11. Ask participant with children >6 months if they would be willing to try the thick porridge; ask families with those less than 6 months if the adults want to try the porridge.
12. Have all families wash their hands with soap and water.
13. Distribute spoons. Have participants use the toolkit bowl and spoon to try the food
14. Pass out porridge to those who are willing to try it. Have each family choose 1-2 available enriching ingredient to add to their porridge.
    a. Encourage families that their children will be able to handle the thicker porridge. Remind families that children need to practice how to eat, just like they have to practice learning how to walk.
    b. Encourage participants to talk to their child while they are feeding their children.
    c. Encourage fathers to feed children as well.
    d. Walk around and help any participants that are having trouble.
15. Split participants into small groups of mothers only and fathers only. Have each group discuss different actions they could take to ensure that children are fed thick, enriched porridge. Give participants 10 minutes for discussion.
16. Have the group come back together. Ask one member from each group to share what they discussed. Allow for 10 minutes of discussion.
    a. If no women volunteer to talk, summarize what you heard them discuss.

Goal Setting (10 minutes)

28. Explain each feeding goal and have families discuss and pick one goal to practice for the next month. All families should use the toolkit and then select an additional goal.
    a. Use the spoon to test consistency of the child's meal at least once a day.
    b. Mothers with children < 6 months, give only breastmilk every day and night.
    c. Mothers enrich their child's porridge with a special food 5 times per week.
    d. Mothers feed thick porridge that doesn't drip off a spoon to their children each time it is served.
    e. Fathers bring home a special food item for his wife to use in their child's food once per week.
17. Give each family a goal card and have them circle the behavior they have chosen as their goal for the next month. Encourage them to hang up the card in their houses or somewhere they can see it often. Ask them to bring the card back at the next session.

Message Recap, Conclusion, and Instructions for Next Session (15 minutes)

18. Ask participants to recap what was discussed. Give them a chance to ask questions. Remind them of the session catchphrase.
19. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
20. Tell participants when the next session is. Invite mothers, fathers and grandmothers. **Remind them to bring their toolkit bowls, spoons and counseling cards**. Thank participants for coming.

Session 4: Complementary Feeding—Frequency and Volume

Session Goal:

Discuss the importance of meal frequency and volume for children 6-23 months.

Who's in Attendance:

Mothers, Fathers, Grandmothers

Specific Objectives:

By the end of the session participants will:

1. Know how often children 6-12 months should be fed.
2. Know the amount children 6-12 months should be fed at each meal.
3. Commit to trying one new action to improve meal frequency/volume for their child.

Materials Needed:

- Audio Story File
- Mp3 player
- Batteries/Speakers if Necessary
- Meal Frequency & Amount Supplemental Page (On back of Dietary Diversity Wheel) (NON TOOLKIT ONLY)
- Session 4 Goal Cards & Marker
- Session 4 Quality Standard Checklist
- ***Toolkit Spoons: Distribute to families with children 5-6 months who have not yet received one. Do not give to families that have already received one.***

Session Catch Phrase: Three meals a day: one for growth, one for strength and one for intelligence

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Session Schedule

Session Opening & Goals recap (15 minutes)

1. Welcome participants and tell them the session will be about how much and when to feed children
2. Sing group song. Play recorded song if necessary.
3. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
4. Have families split up into pairs or trios and discuss how their previous feeding goal went.
5. Bring group together and ask for 1-3 families to share how their previous feeding goal went.
    a. If no one will talk emphasize that no one is perfect and that it was probably difficult to accomplish their goal. Share your own story about your goal and emphasize what was difficult for you. Ask again if anyone would like to share.
    b. When families share, be sure to complement something they did well.

Activity: Audio Story (35 minutes)

6. Play the audio story.
7. Mothers, fathers and grandmothers split up into small groups each of fathers only, mothers only, and grandmothers only.
8. Groups discuss the following questions:
    a. What should the characters do next? Why?
    b. What do they agree with?
    c. What did they find strange?
    d. What questions do they have?
    e. How are the characters and the actions they take different or similar to their own experience?
9. Move between groups and listen to what people are saying.
10. As one group, ask participants to summarize the story and their discussion. Make sure the following
    a. Children should be fed frequently because their stomachs are small and they cannot hold that much food at once.
    b. As their stomachs grow, the amount of food they are fed at each meal should increase.
    c. Infants even as young as 6 months can eat pureed, mashed and soft foods from the family pot.
11. Explain the Meal Frequency & Amount Supplemental Page (on the back of the dietary diversity wheel) (NON TOOLKIT)
12. Use the counseling card and bowl to explain meal frequency and amount recommendations.

Goal Setting (10 minutes)

13. Explain each feeding goal and have families discuss and pick one goal to practice for the next month.
    a. Fathers – bring home special foods for moms and / or babies > 6 months at least once per week
    b. Feed child 6-12 months of age 3 meals a day, every day.
    c. Give child a snack, such as boiled orange fleshed sweetpotato, every morning or afternoon.
    d. Slowly increase the amount of food served to a child 6-12 months at each meal so that children are eating the right amount.
    e. Give only breastmilk until child is 6 months of age
14. Give each family a goal card and have them circle the behavior they have chosen as their goal for the next month. Encourage them to hang up the card in their houses or somewhere they can see it often. Ask them to bring the card back at the next session.

Message Recap, Conclusion, and Instructions for Next Session

15. Participants recap what was discussed. Give them a chance to ask questions. Remind them of the session catchphrase.

16. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
17. Tell them when the next session is and that it is for mothers, fathers and grandmothers. They should bring ***toolkit bowls/spoons*** to feed their children with during the next session. Thank participants for coming.

Session 5: Responsive Feeding and Feeding During Illness

Session Goal:

Introduce parents to the idea of responsive feeding, provide them with responsive feeding strategies and discuss appropriate feeding of children during and after illness.

Who's in Attendance:

Mothers, Fathers, Grandmothers

Specific Objectives:

By the end of the session, participants will

1. Know three strategies for responsive feeding.
2. Practice one of the three responsive feeding strategies.
3. Know how to feed children during and after illness.
4. Commit to practicing one of the responsive feeding strategies over the next month.

Materials Needed:

- Audio Story File
- Mp3 player
- Batteries/Speakers if Necessary
- Premeasured flour with pictorial instructions for how much water to add to make a thick porridge.
- 1large bowl (for preparing thick porridge)
- 1 coffee cup or other standardized measuring cup
- 4L of Clean/Bottled Drinking Water + Water for Hand Washing
- Soap
- Mixing Utensil
- Supplies to heat water with (pot, pot stand, firewood, fire starter…)
- 4-5 locally available ingredients to enrich porridge with (examples include avocado, orange fleshed sweetpotatoes pulses, dark green leaves, milk)
- Waste container and materials for cleaning up afterwards.
- 10 Feeding bowls and spoons (Extra in case participants don't bring theirs.)
    - **These bowls are not for participants. Be sure they are returned.
- 32 Toolkit Spoons to distribute to participants whose children are >5.0 months
- Session 5 Goal Cards & Marker
- Session 5 Quality Standard Checklist
- ***Toolkit Spoons: Distribute to families with children 5-6 months who have not yet received one. Do not give to families that have already received one.***

Session Catch Phrase: Feeding times are times of learning and love

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Session Schedule

BEFORE SESSION STARTS: Begin heating water for feeding demonstration.

SESSION OPENING &GOALS RECAP (15 MINUTES)

1. Welcome participants and tell them that the session will be about encouraging children to eat and feeding while a child is sick.
2. Sing group song. Play recorded song if necessary.
3. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
4. Have families split up into pairs or trios and discuss how their previous feeding goal went.
5. Bring group together and ask for 1-3 families to share how their feeding goal went.
    a. If no one will talk emphasize that no one is perfect and that it was probably difficult to complete the goal. Share your own story about your goal and emphasize what was difficult for you. Ask again if anyone would like to share.
    b. When families share, be sure to complement something they did well.

ACTIVITY: AUDIO STORY (35 MINUTES)

6. Play the audio story.
7. Mothers, fathers and grandmothers split up into small groups each of fathers only, mothers only, and grandmothers only.
8. Groups discuss the following questions:
    a. What should the characters do next? Why?
    b. What do they agree with?
    c. What did they find strange?
    d. What questions do they have?
    e. How are the characters and the actions they take different or similar to their own experience?
9. Move between groups and listen to what people are saying.
10. As one group, ask participants to summarize the story and their discussion. Make sure the following points are discussed:
    a. It is important to breastfeed more and/or giving more food/liquids (for children >6 months) while children are sick and following sickness to help fight the illness, reduce weight loss and recover quickly.
    b. Give foods that are easy to eat, such as thick porridge. Prepare foods in a way that will encourage children to eat.
    c. Take the baby to the nearest health facility for treatment if he/she is seriously sick, has sores in the mouth, or if the sickness gets worse.

ACTIVITY: DEMONSTRATION AND PRACTICE (25 MINUTES)

11. Ask participants what they do to encourage children to eat? Explain:

a. Feeding times are times of learning and love.
b. Learning to eat takes practice, just like learning to walk or do other things. Children aren't going to be good at eating at first. They need their family's love and patience to help them learn this skill.
c. Feeding time is a great time for fathers, grandmothers and grandfathers to bond with the baby

12. Explain the concept of responsive feeding and the following strategies for encouraging children to eat:
    a. Talking or playing with children and maintaining eye-to-eye contact during feeding are some ways to encourage them to eat more.
    b. Children are easily distracted and can easily be distracted from feeding. Feed children away from distracting objects, noises, or situations.
13. Demonstrate proper handwashing practices and encourage families to wash their hands before feeding children.
14. Distribute a small portion of prepared porridge to each family member. Have them practice feeding their child using responsive feeding strategies. Each family member should feed a little of the food to the child. Allow 15 minutes for families to practice these skills.
15. Bring the group back together to discuss.
    a. What strategies did they try? Did it seem to help?
    b. What was challenging? If participants had difficulty, assure them that it might just take time and practice to get more comfortable with feeding.

Goal Setting (10 minutes)

16. Explain each feeding goal and have families discuss and pick one goal to practice for the next month.
    a. Minimize distractions during feeding every day. Feed in a quiet place, away from large groups of people or where a lot of activities are taking place.
    b. Make eye contact with the child while feeding at every meal.
    c. Talk or play with children while feeding at every meal.
17. Give each family a goal card and have them circle the behavior they have chosen as their goal for the next month. Encourage them to hang up the card in their houses or somewhere they can see it often. Ask them to bring the card back at the next session.

Message Recap, Conclusion, and Instructions for Next Session (10 minutes)

18. Participants recap what was discussed. Give them a chance to ask questions. Remind them of the session catchphrase.
19. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
20. Tell them when the next session is and that it is for mothers and fathers. Thank participants for coming.

Session 6: Vitamin A and Orange Fleshed Sweetpotatoes for the Family

Session Goal:

Identify the benefits of eating a variety of foods, especially vitamin A rich foods and orange fleshed sweetpotato. To provide participants the opportunity to prepare and taste vitamin A rich orange fleshed sweetpotato and sweetpotato leaves

Who's in Attendance:

Mothers, Fathers

Specific Objectives:

By the end of the session participants will:

1. Be able to describe the six food groups and how each benefit the body.
2. Be able to name three benefits vitamin A.
3. Be able to identify three foods that have vitamin A.
4. Be able to prepare one dish with orange fleshed sweetpotatoes and one with sweetpotato leaves

Materials Needed:

- 4 Cups
- 4 Mixing Spoons
- 4 Large Bowls
- 4 Small Bowls
- 4 Cooking Pots
- 8 Knives
- 4 Mixing Utensils
- 4 Large Plates
- 8L Clean/Bottled Drinking Water + Water for Hand Washing
- Soap
- Supplies for Cooking (wood, pot stand, fire starter)
- Waste container and materials for cleaning up afterwards.
- Session 6 Goal Cards & Marker
- Session 6 Quality Standard Checklist
- ***Toolkit Spoons: Distribute to families with children 5-6 months who have not yet received one. Do not give to families that have already received one.***
- Ingredients: 2-5 Items from each group listed below that are locally available and Inexpensive. Foods that are bold must be included.

Vitamin A Rich Foods	Foods from Animals	Beans/Pulses
• ***Orange Fleshed Sweetpotato*** • ***Orange Fleshed Sweetpotato Leaves***	• Milk • Egg • Powdered Meat (Kwanta)	• Lentils • Chickpeas • Haricot Beans • Barley • Black Eyed Peas • Peanuts
Fruits & Vegetables	**Foods Like Oil/Butter**	**Foods Like Enset/Enjera**
• Avocado • Banana • Kale • Cabbage • Tomatoes • Onion • Lemon	• ***Oil*** • Butter	• ***Flour*** • Wheat Grains • Iodized Salt

Session Catch Phrase: Orange keeps the sickness away

Session Schedule

Before Session Starts: Begin boiling orange fleshed sweetpotatoes.

Session Opening & Goals Recap (15 minutes)

1. Welcome participants and tell them that the session will be about vitamin A and orange fleshed sweet potato
2. Sing group song. Play recorded song if necessary.
3. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
4. Have families split up into pairs or trios and discuss how their previous feeding goal went.
5. Bring group together and ask for 1-3 families to share how their feeding goal went.
    a. If no one will talk emphasize that no one is perfect and that it was probably difficult to accomplish the goal. Share your own story about your goal and emphasize what was difficult for you. Ask again if anyone would like to share.
    b. When families share, be sure to complement something they did well.

Activity: Demonstration (60 minutes)

1. Review the dietary diversity wheel and the benefits each food group provides for the body.
2. Ask if anyone has ever heard of vitamin A. If so, what have they heard? Explain:
    a. Vitamin A is the same vitamin that children are given at health posts twice a year. The supplement is in a capsule and squeezed into the child's mouth.

b. Vitamin A is important for our bodies. It helps make our skin beautiful, builds blood, keeps our eyes strong, and prevents us from becoming sick.
c. The orange in orange fleshed sweetpotatoes come from vitamin A.

3. Discuss: *What other orange foods can you think about that might have vitamin A?*
    a. Examples: Mangoes, carrots, pumpkin
    b. If oranges come up: Make the point that funnily enough, oranges don't have vitamin A. They are sour like lemons and have other important vitamins, but not vitamin A
4. Women split up into four groups. Encourage men to participate or hold the children while the women cook.
5. Demonstrate proper handwashing practices. Encourage all participants to wash their hands with soap at home before preparing and eating food.
6. Pass around boiled orange fleshed sweetpotatoes. Ask participants to taste them and feed to their children.
7. Have the groups discuss:
    a. Do they like them?
    b. How are they different/similar from white fleshed sweetpotatoes?
        i. Orange fleshed sweetpotatoes have vitamin A, white sweetpotatoes do not.
8. Using the supplies provided, ask participants to create a dish they might serve to their family using the orange fleshed sweetpotatoes. Allow 20-30 minutes for them to cook.
    a. Two groups cook with orange fleshed sweetpotato leaves in addition to orange fleshed sweetpotatoes. The other two groups will cook only with orange sweet potatoes.
    b. Encourage questions and make it a fun environment.
    c. Have each group come up with a name for their dish.
9. Each group presents their dish and shares the name of their dish. Explain what is in it and how they prepared it. Encourage everyone to try the dishes.
    a. If no women want to present for their group, have one man join the group and present for them.
10. Ask participants what they think.
    a. What did they like most/least?
    b. Is this a dish they could make at home?
    c. What are substitutes for some of the ingredients if they aren't available?
    d. Would they consider making it?

GOAL SETTING (10 MINUTES)

11. Explain each feeding goal and have families discuss and pick one goal to practice for the next month.
    a. All family members eat four different food groups a day for at least four days each week (excludes babies < 6 mo).
    b. All family members eat orange fleshed sweetpotatoes or other vitamin A-rich food on at least four days each week (excludes babies < 6 mo).
    c. Mothers share with two people (one family member, one neighbor) about how to prepare a recipe with orange fleshed sweetpotato or sweet potato leaves
    d. Fathers talk to 2 neighbors / fellow farmers about why they should grow OFSP or other vitamin A rich fruits and vegetables in their gardens / farms

12. Give each family a goal card and have them circle the behavior they have chosen as their goal for the next month. Encourage them to hang up the card in their houses or somewhere they can see it often. Ask them to bring the card back at the next session.

Message Recap, Conclusion, and Instructions for Next Session (10 minutes)

13. Participants recap what was discussed. Give them a chance to ask questions. Remind them of the session catchphrase:
14. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
15. Tell them when the next session is and that it is for mothers, fathers and grandmothers if they wish to come. ***Participants should bring their toolkit bowl and spoon to the next session*** Thank participants for coming.

Session 7: Orange Fleshed Sweetpotato Recipes for Complementary Feeding and Dietary Diversity

Session Goal:

Reinforce vitamin A messages, with a particular emphasis on children and dietary diversity

Who's in Attendance:

Mothers, Fathers Grandmothers (if desired)

Specific Objectives:

By the end of the session participants will:

1. Be able to name three benefits vitamin A, specifically for children.
2. Identify one feasible strategy to improve their child's diet diversity
3. Be able to describe the six food groups and how each benefit the body
4. Have prepared one dish with orange fleshed sweetpotatoes and one with sweetpotato leaves

Materials Needed:

- 4 Cups
- 4 Mixing Spoons
- 4 Large Bowls
- 4 Small Bowls
- 4 Cooking Pots
- 8 Knives
- 4 Mixing Utensils
- 4 Large Plates
- 8L Clean/Bottled Drinking Water + Water for Hand Washing
- Soap
- Supplies for Cooking (wood, pot stand, fire starter)
- Waste container and materials for cleaning up afterwards.
- Session 6 Goal Cards & Marker
- Session 6 Quality Standard Checklist
- ***Toolkit Spoons: Distribute to families with children 5-6 months who have not yet received one. Do not give to families that have already received one.***
- Ingredients: 2-5 Items from each group listed below that are locally available and Inexpensive. Foods that are bold must be included.

Vitamin A Rich Foods	Foods from Animals	Beans/Pulses
• ***Orange Fleshed Sweetpotato*** • ***Orange Fleshed Sweetpotato Leaves***	• Milk • Egg • Powdered Meat (Kwanta)	• Lentils • Chickpeas • Haricot Beans • Barley • Black Eyed Peas

		• Peanuts
Fruits & Vegetables	**Foods Like Oil/Butter**	**Foods Like Enset/Enjera**
• Avocado • Banana • Kale • Cabbage • Tomatoes • Onion • Lemon	• ***Oil*** • Butter	• ***Flour*** • Wheat Grains • Iodized Salt

Session Catch Phrase:

Orange keeps the sickness a way.

Session Schedule

Session Opening & Goals Recap (15 minutes)

1. Welcome participants and tell them that today's session will be on vitamin A for children, and orange fleshed sweetpotato recipes for complementary feeding.
2. Sing group song. Play recorded song if necessary.
3. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
4. Have families split up into pairs or trios and discuss how their previous feeding goal went.
5. Bring group together and ask for 1-3 families to share how their feeding goal went.
    a. If no one will talk emphasize that no one is perfect and that it was probably difficult to accomplish the goal. Share your own story about your goal and emphasize what was difficult for you. Ask again if anyone would like to share.
    b. When families share, be sure to complement something they did well.

Activity: Demonstration (60 minutes)

1. Review the dietary diversity wheel and the benefits each food group provides for the body.
2. Review discussion of vitamin A and vitamin A rich foods.
    a. Vitamin A is the same vitamin that children are given at health posts twice a year. The supplement is in a capsule and squeezed into the child's mouth.
    b. Vitamin A is important for our bodies. It helps make our skin beautiful, builds blood, keeps our eyes strong, and prevents us from becoming sick.
    c. The orange in orange fleshed sweetpotatoes come from vitamin A.
    d. Examples of vitamin A rich foods: orange fleshed sweet potatoes, mangoes, carrots, pumpkin
3. Women split up into four groups. Encourage men to participate or hold the children while the women cook.
4. Demonstrate proper handwashing practices. Encourage all participants to wash their hands with soap at home before preparing and eating food.

5. Using the supplies provided, ask participants to create a dish using the orange fleshed sweetpotatoes and/or leaves that they would feed to their children.
    a. Remind participants about appropriate consistency, enriching porridge and meal volume
    b. Have participants think about ways they can adapt family dishes so that they are more appropriate for children (ex: mashing vegetables)
    c. Encourage questions and make it a fun environment.
    d. Have each group come up with a name for their dish.
6. Each group presents their dish and shares the name of their dish. Explain what is in it and how they prepared it.
    a. If no women want to present for their group, have one man join the group and present for them.
    b. Ask what the special item(s) is/are that make it an enriched food.
    c. Ask how many food groups are in the one dish
7. Encourage fathers feed one of the dishes to their child using a responsive feeding strategy they learned from a previous session.

Goal Setting (10 minutes)

8. Explain each feeding goal and have families discuss and pick one goal to practice for the next month.
    a. Add orange fleshed sweetpotatoes or other vitamin A rich foods into their child's meals four times per week.
    b. Make sure children eat from 4 food groups every day or at least 4 days per week.
    c. Fathers bring home a special food item from a different food group once per week.
9. Give each family a goal card and have them circle the behavior they have chosen as their goal for the next month. Encourage them to hang up the card in their houses or somewhere they can see it often. Ask them to bring the card back at the next session.

Message Recap, Conclusion, and Instructions for Next Session (10 minutes)

10. Participants recap what was discussed. Give them a chance to ask questions. Remind them of the session catchphrase.
11. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
12. Tell them when the next session is and that it is for mothers, fathers and grandmothers if they wish to come. ***Tell families to bring their toolkit bowl, spoon and counseling card to the next session*****.** Thank participants for coming.

Session 8: Complementary Feeding as Children Age and Maternal Nutrition

Session Goal:

Describe complementary feeding practices for older children and maternal nutrition during pregnancy

Who's in Attendance:

Mothers, Fathers, Grandmothers (if desired)

Specific Objectives:

By the end of the session, participants will:

1. Be able to describe how complementary feeding recommendations change as children get older
2. Be able to describe how women should change their diet during pregnancy

Materials Needed:

- Audio Story File
- Mp3 player/phone
- Batteries/Speaker as needed
- ***Toolkit Spoons: Distribute to families with children 5-6 months who have not yet received one. Do not give to families that have already received one.***
-

Session Catch Phrase: An extra meal for mom and baby during pregnancy.

Session Schedule

Session Opening & Goals Recap (15 minutes)

1. Welcome participants and tell them that the session is about feeding children as they age and nutrition for mothers when they are pregnant.
2. Sing group song. Play recorded song if necessary.
3. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
4. Have families split up into pairs or trios and discuss how their previous feeding goal.
5. Bring group together and ask for 1-3 families to share how their feeding goal went.
    a. If no one will talk emphasize that no one is perfect and that it was probably difficult to accomplish their goal Share your own story about your goal and emphasize what was difficult for you. Ask again if anyone would like to share.
    b. When families share, be sure to complement something they did well.

Activity: Discussion (15 minutes)

1. Review previous meal frequency and amount recommendations
2. Explain the Meal Frequency & Amount Supplemental Page, focusing on older children (on the back of the dietary diversity wheel) (NON TOOLKIT)
3. Use the counseling card and bowl to explain meal frequency and amount recommendations.

Activity: Audio Story (35 minutes)

4. Play the audio story.
5. Mothers, fathers and grandmothers split up into small groups each of fathers only, mothers only, and grandmothers only.
6. Groups discuss the following questions:
    a. What should the characters do next? Why?
    b. What do they agree with?
    c. What did they find strange?
    d. What questions do they have?
    e. How are the characters and the actions they take different or similar to their own experience?
7. Move between groups and listen to what people are saying.
8. As one group, ask participants to summarize the story and their discussion. Make sure the following
    a. It is important for pregnant women to eat 4 or more different food groups every day to ensure that their babies grow well and they have a healthy pregnancy.
    b. Pregnant women should eat an extra meal every day for their babies.

Goal Setting (10 minutes)

9. Explain each feeding goal and have families discuss and pick one goal to practice for the next month.
    a. Continue with their previous goals.
    b. Share with 1+ neighbor, friend or family member.
10. Ask participants what they liked about the HLC, what they would change, what they learned.

Message Recap, Conclusion, and Instructions for Next Session (10 minutes)

11. Participants recap what was discussed. Give them a chance to ask questions. Remind them of the session catchphrase.
12. Remind participants: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
13. Tell participants when the graduation ceremony will be. Invite mothers and fathers and grandmothers. Thank participants for coming.

Session 9: Graduation

Session Goal:

Recognize families for their accomplishment of completing the HLC sessions and certify them as model families for their kebele.

Who's in Attendance:

Mothers, Fathers, Grandmothers (if desired), HDAs, HEWs, Kebele Officials, Ministry of Health Staff

Specific Objectives:

By the end of the ceremony:

1. Participants will be recognized as model families in their kebele.
2. HDAs will be recognized for their role facilitating HLCs
3. Everyone will be reminded that it takes a whole family to feed a child well.

Materials Needed:

- Certificates for each family
- Refreshments for all attendees

The graduation ceremony will be carried out a little differently in each kebele. Some general guidelines to follow include:

- This should be an enjoyable experience for HLC participants and it should make them feel accomplished. It should be a ceremony
- HDAs should also be invited and recognized for their role as facilitators of the HLCs.
- Recognize families individually. Call out each family individually and recognize them as a model family.
- Give each family a "Model Family" certificate.
- Encourage participants to continue practicing behaviors they learned during HLCs and to share them with neighbors, friends and family.
- Remind them of the overall message: A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.
- Provide refreshments at the ceremony. Make sure there is enough for all participants and invited guests.

Appendix I: Technical Nutrition Information for HDAs by HLC Session

Session 2: Maternal Nutrition for Exclusive Breastfeeding

- Infants only need breastmilk for the first six months of life. It is their food, water, and medicine.
- Babies tummies aren't fully developed until 6 months -- An infant under six months who is given other foods / drinks gets sick more often, does not grow as well and their brains do not develop as well as an infant who is given only breastmilk.
- Mothers should eat two extra meals per day while they are breastfeeding. This extra food gives mothers strength and energy.
- If a mom eats different types of food each day, then her breastmilk will be stronger medicine for her baby.
    - Infants can get the benefits of milk, porridge water, or traditional medicine from their mother's breastmilk. Instead of giving these to the baby, give it to mom and baby will benefit.
- Mother's milk is a gift from God. Even if a mothers feels she doesn't have enough milk, she usually does. A mother's body will make enough breastmilk for her baby, even when the mother is stressed or not able to eat well. Keeping the baby on one breast until is empty and feeding the baby frequently keeps the baby full and happy and helps mother make more milk.
- If a baby is urinating several times a day and defecating every day, then s/he is likely getting enough breastmilk, even if the baby is crying a lot.
- If you are worried about the baby's growth, ask an HEW for advice. They can measure your baby to see how well they are growing.
- Babies go through periods of rapid growth – they will grow faster at some times than at other times. When this happens, they want to nurse more often and may cry more. It does not mean they are not getting enough breastmilk – it just means they are getting ready to grow. What is important is that moms breastfeed whenever the baby begins to appear hungry.

Session 3: Complementary Feeding—Texture

- At around 6 months babies need more than breastmilk to grow and develop well.
- You know when to start giving your baby food or liquids other than breast milk when your baby is able to sit up and move his/her head on his own.
    - Complementary food should be started at 6 months. Continue to breastfeed as much as children want until 24 months or beyond.
- In order to learn how to walk, children have to practice. The same is true with eating. In order to practice chewing and swallowing, they need to have soft foods to practice on.
    - Children will not be very good at chewing/eating at first. They need time to practice. It is important for caregivers to be patient when feeding young children.
- The texture of a porridge is important.
    - If you go to the market and fill up a bag with [useless item] your bag will be full, but you won't have what you need. You can't get what you need because your bag is full and you won't be able to carry it. When you feed your children food that is thin like water or soup you are filling your child's stomach up with [useless item] and their body won't have what it

needs. A child's stomach is small and gets full quickly. You should make sure that what goes in their stomach includes the nutrients that they need.

- Thicker foods fill the baby's stomach with what it needs.

- Feeding thicker foods will also keep a baby full longer. They won't need to breastfeed as often and this can provide relief for mothers from breastfeeding.
- Foods that can stay on the spoon are thick enough for children. Even young infants just starting to complementary feed can handle this kind of food.
    - Explain that if food falls quickly through the holes in the spoon then it is too thin. They will fill a child's stomach up without giving them the energy or vitamins they need to be healthy.
- At 8 months infants can eat soft foods they can hold in their hand like banana or boiled orange fleshed sweetpotatoes
- When growing crops, we give them different types of "food" sun, water, soil etc. We must do the same thing for our bodies.
- Different types/groups of food help children's bodies in different ways. For example, foods from animals like meat, milk and eggs build up muscles and help their bodies grow strong and fight illness. Fruits and vegetables protect against illness. It is important for children to eat foods from these different groups as often as possible, so that they can get the benefits from each group.
    - Foods from Animals (Eggs, milk, meat): For strength
    - Beans/Pulses: For growth
    - Fruits and Vegetables: For preventing illness
    - Foods Like Enset, enjera: For energy
    - Foods Like Oil/Butter: To give energy
- In addition to being thick, porridge also needs to be enriched. Enriched porridge has one (or more!) special food added to it. Special foods are those from food groups outside the Enset/Enjera/white potato and Oil/Butter groups on the dietary diversity wheel. Examples include:
    - Legumes/Pulses
    - Fruits
    - Vegetables
    - Powdered meat (Kwanta) or meat
    - Eggs
    - Milk
    - Boiled orange fleshed sweetpotato and avocado are great foods to add to porridge because they are soft and rich in vitamins and energy.

Session 4: Complementary Feeding—Frequency and Volume

- Food provides the fuel for children to grow, learn and play. Without it, they will not be as active, healthy or smart as they could be. The amount of food a child eats, the number of times per day they eat, and the texture of food all impact how they grow.
    - When plants first start to grow, they need extra care and attention or else they will never be able to produce as much fruit or grow as tall as other plants. Children are the same way, without enough food and care the first two years of life they won't grow as well or be as healthy or smart as other children. In some cases, losses during these first years cannot be overcome by extra attention later on.

- To help children > 6 months learn how to eat, feed them food before switching to breastfeeding. That way they will be most hungry when food is given to them and will be more likely to practice eating, chewing and swallowing.
- A child's stomach is small and fills up quickly. Therefore they need to be fed enriched / thick porridge several times a day. As a child ages and their stomach grows, they should be fed more often and more food at each meal.
- Children 6-12 months should be fed 3 times a day and breastfed frequently; children in the older end of this range also need 1-2 snacks. Boiled orange fleshed sweetpotatoes are a safe, tasty and healthy snack for babies
- When children are just starting to learn to eat (at 6 mos) they may not be able to eat a lot of food. Parents should encourage children to eat more food and gradually increase the amount fed to them at each meal until they are able to eat ***up to their mark on the toolkit bowl*****.**
- Never force children to eat.
- If the child does not finish the food, families should cover the food and store it for up to one hour in case the child gets hungry later. It should be eaten or discarded after 1 hour.

Session 5: Responsive Feeding and Feeding During Illness

- Learning to eat takes practice just like learning to walk. Children aren't going to be good at it at first. They need their family's love and patience to help them learn this skill. Feeding times should be periods of learning and love.
- Feeding time is a good opportunity for the whole family to bond with the child. Mothers, fathers and grandmothers can use feeding time as a special time to bond with their children / grandchildren.
- Talking with children, playing with them, and maintaining eye-to-eye contact during feeding are some ways to encourage them to eat more; doing this also helps you bond with child and helps children learn to speak!
- Children are easily distracted and can easily be distracted from eating. Feed children away from distracting objects, noises, or situations.
- Sometimes babies only want to breastfeed with mom and may not eat much food. Having grandma, dad, or an older brother or sister feed the baby may be a good way for the baby to learn to eat foods.
- Never force a child to eat. A child who is forced to eat could choke and get sick. If a child is forced to eat, s/he will not learn how to eat and can actually grow less well.
- Older infants may try to feed themselves – encourage them to do so!
- Children may be messy and take a long time to eat – that is normal and a part of learning to eat.
- Even though your baby cannot use words to tell you when s/he is hungry or when s/he is finished eating, babies use "body language" to talk to us.

Babies do not usually cry until they are *very* hungry and get upset. By this time, it can be difficult for them to "learn" to eat. So if we notice the other ways babies tell us they are getting hungry, it can help them learn to eat.

Hunger Cues	**Fullness Cues**
Bring hands to mouth and suckling	Turning head away from food / closing mouth
Opening mouth	Pushing food away
Fussiness	Relaxing arms / hands
Walk/crawl to area where they are fed	

These are just some examples. Every baby is different—what matters, is that caregivers are attentive to their baby's "language."

Feeding Children When they are Sick

- Breastfeed your baby more frequently when the baby is sick (especially children <6 months). It is important to feed your baby more often to help fight the illness, reduce weight loss and recover quickly.
- For children over six months: Give more food and liquids than usual. Your child needs more food and liquids when sick to make his/her body strong and able to fight the illness.
    - Give foods that are easy to eat, such as thick porridge. Prepare it in a way that will encourage them to eat.
- If the child has diarrhea, talk with your HEW about oral rehydration salts and zinc tablets
- Take the baby to the nearest health facility for treatment if he/she is seriously sick, has sores in the mouth, or if the sickness gets worse.
- When your child gets better, encourage the child to eat an extra meal of solid food each day. This will help the child to gain the lost weight and grow well again.

Session 6 & 7: Vitamin A and Orange Fleshed Sweet Potatoes

- When growing crops, we give them different types of "food" sun, water, soil etc. We must do the same thing for our bodies.
- Different types/groups of food help our bodies in different ways. For example, foods from animals like meat, milk and eggs build up our muscles and help our bodies grow strong and fight illness. Fruits and vegetables protect against illness. It is important to eat foods from at least four different groups every day, or as often as possible, so that our bodies can get the benefits from each group.
    - Foods from Animals (Eggs, milk, meat): For strength
    - Beans/Pulses: For growth
    - Fruits and Vegetables: For preventing illness
    - Foods Like Enset/Enjera: For energy
    - Foods Like Oil/Butter: To help vitamin A get in the body
- The orange color in orange fleshed sweetpotatoes (see photo, right) comes from vitamin A. Vitamin A is the same vitamin that children are given at health posts twice a year. The supplement is in a capsule and squeezed into the child's mouth, like in this picture (right)
- Vitamin A is important for our bodies. It helps make our skin beautiful, builds blood, keeps our eyes strong, and prevents us from becoming sick.
- Other fruits and vegetables that are orange inside, such as mango, pumpkin, and carrots have vitamin A. Eggs and liver also have vitamin A.
    - Make the point that funnily enough, oranges don't have vitamin A. They are sour like lemons and have other important vitamins, but not vitamin A
- Orange fleshed sweetpotato leaves also have important vitamins for our bodies. They are similar to gomen. Other dark green, leafy foods like gomen also have vitamin A.
- Eating foods that are rich in vitamin A is a good way to help children stay healthy in between their vitamin A supplements at the health post.

- If a mom eats from the different groups of food each day, especially vitamin A rich foods, then her breastmilk will be stronger medicine for her baby.
    - Infants can get the benefits of animal milk, porridge, special foods, water, traditional medicines from their mother's breastmilk. If the baby is less than 6 months it is best to give these foods and drinks to the mom instead of the baby – then both she and the baby will benefit.
- How a food is prepared is also very important for staying healthy. Caregivers should wash hands with soap after visiting the latrine, after handling child / animal feces, before preparing food, and before feeding.

Session 8: Complementary Feeding as Children Age and Maternal Nutrition Technical Information for HDAs

- Children 9-12 months should be fed 3 meals a day with 1-2 snacks offered and frequent breastfeeds.
    - Boiled orange fleshed sweetpotato makes an excellent snack for young children.
- Children 12-24 months should be fed 3-4 meals a day with 1-2 snacks and frequent breastfeeds.
- Use the guide on the back of the Dietary Diversity Wheel to explain complementary feeding recommendations as children age.
- As babies get older, they should learn how to feed themselves. Give babies soft, "finger foods" (solid foods that babies can pick up and hold, like a boiled sweetpotato) and let them experiment with self-feeding. They may take a long time and make a mess – but that means they are learning to eat!
- Children can start transitioning to family foods around 12 months. Some family foods may need to be modified so they can eat it better (ex: mashing up vegetables). Children should have their own plate so parents can monitor how much food they are eating.
- It is important for pregnant women to eat 4 or more different food groups every day to ensure that their babies grow well and they have a healthy pregnancy.
- Pregnant women should eat an extra meal every day for their babies.
- The toolkit bowl can be used by families to remember how much and how many times to feed children 9-12 and > 12 months of age.
- The toolkit bowl can be used by pregnant women to remember to eat one extra meal a day for her baby. Use the counseling card to help explain the bowl.
    - Emphasize that the bowl is for pregnant mothers to take an ***additional*** meal each day (ie. In addition to the meals she usually takes when not pregnant).

Appendix II: Audio Story—Maternal Nutrition for Exclusive Breastfeeding

Amare and Birtukan are a young, married couple living in Gedeo kebele. They live in a small house not far off the main road, very near Amare's mother, Imama. About a year after they were married, Birtukan received the joyous news that she was pregnant with the couple's first child. Amare was thrilled by the news, as was Imama. Amare was excited to become a father and this baby would be the first grandchild in the family. Amare had always worked hard as a day laborer on a nearby field growing coffee beans. When he heard the news that he would become a father he committed himself to working even harder so he could provide what his firstborn needed. Nine months later, Birkutan delivered a beautiful baby daughter. They named her Sanayet.

One warm and sunny day, when Sanayet was about 3 months old, Amare was on his way to the market to buy some milk for Sanayet as well as a new battery for his cell phone. Not long after heading out, he came upon his good friend, Biruk, who also happened to be his neighbor. Amare had known Biruk since they were young boys attending primary together. Biruk was a bit older then Amare, had been married longer and had three children. Biruk's youngest child, Fayo, was only a few weeks older than Sanayet. Any day was a good day to see Biruk, but today Amare was particularly happy to see him. Biruk was a cheerful man and also a wise man. He went to the city several times a year to visit his older brother and always seemed to bring home interesting and useful information that he shared with Amare. Ordinarily, Amare saw Biruk every Sunday at church, but Amare hadn't seen him this past week. He'd been meaning to pay a visit to Biruk to check if everything was alright. Now was his opportunity to do just that. Biruk was walking in the same direction as him so Amare quickened his pace to catch up with him. The two met up and exchanged pleasant greetings. Amare assumed Biruk would also be headed to the market - it was market day after all – and Biruk confirmed this. Biruk expressed his pleasure that they could walk the distance to the market together. They fell in step beside each other and joined the dozens of others walking towards the market.

Biruk enquired about Amare's health and asked about how Birtukan was faring. Amare assured him they were both doing well. He shared with Biruk about Birtukan's latest unusual food creation. Birtukan was always mixing together ingredients that seemed quite unusual when you heard them, but somehow almost always tasted great when put together into one dish. He described the meal she had prepared last night, [dish] a pairing so unusual Biruk laughed but said he'd mention it to his own wife that evening when he returned from the market.

They continued down the main road passing the school. They could hear the sounds of children running around in the schoolyard. Now it was Amare's turn to inquire after Biruk's health, and that of his family. Biruk explained how his 6 year old daughter, [Daughter's name] had been ill with fever. Biruk stayed home from church last Sunday to take his daughter to the hospital. Amare was always doting over his only child and could sympathize with concern over a sick child. Biruk assured Amare that [Daughter's name] was now ok. "She recovered very quickly and is now back in school"

Amare inquired about the well-being of Biruk's two other children. Biruk smiles broadly and tells Amare "Our baby girl is so big and always smiling; And [Son's name] just turned 3 years yesterday. He is so smart and lively. He keeps his grandmother and mother very busy looking after him. Just yesterday, he

chased the chickens around the compound and ran one right into the house. It made quite the racket trying to get out!" Both men laughed at this.

A few minutes later Amare asked, "Biruk, what brings you to the market?"

Biruk responded, "I am on a special market trip today to buy some avocado for my wife." Amare asked why he was buying avocado. He thought that Biruk's wife might be preparing a new recipe for the family.

"No," Biruk replied, "The avocadoes are only for her to eat. I try to bring her a special food each week and make sure she eats some extra food when we share dinner. These foods keep her strong and help our baby girl stay healthy"

Amare was confused and asked "Biruk how does your wife eating extra food help Fayo at all?"

Biruk responded, "Amare, you are forgetting that breastfeeding is a lot of work. The extra food helps my wife. It gives her strength and the energy to breastfeed"

Biruk then asks Amare what he plans to buy at the market. Among a few other things, Amare is planning on buying a new battery for his cell phone. His hasn't been working right and he wants to buy another. Biruk of course knows something interesting about cell phones and shares with Amare, "Did you know that "Merry Christmas" was the first text message ever sent?" Biruk had learned this from TV when visiting his brother in the city.

As the market came into view, Amare remembered the last item he was supposed to get, the most important item. "Oh, and I must remember to buy milk for Sanayet" he tells Biruk. Birtukan and his own mother were concerned that Birkutan was not producing enough milk to satisfy Sanayet.

"Sanayet is breastfeeding well" he explained to Biruk "but crying more than usual, even after feeding. Amare wants Sanayet to grow up strong and smart, so we feel like milk and some porridge would be good for her now."

Biruk expressed his concern over this plan, "cow's milk is not like mothers milk" he said to Amare; "Breast milk is a gift from God and it is all she needs right now; breastmilk is a child's food, water and medicine".

"Yes, mothers milk is indeed a gift from God" Amare responds "but", he continued, "some children are hungrier than others and need more than breastmilk to stay healthy."

Biruk frowned, "I do not agree with you Amare" he said, "but as a father and husband you must decide what is best for your family"

Amare continues into the market, thinking about what Biruk has told him. He is concerned that Biruk does not agree with his decision. He is confused about how to spend his money.

Appendix III: Audio Story—Complementary Feeding

Amare and Birtukan are very proud of their first child, a beautiful daughter, Sanayet. They have enjoyed all the new responsibilities that come with becoming a parent, even though it can be exhausting at times. They love watching Sanayet grow and are impressed by all the new skills she's developed. Sanayet is six months old now and able to sit up on her own and enjoys rolling over from front to back. She likes to put everything she can get her hands on into her mouth including Birtukan's scarves. She's recently started looking at her parents when they call her name. [Add detail about Amare/Birtukan and their lives in their kebele]

Amare, Birutkan and of course Sanayet have joined their friends and neighbor, Biruk and [Biruk's wife name] for Sunday dinner. Amare has known Biruk since they were children, when they met [add detail about how they met, Biruk is ~5yrs older then Amare] although Biruk is a few years older then Amare. Biruk and [Biruk's wife] have a daughter, Fayo, who is only a month older then Sanayet as well as two older children, a 6 year old daughter [Daughter Name], and 3 year old son [Son name] who is always running around causing mischief. Biruk and [Biruk's wife name] live only a short walk down the road from Amare and Birtukan.

On this brisk Sunday afternoon, Biruk and Amare are having a pleasant conversation while their wives are preparing the meal. Standing near to the open door where they are cooking, the men can smell the rich aroma of the food wafting out. Amare breathes in deeply and smells the scent of [dish] but there's something else as well. He can't quite think of what the unidentified smell is, but he's sure it will be something good. Whenever Birtukan cooks or helps with the cooking she adds different ingredients that wouldn't seem like they go together, but then they taste delicious together. Just last week she made [dish] but then added sweet potato and sweet potato gomen. She taught his mother how to make it the very next day she liked it so much.

Putting the thoughts of the meal aside for now, Amare asks how Biruk's daughter Fayo is doing. Since she is only about a month older then Sanayet, Amare is always interested to hear how she's doing. He is excited that their daughters can grow up to be good friends, just like their fathers. Biruk tells Amare that Fayo has just started crawling. She just goes, goes, goes all the time. Amare comments before you know it she will be walking. Biruk points out that it will take some time before Fayo can walk. Learning to walk is a difficult process that takes a long time and has many intermediary steps. First she learns to crawl, and then stand, then those first, hesitant steps and eventually she will be able to walk.

Amare knew all this, but of course Biruk had something else to add, "Did you know that someone once walked all the way around the world?" It took him 11 years to do so. It was a man from Canada." Biruk was always sharing random bits of information that he learned while in the city or talking to people in the kebele.

"Wow! That is so long" responded Amare "Could you imagine walking for 11 years? That's longer then you've been married to [Biruk's wife's name]. "

Biruk continues on the conversation on the topic of learning new things, “So it might still be a while before Sanayet learns to walk, but how is she doing learning how to eat? She must be about six months now and starting to eat foods besides breast milk now.”

Amare gave him a perplexed look. Learning to eat? What was he talking about? Biruk knows a lot of things, so surely he must know that people don’t learn how to eat. Biruk explained his comment, “Just like she will have to practice crawling before she can walk, she has to practice chewing, tasting and swallowing before she becomes a competent eater. These are skills for a young baby!”

This did seem to make sense to Amare. It was an unusual way to think about it though. No one thinks about learning how to eat, but then again no one remembers being a baby and learning how to do it, or even learning how to walk for that matter.

Biruk and Amare decide to head inside and see if their meal is ready. They follow the smell of [dish] and walk in to hear their wives discussing the health extension worker, [HEW Name]. She grew up in the kebele and is well-known. Everyone in the kebele knows that she really wants to get married. There are always men interested in her, but it never seems to work out. [HEW Name] is a beautiful young woman who would make a good wife and mother. Birtukan admires how she handled Sanayet when she was at the health post last week for her [vaccine? Supplement? Add Details] Sanayet was very upset, because the injection hurt her, but [HEW name] was able to comfort her very quickly. [Biruk’s wife] comments how she’s heard that the butcher is interested in [HEW name] and wants to marry her. But she doesn’t know if she is interested in him, she seemed to be interested in someone else at least that’s what everyone else is saying.

Biruk, Amare, Birtukan and [Biruk’s wife name] continue discussing Sanayet’s visit to the health post. [HEW name] commented that Sanayet’s growth has slowed but Birtukan thinks she is perfect. This makes Biruk and [Biruk’s wife] laugh. Mother’s always think that their babies are perfect. Birtukan continues to explain that [HEW name] told them to try feeding Sanayet several times throughout the day. She has a small stomach and cannot eat all that much at once. [Biruk’s wife name] nods along, having heard similar advice for Fayo and when her other children were younger.

“Speaking of stomach’s….” Biruk begins, “mine is empty right now. Is dinner almost ready?”

Amare adds in, “Yes, we can’t wait to taste what you’re making, we could smell it all the way from outside and are eager to try it.”

[Biruk’s wife] continues stirring the pot looking to see if the food is cooked all the way through. Its not quite how she would like it, and decides to let it continue cooking for another few minutes. In the meantime, she suggests that they feed Fayo and Sanayet who seem to be getting hungry. [Biruk’s wife] pulls out the food she had just prepared for Fayo and serves it into bowls for Fayo and Sanayet.

Amare steps in and says, “Let me feed Sanayet. You did that for six months and now it is my turn. I want to share this special time with my daughter.” Biruk notes how Amare is such a good father and agrees to feed Fayo as well.

Birtukan looks at the food [Biruk’s wife] as prepared and asks for some water to add to it. Biruk asks what she is doing. Birtukan explains that the porridge is too thick. It is ok for Fayo because she is older then Sanayet, but Sanayet cannot have porridge like this. Biruk explains that Sanayet’s stomach is very

small and that if they feed her the thin porridge that drips off the spoon, she won't get the energy and vitamins she needs to be healthy. Thicker porridge will give her the energy and vitamins they need to be healthy, strong and intelligent.

Birtukan is still not convinced, and neither is Amare. Biruk also brings up the point that letting Sanayet practice chewing and swallowing in order to become a competent eater. Thin porridge won't let her practice those skills and she won't become a competent eater.

Amare turns to Biruk and says, I don't agree with you Biruk. This is how children who are Sanayet's age are fed. Biruk begins to feed Fayo. Amare and Birtukan are confused and need to decide whether or not to add water and thin out the porridge they are giving to Sanayet.

Appendix IV: Audio Story—Responsive Feeding

Welcome back to [Program Title] where we follow the lives of Birtukan, Amare, and their young daughter Sanayet who is now 7 months old. Sanayet continues to impress her parents with all the new skills she's learning. Recently, Birtukan noticed that she looks at you when you say her name. In the late morning of a brisk [season] day, Birtukan is at the health post with Genet, a dear friend and neighbor. Genet is married to Biruk, who has known Amare since they were young boys. Genet has also brought her 8-month old daughter Fayo to the health post for their check-up with Tigist, the HEW as part of routine child health days.

While waiting in line to see Tigist, the two women spend time talking and catching up. Birtukan was telling Genet about the meal she prepared last night. Birtukan comes from a family of creative cooks and is always putting together interesting dishes that sound unusual, when you hear them but always end up tasting delicious. Yesterday, she prepared shiro with bananas for her husband and mother-in-law. She even fed a little bit to Sanayet who seemed to enjoy it as well. The sweetness of the banana fit well with the spiciness of the shiro.

Although Genet had never heard of anyone eating bananas and shiro together, she's not surprised Birtukan's dish tasted nice. She's tried her fair share of creative food combinations prepared by Birtukan; the two women have been friends for sometime and have shared many meals together. She comments on the dish,

"The pulses in shiro and bananas are so different from one another; they must be in different food groups, which mean they provide different benefits for our bodies. Eating from those different groups will help Sanayet grow up strong and smart. Maybe I'll try it next time I make shiro."

Sitting on the bench in the shade outside the health post Genet gets a little cold and pulls her shawl closer around her shoulders. Ordinarily, there are so many mothers at child health days that by the time Birtukan and Genet get there, there's no room left on the benches and they have to stand. Birtukan in particular is glad they found room to sit today; her feet hurt from walking all the way to [location] for the big market they have there.

The mothers continue talking and as often happens when the two women get together, the conversation turned to gossip. Everyone in the kebele knows Tigist, the HEW wants to get married and is looking for a husband. She is young and beautiful and there are a number of men who are interested in marrying her. Genet shares the latest rumor she's heard. A man man who works in the woreda health office is interested in marrying her. However, Birtukan had heard something else.

"I heard that her sister in [City] had found a nice man for Tigist to meet and she was going there next week to meet him."

Genet begins to respond, but the sound of a child crying loudly drowns her voice out. A little girl waiting with her mother had been chasing after an older child when she tripped and fell. Tigist came out from the exam room to see what all the noise was. She is wonderful with children and is quickly able to comfort the child, distracting her from her discomfort by waving [shiny object] around the girls face. Birutkan sees this unfold and chuckles to herself, noting to Genet how easily it is for children to get distracted. Genet responds

“Yes, children are so easily distracted. I was feeding Fayo the other day and Biruk and some friends were having a loud discussion nearby. Fayo kept looking at them and making noises like she wanted to be part of the conversation as well. She barely ate a thing.”

Birtukan sympathizes with Genet knowing how difficult it can be to feed children. Sanayet has just started learning to eat and it can take a long time to feed her. She shares a tip that she’s learned to help make eating easier and faster for Sanayet, feeding her in a quiet place so she’s not distracted when eating. Genet takes note of this advice and adds that it might be difficult to find a quiet place to eat because two other children are often around when she’s feeding Fayo, often making a lot of noise on their own.

While she’s talking, Birtukan happens to look up and sees her mother-in-law walking down the road towards them. She stands up quickly and waving her arms and yelling her name. After a few calls, Imama, who had been coming from a friend’s house doing [activity] hears Birtukan, waves back and slowly walks toward them. The women all greet each other and Imama gladly takes Sanayet and hugs and kisses her grandchild. Birtukan asks Imama to stay and wait with them since they are next in line. Imama, eager to spend time with her granddaughter, gladly agrees.

Sitting close to the exam room, the women are able to hear what Tigist is telling the mother in front of them. Birtukan, Imama and Genet know [Woman’s name], but not well. They’ve seen her, her husband and their 10-month old son at church. Last Sunday, Genet had heard that [Woman’s name] son had been ill so she wasn’t particularly surprised to see them at the health post. However, she was surprised by what Tigist told [Woman’s name]. Tigist was telling [Woman’s name] that she should breastfeed and feed her son more while he is sick and right after he gets better. Birtukan also thought this was strange advice—when children are sick they have no appetite and won’t even eat a normal amount of food, and definitely not more food.

Imama, who has raised 5 children added, “When Amare and his siblings were young and they were ill, I used to add something I knew they liked to their food, some mashed banana or a pinch of sugar. They were always more willing to eat it, even when they were ill.”

Genet recognizes and respects Imama’s experience, but she’s heard that when a child is sick, you must let their stomach rest. They can’t handle food when they are sick, much less extra breast milk. Imama continues to explain, happy to share her expertise with the younger women

“Food provides children with the fuel to fight the disease. Illness can prevent children from growing well, and if children are sick often their growth will stop progressing as it should. After they recover, it is important to feed them extra to make up for the energy they lost while they were sick. Otherwise, they do not grow as strong or smart as they possibly can. “

Genet is still uncertain about the advice. Tigist has told a mother to breastfeed her child more while he is sick and in the days after he recovers. Imama thinks that this will help the child continue to grow and develop as he should. She also recommends adding something [Woman’ name] knows her child will like to his food, to encourage him to eat it. Genet doesn’t agree with this. What do you think they should do?

Appendix V: Audio Story—Nutrition During Pregnancy

Welcome back to [Program Title] where we follow the lives of Birtukan, Amare and their young daughter Sanayet. Sanayet is getting very big and is only two months away from her first birthday. Although she can't yet walk on her own, she can stand up and with her mom holding her hands has taken a few tentative steps. She loves it when her dad makes silly faces and has the most beautiful laugh. Having a baby has been a lot of work for Birtukan and Amare, but has also a great joy.

This morning, Amare is getting ready to go to the farmer training center for [Event] with his good friend and neighbor Biruk. Biruk and Genet also have a young daughter, Fayo who is only a month older then Sanayet, as well as 2 older children. While waiting for Biruk to show up, Amare is playing with Sanayet. She loves it when he puts his hands in front of his face and says "Where's papa?" And then surprises her by saying "boo" and showing his face again. As he does this, she starts laughing and waving her arms wildly in the air knocking [item] over making a loud noise.

Birtukan likes seeing Amare interact with Sanayet as a caring father. Picking up [item] that she knocked down, Birtukan comments on much of a mess Sanayet can get make. As an infant who is constantly growing and learning, she is always crawling around, picking things up and putting them in her mouth. Birtukan can't image how she'll be able to keep an eye on her once she starts walking and moving around a lot. Amare is glad their daughter is curious. That means she will grow up to be smart child. However, Birtukan adds a word of caution,

"We must be careful though, too much curiosity could be harmful. Two days ago when Genet was here, Fayo and Sanayet were playing together. I looked over and Sanayet had [Item that is often dirty] in her hand, ready to put it in her mouth. We need to make sure her hands are clean and that we don't leave dirty items around. They can make her ill!"

Amare looks surprised hearing this. He was the one that left [Item that it is often dirty] on the ground. He hadn't realized how easy it was for this to harm Sanayet. He cares deeply about her and doesn't want his actions to make her sick. Looking out the door, Birtukan sees Biruk coming down the road. She tells Amare who bids good-bye to his wife and daughter.

The two men start walking side by side up the large hill outside of Amare's home towards the farmer's training center. It's a cold day, usual for the time of year when the heavy rains come. While talking about the weather, Biruk has an interesting fact to add,

"Did you know that in some parts of the world rain is colored?"

Biruk loves learning new things and is always sharing interesting facts. He visits his brother in the city often and every time he comes back seems to have learned something new. Amare of course is quite surprised and asks Biruk to elaborate, thinking he might be playing a joke on him and not telling him the truth. Colored rain is such a ridiculous idea. Birk explains,

"No, no its true! The weatherman was talking about it on TV one day. I saw it when I was in the city visiting my brother. In some places, when there's a lot of dust or dirt in the air, it mixes with the rain and it looks like the rain coming down is red or yellow."

Having reached the top of the hill, the walk gets easier for the men and they continue more quickly to the FTC, as several donkey carts and even a few motorbikes pass them. Both men are anxious to get

there, both for the [event] but also to see [Man's name]. They have known [Man's name] since they were children. However, [man's name] went to live in [kebele name] for several years and has only just returned. The last time either father had seen [Man's name] was at [Celebration where community comes together]. As they continue walking, the two men discuss their recollections of that day. As Biruk remembers it, a group of children were playing together and decided to start chasing a goat. The goat got so frightened it climbed right up a tree. It jumped onto that low-hanging branch and just kept scrambling. And then it got so scared, it couldn't get down and it wouldn't stop bleating.

Amare, remembered things a little differently and excitedly explains,

"I don't know if it really went up the tree, I remember it more as the goat running into the bushes to hide. But, either way, it was quite an ordeal getting the goat down. "

Biruk is about to respond when his cell phone starts ringing. He picks up the phone and begins talking. Judging by his greeting and friendly tone, Amare guesses that Biruk's brother is on the phone. It also sounds like he is sharing good news with Biruk.

After a few more minutes of discussion, Biruk gets off the phone and shares some exciting news with Amare,

"That was my brother. He and his wife are going to have a child. It will be their second child. My mother will be so excited when I tell her. This baby will be her 12th grandchild. I will be going to [City] to celebrate with them in a few days. "

Amare shares his congratulations with Biruk. A new grandchild in the family is a blessing. Amare hopes he has a lot of children one day. Family is very important to him and he's enjoyed watching Sanayet grow, seeing Birtukan as a mother and his mother as a caring grandmother. Sanayet is part of his family and it takes the whole family to raise a healthy, happy child.

Biruk agrees with his friend and adds how hard it can be on a family when a new baby is ill. He continues, talking about his brother's first child was born very small and fragile. She hardly cried at all because she didn't have the energy. Everyone was so worried about her. Amare sympathizes with Biruk, he can imagine how difficult it would be if something happened to Sanayet.

Biruk adds that his brother and brother's wife will do everything they can to make sure this baby is born healthy. He adds about his experience with Genet's last pregnancy,

"When Genet was pregnant she tried to eat one extra meal almost every day to feed Fayo growing inside her. Also, I tried to make sure she ate lots of different kinds of food so that Fayo was born healthy and strong. Whenever I could, I used to bring her special items from the market, like avocado or orange fleshed sweet potato, so that she would have the energy for a safe and healthy pregnancy and delivery."

For the most part, this makes sense to Amare. A pregnant woman is eating for herself and a child, so she would need more food. But he doesn't understand why it matters what kind of food she eats. Food is food. It nourishes our bodies and gives us energy. Biruk explains,

"You are forgetting that different kinds of food help our bodies in different ways. With crops, you feed them water, sunlight, and soil. They are only able to grow with all three. Similarly, people are unable to

grow and flourish without different types of food. For example, beans and pulses can help with growth. And orange-fleshed sweetpotato is good for the eyes and protection from illness."

Amare still seems uncertain about what Biruk has shared. He said that during pregnancy, his wife ate one extra meal per day. He also suggested that pregnant mothers should eat a variety of kinds of food to ensure their babies are born healthy and to give mothers the energy for a healthy pregnancy. Amare doesn't agree. What do you think?

Appendix IV: HLC Materials List

Print Materials (HLCs)					
Item	**Description**	**Uses**	**Unit**	**Total**	**Cost**
Diet Diversity Wheel and Meal Frequency/Amount Supplemental Page	A letter sized piece of paper with the 6 different food groups in a wheel. It also has four checks to remind parents to feed their children from four different food groups. On the back is a pictorial guide to meal frequency and volume recommendations.	Sessions: 3, 6, 7 (Wheel) 4, 8 (Supplement)	1 per HLC	26	
Dietary Diversity Wheel Handout	A letter sized piece of paper with the 6 different food groups in a wheel. It also has four checks to remind parents to feed their children from four different food groups. It will serve as a cue to remind parents of the dietary diversity recommendations.	Session 3	1 per family	780	
Toolkit Counseling Card	This card includes instructions for how different groups (pregnant/lactating women, 6 to 8 months, 9 to 11 months, and 12 to 24 months) should use the toolkit. Only HLCs where the toolkit is distributed will receive this counseling card.	Sessions: 2, 4, 8	1 per HLC family in intervention kebeles	210	
Goal Cards	A half-page sized card with pictures representing the goal options for the HLC session. Families circle the goal option they choose. It will serve as a reminder of the goal and a cue to action.	All Sessions	1 per HLC family per session		
Quality Standard Checklist	Checklist for PIN Facilitators/HEWs to use during HLC observations. Can also be used as a guide for HDAs during the session.	All HLC Sessions	2 per HLC per session	416	
Graduation Certificates	Certificates for participants who complete the HLC sessions	Session 9	1 per family	780	
Other Materials (HLCs)					
Item	**Description**	**Uses**	**Unit**	**Total**	**Cost**
Audio Story Files	Entertaining audio “stories without an ending” to keep messages consistent across HLCs, engage participants and prompt discussion of optimal practices and action planning.	Sessions: 2, 4, 5, 8	N/A	N/A	

Mp3 players or other audio device	If the HDA doesn't have a phone, or the phone cannot play the audio stories, they will need a device to play the stories on, extra batteries (if needed). The device will need to have a speaker loud enough to play the stories at a volume where everyone can hear them. Will also be used to record the group song.	Sessions: 2, 4, 5, 8	1 per kebele	26	
Speakers & Batteries	As needed for Mp3 players/audio devices for audio stories	Sessions: 2, 4, 5, 8	As needed	As needed	
Supplies for Cooking Demonstrations	This includes all necessary ingredients (including orange fleshed sweetpotatoes and leaves and other locally available ingredients) water for cooking and handwashing, cooking utensils and dishes (bowls, spoons, knives, pots, etc.) and anything needed for cooking (wood, fire starter, pot stand).	Sessions: 6, 7	4 sets per HLC		
Supplies for Feeding Demonstrations	This includes all necessary ingredients (flour, enriching foods, other locally available ingredients), water for cooking and handwashing, cooking utensils and dishes and anything needed for cooking.	Sessions: 3, 5,	Enough to serve food to all families		
Bags	Incentive for HDAs. Identify them during HLC sessions and in the community; allow them to carry materials	For HDAs	1 per HLC	26	
Umbrellas	Incentive for HDAs	For HDAs	1 per HLC	26	
Snacks	For HLC participants. Fruit, kolo, water, etc. to encourage participants to come	HLC sessions 1, 2, 4, 5, 6, 8	Enough for all participants	Enough for all participants	

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Appendix 2: HDA Session Guides

HEALTHY LIVING CLUBS GUIDE -- SESSION 2

Session Topic: Maternal Nutrition for Exclusive Breastfeeding

This guide was developed for facilitators to use during Session 4. It should be translated into the local language and given to HDAs during training. HEW/CF should review the session with the HDAs during the HDA training to ensure that HDAs are prepared to lead the HLC session.

A.	**PREPARATION**
1	Ensure you have all the required materials available and in working order: Audio Story File, Mp3 player or HDA phone, extra batteries/speakers as needed, Alive and Thrive Child Nutrition Card, Session goal cards; family goal cards; toolkits / counselling cards if applicable) If you have any problems let community facilitator know
2	Start session on time so that participants do not have to wait
3	Have participants sit in a circle
B.	**INTRODUCTION**
4	Invite everyone to refreshments and to introduce themselves
5	Explain the purpose of HLC: for mothers, fathers, and grandmothers to come together to learn, practice new skills, ask questions, and set goals for their family.
6	Remind participants of the HLC slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
7	Give participants a chance to come up with their HLC ground rules
C.	**GROUP SONG**
8	Remind participants that HLCs are about child feeding, orange sweet potatoes and the roles each family member plays in child feeding?
9	Invite participants to create a song about these things.
10	If possible record the group song and play it back?
D.	**ACTIVITY**
11	Briefly introduce the background to the audio story
12	Play the audio story
13	divide participants into 3 groups: one for mother, one for fathers, one for grandmothers; invite them to discuss the story and what they thing should happen for about 10 minutes.
14	Encourage participants to answer the following questions in their groups -- what would they do? What do they agree with? What did they find strange? What questions do they have? How is the situation different to their own experience?Move between groups to listen to what people are saying.
15	Bring the participants back together and ask them to summarize the discussion
16	Share the key messages: • Mothers need extra food while breastfeeding so they have the strength and energy to exclusively breastfeed their children. • Children should be exclusively breastfed for six months. • A mother cares for a child with her breastmilk, but every family member plays a role in helping mothers to exclusively breastfeed
17	State the session catchphrase? ***Mother's milk is baby's food, water and medicine. It is all a baby needs up to 6 months.***
18	Explain step 2 of the Child Nutrition Card

19	Ask participants to discuss the role of the father/ mother/ grandmother in supporting exclusive breastfeeding.
20	*Feeding bowl kebeles only: introduce the bowl and say that it is for mothers to take an additional meal during breastfeeding and when the baby is 6 months, it can be used for feeding the baby?*
E. GOALS	
21	Pass out household goal cards and discuss the goals for this session using session goal cards • Mothers try to eat an extra meal every day. • Mothers share the benefits of exclusive breastfeeding with a family member who is uncertain of her decision to exclusively breastfeed. • Father brings home extra food for mother 3 times over the next month. • Fathers or Grandmothers help out with one family chore to give the mother more time to breastfeed.
22	Encourage families to choose one goal from this session to work on between now and the next session
23	Remind families to bring their goal cards to the next session
F. RECAP & CLOSURE	
24	Ask the participants to recap what was discussed
25	Give participants the opportunity to ask questions
26	Review the session's catchphrase? ***Mother's milk is baby's food, water and medicine. It is all a baby needs up to 6 months.***
27	Review the project slogan? ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
28	Encourage participants to attend the next session with fathers and grandmothers and to bring a bowl and spoon to feed the child

HEALTHY LIVING CLUBS GUIDE: SESSION 3

TOPIC: Complementary Feeding—Texture

This guide was developed for facilitators to use during session 3. It should be translated into the local language and given to the HDAs during HDA training. HEW / CF should review the session guide with the HDAs during training and ensure that HDAs are prepared to lead the HLC session.

A. SESSION PREPARATION (to be completed prior to the session)	
1	Check that required materials / supplies are available and in good / working condition (diet diversity wheels for families, cooking demonstration supplies, bowls, spoons for feeding children porridge; session goal cards). If there are problems with supplies / materials tell your community facilitator.
2	Start on time so that participants do not have to wait.
3	Have participants sit in a circle.
B. SESSION OPENING AND CHALLENGE RECAP	
4	Welcome participants, invite them to refreshments if available and tell them the session topic (enriched porridge for enriched children)
5	Invite participants to sing the group song.
6	Remind the group of the project slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
7	Have families discuss their goals from previous session in pairs and then as a whole group
C. ACTIVITY	
9	Explain why it is important for children to eat thick and enriched porridge.
10	State the session catchphrase and have group repeat session catchphrase: ***Thick and enriched porridge for enriched children – to enrich your children feed them thick, enriched porridge beginning at 6 months***.
11	Demonstrate proper handwashing techniques and encourage participants to do the same
12	Prepare three types of porridge (thin, medium, thick) and show participants the differences between them
13	Demonstrate enriching porridge by adding a special ingredient; explain how enriching porridge means adding one special ingredient
14	Encourage families with children >6 months to try the porridge
15	Explain the dietary diversity wheel and how to use it to select foods to enrich porridge; encourage families to feed foods from at least four groups every day (the four check marks)
16	Pass out 1 dietary diversity wheel to each family
17	Have participants split into 2 group to discuss the different roles mothers and father can take to ensure children are fed thick, enriched porridge
18	Bring group together to discuss this topic as a whole group
E. GOAL SETTING	
19	Review goal options using session goal cards and facilitate discussion on which Goals families would like to try • Give only breastmilk until the child is 6 months • Enrich porridge with a special food 5 times a week • Feed infants > 6months with thick porridge that does not drip off of the spoon • Feed children > 6 months foods from four different groups every day • Fathers bring home special food for wife or child at least once per week.
20	Have participants select goal to try for the next month
F. RECAP & CLOSURE	
21	Recap what was discussed

22	Give participants the opportunity to ask questions
23	Remind the group of the session's catchphrase: ***Thick and enriched porridge for enriched children***
24	Remind the group of the project slogan: ***It takes a whole family to feed a child well***
25	Encourage participants to attend the next session on complementary feeding

HEALTHY LIVING CLUBS GUIDE -- SESSION 4

Session Topic: Complementary Feeding—Frequency and Amount

This guide was developed for facilitators to use during Session 4. It should be translated into the local language and given to HDAs during training. HEW/CF should review the session with the HDAs during the HDA training to ensure that HDAs are prepared to lead the HLC session.

A.	**PREPARATION**
1	Check that required materials / supplies are available and in good working condition (audio story file, MP3 player / phone, extra batteries; counselling cards/ session goal cards). If there are problems tell your community facilitator.
4	Start on time so that participants did not have to wait
5	Have participants sit in a circle
B.	**SESSION OPENING AND GOAL RECAP**
6	Welcome participants and tell them the topic of today's session (frequency and amount)
7	Invite participants to sing the group song
8	Remind the HLC of the slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
9	Have families discuss their goals in pairs and then as a whole group
C.	**ACTIVITY**
10	Play the audio story on complementary feeding
11	Invite participants to split into groups to discuss the story
12	Bring participants back together to discuss this topic as a whole group
14	Explain the importance of feeding 3 meals a day to children 6-12 months of age
15	Explain the importance of feeding the right amount of food at each meal
17	Use the provided materials to explain correct meal frequency and volume (recommended meal frequency card on back of diet diversity wheel / counselling card)
18	Tell participants the session's catchphrase: ***Three meals a day: one for growth, one for strength and one for intelligence***
E.	**GOALS**
23	Review goal options with the participants using goal cards • Fathers bring home special foods for moms and / or babies > 6 months at least once per week • Feed child 6-12 months of age 3 meals a day, every day. • Give child a snack, such as boiled orange fleshed sweetpotato, every morning or afternoon. • Slowly increase the amount of food served to a child 6-12 months at each meal so that children are eating the right amount (3 buna cups each meal). • Give only breastmilk until child is 6 months of age
24	Have families select their own goal to try for the month
F.	**RECAP & CLOSURE**
25	Ask the participants to recap what was discussed
26	Give participants the opportunity to ask questions

27	Remind participants of the session's catchphrase: ***Three meals a day: one for growth, one for strength and one for intelligence***
28	Remind participants of the project slogan: **It takes a whole family to feed a child well**
29	Encourage participants to attend next session on responsive feeding and to bring their goal cards with them

HEALTHY LIVING CLUBS GUIDE -- SESSION 5

Session Topic: Responsive Feeding and Feeding the Sick Child

This guide was developed for facilitators to use during Session 5. It should be translated into the local language and given to HDAs during training. HEW/CF should review the session with the HDAs during the HDA training to ensure that HDAs are prepared to lead the HLC session.

A.	**PREPARATION**
1	Check that required materials / supplies are available (audio story file, MP3 player / phone / speakers; extra batteries; session goal cards; prepared porridge). Ensure supplies are in good working condition. If there are problems tell your community facilitator.
2	Start on time so that participants did not have to wait
3	Have participants sit in a circle
B.	**SESSION OPENING AND GOAL RECAP**
4	Welcome participants and tell them the topic of today's session (responsive feeding and feeding the sick child)
5	Invite participants to sing the group song
6	Remind the HLC of the slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
7	Have families discuss their goals from last session in pairs and then as a whole group
C.	**ACTIVITY**
8	Play the audio story
9	Invite participants to split into groups to discuss the story
10	Bring participants back together to discuss this topic as a whole group
11	Explain the importance of feeding children while sick
12	Explain the proper way to feed sick children • Breastfeed more • Give more foods / liquids to children > 6months • Give foods that are easy to eat and liked by child • Take child to nearest health facility if has sores in the mouth, is very ill (fever, diarrhea, vomiting), if illness gets worse or if illness does not get better after 2-3 days.
13	Ask participants what they do to encourage children to eat
14	Explain the importance of responsive feeding and tell participants the session's catchphrase: ***Feeding time is a time of learning and love***
15	Give examples of responsive feeding techniques that were not mentioned earlier (make eye contact; play games; sing songs; imitate eating)
16	Wash hands and encourage participants to do the same
17	Pass out porridge to participants and allow families to practice responsive feeding techniques
18	Discuss the techniques the families practiced
E.	**GOALS**

19	Review goal options with the participants using session goal cards. • Feed in a quiet place, away from large groups of people or where a lot of activities are taking place. • Make eye contact with the child while feeding at every meal. • Talk or play with children while feeding at every meal. • Feed children 6-11 months at least three meals a day
20	Have families select their own goal to try for the month
F. RECAP & CLOSURE	
21	Ask the participants to recap what was discussed and give participants the opportunity to ask questions
22	Remind participants of the session's catchphrase: ***Three meals a day: one for growth, one for strength and one for intelligence***
23	Remind participants of the project slogan: **It takes a whole family to feed a child well**
24	Encourage participants to attend next session on responsive feeding and to bring their goal cards with them

HEALTHY LIVING CLUBS GUIDE -- SESSION 6

Session Topic: Vitamin A and OFSP for the Family

This guide was developed for facilitators to use during Session 6. It should be translated into the local language and given to HDAs during training. HEW/CF should review the session with the HDAs during the HDA training to ensure that HDAs are prepared to lead the HLC session.

A.	**PREPARATION**
1	Check that required materials / supplies are available and in good / working order (boiled OFSP roots, enough for all participants, ingredients for recipe creation, cooking demonstration equipment, handwashing supplies; session goal cards). If there are problems contact your community facilitator.
2	Start on time so that participants did not have to wait
3	Have participants sit in a circle
B.	**SESSION OPENING AND GOAL RECAP**
4	Welcome participants and tell them the topic of today's session (Vitamin A and OFSP for the whole family)
5	Invite participants to sing the group song
6	Remind the HLC of the slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
7	Have families discuss their goals from last session in pairs and then as a whole group
C.	**ACTIVITY**
8	Review Diet Diversity Wheel and ask participants to describe benefits of each group and how many groups to consume in a day
9	Ask if anyone has heard of vitamin A? Ask what are the functions of vitamin A in the body? Ask what foods contain vitamin A
10	Summarize the functions of vitamin A in the body (fight infection, makes skin beautiful, builds blood, keeps eyes strong)
11	Summarize the foods that are rich in vitamin A (OFSP, other orange fruits / vegetables; dark greens; liver, egg yolk).
12	Wash hands and encourage participants to do the same
13	Provide everyone samples of boiled OFSP roots and have them taste the roots and discuss what they like / do not like about the roots
14	Teach participants the session catchphrase:
15	Divide participants into four groups; ask them to create a dish they might feed their family using the ingredients provided – two groups will use OFSP roots and two will use OFSP leaves
16	Once they have finished preparing, have them present their dishes to everyone
17	Encourage them to taste each others' dishes and come up with names for their dishes
18	Ask participants What dish did they like most? Which dishes would they try at home? What are substitutes if certain ingredients aren't available
E.	**GOALS**
19	Review goal options with the participants using session goal cards. • Fathers talk to 2 neighbors / farmers about why they should grow OFSP or other vitamin A rich fruits and vegetables in their gardens / farms • All family members eat four different food groups a day (excludes babies < 6 mo). • All family members eat orange fleshed sweetpotatoes or other vitamin A-rich food at least four days / week (excludes babies < 6 mo).

	• Mothers share with two people (one family member, one neighbor) about how to prepare a recipe with orange fleshed sweetpotato or sweet potato leaves.
20	Have families select their own goal to try for the month
F. RECAP & CLOSURE	
21	Ask the participants to recap what was discussed and give participants the opportunity to ask questions
22	Remind participants of the session's catchphrase:
23	Remind participants of the project slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
24	Encourage participants to attend next session on OFSP dishes for babies

HEALTHY LIVING CLUBS GUIDE -- SESSION 7

Session Topic: Complementary Feeding with OFSP

This guide was developed for facilitators to use during Session 7. It should be translated into the local language and given to HDAs during training. HEW/CF should review the session with the HDAs during the HDA training to ensure that HDAs are prepared to lead the HLC session.

A.	**PREPARATION**
1	Check that required materials / supplies are available and in good / working order (recipe ingredients, cooking demonstration equipment, handwashing supplies, diet diversity wheel, session goal cards). If there are problems contact your community facilitator.
2	Start on time so that participants did not have to wait
3	Have participants sit in a circle
B.	**SESSION OPENING AND GOAL RECAP**
4	Welcome participants and tell them the topic of today's session (Complementary Feeding with OFSP)
5	Invite participants to sing the group song
6	Remind the HLC of the slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
7	Have families discuss their goals from last session in pairs and then as a whole group
C.	**ACTIVITY**
8	Show participants the diet diversity wheel; Ask participants to describe benefits of each group for children and how many groups children should consume in a day
9	Ask what are the functions of vitamin A in the body? Ask what foods contain vitamin A?
10	Summarize the functions of vitamin A in the body (fight infection, makes skin beautiful, builds blood, keeps eyes strong). Remind participants that vitamin A is in the capsules children receive twice / year from health post.
11	Using the diet diversity wheel, summarize the foods that are rich in vitamin A (OFSP, other orange fruits / vegetables; dark greens; liver, egg yolk).
12	Wash hands and encourage participants to do the same
13	Teach participants the session catchphrase:
14	Divide participants into four groups; ask them to create a dish they might feed their young child using OFSP roots and /or leaves and the other ingredients provided
15	Remind participants about thick consistency, enriching dishes with special foods like OFSP and feeding an adequate amount at each meal (3 buna cups per meal for children 6-12 months)
16	Once they have finished preparing, have participants present their dishes to the group and come up with a name for their dish
17	Encourage fathers to feed the dishes to the children during the session
18	Ask participants -- What dish do they think their children liked most? Which dishes would they try at home? What are substitutes if certain ingredients aren't available? How can they make family foods easier for young children to eat?
E.	**GOALS**
19	Review goal options with the participants using session goal cards. • Add orange fleshed sweetpotatoes or other vitamin A rich foods into their child's meals four times per week. • Make sure children eat from 4 food groups every day or at least 4 days per week. • Fathers bring home a special food item from a different food group once per week. • Increase the amount of food you are giving children as they get older until you are feeding the right amount.

20	Have families select their own goal to try for the month
F. RECAP & CLOSURE	
21	Ask the participants to recap what was discussed and give participants the opportunity to ask questions
22	Remind participants of the session's catchphrase:
23	Remind participants of the project slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
24	Encourage participants to attend next session

HEALTHY LIVING CLUBS GUIDE -- SESSION 8

Session Topic: Complementary Feeding of Older Children and Nutrition in Pregnancy

This guide was developed for facilitators to use during Session 8. It should be translated into the local language and given to HDAs during training. HEW/CF should review the session with the HDAs during the HDA training to ensure that HDAs are prepared to lead the HLC session.

A.	**PREPARATION**
1	Check that required materials / supplies are available and in good / working order (audio story file; mp3 player / phone / speaker; extra batteries; diet diversity wheel / frequency volume card; session goal cards). If there are problems contact your community facilitator.
2	Start on time so that participants did not have to wait
3	Have participants sit in a circle
B.	**SESSION OPENING AND GOAL RECAP**
4	Welcome participants and tell them the topic of today's session (complementary feeding odler children and nutrition in pregnancy)
5	Invite participants to sing the group song
6	Remind the HLC of the slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
7	Have families discuss their goals from last session in pairs and then as a whole group
C.	**ACTIVITY**
8	Ask participants to recall how often and how much children 6-12 months should be fed.
9	Review meal frequency and amount recommendations for children 1-2 years using provided materials • Four meals each day plus 2 snacks • Four buna cup per meal • Four food groups each day
10	Have participants discuss why children need to increase the frequency and amount of food they consume from 1-2 years?
	Teach participants the session catchprase: A bright future starts with a well-nourished child
11	Play the audio story
11	Divide participants into groups (mothers, fathers, grandmothers) and have them discuss the story – what should characters do next; what do they agree with / disagree with? How are their experiences similar to / different from those in the story;. Move between groups and listen to what they are saying
12	Bring groups together and ask them to summarize their discussion and the key points • It is important for pregnant women to eat from the different food groups each day (use diet diversity wheel to describe) to build blood, give strength and energy and keep the baby healthy • It is important for pregnant women to take extra meals during pregnancy to build strength, energy and ensure the baby is healthy when born.
13	Ask participants – what can fathers and grandmothers do to ensure women consume extra food and enough different food groups each day during pregnancy
E.	**GOALS**
19	Review Goal options with the participants using session goal cards. • As child ages, increase the amount of food fed at each meal • Feed 12-24 month old children four times a day + two snacks

	• Pregnant mothers take extra food to give strength • Share what you've learned with 1+ neighbor, friend or family member.
20	Have families select their own goal to try for the month
F. RECAP & CLOSURE	
21	Ask the participants to recap what was discussed and give participants the opportunity to ask questions
22	Remind participants of the session's catchphrase:
23	Remind participants of the project slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***
24	Encourage participants to attend next session

Appendix 3: Sample Monitoring Tool

QUALITY STANDARDS CHECKLIST

HEALTHY LIVING CLUBS: Session 3 Complementary Feeding—Texture

This checklist was developed for PIN's Field Officers, Community Facilitators and government Health Extension Workers. It is used to monitor the performance of Health Development Army volunteers when they facilitate Healthy Living Club sessions.

0A Woreda: _____ 0D Number of mother participants _____

0B Kebele: _____ 0E Number of father participants _____

0C HDA:_____ 0F Number of grandmother participants_____

		YES	NO	N/A
A.	**PREPARATION**			
1	Are all the required materials available (diet diversity wheel / counselling card; toolkit; demonstration supplies; session goal cards)?	Y	N	N/A
2	Are materials in good / working condition?	Y	N	N/A
3	Are there at least 15 fathers attending the session?	Y	N	N/A
4	Did the session start on time so that participants did not have to wait for more than 30 minutes?	Y	N	N/A
5	Did the participants sit in a circle?	Y	N	N/A
B.	**SESSION OPENING AND CHALLENGE RECAP**			
1	Did the HDA welcome participants and tell them the topic of today's session (texture)?	Y	N	N/A
2	Did participants sing the group song or did the HDA play the song?	Y	N	N/A
3	Did the HDA remind the HLC of the slogan: ***A well-fed child can grow up strong and smart, which is good for the family and the whole community! All the family needs to be involved to feed a child well.***	Y	N	N/A
4	Did the HDA have families discuss their goals from last session in pairs and then as a whole group?	Y	N	N/A
C.	**Activity**			
1	Did the HDA explain why it is important for children to eat thick porridge beginning at 6 months?	Y	N	N/A
2	Did the HDA introduce the session catchphrase: ***Thick and enriched porridge for enriched children. To enrich your children, feed them thick, enriched porridge beginning at 6 months***	Y	N	N/A
3	Did the HDA demonstrate proper handwashing techniques and encourage others to do the same?	Y	N	N/A
4	Did the HDA prepare three types of porridge (thin, medium, thick) and show participants the differences between them?	Y	N	N/A
5	Did the HDA correctly explain how to enrich porridge?	Y	N	N/A
6	Did the HDA correctly explain the dietary diversity wheel and the importance of eating from four food groups in a day?	Y	N	N/A
7	Did the HDA pass out 1 dietary diversity wheel to each family?	Y	N	N/A
8	Did the HDA encourage families with children >6 months to try the porridge?	Y	N	N/A

9	Number of families that tried the porridge			
10	Did the HDA have participants split into 2 group to discuss the different roles mothers and father could take to ensure children are fed thick, enriched porridge?	Y	N	N/A
11	Did the HDA have the group come back together to discuss this topic as a whole group?	Y	N	N/A
E. GOALS				
1	Did the HDA facilitate discussion on the session goals and which ones families would like to try? • Give only breastmilk until the child is 6 months • Enrich porridge with a special food 5 times a week • Feed infants > 6months with thick porridge that does not drip off of the spoon • Feed children > 6 months foods from four different groups every day • Fathers bring home special food for wife or child at least once per week.	Y	N	N/A
2	Did the HDA encourage families to select one goal to work on for the month?	Y	N	N/A
3	Did the HDA remind families to bring their goal cards with them next month?			
4	Which session challenges were selected most frequently by participants (please list top 2-3 challenges)?			
F. RECAP & CLOSURE				
1	Did the HDA ask the participants to recap what was discussed?	Y	N	N/A
2	Did the HDA give them opportunity to ask questions?	Y	N	N/A
3	Did the HDA remind the session's catchphrase? ***Thick and enriched porridge for enriched children. To enrich your children, feed them thick, enriched porridge beginning at 6 months***	Y	N	N/A
4	Did the HDA remind the project slogan? ***It takes a whole family to feed a child well***	Y	N	N/A
5	Did the HDA get the participants interested to attend the next session with fathers and grandmothers?	Y	N	N/A

G. OVERALL IMPRESSIONS: On a scale of 1-5 please indicate to what extent you agree with each of the below statements; 1 = very much disagree; 2 somewhat disagree; 3 being neutral; 4 somewhat agree and 5 very much agree

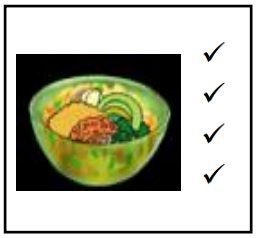
1	All participants were actively engaged during the entire session e.g. they listened, engaged in discussion, participated in activities, answered questions	
2	Participants appeared to enjoy the session activities	
3	The HDA was an effective facilitator e.g. knowledgeable of the material, able to engage every participant, good-humoured, comfortable and respectful of participants	

At the end of the session, the PIN facilitator should debrief the observation findings with the group facilitator. The PIN facilitators should discuss with the group facilitator which parts went particularly well and which ones were more challenging for the facilitator and note any recommendations for improving the curriculum.

Completed By: _____ ***Date:*** _____

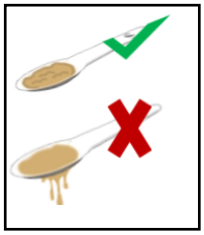
Appendix 4: Pictorial HLC Tools

Session 2: Maternal Nutrition and Exclusive Breastfeeding

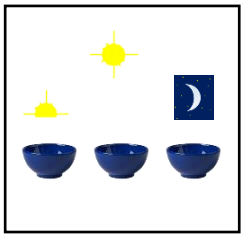


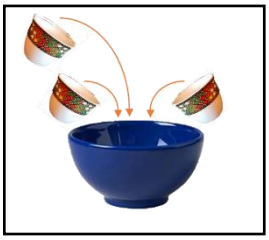

Session 3: Complementary Feeding – Consistency and Diversity





Session 4: Complementary Feeding – Frequency and Volume

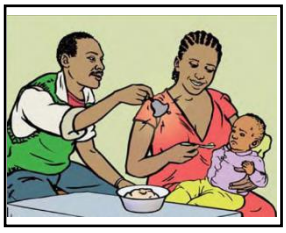
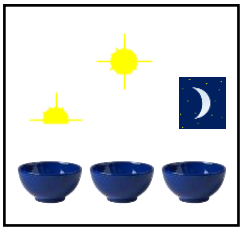





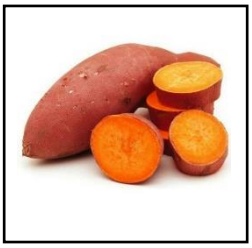

Session 5:

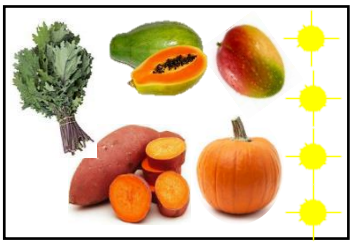
Responsive Feeding



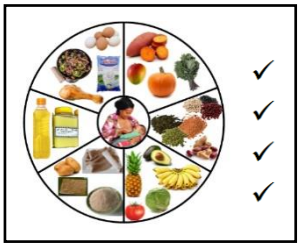



Session 6: Vitamin A and OFSP for the Family





Session 7: OFSP for Child Complementary Feeding and Dietary Diversity

These cards have been adapted from Alive & Thrive by Rollins School of Public Health, Emory University.


Anchor
Full Cream
Milk Powder

✓

✓

✓

✓

6-11 months

12-24 months

This card has been adapted from Alive and Thrive by Rollins School of Public Health, Emory University with funding provided by the European Union.

HEALTHY MOTHER, HEALTHY CHILD

Pregnant Mothers

0 - 6 months

6 - 8 months

9 - 12 months

1 - 2 years

This card was developed by the Rollins School of Public Health at Emory University; images adapted with permission from UNICEF and Alive & Thrive. Project funding provided by the European Union.

Eat foods from at least 4 different groups every day

Wash hands with soap

Use clean water to prepare food

Clean bowl and spoon after each use