Initial Insight Mining and Pretest Research for Alive & Thrive Ethiopia

Conducted April 2011

Academy for Educational Development (AED)/Alive & Thrive Ethiopia Country Office

August 2011
List of Acronyms

A&T        Alive & Thrive project  
FGD        Focus group discussion  
HDI        Howard Delafield International  
HEW        Health Extension Worker  
IDI        In-depth interview  
IYCF       Infant and young child feeding  
SNNPR      Southern Nations, Nationalities, and People’s Region  
VCHW       Voluntary Community Health Worker
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I. Background

A. Rationale for the Research

In its subcontract with the Academy of Educational Development/Applied Research and Technical Services’ Alive and Thrive (A&T) Project, Howard Delafield International (HDI) supports the “shaping IYCF demand and practice” milestone for the Ethiopia country program. A communication campaign is being developed to address barriers to adopting optimal infant and young child feeding (IYCF) practices from both a demand- and supply-side perspective.

Prior to the full marketing and communication campaign development, two-pronged primary research was undertaken from January 25 to February 14, 2011. The insight mining portion explored lifestyles, media habits, specific knowledge, awareness and practices (KAP), motivators for behavior and psycho-social and physical hurdles to correct IYCF practices and identified information gaps among key target audiences. The pretest portion had selected audiences assess communication tools and materials, developed by HDI and the local A&T team, for overall appeal, appropriate imagery, memorability, relevance, comprehension, and believability of various elements and their respective promised benefits as well as likelihood to motivate change behavior.

This exercise was preceded by a thorough desk review of all relevant previous studies conducted on IYCF practices as well as an analysis of the specific information gaps that needed to be explored through the insight mining and pretest research. These findings were submitted in January 2011.¹

B. Key Target Audiences

The target audiences for the primary research are split into the demand side (i.e., those who would consume the communication) and the supply side (i.e., those who would provide the communication or make it available to the intended recipients).

The following are the demand-side audiences²:

- **Mothers of infants or young children between the ages of 0 to 24 months.**
  
  Since the spectrum of childcare needs of infants versus 2-year olds is very different in nature, the mothers were informally segregated into three groups: mothers of newborns to 6 months, mothers of infants of ages 6 to 12 months and mothers of young children of ages 13 to 24 months.

- **Fathers of infants and young children between 0 to 24 months of age (i.e., Husbands).** Recruitment requirements for fathers corresponded to those of mothers (i.e., a fair balance of fathers of newborns to 6 months, fathers of infants 6 to 12 months and fathers of young children 13 to 24 months.)


² Originally a sibling group of school-aged girls aged 6 to 8 was set to be a demand-side research target audience because these girls are often tasked with taking care of younger siblings while their mothers are busy and would be well aware of childcare norms in the family. Government permission to interview the children was not received in time to allow for it and thus may be covered in the next phase of research.
• **Paternal grand mothers of young children between 6 to 24 months of age (i.e., Mothers-in-law).** According to the situational analysis (developed after the study of various research reports commissioned by A&T on IYCF) the daughters-in-law, out of respect for their age and relationship, are expected to obey their mothers-in-law, which makes them a potentially key influencer in child-care and nutrition.

The following are the supply-side audiences:

• **Health extension workers (HEWs).** These workers are the health systems’ first point of contact with the mothers of infants and young children.

• **Community health promoters and voluntary community health workers (VCHWs).** These workers are directly involved with community health education and provide support to HEWs.

• **Community leaders.** For the purpose of this research, community leaders were defined as those who influence or have the potential to influence the community on childcare and feeding issues. Individuals of the following three categories were considered: religious leaders, kebele leaders and influential women’s association leaders.

The following matrix presents the key audience and the research element exposed to them:

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Research Element</th>
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</thead>
<tbody>
<tr>
<td>1 Mothers</td>
<td>Insight mining and Materials Pretest</td>
</tr>
<tr>
<td>2 Fathers/Husbands</td>
<td>Insight Mining</td>
</tr>
<tr>
<td>3 Mothers-in-law</td>
<td>Insight mining and Materials Pretest</td>
</tr>
<tr>
<td>4 HEWs</td>
<td>Insight mining and Materials Pretest</td>
</tr>
<tr>
<td>5 VCHWs</td>
<td>Insight Mining</td>
</tr>
<tr>
<td>6a Religious Leaders</td>
<td>Insight Mining</td>
</tr>
<tr>
<td>6b Kebele Leaders</td>
<td>Insight Mining</td>
</tr>
<tr>
<td>6c Women’s association leaders</td>
<td>Insight Mining</td>
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### C. Methodology

The research requires flexibility in probing and exploring various topics while any interaction is underway; thus, in order to have a healthy and rich exchange, focus group discussions (FGDs) were conducted for all those audiences that could be found in the required numbers (a minimum of 7 and maximum of 10 respondents with an optimal of 8 respondents for each specific profile). The FGDs were for mothers, fathers/husbands and mothers-in-law. For the remaining respondent categories where there would be fewer in number in any given community, in-depth interviews (IDIs) were planned and conducted (i.e., with community leaders, HEWs and VCHWs).

Each audience profile was listed in detail in a recruitment questionnaire that was filled out by the field recruiters with the key criteria for selection as well as the criteria for disqualification for participation in the research. Only those individuals who fulfilled the criteria were invited to participate in the research on a completely voluntary basis. The FGDs were arranged at a central location that was convenient to all the respondents; some of whom were ferried to the research
location by the field research consultants if needed. The research interactions were guided and moderated by a trained moderator who was assisted and accompanied by the field recruiter. The focus group interaction was tape-recorded in addition to the interaction notes taken by the moderator and the helper.

The supervisor arranged the IDIs by appointment at the residence or work place of the respondent. The interaction was conducted by an experienced moderator and was tape-recorded for future analysis.

As the A&T project focuses on infant and young child nutrition in non-urban areas, the research was conducted in rural locations only. In each of the four priority regions, two rural locations were selected in consultation with the local A&T team considering the following criteria:

- a fair representation of the profile
- accessible for implementation of research
- extensive communication or programmatic interventions have not taken place to avoid any skew in the research data

The research team used the towns as a base and recruited from and researched in the outskirt rural areas.

**D. Locations**

A total of 32 FGDs and 26 IDIs took place among a total of 8 locations among the A&T high priority regions of Oromia, Amhara, SNNPR and Tigray. The following matrix presents the locations and the sample size.

<table>
<thead>
<tr>
<th></th>
<th>Amhara Region</th>
<th>Oromia Region</th>
<th>SNNPR Region</th>
<th>Tigray Region</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mothers (for Insight Mining)</strong></td>
<td>Dejen</td>
<td>D/Berhan</td>
<td>Fitche</td>
<td>Ziway</td>
<td>Chuko</td>
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<td>1 FGD</td>
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<td><strong>Mothers (for Pretest)</strong></td>
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<tr>
<td><strong>Husbands</strong></td>
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<tr>
<td><strong>Mothers-in-law</strong></td>
<td>1 FGD</td>
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<tr>
<td><strong>Total FGDs</strong></td>
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<td><strong>HEWs</strong></td>
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<td><strong>VCHWs</strong></td>
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<td><strong>Religious Leaders</strong></td>
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<tr>
<td><strong>Kebele Leaders</strong></td>
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<td>1 IDI</td>
<td>1 IDI</td>
<td>1 IDI</td>
<td>1 IDI</td>
</tr>
<tr>
<td><strong>Women's Assoc. Leaders</strong></td>
<td>1 IDI</td>
<td>1 IDI</td>
<td>1 IDI</td>
<td>1 IDI</td>
<td>1 IDI</td>
</tr>
<tr>
<td>Total IDIs</td>
<td>4</td>
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<td>4</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Total Interactions</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>8</td>
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(For more complete information about the fieldwork plan and execution, see Appendix A for the Research Concept Paper, Appendix B for the set of IDI and FGD Guides in English and Appendix C for the set of IDI and FGD Guides in Amharic.)
II. Insight Mining

A. Inquiry Topics

The insight mining aspect of the research focused on understanding people at an intimate level so as to guide the creative development process and to assist in designing audience-centric communication. Key inquiry areas included:

- **Motivating and enabling factors (most potent lifestyle benefits of proposed behaviors)**
  - Identified through the use of concept boards
  - Types of concepts tested include “pride/hero” and “healthy and happy child”

- **Family-level dynamics and decision making**
  - Explore role of various family members in decision making
  - Role of men in child care
  - Women’s access to information and resources
  - Role of school-going children in influencing health (and other) decisions at household level
  - Key family-level priorities

- **Community-level dynamics and decision making**
  - Role of various community leaders in influencing community and household-level priorities
  - Role of school teachers and other educated persons within the community
  - Role of community institution such as *idirs* (i.e. self-help associations), women’s associations, etc.

- **Local anecdotes, folklore, folk tales and songs**

- **Mobile phone usage patterns, particularly among HEWs and men**
  - General level of cell phone ownership (non-quantitative)
  - Types of handsets commonly found
  - Use of voice versus SMS
  - Most usual calls made and received
  - Intention to use mobile phone-based services

- **Identification of localized media/channel solutions**
  - Water points, near school, near markets, health centers, etc.

B. Findings

This section discusses the routines of the communities and their dynamics, family structures and the living conditions, and the knowledge, attitudes and practices of parents of infants and young children.

1. Family and Community

All the rural communities visited are small and close knit: all the members of the community know each other well. Most people live in a nuclear family setup where sons had separated from their parents after marriage and had moved to either another section of the same family compound or to another home close by. The extended families interact regularly.
Most men are involved in farming and had visited the towns. Some are involved in trading and regularly visit the town markets. Townsfolk were perceived as well-off or rich and fortunate to have more of life’s amenities and greater opportunities. But they were also perceived as self-centric, selfish and unsocial.

The women in the village manage household chores and children and are also involved in seasonal work, helping out on the farm in light work, or in other small income-generating initiatives (e.g., making baskets). The men often get together briefly after work to discuss subjects of common interest, like procurement of seeds or the harvest, while the women have a coffee ceremony every afternoon with neighbors and other women in the community. Some of them also get together every week or fortnight for idir or iqqub meetings, traditional self-help associations/savings networks that serve as economic and social insurance or mahber or senbete socio-religious functions.

All the communities consider education as important. Some older children in the communities still attend school, while some had been forced to drop out; the boys dropped out to provide a helping hand on the farms, while girls dropped out to share the mother’s workload. Those children who were going to school were learning new and correct health and hygiene routines (e.g., washing hands before eating), which they shared with their mothers and practiced at home.

There are religious leaders in each of the communities who are highly respected, and some villagers reported visiting them to discuss personal issues. Each community also had its HEWs, who were respected because they were educated. In some locations women’s associations were formed, which encompassed a few women who were involved in social development issues and were respected for it. Though most of the mothers were aware of these associations, they indicated that they do not have time to be involved in such regular meetings.

2. Daily Routines of Mothers

As the primary caretakers of infants and young children, mothers’ daily routines were explored. In all the locations mothers were found to be extremely busy handling the household chores as well as helping out on the farm or doing other seasonal work whenever possible.

They claimed that they usually woke up at 6:00 am and started their day by getting water from the well, which could be as far as 8 kilometers away. On return, they would make breakfast for their husbands, who would leave for work on the farm around 8 am. They would also milk the cows and tend to the sheep and other animals. The mothers would then prepare breakfast for the rest of the family, ready their older children for school that starts at 9:00 am. Between 9:00 and 11:00 am, they would take care of household chores and the younger children who are at home.

At noon the mothers would carry their husbands’ lunches to the farm/fields. When farms are far away, a group of women go together. Upon return at 1:00 pm, the mothers provide for the younger children, have their lunch and breastfeed infants. Between 2:00 and 3:00 pm, the mothers in the neighborhood get together for a coffee ceremony, which is the only leisure time they have in the entire day. During this time, the mothers-in-law, who live in the neighborhood, are usually present. Women discuss issues of common interest, such as any new happenings in the community, their children and personal concerns, etc. After the coffee ceremony,
the mothers finish up their household chores or help on the farm if required. They then take care of the children and finish up any pending work.

At 6:00 pm they prepare dinner for the family and coffee for their husbands who return at 7:00 pm. The mother serves the family dinner between 7:00 and 8:00 pm and spends some time with the husband and the rest of the family. The families usually sleep between 9:00 and 10:00 pm. Thereafter, the mother winds up her kitchen duties and completes her unfinished chores (e.g., knitting or making baskets) before sleeping at midnight.

When asked specifically about a breastfeeding schedule, most mothers said that there were no fixed times of the day but they do so whenever it is possible.

<table>
<thead>
<tr>
<th>Implications of Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Women’s lives revolve around their families with a diverse set of competing priorities pulling them in various directions throughout the day. Overall, they are very busy and have limited access to media and information.</td>
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<tr>
<td>• It is evident that it is hard for women to prepare specific (i.e., special) meals for children.</td>
</tr>
<tr>
<td>• The same is true related to ability to exclusively breastfeed for 6 months, especially for women who have to work in the field.</td>
</tr>
<tr>
<td>• The coffee ceremony with other women is a regular activity and the only time for leisure for women. This could be the ideal opportunity for group interactions with health workers or group radio listening.</td>
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3. Infant and Young Child Feeding Behaviors

Breastfeeding is a common but exclusive breastfeeding is difficult. The knowledge of exclusive breastfeeding was found to be prevalent in most locations, as it has been promoted by HEWs. However, most mothers reported that exclusive breastfeeding is difficult as they are busy with household chores and farm work, which forced them to be away from their children for long durations of time. In some cases, infants and young children were fed sugar water to pacify them. In addition, sugar water and cow’s milk are accepted as an alternative nutrition to breast milk.

Respondents indicated that mothers give fenugreek and other traditional herbs that are believed to clean the bowel and prevent digestive problems. In one instance, a respondent said that the herbs are so bitter that even a mother cannot take them. Butter is also given to some young babies and is believed to lubricate their bowels; elders in the families insist that it be given to avoid colic.

Adding oil to baby food is common. This is perhaps the simplest practice to be adopted by the families, as oil is part of the household kitchen. Butter, though, is expensive and often the families claimed that they could not afford it.

Meat is considered nutritious but unsuitable for children under 2 years of age. There was an overwhelming consensus among mothers that children under 2 cannot digest meat. Further, most families cannot afford meat products. In locations like Dejen, Fitche and Debre Berhan, meat is consumed only once or twice a year.
during feasts and festival times. In SNNPR, where meat is eaten raw, it is not given to children under 5 for fear of tapeworm infections. However, many mothers said that the technique of preparing dry meat and adding it to porridge is doable provided they can get it (as described in Tool A, which is explained in the next section on Pretest Findings).

**Milk is not given to young children every day.** In families that own a cow or goat, milk is often sold in the market to supplement household provisions. Others did not own a cow or goat and could not afford milk from the market. Its importance in growth and development was recognized but practice varied by location and household (e.g., in Fitche, Boditi and Chuko, mothers mentioned that they give milk when available, while in Dejen and Debre Berhan, there was minimal practice of giving milk to young children).

**Eggs are not given to young children every day.** In families that own hens, eggs are often sold in the market. Others did not own hens and could not afford eggs as they are very expensive. Eggs are considered a “good food” but their nutritional importance is not understood. Usually egg is mixed in the porridge.

**Thick porridge is believed to be hard to digest and thus avoided.** In most locations, the respondents said that thin porridge is fed to young children and they believe that they already give thick porridge, as it is thicker than breast milk. In Boditi, Chuko and Debre Berhan, mothers and others have been informed about feeding thick porridge, but it was not always practiced.

**Implications of Findings**

- Breastfeeding is common, but exclusive breastfeeding remains difficult for most mothers as they are responsible for a lot of work both in and out of the home. Myths surrounding breastfeeding (e.g., colostrum as unhealthy, sugar water and cow’s milk as a substitute to breast milk, fenugreek and other herbs as useful for softening bowel) further lead to lack of importance given to breastfeeding. Increased knowledge about the benefits of exclusive breastfeeding would help in increasing the intention to exclusively breastfeed.

- Overall, there is a lack of awareness about nutritional requirements for infants and young children. Increased knowledge, especially about specific benefits of the various food categories, would help to increase the consumption of food items that are available but are currently being sold to supplement household income (i.e., eggs and milk).

- In most locations, there is lack of availability of several food categories, especially meat and fish. Even if there is knowledge, these food categories cannot be purchased as they are not available or are too expensive. However, mothers can be informed of ways to store meat (purchased during festivities) for long duration of time through the drying process.

- Popular beliefs are a hindrance to correct practices. Repeated exposure to correct information through a good mix of media and people may lead to more widespread adoption of recommendations.
4. Attitudes Related to Child Health and Feeding

When asked about their dreams and aspirations for their children, all mothers wanted their children to be healthy, happy and to grow up well. The mothers defined a healthy child as a child who is not sick with diseases, such as malaria, diarrhea or pneumonia. Though most mothers said that they would want their child to be “chubby,” there is no negative association with a “thin” child. Malnutrition is associated with acute and chronic malnutrition and not with stunting or mental deficiencies.

There is also no knowledge of nutrition and the different categories of foods providing different sets of nutrients. The respondents also did not understand that different food types can lead to better overall mental and physical development. When questioned as to why some children are smarter, taller or healthier than others, most respondents said that “it was God’s gift/Will” and that no one can do anything about it.

The respondents were also unaware of the importance and criticality of the first two years of life. This was also reflected in their responses to the Cover Panel of Tool A (as explained in the next section on Pretest Findings).

Mothers did not identify with any of the hero figures, like the runners or other successful people as their role models. When probed, the mothers said that they would want their children to be educated as they can then empower themselves to do well in life. Education came out as the only external motivator for the mothers.

5. Key Influencers to Mothers

The key influencers for mothers are husbands, HEWs, peers that they spend time with at coffee ceremonies, and, to a lesser extent, mothers-in-law and school-going older children. Community leaders, women’s associations and religious leaders play a smaller role in their lives.

_Husbands._ Husbands have the most direct influence on the women. Pleasing the husband is a top priority for a wife. The husband controls the resources as well as the information available to the woman. Although the wife need not get her husband’s permission on all activities and interactions, she is unlikely to indulge in a practice to which he actively objected. The respondents narrated an example: In some cases, the husband does not approve of the HEW; therefore, in those cases, the woman either meets with the HEW when the husband is not at home or does not invite the HEW into her home. In some cases, such as in Dejen, it was observed that women still wash their husbands’ feet as a sign of respect. In most cases men do not play any active role in child rearing, but it is aspirational for women to see men involved in childcare.

_HEWs._ The advice of the health workers is valued by all women. Health workers command respect from all members of the community and can act as primary agents of change. However, most health workers claim that they do not have significant training in IYCF practices nor do they have any communication aides. Many also demonstrated incorrect understanding of various feeding practices.

_Community leaders._ These leaders have a strong influence on men and, to a lesser extent, women. Their recommendations may not change attitudes in the short run, but recommended behavior will be practiced (up to the point of inspection). For example, for a water and sanitation project, the _kebele_, religious and other...
community leaders had encouraged community members to dig holes for latrines behind their houses. Most people dug the holes, but never used the latrines.

**Mothers-in-Law.** Mothers-in-law are most influential at the time of the first pregnancy as they inform and guide the first-time mother through the period of early childcare. When the mother has to go out (like to the farm/market), then the mother-in-law babysits for the children. She also visits regularly for coffee ceremonies. When asked how the mothers reconcile new information provided by the HEWs with the old traditional practices preached by the mothers-in-law, the respondents said that they do not want to anger the husband’s mother so they would practice the new methods secretly.

**School-going children.** Education is a highly valued commodity. Most parents want their children to be educated. School-aged siblings are often secondary caregivers and sometimes feed their younger siblings, but are rarely involved in preparing meals. School children are a source of new information in the household but have very limited role in influencing behaviors. One reason for this could be that BCC programs in the past have not targeted school children as change agents.

**Implications of Findings**

- Husbands have the most significant influence on the woman. Currently they do not have any real role in child-care or feeding. However, as the primary “resource managers” and “information providers,” they need to be targeted for any IYCF initiative to be successful and for sustainable change. Targeting men can significantly improve the self-efficacy of mothers to practice desired feeding practices.

- Mothers-in-law have a significant role during the first pregnancy and related child rearing and feeding practices. However, their role diminishes as the mother bears more children and becomes more independent.

- HEWs can be active agents for any community mobilization efforts due to their acceptance among kebele leaders and other community decision makers. Attractive user-friendly materials can help improve their ability to negotiate for behaviors with mothers and families.

- School children are the most open to new ideas, and what they learn in school is taken seriously. They often come back and share the new information with their mothers. Targeting school children can reap both short-term and long-term gains.

- Community leaders and religious leaders have the power to influence people, especially men. However, messages espoused by these leaders need to be very specific so that related actions can be taken by people. Advice of these leaders will not necessarily lead to a sudden attitude change, but it could result in short-term behavioral gains.

**6. Mothers’ Decision Making**

**Mothers.** In general they have the freedom and flexibility to manage their household as they wish. Mothers/wives are the key decision makers for childcare, home management, household supplies as well as maintaining social relations with mothers-in-law and others in the community. Further, they have some freedom to
make purchasing decisions if paid from the income that they generate by doing seasonal work or light income-generating activities, i.e., mothers visit the Saturday market and purchase necessary provisions for the household as well as personal use items.

Despite her responsibilities and part-time economic activities, a wife is expected to follow tradition and obey elders in the family and community. The husband remains the most important person in the household, and a wife does not want to defy his wishes in any of her decision making. This is most likely due to the fact that Ethiopia is a patriarchal society, and men control most of the economic resources as well as make the important family decisions. However, in many locations, these decisions are discussed with the wife who is able to freely discuss and present her opinion on the matter. In a way, the mother/wife plays an important advisory role in such cases.

**Husbands.** They are the “head” of the family and responsible for most of the monetary and investment decisions, like issues related to farming, home repairs, purchase of more farm land/tractor, buying/selling livestock, etc. The husband is also responsible for bringing in provisions for the household at the beginning of the month. Therefore at the time of purchase in the market place, it is his decision and choice whether to purchase eggs and vegetables for the children or not. In case some of the provisions are short during the month, then the mother purchases those later in the month with her own income.

Overall, the husband plays a “gatekeeper” role and is the main source of information for the mother. Further, he controls the role played by the wife both in the household and the community. If he objects to his wife’s interaction with any particular person or persons, she usually obeys him and avoids contact. He is also responsible for the children’s education.

**Mothers-in-law.** On an overall level, she is a “protector” of old values and traditions. She is the hardest to influence as her habits and way of life are established and accepted by the community. The mother-in-law influences household decisions, especially involved in childcare, health and nutrition choices and practices. Further she is also influential in the social relationships of the mother as she is an established member of the community. However, her involvement is low in the day-to-day affairs and decisions of the mother’s household.

**Implications of Findings**

- Mothers sometimes have disposable income by doing seasonal work and can buy provisions for the household. But their decisions must be ratified by their husband and should not be in contradiction to their mother-in-law’s advice.

- Mothers are caught in a conflict of competing priorities and limited time and resources.

- Mothers-in-law are not part of the day-to-day household decision making as they live separately and cannot control or dictate regular feeding habits. However, the mother is expected to respect the mother-in-law especially when she is in her company.
• Women take low resource-intensive decisions easily. Minor adjustments in household budget or minor changes in food cooked at home can be made by her at her own discretion.

• Because men control the finances and control the rations and provisions at home, they need to be targeted for decisions related to the sale of farm products, like milk and eggs, which have implications as to whether they will be fed to children.

7. Behavior and Attitude Conflicts

Conflict between norms and new behaviors. The new information on correct practices made available to the mother through the HEWs and VCHWs is often in contradiction to the traditional practices that the mothers have been following. For example, exclusive breastfeeding up to the age of 6 months was being promoted by HEWs; however, mothers were also giving fenugreek and butter, which are traditionally believed to be good for the children. And while traditionally it was believed that porridge should be given in a thin consistency, “thick” porridge is being promoted to ensure the required quantity of food. Both these leave the mother with the dilemma of continuing to follow the old traditions or to change behavior based on the advice of a respected and knowledgeable health worker. Often this is not a decision that she is empowered to take alone as she has strong influencers (such as her husband and mother-in-law) from whom she needs approval.

Conflict between desire and availability of resources. All the mothers in the research repeatedly said that they love their children and would do anything for them. Though they understood that animal source foods (such as meat and fish) are good for the growth and development of their children, this food category is not available in most locations (i.e., there is no butcher shop nearby for meat and/or no pond or river for fish).

The knowledge of nutritious food categories combined with the inability to provide the best for the children leads to frustration and disappointment among mothers. To cite a case, during the course of the discussion in one of the interactions, one mother said to the moderator: “You keep talking about good food, of animal source foods, but we cannot provide it to our children. If I could, I would give the last drop of my blood to my child. Because I have it! How can I provide something that is not there?”

Conflict between childcare needs and household income needs. Milk and eggs are considered “good food” in almost all locations, even though in most cases the respondents were unaware of their nutritional value. These food products are considered too expensive to purchase from the market to provide for children on a regular basis. In families where there are hens and cows, these products are most often being sold in the market to supplement household income to purchase basic rations like teff, cereals, sugar and coffee.

Implications of Findings

• A woman is willing to make sacrifices for her family. Her children are her top priority. However she is constantly making choices based on her own limitations (knowledge and resources) and her desire to serve her family better.
• Communication must be sensitive to this predicament. All suggested actions should be easily doable. Self-efficacy considerations should be paramount. Where self-efficacy can be created, messages should provide such solutions (e.g. preparing dried meat powder). Where self-efficacy cannot be improved (e.g., using eggs and milk to supplement household income), messages should be channeled towards other target audiences, like husbands, who have decision-making authority.

• If messages do not consider self-efficacy, it will result in creating a sense of inadequacy, dejection or guilt for mothers. Once that sets in, the motivation for even simple doable actions will be reduced.

• It is also critical to promote the idea that every small improvement in nutrition (e.g., adding milk, eggs, oil, or thick porridge) counts—the notion of “something is better than nothing.”

8. Media Channels and Opportunities

Channels. Various media channels were explored for access, involvement and reach:

• Radio is available in most households and is listened to in the evenings, especially by women. It plays in the background while people are involved in other activities. Primarily songs are listened to. No radio programs are followed regularly. In some locations, older children listen to songs on radio in the afternoons.

• TV is not available in any of the most rural locations. Where available, it is popular with men and community leaders. Semi-rural locations have higher TV reach.

• Mobile phones are common with men. All HEWs have mobiles as well for their jobs. In most locations, mobiles are considered as a personal gadget and not shared with the family (i.e., men use it for information from the market). However, in Debre Berhan and Fitche, mobiles are shared with the family and women have access to and can use the phones.

Media Opportunities

• TV has limited reach in rural areas but could be used to create a national campaign to reach out to kebele leaders and other influencers.

• Radio access is far more than TV. If a program was specifically created for rural women and promoted by HEWs and women’s association leaders, listenership could be high. Women could be organized into listening groups, particularly through active community mobilization. The coffee ceremony could be the perfect opportunity for women to listen to the radio together.

• Most women are involved in water collection and many also visit the market. These venues could act as potential sources of message dissemination with posters or signage.
• *Kebele* leaders are both respected and feared. Any message delivered by them would have a high rate of compliance both by HEWs as well as the community (especially if that behavior can be monitored). Overall, involvement of *kebele* leaders and officials would be critical in making any community mobilization effort successful.

• Religious leaders are highly respected. People (usually men) approach them for personal advice. During the interviews, religious leaders showed interest in promoting messages related to IYCF. They also claimed that they could introduce this subject to men. Religious leaders would be the most ideal source of influencing male involvement in child feeding.

• The younger siblings are sometimes involved in engaging the children when the mother is busy. They have limited influence on household decisions, particularly important decisions taken by their fathers. However, they could be a very important source of information to the mothers. Anything learned in school is given importance and usually considered authentic and reliable. School children, if directed by teachers, could also be mobilized to conduct community-level activities.

• Many mothers know about women’s associations but most were not involved in any association or intending to be. However, the leaders/members of the women’s association are respected and could act as agents of change.
III. Materials Pretest

A. Inquiry Topics

The following three sets of creative materials were developed and pretested among the key target audience in the research:

- **Tool A**: Two design prototypes of an interpersonal counseling tool to be used by HEWs in sessions with mothers (one full version with photographs and one limited version with illustrations)
- **Tool B**: One design prototype of a child growth chart to be handed out to mothers by HEWs
- **Tool C**: Simple Panels about the six prescribed IYCF practices to test which actions mothers were most likely to adopt

The pre-test explored the following key inquiry areas:

- **Spontaneous reactions**
  - Key evocations (i.e., body language and facial expressions in response to the materials and messages)

- **Comprehension of messages**
  - Whether messages are being understood by the HEWs, mothers and mothers-in-law
  - Whether the images are understandable

- **Acceptability of messages**
  - Religious, cultural and financial barriers to the practice of proposed behaviors
  - Acceptability of key messages related to *everyday* feeding of animal source foods

- **Believability of “reason to believe”**
  - Whether behavioral messages that are supported by “a reason to believe” or “reason to do” (e.g., eating meat leads to mental and physical development) are believable
  - Particularly, the believability of key messages related to *everyday* feeding of animal source foods

- **Acceptability and preference of design elements**
  - Preference of photos versus illustration style of presentation
  - Overall and specific likes and dislikes
  - Semiotic decoding (i.e., response to visual elements)

- **Wording preference**
  - Whether language used is appropriate and understandable

- **Cultural sensitivity towards presented images and messages**
  - Whether the images used are culturally sensitive
  - Whether the images are universal within the regions tested or whether there is need to differentiate the material by regions or a need to find more universally acceptable depictions
• **Usability of materials proposed**
  – Ability of HEWs to use the materials as they are intended
  – Ease of use of materials
  – Ability of women to display/hang the give-away materials in their homes
  – Whether the intention to use is strong or not

### B. Tool A Results

Tool A consists of 8 panels in addition to a cover panel and was tested with mothers, mothers-in-law and HEWs. It was designed as an interpersonal counseling tool for the HEWs to use during their visits to mothers in their homes. Each panel was tested with the audience separately and their opinions asked for on various elements. An overall response to the material was also taken after the exposure to all eight panels.

#### 1. Cover Panel

![Image of the cover panel]

**Spontaneous Reactions**
All the respondents liked the cover panel. They found it colorful and attractive and reacted with curiosity and interest. The mothers were attracted to the image of the child being fed and understood the other images clearly. Overall, the respondents found the images bright and uplifting in mood.

**Comprehension**
Most groups understood that the material was regarding nutrition. In Fitche and Debre Berhan (Amhara region), the respondents said that the panel might be about breastfeeding and about the mother’s nutrition at the time of nursing. None of the mothers and mothers-in-law comprehended that the material related to infant and young child nutrition. Further there was no understanding of the importance of nutrition in the *first two years of life*. The respondents did not relate to the message, as they understood undernourishment and malnutrition as acute and chronic malnutrition only.
**Uniqueness and Relevance**

The HEWs understood the message and appreciated the material. They said that they have not received such materials in the past and that this would be an aid in consultative visits with the mothers. The HEWs also appreciated the “briefcase style” of the material and said that it would be easy to use and more enjoyable.

2. Panel 1: Exclusive Breastfeeding

**Spontaneous Reactions**

The respondents reacted to the panel with excitement, curiosity and interest. The level of energy in all the groups was high, and respondents were engaged and attentive. The respondents found the panel attractive and appealing and were eager to discuss it. The HEWs in all locations also liked the panel.

The mothers spontaneously were attracted to the central image of the “mother breastfeeding the baby” and found the image pleasant, mentioning that the mother was caring and affectionate. They also described the baby as “healthy” and “cute.” All groups commented that they thought that the mother and child were happy and healthy; the breastfeeding mother looked “well fed” and the respondents extrapolated that she must be from a well-to-do family and thus did not have to worry about the household chores. She was found to be aspirational.

**Comprehension**

Overall, the material and the content was well understood and liked by all the groups of mothers and mothers-in-law as well as the HEWs.

During the discussion, the mothers in all regions said that they were aware that colostrum is good for their babies but were not aware of the specific benefits. They also understood the message that colostrum should be given within an hour of the birth. However, in Boditi and Chuko (SNNPR region), respondents said that they usually wait for up to two days before beginning breastfeeding because the mother is usually “too tired and weak” and “is away from her family” or “it takes too long for the milk to come.” When told about the benefits, the mothers were convinced of them all except that of prevention of pneumonia and diarrhea.
The green clock symbolizing that colostrum should be given within 24 hours of birth was not noticed by most groups. The groups focused more on the brightly colored elements. When specifically asked, several respondents said that it looked like a ball. Though most respondents were unfamiliar with the use of a clock in a creative, when explained they agreed with the message.

When the respondents were asked to remark on the pictures depicting the incorrect practices, they did not spontaneously understand the “cross mark” signifying that the depicted action should not be done. Most mothers and mothers-in-law said that they were familiar with all the depicted practices and knew people who practiced these behaviors, like giving sugar water, butter, bottle milk, and, in the Amhara region, fenugreek seeds.

All respondents who admitted to practicing the “wrong behaviors” in the past said that they do not do so any more after being educated by the HEWs. However, this was found (during triangulations with HEWs and community leaders) to be untrue. The HEWs further elaborated that in all locations people continue to practice these incorrect behaviors even thought they have correct knowledge. When asked for reasons, the HEWs said that the mothers are being polite but may be afraid to stop the practices that have been traditionally followed and therefore continue in spite of the correct behavior knowledge.

**Hurdles**

Respondents in all location understood the message and said that they are aware of exclusive breastfeeding and its benefits. They discussed the following key hurdles to exclusive breastfeeding:

- Most mothers stay busy with household chores and do not find the time to exclusively breastfeed. They therefore provide cow milk and butter to their babies.
- Some mothers do seasonal work in the farms and have to leave behind their babies for long durations of time.
- Some mothers claimed that the milk “dries up” within the first six months and therefore they cannot exclusively breastfeed.

This finding was confirmed by the HEWs. They said that the mothers have been briefed about exclusive breastfeeding. However, the knowledge has not translated into practice.

**Likes and Dislikes**

In specific, all mothers and mothers-in-law liked the picture of the mother sitting with the child. They remarked that the mother looked affectionate. But they did not like the way the mother was sitting and indicated that the posture would be uncomfortable for a breastfeeding mother. This was mentioned by HEWs as well.

The image of the “mother and child smiling” was also liked and appreciated. The participants said they found the color and presentation attractive.

The respondents mentioned that the costumes were attractive and clean and suggested an urban setting, especially in the way the model tied her scarf. Overall, the respondents enjoyed the pictures and found the mother to be aspirational and said these mothers must be from the neighboring towns. The respondents however, said that they did not like the mother with the “blue scarf” with the message “protects from diarrhea and pneumonia as the model lacks expression of affection
and comes across as “unattached” and “cold”. Some mothers in the Tigray region mentioned that the “happy baby” seems to have a very “big” head and may look unnatural with some disorder.

**Recommendations**
- Change the image of the mother comforting the sick child as the current model looks unaffectionate.

### 3. Panel 2: Critical Feeding Practices

**Spontaneous Reactions**
Respondents in all the locations and groups were immediately interested and excited to see the panel and found it visually attractive. There was a high level of energy in the groups and the respondents were involved in the panel and its message and attentive during the discussion.

All the groups, except those in Boditi, understood the key message before reading the text on the panel. In Boditi, the mothers did not understand the panel spontaneously because they were illiterate and had almost no exposure to any print material; some of the respondents were holding the panel upside down, which led to confusion even with the images on the panel.

At the end of the discussion on Tool A, several respondents rated this panel as the most attractive and attention grabbing. To explain how much she enjoyed this panel, one of the mothers said, “This is what I want my child to be like, if only I could afford to give him food like this.” Another spontaneously said, “If I was living in town, my child would be this clean and chubby” (i.e., healthy). The mothers liked that the child looked clean, well taken care of and loved. He looked like a regular child from their neighborhood.

The HEWs said that the material was descriptive of the necessary requirements for a healthy and happy child and excellence in school and that they liked the clear depiction of the benefits of looking after one’s child. At the same time, HEWs were concerned as to whether all the mothers would understand the “graduation cap” and its significance. Yet, during the interactions, almost all respondents spontaneously understood the cap concept.
**Comprehension**
When queried, almost all mothers in all locations said that they understood that a child requires different types of food items to have a healthy development and believed and accepted that different food types help in different aspects of development. However, they did not understand what constitutes an “ideal diet” for a child. They also did not know the benefits of different food categories.

Although most respondents said that meat was not provided for the children because it was expensive and unavailable, none of the mothers actually said that they would feed meat to a young one if it was inexpensive and readily available.

**Hurdles**
Animal source food, like eggs, milk and butter, was considered “good food” in all locations, especially in SNNPR where meat is the most preferred food. When specifically probed on the factors that restrict the families from providing the various food categories, the respondents mentioned the following:

- **Economic factors.** Across all locations the mothers said that they are unable to feed their children all the various food types because of lack of financial resources. The most economically challenged location was Dejen (Amhara region) where respondents claimed to feed children dry bread with pepper and oil. This was claimed to be especially valid for animal source food, which is expensive. Typically, milk is sold in the local market and not kept for personal consumption. Among communities that are located close to a lake, fishermen also catch fish for sale. Others indicated that purchasing fish is very expensive and that they cannot afford it.

- **Availability.** Fitche, Ziway, Debre Berhan, Chuko, and Andmahoniy, mothers said they could feed milk, egg, oil and butter depending on the harvest. Respondents indicated that there is often no “butcher” shop nearby and meat is available only when an animal is slaughtered for a communal festivity. Further, fish is never available to the communities that are far away from a lake or river. When probed about cow milk, the respondents said that not all families have a cow or goat. In the Tigray region, there were families that did not have a cow and thus had no milk, as it is not available in markets either.

- **Community and family priorities.** The research found that there is a priority placed on the show of status and wealth rather than on day-to-day well-being. In Dejen, people were spending on big houses with tin roofs and claiming to be “poor people” during the discussion of purchase of milk and egg. In the Tigray region, families reported spending large amounts of money on festivals and annual memorial celebrations for the deceased, as promoted by the church and emphasized by tradition. And when people in the region have a good harvest, the respondents indicated that they organize big feasts for the community and church rather than sell the crop and earn money for the family.

- **Cultural beliefs.** Across the board, a level of discomfort was noticed about feeding meat to young children. In SNNPR locations, the respondents emphasized that they don’t give meat to children under 5 because of parasites (as the meat is primarily consumed uncooked). The mothers, mothers-in-law as well as the HEWs there believe that meat is difficult to digest and that is unfit
for children. In addition, in Dejen, Debre Berhan, Ziway, Adigrat and Andmahoni, the mothers also stated that a one- or two-year old cannot digest meat. Overall, these traditional beliefs are part of the culture in all the locations and therefore mothers face pressure from the community in general and family in specific (especially mothers-in-law) to avoid meat for their children.

- **Lack of Self-Worth.** In Dejen (Amhara region), the research found that the problem was escalated with a sense of lack of self-worth. While one reason for not feeding a balanced diet could be the lack of understanding of the benefits of these food categories, another could be the lack of self-worth and a hesitation to spend money on their well-being. When specifically asked, respondents in Dejen said, “We are not lucky enough to have a good life” (i.e., ability to afford eating good food). There was also a tendency to save for a “rainy day” rather than “spend on well-being today.” This may be because farming work is seasonal and dependent on rains, which creates a sense of uncertainty for the future.

**Likes and Dislikes**
All the respondents liked the presentation, colors and images in the panel. They also appreciated the message and valued it.

**Uniqueness and Relevance**
In most locations, the panel managed to create interest, curiosity and discussion because the message was relevant to their lives and teaches them how to bring up their child as healthy, strong and intelligent. They also praised the presentation style as unique and appealing. They elaborated that previously they had been exposed only to black and white, illustration-based materials and were thrilled to see such vibrant material.

**Intention to Try**
Most respondents across locations said that they would try to practice what the panel is educating and would be careful with the selection of food categories. The HEWs felt that mothers exposed to this panel would want to practice correct behaviors so that their children could become like the child on the panel. Although during the discussion the respondents understood the value of various types of food categories, most did not feel empowered to feed all the categories. In specific, respondents in Dejen felt that that feeding these food categories is not a possibility. When meat was discussed, the respondents *simply chuckled and turned away.*

**Recommendations**
- Change the guidance in the panel to feed a variety of foods “every day” as it is farfetched and impractical.
**Spontaneous Reactions**

Though the respondents were interested, the level of energy was moderate, and the mood was quiet and serious as they moved from one element to another trying to decipher the message of the panel.

Spontaneously most mothers said that they did not like the central image of the mother with the child because “affection” and “motherly love” did not come through. They elaborated that she looked more like a “maid” because she is not wearing shoes. The respondents also were distracted by the image of the “crying child” in the panel and repeatedly tried to guess the reason of his/her discomfort (e.g., stomach ache, missing his/her mother who was away to the field or market or underfed and hungry, etc.).

**Comprehension**

Most mothers and mothers-in-law could not understand that the panel was about thicker foods. Most thought that the image implies using spoons instead of hands to feed children as they have been counseled by HEWs to so as part of the health workers’ focus on sanitation and hygiene education. Most respondents also did not understand, in unaided exposure, that “wrong practice” depicted by an “X” as they were illiterate and therefore the notation did not signify anything to them. Further, several were found to be attracted to the red colored image as the “correct practice” image because it catches their eye more and therefore must be the right way. This can be explained by their lack of exposure and education whereby they do not comprehend “red” as the color used to signify “wrong” or “danger.”

While discussing the images on the right side, the respondents said that they did not like the image of the “crying child” as it disturbed them. They however understood the image of the food categories at the bottom of the panel with only minor confusion. In a few groups, the respondents mistook the “pumpkin” to be a “tomato” and did not recognize all the cereals that were presented.
When the message of the panel was explained, all the mothers and mothers-in-law understood and could then relate to the images. All the respondents said that they understood that as the baby grows older, he/she would require additional food to be healthy and happy. To support the message in the panel, several mothers said that they have noticed that babies/children are less fidgety and fussy when they have had a stomach full of food and are restless when hungry. They also understood the symbolism of the “cups” that were “less full” and “more full.”

Although the respondents across location understood the message of the panel, most said that they did not believe that the child was ready for thick porridge before the age of 2 years.

In Debre Berhan and Fitche, as well as in the Tigray region, mothers said that they prepare a thicker food called mitin with a mixture of 12 types of grains. However the respondents were not aware that because all 12 were grains, this couldn’t be considered a variety. In Chuko and Boditi (SNNPR), respondents said they typically prepare their babies’ foods mainly from a maize porridge and milk as available.

Dejen was the only exception where respondents did not know they should—or were not willing to—feed thick food to their babies, though they give a dry pita-like bread laced with pepper and oil on a daily basis.

**Intention to Try**
The HEWs observed that the mothers and the community in general are aware of the importance of thicker foods. However, the knowledge does not always translate into action because of the belief that the child may not be able to digest thick food. The HEWs believed that the panel’s reminders would help change attitudes.

**Recommendations**
- Change the “mother” in the panel to appear more affectionate and involved with the baby.

5. Panel 4: Variety of Foods

**Spontaneous Reactions**
The panel was received with renewed energy and interest, and all the groups were actively engaged with the child in the center of the panel. Many remarked that he was “chubby” and “cute” while others noticed that he was eating on his own. In spite this, some mothers in Fitche, Ziway and Adigrat thought that the child was suffering from some disorder because its head was “disproportionally big” and looked abnormal. This could be because in some regions in Ethiopia children normally have their hair braided, and the child in the panel has full hair. This was mentioned by the HEWs as well.

**Comprehension**

Even though the spontaneous discussion focused on the “boy” in the panel, respondents across locations understood the elements and the message. They reported that they understand that various kinds of food are required for proper growth and development of children. However, they did not distinguish between the different food categories and did not know what each category does. When probed further, several respondents got frustrated and irritated not only due to the repetition but also due to the feeling of helplessness and guilt for being unable to provide the best for the children (i.e., meat and animal source food). The respondents were unclear about the benefits provided by vegetables and fruits, which are less expensive and more easily available. The respondents recognized almost all the vegetables with the exception of “pumpkin,” which was confused with a “tomato” because it was red in color rather than orange. They also recognized most of the cereals. However, the respondents did not notice the image in the top right of the panel depicting the various kinds of food mixed for a child.

**Likes and Dislikes** Generally, the respondents liked panel. Some said that the “bowl” the boy had looked too big for a child his age.

**Intention to Try**

The respondents did not have any hesitation to try new food categories for their children. However, they felt helpless and did not feel empowered to provide different kind of “good food” for the children (i.e., understood as animal source food).

**Recommendations**

- Change the image of the boy so that his head looks more normal sized.
- Change the image of the pumpkin so that it is not confused with a tomato.

6. Panel 5: Feeding Schedule
Spontaneous Reactions
Overall, the panel was received with enthusiasm and interest, and the respondents across the board enjoyed its colors and images and understood the overall message. The respondents across locations said that they understood that as the child grows, he/she needs more food and the quantity of food needs to be increased. Although many respondents recognized that the amount of food has increased in general, they did not notice the measurement shown in the panel. All the respondents noticed the breastfeeding mother and understood the message that breastfeeding should be continued. They however, did not notice the snacks at the bottom of the panel nor that it should be increasing as the child grows.

Comprehension
In most groups, comprehension of the concept was spontaneous and the respondents understood the panel. The respondents in most locations were not aware of the term “snack,” although they were being given to children in the form of fruit or other small amounts of food.

For example, during the interaction, the respondents explained the current feeding practices. The mothers in Fitche, Debre Berhan, Chuko, Boditi, Adigrat and Andmahoni said that the children were given steady timed meals. They were also given seasonal fruits available in the local market. In Chuko and Boditi (SNNPR) and in Fitche (Oromia region), the mothers reported that the children were given bananas and oranges, among other small treats. In locations where fruits were not available, children were given some other small snack or milk between meals whenever available. In Dejen, however, the children were given a piece of dry bread with oil and pepper, which they were found to be nibbling at all day long. Their other meal was breast milk when the mother returns home or when her child is crying. Therefore, there was no concept of meals or snacks in Dejen.

The respondents however were slow to notice and understand the measurement of food. When asked, the respondents in Chuko said that they use the coffee cups for measurement, while those in Adigrat said that they use the tela cups.

Likes and Dislikes
The respondents in all the locations liked the colors, style and pictures in the panel. No specific dislike was mentioned.
**Intention to Try**

Though the information on the creative material was new to the respondents, they found it to be informative, easy to follow and useful in adoption with their children.

**Recommendations**

No changes were proposed.

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**7. Panel 6: Active Feeding**

*Spontaneous Reactions*

All groups experienced a surge of energy when they were exposed to this panel. Though most of the groups were quite fatigued by the time they were shown it (i.e., the third-to-last in the material), it was received with interest and excitement (as the interaction was ongoing for at least one and a half hours). The respondents across groups were attentive and eager to discuss the panel.

The most exciting element of the panel was the image with the family sharing food, and the father feeding the child. In most groups the respondents talked at length about this image spontaneously as it represented a closeness and affection that they admired and aspired to. They indicated that it was not a common thing for the father to feed the child and that the family is happy because he must love the wife.

*Comprehension*

All the groups understood the message clearly and immediately. They indicated that children need the participation of both parents. Feeding the child in a loving
and affectionate fashion helps the bonding in the family and ensures that the child finishes the portions appropriate for his/her age. They said that other caregivers might not have the patience or the time to ensure that the child eats properly.

Most of the respondents explained that fathers are not involved in childcare traditionally as it is not considered man’s domain and that they go out to work for the day and are not available to be involved with the family or children. In Fitche and Debre Berhan (Oromia/Amhara regions), the respondents said though that the fathers often bring sweets or fruits whenever they visit the market.

**Likes and Dislikes**
The respondents especially enjoyed the image of the father feeding the child and the appreciated the message. No specific dislikes were mentioned.

**Intention to Try**
Most of the respondents said that the panel makes a compelling case for active feeding and they would remember it and would try to implement it in their lives. They reported that the panel would help influence men in the family to be more involved in child feeding and care. The HEWs too were confident that this panel presents the benefits fairly and would help create a discussion on the involvement of fathers in childcare and feeding and lead to a change in attitudes in the community.

**Recommendations**
No suggestions were presented, as the panel was perceived as “perfect.”

### 8. Panel 7: Feeding During Illness

**Spontaneous Reactions**
Overall the panel was received with medium-to-low energy across all groups. The groups were quiet and contemplative and looked at the images carefully before making their remarks. Spontaneously the discussion revolved around the mother with the sick child. The respondents remarked that the model did not look like a mother but like a “cold and uncaring” person. Her posture, body language and expressions were not perceived to be affectionate. Some respondents said that they thought that she was “putting eye drops” in the baby’s eyes. The discussion focused on the model rather than the message.
Comprehension
Through insight mining, researchers had found that in several locations, mothers do not feed increased quantities or frequencies of meals during illness. Most had said that they believe that when the baby requires food, he/she would ask for it. The respondents here also commented that the panel contains an unexpected message. When probed, they explained that they have been counseled and briefed that when the child is ill, he/she should be taken to the hospital. They were also confused as to what was meant by giving “fluids” to the sick child.

After the exposure to this panel, several respondents indicated that they had been aware of the message prior to the material (i.e., several mothers in Chuko (SNNPR) said that there was a traditional practice of forcing the child to eat during illness.

Likes and Dislikes
Overall the groups liked the panel. The respondents did not like the model used for the main image as she was found to be unaffectionate.

Recommendations
- Change the image of the mother as the current model looks uninvolved and unaffectionate.
- Change the seated posture of the breastfeeding mother to something more comfortable and natural.

9. Panel 8: Preparation of Foods

Spontaneous Reactions
Even though this panel was the last of the eight and the reviewers were fatigued, it generated a lot of interest and excitement among the mothers. Some who were ready to leave even stopped and sat down. All respondent groups were curious, interested and eager to know about the preparations. In one of the groups, some cried out, “Why did you not tell us this before?” There was an instant sense of empowerment.

Comprehension
Overall, the concept of food preparation was completely and spontaneously understood. The respondents were relieved to see that meat was mixed in the porridge in a “powder” form because in previous panels they had been confused as to how meat chunks could be added as they would be hard to chew and difficult to swallow. Many said that they were aware of the general food preparation with cereals, meat drying and bean sprouting but were unaware that it could be added to children’s food. Although the processes were understood, on several occasions the respondents requested the moderators to repeat the steps so that they could remember them and use them right away.

**Likes and Dislikes**
All the mothers and mothers-in-law in the groups liked this panel, and no dislikes were mentioned.

**Uniqueness and Relevance**
Respondents found the panel unique both in content and presentation. They also found it very relevant as the panel provided simple solutions to the issue of adding all nutrients in the child’s food and the preparation methods more in tune with their lifestyle.

**Intention to Try**
When asked about the intention to try, most mothers said that they would like to try the processes. Some were not sure how the porridge would taste or how they would be able to procure meat but said they would like to try. The HEWs said that the “dried meat concept” was new to them too and were unaware that dried meat could be given to children. They found the new method acceptable and felt that others would try it. They were very happy to see the panel and concluded that it would help them influence mothers to improve the child’s diet.

**Recommendations**
The respondents said that they would like to see more panels such as this one as it had grabbed the attention of all mothers, motivated them to prepare meals with higher nutritional value and shown them how it could be done in their kitchens.

10. Overall: Illustrations versus Pictorial Presentations
At the end of the discussion on Tool A, respondents were shown the illustrated version of the tool and queried about it. In all the groups, the pictorial presentation style was preferred. The illustrative format was found to be uninteresting and unattractive, whereas the pictorial style was enjoyed and appreciated by every group.

(See Appendixes D and E for the full-paged English and Amharic pictorial versions of Tool A.)

**C. Tool B Results**
Tool B, the child growth chart, was designed for the HEWs to distribute to mothers to keep in their homes related to the key infant and child nutrition messages that they would commit to and as a record of the important dates and milestones.
**Spontaneous Reactions**
At a spontaneous level, all the groups liked the tool and thought of it as unique. They immediately recognized most of the images from Tool A.

**Comprehension**
All the groups understood that the material was designed as a reminder of the importance of infant and young child nutrition. They could recall and reiterate a few of the messages based on the images. When explained, they understood that the tool provides for record of important dates and milestones. They indicated that though they cannot read or write, their older school-going children would read the messages for them and would record the milestones as well.

**Intention to Use**
A high intention to use was noted. Across the groups, the respondents were eager to get a copy of the tool so that they could take it to their homes and put it up on one of the walls. They reported that they would like to record their child’s important milestones. Most respondents also admitted that the tool would bring
the issue of infant and young child nutrition to the fore on a day-to-day basis. Several respondents in a number of groups also asked the research team and the moderators for a copy of the tool during the interaction.

**Recommendations**
None were made.

*(See Appendixes F and G for full-paged English and Amharic versions of Tool B.)*

**D. Tool C Results**

Tool C constituted of six individual panels each with a separate message, which represented a microcosm of messages in Tool A in order to simply probe mothers’ abilities/willingness to adopt the six key prescribed IYCF practices. The respondents were exposed to each of these panels to check for comprehension and intention to try the behavior. *(See Appendixes H and I for the full-paged English and Amharic versions of Tool C.)*

**1. Panel One: Feeding Meat Every Day**

**Comprehension**
Most respondents understood immediately that the panel was about child nutrition. They understood images of different kinds of meat, though a few respondents said that they had never seen a fish. The image of a mother feeding porridge to the child was also clear, but none of the respondents could correlate it with the meat.

**Current Practice**
When asked, all the groups said that they do not feed meat to their young ones. In most locations the respondents said that they have no access to meat, as it is either too expensive or unavailable. In SNNPR, the respondents cited cultural reasons for not feeding meat to children under 5.

**Intention to Practice Every Day**
All the respondents spontaneously denied any intention to feed meat to their children every day. They said that meat is an expensive and rare commodity that cannot be bought easily. In SNNPR the respondents said that would not include it in the daily diet of children under 5.

**2. Panel Two: Feeding Eggs Every Day**

**Comprehension**
Comprehension of the panel was immediate and spontaneous as the image and presentation style was similar to the previous panel. The respondents could tell that the panel discusses including eggs in the baby’s diet every day.

**Current Practice**
In most locations respondents said that an egg is an expensive commodity and is not purchased every day. In locations like Dejen, households that own hens sell the eggs in the local market for other household supplies like sugar, coffee and oil.
**Intention to Practice Every Day**
Respondents across locations said that they could give eggs to children on a regular basis. In Boditi, respondents were open to feeding eggs to their children “whenever they could get one.”

### 3. Panel Three: Feeding Oils and Butter Every Day

**Comprehension**
Quite a few respondents did not spontaneously understand the image of “the bottle of oil,” which led to some confusion. However, they all understood the image of “butter.” They reported that they add oil to the baby’s food every day as a matter of practice. However, butter is not available in the household everyday and is included when ever it is available.

**Current Practice**
Oil is included in the baby’s food across all locations, although butter was mentioned to be expensive and not available on a regular basis.

**Intention to Practice Every Day**
The respondents in all the locations said that would try to make butter more available for their young children but that they could not feed butter every day.

### 4. Panel Four: Continue Breastfeeding Every Day

**Comprehension**
All the respondents spontaneously understood the message of the panel about continuing to breastfeed one’s babies. They said that the style, look and feel of the panel was similar to previous panels and thus easy to guess the message.

**Current Practice**
Breastfeeding is common in Ethiopia and most respondents said that they breastfeed their babies, though they are unable to exclusively breastfeed because of their work schedules in and out of the home.

**Intention to Practice Every Day**
The respondents across locations said that they would try to breastfeed more often. However, they did not commit to exclusive breastfeeding babies older than 6 months citing the burden of trying to do so.

### 5. Panel Five: Feeding Thick Porridge

**Comprehension**
Initially, in Tool A, this image led to some confusion as some of the respondents thought that the images relate to sanitation and hygiene. This was so because the images showed hand feeding in a box and the mother feeding the child with a spoon. However, the respondents understood the image clearly in this panel as the style of the panel was similar to those in previous panels. They said that the panel talks about feeding thick porridge as it provides for a required amount of food to the children.
Current Practice
In most locations, respondents said that they believe feeding thick porridge would lead to upset stomach, stomach aches and other digestive problems as the child will not be able to digest the thick food.

Intention to Practice Every Day
In SNNPR, Debre Berhan and Fitche respondents claimed to be already feeding thick porridge. In other locations respondents were a little skeptical about the message but said that they would try feeding thick porridge.

6. Panel Six: Feeding Milk Every Day

Comprehension
The respondents completely understood that the panel relates to giving a glass of milk to the young children every day.

Current Practice
In most locations, milk is not given to young children regularly. In some locations, like Dejen, the families that have cows sell the milk in the market to purchase household provisions. There was also a lacking in understanding of the nutritional value of milk for young children, although respondents generally felt that milk is good for babies.

Intention to Practice Every Day
Most of the respondents remained non-committal about feeding milk every day to young children. However, respondents in almost all locations (with the exception of Dejen) said that they would try to provide milk “as often as possible.”

7. Overall Response
Currently, respondents were not found practicing any of the six prescribed practices every day, except breastfeeding in mothers who had infants. No respondent committed to feeding any of the food items from the panels on a daily basis. The respondents cited two main problems: unavailability of the food items like meat and inability to afford/purchase from the market. In Dejen, the respondents said that they would commit to breastfeeding more regularly and frequently. They further said that they would include oil in the baby’s diet. In all other locations the respondents said that they would feed milk, oil and eggs as often as possible but did not commit to the “every day” concept.

IV. Conclusion
From the insight mining research interviews and discussions, HDI confirmed that most families in researched locations are nuclear in nature with strong ties and involvement with the extended family as well as the community. The household affairs like household chores, childcare, health care and social relationships are the domain of the wives/mothers. Their children and childcare are one of their top priorities, and they were “ready to do anything for their children.” She is guided and assisted by the mother-in-law, who lives in the community or the same family compound, mainly through her first pregnancy and early child rearing. The mother enjoys a certain amount of decision-making freedom in her conduct of regular
household chores and infant and young child nutrition. She is therefore open to influence from her peers as well as from the HEW who visits households.

Women/mothers lead busy lives and their time for and efforts are constrained by competing priorities: household chores, food and nutrition, child care, helping in the farm, taking up seasonal income-generating work and social engagements. Their day begins at six in the morning with fetching water and cooking breakfast and ends with the dinner preparation, cleanup and winding up unfinished chores at midnight. Their only time of leisure is the coffee ceremony after lunch where neighborhood mothers and their mothers-in-law get together for a short break. A few women in some communities also get together for self-help/savings association meetings every few weeks.

As the bread-earners and primary decision makers in a patriarchal society, husbands are the most important and respected members of the family. They work on the farms all day and return around 7 pm. They spend time with other men in the community every evening for a short while. They control the families’ finances as well as all the important decisions related to the farm and home, such as investments in repairs or equipment, purchase of livestock, sales in the market. In most locations, though, they discuss decisions with their wife and she has some power to influence him. Although they are not closely involved in household affairs or childcare, their disapproval of any activity or behavior is taken seriously and amended by the family.

Related to the women’s knowledge of infant and young child nutrition, it is quite low and inaccurate due to traditionally held misconceptions and myths. There is no understanding of “the criticality of the first two years of the child’s life,” and the concept of malnutrition was understood only as acute or chronic malnutrition. By and large, women did not view physically “thin” children as nutritionally deficient, nor did they grasp the link between food and mental development, as “smart and intelligent” children are believed to be thanks to “God’s Will.” Food categories and their differing benefits for an infant or child’s growth were also not understood.

Breastfeeding is a common practice among all women across locations, although exclusive breastfeeding was uncommon because mothers report being away from their children for long durations of time helping on the farm or going to market. Further in some cases the infant was not breastfed for up to two days after birth because, for example, the mother is considered too weak and tired. Although mothers in all regions were aware that colostrum is good for the baby, they were unaware of benefits and regularly disposed of it. As a tradition passed from mothers-in-law to daughters-in-law in almost all locations, butter and traditional herbs were fed to infants to clean their bowels in contradiction to the advice of the HEWs. The research revealed that in several locations mothers claimed knowledge of the correct exclusive breastfeeding practices although their behaviors did not follow in accordance.

Regarding IYCF, in communities across locations, mothers added oil to their baby’s food. However, meat is not considered suitable for children under 2 because women believe it cannot be digested. Animal source products like milk and eggs, although considered “good foods” are not given to young children every day because they are too expensive to buy. Finally, women widely believe that thick food will lead to indigestion.
In all the locations, there are hurdles to optimal IYCF. For instance, eggs and milk are too expensive for those who do not own livestock and sold in the market by those families who do in favor of other household provisions. Meat is often only eaten a few times per year during festivals and feasts when an animal is slaughtered. There were often no butcher shops in any of the researched locations as well, and fish is also expensive and unavailable. Generally, special meals were not prepared for children, and fruits and vegetables were usually not available in requisite quantities.

With the new information provided by the HEW through counseling, the mothers are faced with conflicts of decisions at several levels:

- *Tradition versus new information:* traditions like feeding butter and thin porridge conflicts with information provided by the HEWs
- *Desire versus availability of resources:* providing the best nutrition (i.e., eggs, milk and meat) conflicts with families’ ability to afford and to access
- *Childcare needs versus household income priorities:* pressure to cook special meals conflicts with need to sell same products to provide basic rations.

On media opportunities, research revealed that there is no television access in the regions. Radio was accessible and played in the evening as a backdrop to conversations. Although mothers are not following any particular program, there may be potential to organize listening groups. Mobile phones were owned and used by men for market information and by HEWs for their jobs. In most locations, men did not share their phones with the family. In all the locations, the respondents respected religious and community leaders and those from women’s associations, who could be used as channels of communication.

Related to the materials pre-test findings, overall Tool A was appreciated and considered colorful and attention grabbing as well as unique and memorable. The women and HEWs found the information relevant and useful. The panels discussing active feeding and preparation of foods were liked most by the mothers, the former because of the husband’s involvement with child feeding was seen as aspirational and the latter because it empowered them to prepare higher nutritional meals in their kitchen. They also liked the cover page and the boy with the graduation cap as it depicted education. Respondents across locations said that they disliked the model feeding the “sick child” as they said she looked “un-motherly.”

Tool B was also received well and most mothers could recognize the pictures from Tool A. They found it relevant and useful. They said that they would like a copy of the material for their homes so that they can record the child’s development and growth.

When exposed to Tool C, the respondents could not spontaneously understand the first panel. They however understood all the other five panels because of the similar layout and design. Across locations, the respondents seemed most predisposed and most able to increase breastfeeding and include oil and butter in the complimentary food for their young children every day. For recommended action of preparing thick porridge, the respondents said that “would try to practice” this behavior and for practices of feeding meat, eggs and milk every day mothers would not commit to “doing it every day” because of the inherent limitations of access and affordability.
V. Appendixes