



Designing Nutrition Education for Behavior Change:

Experiences from *Quality Diets for Better Health*

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Quality Diets for Better Health

- Location
 - Southern Nations, Nationalities, and Peoples' Region (SNNPR), Ethiopia
- Objective
 - Improve diets of women and young children by introducing a reliable, bioavailable source of vitamin A and energy into the food system
- Target population
 - Households with pregnant women and/or children < 2 years
- Approach
 - Support homestead production of orange-fleshed sweetpotato (OFSP)
 - Health Living Clubs to disseminate nutrition and agriculture education
 - Healthy Baby Toolkit



Image adapted from: www.cia.gov;
https://en.wikipedia.org/wiki/Southern_Nations,_Nationalities,_and_Peoples%27_Region



Healthy Living Clubs

- Groups of ~30 households
 - Mothers, fathers, and (sometimes) grandmothers
- Meet approximately monthly, for 8 months, to learn about nutrition and/or OFSP agriculture
- Facilitated by a government-sponsored volunteer from the communities
 - Often older mothers or grandmothers with experience
 - Varying degrees of literacy
- Government-employed health extension workers (HEWs) train volunteers and support their activities



Healthy Baby Toolkit

1. Feeding Bowl



- ✓ Portion Size
- ✓ Meal Frequency

2. Spoon



- ✓ Nutrient Density (thickness)

3. Counseling Card



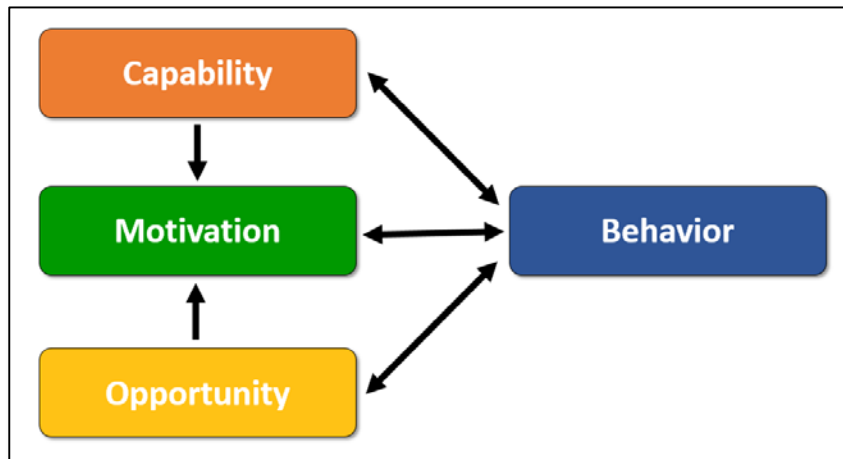
- ✓ Dietary Diversity
- ✓ Hygiene

Previous research in Kenya, India and Malawi suggests the toolkit improves portion size, diet diversity, and nutrient density and may reduce growth failure.



Behavior Change Theory

- Behavior *change* is more than just “telling” – it requires understanding complex factors that influence behavior



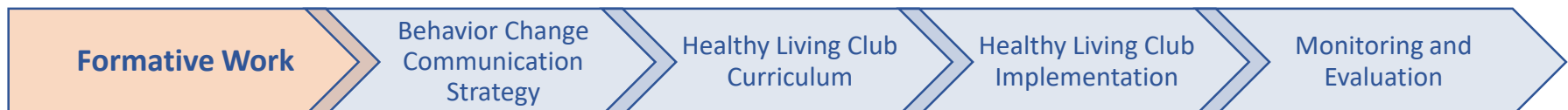
Domains for understanding human behavior
[Michie et al, 2011, *Implementation Science*]

- Behavioral determinants grouped into three domains: capability, opportunity, and motivation
 - Each have several sub-domains
- Once sub-domain determinants of a behavior are understood, we identify ***intervention functions and change techniques*** – evidence based approaches that address specific behavioral determinants to promote change



Formative Work

- Objectives
 - ✓ Identify barriers, facilitators and motivators of current and recommended practices
 - ✓ Characterize vitamin A knowledge
 - ✓ Assess acceptability of project components (OFSP, Healthy Living Clubs, Healthy Baby Toolkit)
- Methods
 - ✓ Literature review
 - ✓ Focus Groups Discussions (FGDs) with mothers, fathers, and grandmothers
 - ✓ Key Informant Interviews (KIIs) with health workers and community leaders





Feeding Nutrient Dense Foods: an Example

Determinant: Caregivers do not know how to prepare nutrient dense porridge

Sub-domain: Physical skill

Intervention: Modeling, Training

Determinant: Caregivers believe infants ≥ 6 months cannot swallow thick porridge

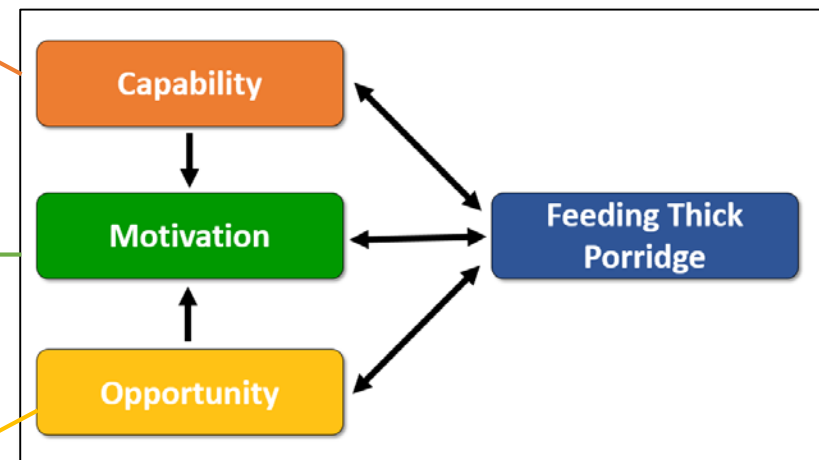
Sub-domain: Beliefs about infant capabilities / Fear

Intervention: Modeling, Training

Determinant: Caregivers do not have utensils to prepare and feed thick porridge (ie. Small spoons)

Sub-domain: Resources

Intervention: Enablement



Formative Work

Behavior Change
Communication
Strategy

Healthy Living Club
Curriculum

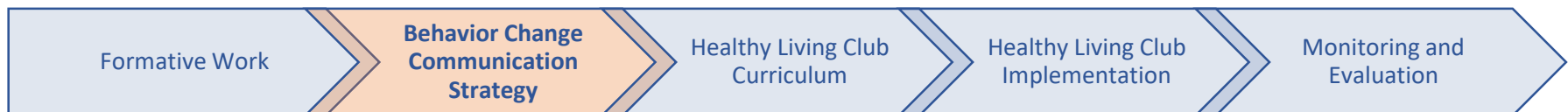
Healthy Living Club
Implementation

Monitoring and
Evaluation



Behavior Change Communication Strategy

- Audience segmentation
 - Primary audience – mothers and fathers of children < 2 years
 - Influencing audience – grandmothers, health workers
- Specify desired behavior changes for *each* audience segment
 - Identify behavioral bridges
 - Motivators of a behavior; identified in formative work
 - Key messages





Feeding Nutrient Dense Foods: an Example

Desired
Change

Mothers will prepare and feed thicker porridge

Behavior
Bridge

Mothers want relief from breastfeeding

Key
Message

“Feeding thicker foods will keep a child full longer. They will not need to breastfeed as often and this can provide relief for mothers from breastfeeding.”

Formative Work

**Behavior Change
Communication
Strategy**

Healthy Living Club
Curriculum

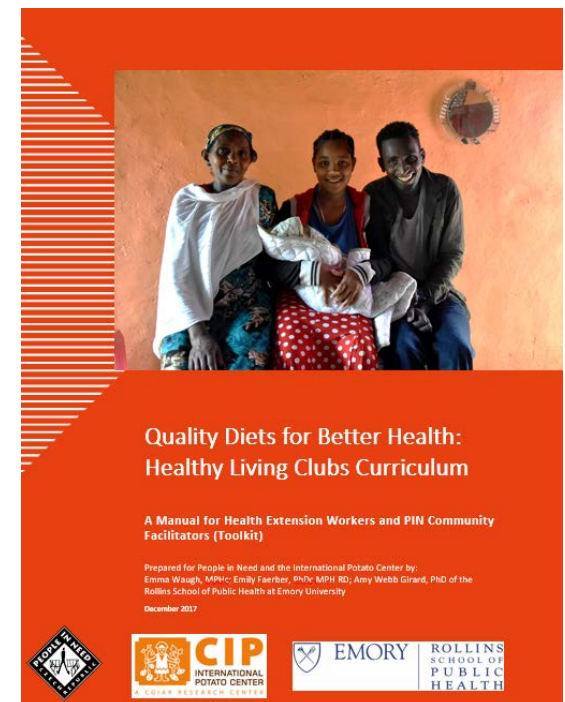
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Healthy Living Club Curriculum

- Each month, community health workers train volunteers to prepare for session
- Each session includes
 1. Welcome and review of last session
 2. Problem solving of challenges faced in reaching goals set in last session
 3. Activity: audio story OR cooking demonstration; gender-specific discussion time
 4. Catch phrase (key message for the session)
 5. Goal setting
 6. Closing



Formative Work

 Behavior Change
Communication
Strategy

 Healthy Living Club
Curriculum

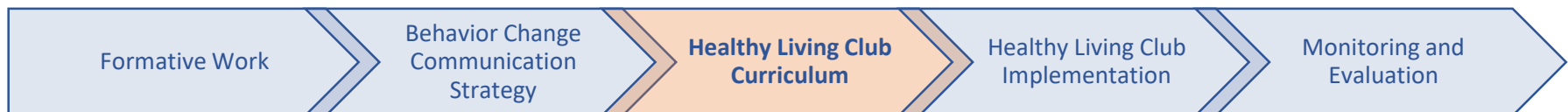
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Audio Stories

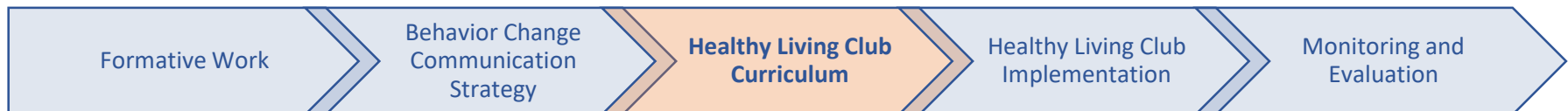
- Ensure message fidelity across communities
- Relieves community volunteers from having to read long scripts or detailed instructions
- Characters include mother, father, a community health worker, and a trusted community leader
- End by posing discussion questions, prompting mothers, fathers, and grandmothers to break into groups for discussion





Feeding Nutrient Dense Foods: an Example

- Cooking demonstration with three porridges
 - Watery
 - Thin
 - Thickshow caregivers the differences using the toolkit spoon
- Use locally available ingredients
- Give caregivers time to practice feeding their infants *thick* porridge





Healthy Living Club Implementation

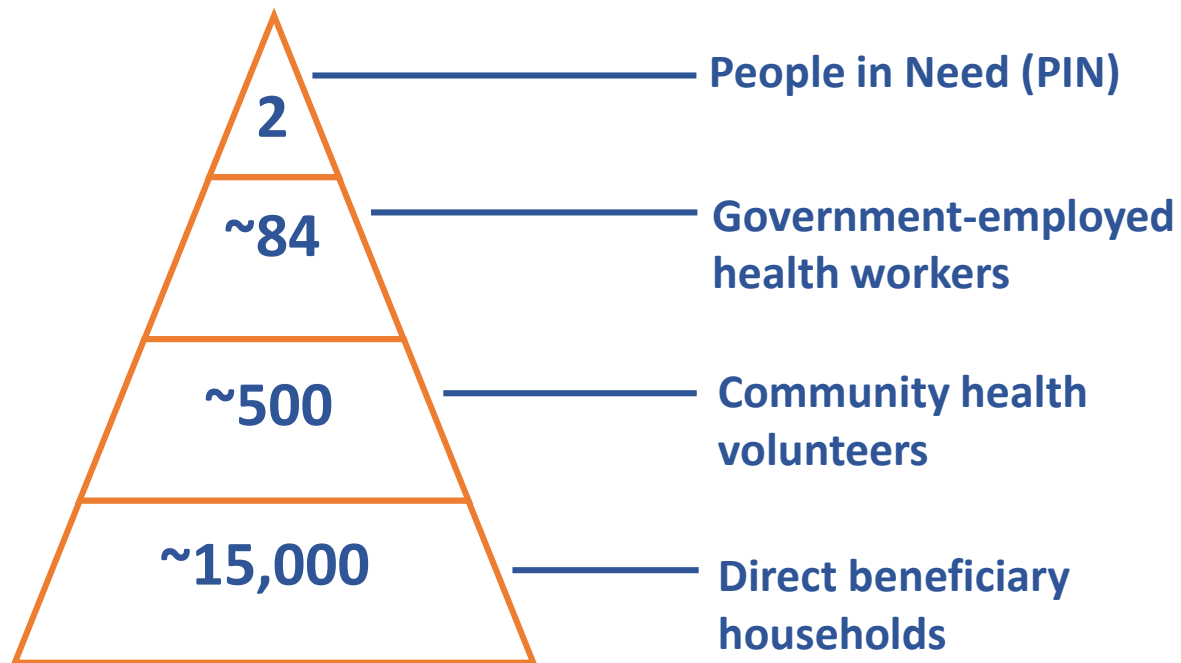


Photo credit: Mihireteab Samuel, PIN





Monitoring and Evaluation

- Monitoring
 - Session-specific checklists
 - Monthly debrief sessions with supervisors
 - Periodic household visits
- Evaluation
 - Longitudinal survey following families in first Healthy Living Clubs (and control households)
 - Process evaluation after first Healthy Living Clubs are complete





Challenges

- Cascade training – message fidelity and detail are lost at every step down in the training
- Organization
 - Delayed printing of educational materials due to budget concerns
 - The project covers 2 zones with different local languages – materials (audio stories) should be in a language that is most comfortable for participants
- Monitoring – with many field activities, project staff have competing interests and the result has been less attention to monitoring activities
- Agriculture cycle
 - Healthy Living Clubs may start at different times during the year
 - Ideally, sessions should line up with agricultural cycle – for example, OFSP nutrition education during OFSP root harvest
 - Rains have been unpredictable in the past year



Concluding Remarks

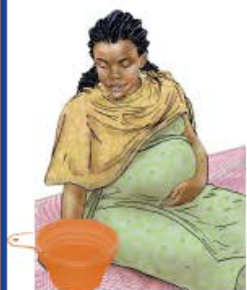
- Formative work helps understand where we start and what drives behaviors
- Behavior change requires more than just telling someone to do something
- Must first understand what influences behavior to best know how to promote behavior change
- Adult learning theory should be incorporated into any behavior change intervention; main components of adult learning theory include:
 - Experiential learning
 - Adults should know why they're learning
 - Learning should be relevant and useful

Thank you!

HEALTHY MOTHER, HEALTHY CHILD



Pregnant Mothers



**Child
6 - 8 months**



**Child
9 - 12 months**



**Child
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