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Mapping and Gap Analysis of Tools for Complementary Feeding in Emergencies

JANUARY 2023

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Recommended Citation

USAID Advancing Nutrition. 2023. *Mapping and Gap Analysis of Tools for Complementary Feeding in Emergencies*. Arlington, VA: USAID Advancing Nutrition.

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Acronyms

BF	breastfeeding
BMS	breastmilk substitutes
CF	complementary feeding
CFE	complementary feeding in emergencies
CRS	Catholic Relief Services
ENN	The Emergency Nutrition Network
FAO	Food and Agriculture Organization of the United Nations
GNC	Global Nutrition Cluster
IBFAN	International Baby Foods Action Network
IFE	infant feeding in emergencies
IFE-CG	Infant Feeding in Emergencies Core Group
IYCF	infant and young child feeding
IYCF-E	infant and young child feeding in emergencies
LSHTM	London School of Hygiene and Tropical Medicine
MAMI	management of at-risk mothers and infants
MIRA	Multi-sector Integrated Rapid Assessment
MNP	micronutrient powder
NFI	non-food item
OFDA	Office of Foreign Disaster Assistance
OG-IFE	Operational Guidance for Infant Feeding in Emergencies
PAHO	Pan American Health Organization
SBC	social and behavior change
SPRING	Strengthening Partnerships, Results, and Innovations in Nutrition Globally
TOR	terms of reference
UNHCR	United Nations High Commission for Refugees
UN-OCHA	United Nations Office for the Coordination of Humanitarian Affairs
USAID	United States Agency for International Development
UNICEF	United Nations Children's Emergency Fund
WASH	water, sanitation, and hygiene
WFP	World Food Programme
WHO	World Health Organization

Executive Summary

Background

A central focus of nutrition programming across humanitarian contexts is on preventing a deterioration in nutrition outcomes in young children with a specific focus on the first 1,000 days from conception to 24 months. With the increased and sustained focus on children under age two to prevent malnutrition, in emergency contexts this translates to protecting, maintaining, and potentially improving nutrition outcomes in children. Improving infant and young child feeding (IYCF) practices, exclusive breastfeeding (BF) and complementary feeding (CF) are key to achieving these objectives.

Recognizing the importance of protecting, maintaining, and potentially improving the diets of children under the age of two, there has been an increased focus on supporting IYCF in emergency contexts in recent years. However, the focus of activities has typically been on promoting exclusive breastfeeding with relatively less emphasis on complementary feeding practices. In 2020, funded by the former United States Agency for International Development Office of Foreign Disaster Assistance (USAID-OFDA), the Infant Feeding in Emergencies Core Group (IFE Core Group), and the Emergency Nutrition Network (ENN) published a "Review of experiences and direction on complementary feeding in emergencies" (ENN 2020). This review found that a key barrier to complementary feeding programming in emergencies (CFE) was implementing partners' perception that they lacked 1) knowledge on what an effective and efficient CFE intervention consists of, and 2) the tools needed to implement CFE programming in emergency contexts (USAID, ENN, and IFE Core Group 2020). In response to the first of the two identified needs, IFE Core Group (IFE-CG) and the United Nations Children's Emergency Fund (UNICEF) documented two case studies of complementary feeding programming in emergency contexts using UNICEF's 2020 guidance as a framework. In addition, USAID Advancing Nutrition aims to produce case studies of complementary feeding programming in two additional contexts. This report, in contrast, seeks to fill the second identified challenge by identifying the tools that are available to support CFE programming and assessing where there are gaps and additional resources needed. Two global guidance documents provide operational guidance and a framework toward improving implementation of infant and young child feeding programming in emergencies (IYCF-E):

- The *Operational Guidance on Infant Feeding in Emergencies (OG-IFE)* V.03 published in 2017 outlines responsibilities and recommended actions for those with IFE coordination authority as well as those undertaking IYCF-E activities directly or indirectly (IFE Core Group 2017a).
- UNICEF published Programming Guidance (*Improving Young Children's Diets During the Complementary Feeding Period*) in 2020 to provide a framework to go beyond household level interventions to articulate actions to improve the availability, accessibility, affordability, and consumption of nutritious and safe complementary foods (UNICEF 2020a). This framework (referred to as the Action Framework for the purposes of this report) outlines actions across the health, water and sanitation, food, and social protections systems.

Together, these two documents can outline the framework for delivery of complementary feeding actions in emergencies. As such, they provide the structure for conducting this resource mapping. The tools identified and presented in this report are organized and categorized in alignment with the program cycle "practical steps" outlined in the OG-IFE. Program interventions are further sub-categorized based on the UNICEF Action Framework. The identified tools are available in an online repository to improve access to these resources by implementing partners and practitioners. This report also includes recommendations for addressing identified gaps in tools for complementary feeding programming. It complements work being carried out by the IFE-CG and UNICEF to improve global CFE.

Objectives and Purpose of the Review

The objectives of this review were to—

- Assess the range of tools available for complementary feeding for all stages of programming across the humanitarian and development "nexus."
- Map globally available tools against the program cycle suggested in the OG-IFE and the programmatic interventions recommended by the UNICEF Action Framework for complementary feeding programming.
- Complete a gap analysis of the tools recommended actions/interventions and understand barriers to the use of existing tools.
- Provide a curated resource list of complementary feeding tools for humanitarian responders.
- Recommend further development of tools for CFE programming and their rollout.

Methods

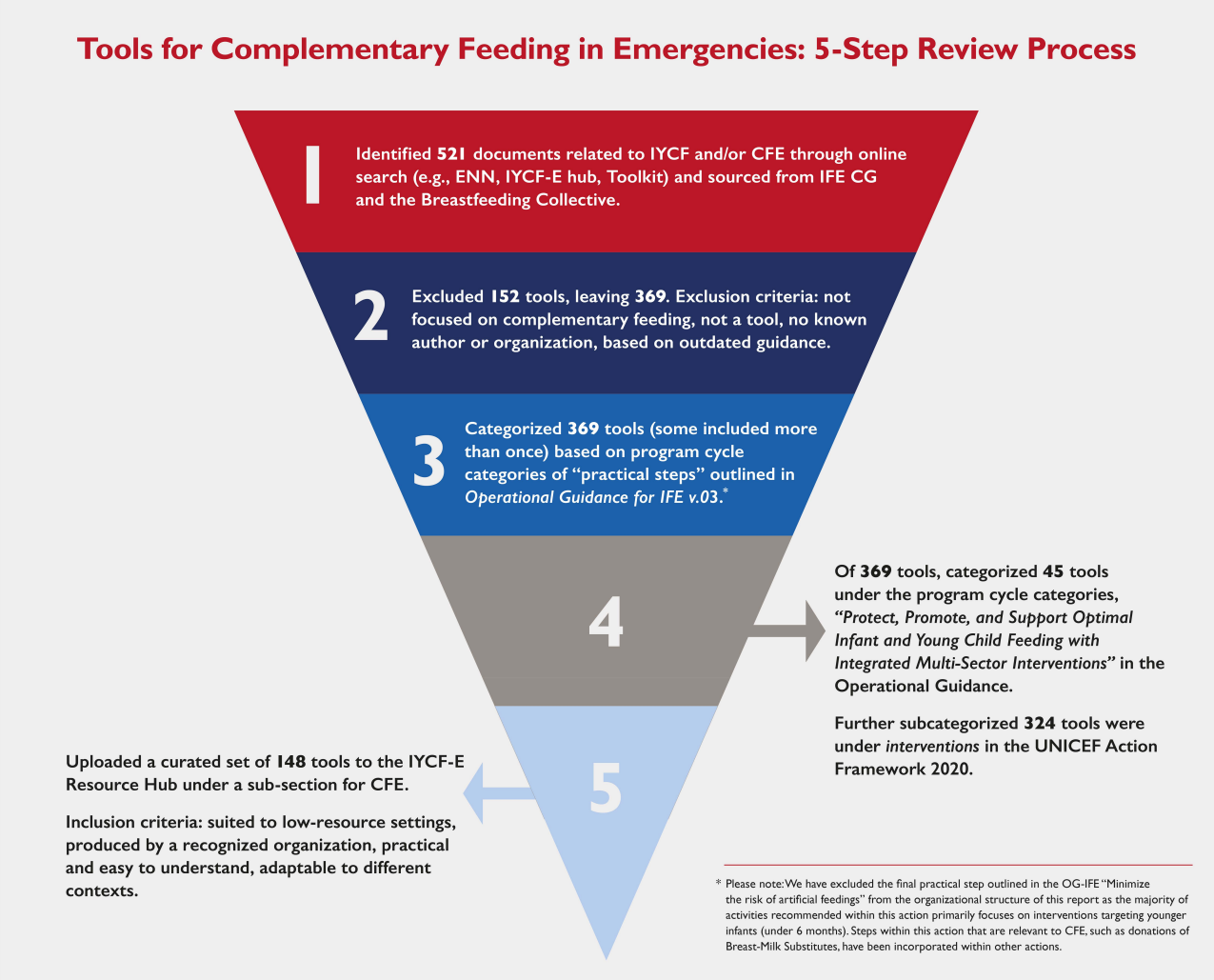
For the purpose of this analysis, a "tool" was defined as a "Resource that assists a field practitioner in *how* to implement global guidance and recommendations." Tools included those that could be used by staff responsible for performing different roles or functions in a response including technical leads, program managers, trainers, and frontline staff.

USAID Advancing Nutrition used the following methods to conduct this review and gap analysis:

- Held discussions and coordinated meetings with UNICEF, the IFE-CG, and the Global Breastfeeding Collective to develop the methodology and to jointly decide how to identify and map resources.
- Conducted a desk review of resources to support complementary feeding. Identified tools using the following approaches:
  - Searching commonly used nutrition and IYCF sites and resources as identified through planning calls
  - Making requests to the IFE-CG, UNICEF and the Global Breastfeeding Collective to share any relevant tools not available on en-net, through listservs and on coordination calls
  - Searching for relevant documents online by using the search terms "Complementary Feeding," "weaning," "weaning food," "weaning practices," infant and young child feeding," "IYCF-E," "IYCF," "cash and nutrition," "voucher and nutrition," "nutrition and agriculture," "nutrition-sensitive agriculture," and "nutrition and WASH [water, sanitation, and hygiene]"
  - Searching references included in a subset of mapped selected tools (more in categorization of tools below) using a "snowball method."
- Interviewed and emailed 19 key stakeholders for CF in development and humanitarian contexts (identified through USAID AN and the IFE-CG).

Categorization of Tools

The figure below describes the five-step process we used to review tools.



Findings of the Mapping and Gap Analysis

Availability and Accessibility of Tools to Support CFE

Stakeholders highlighted a number of gaps in tools to support CFE. A barrier commonly cited to using the tools was lack of knowledge of their existence and the need to ensure access to existing tools at both a global and country level. Many believed that tools were not field-friendly and were embedded in long documents. Additionally, the perception was that tools were often based on best practice in development settings that may not be feasible in a humanitarian context. Relevant tools are often not translated to the appropriate language.

The largest number of tools (140) supported program interventions with many also available to support advocacy (endorse and develop policies) and assessment and monitoring. We sub-categorized tools for program interventions based on the multi-sector actions identified in the UNICEF Action Framework. Of these tools, the majority are focused on support for nutrition counseling and social behavior change communications and for counseling and education for responsive feeding and stimulation. Resources

providing guidance on how to implement the other recommended interventions (the Lancet 2013) were fewer in number.

Conclusions

Although there has been progress on improving IYCF-E, the emphasis has been on protecting and promoting exclusive breastfeeding with relatively less focus on CFE. This is reflected in the tools available to support CFE policy, planning, and programming. Given the updated OG-IFE and the new UNICEF Action Framework, there is a need to revisit and update existing tools, adapt CFE tools intended for development settings for emergency contexts, fill gaps by developing new resources, and ensure tools are accessible and usable for humanitarian staff.

Recommendations

Overall Finding	Recommendation
1. Existing tools for CF programming are not easily accessible as they are embedded in a wide variety of resources.	1. Establish a repository for CF tools that is accessible to field practitioners (this has been partially addressed through the creation of a CFE section in the IYCF-E Hub).
2. A critical gap in programming for CFE is linking assessment findings to program design.	2. Develop a CFE Decision Tool to support practitioners in analyzing and applying assessment findings to design CFE programming. This should include consideration for multi-sectoral interventions.
3. There is no comprehensive training package focused on CFE for field practitioners.	3. Develop and promote brief e-learning training modules that support CFE programming.
4. While there are a number of tools for conducting formative research to design complementary feeding interventions in development contexts, these may be too time-intensive for emergency settings.	4. Develop a rapid assessment tool for identifying barriers and solutions to recommended complementary feeding practices suitable for the first phase of an emergency.
5. Few multi-sectoral assessments and response plans include a focus on CFE.	5. Advocate with the United Nations Office for the Coordination of Humanitarian Affairs (UN-OCHA) and relevant Clusters to include CFE in assessments and program actions in multi-sector emergency responses.
6. The majority of tools support actions through the health system and social and behavior change (SBC). There are limited tools to support implementation interventions for CFE beyond the health system, such as food security, WASH, shelter, nonfood items (NFIs), and protection.	6. Assess how actions to support CFE may be embedded in core resources of key sectors (such as food security, health, shelter/NFIs, WASH, and protection). Advocate to embed tools and actions to support CFE in these resources and in multi-sector emergency response tools.

Introduction

A central focus of nutrition programming across humanitarian contexts is on preventing a deterioration in nutrition outcomes in young children with a specific focus on the first 1,000 days from conception to 24 months. With the increased and sustained focus on children under age two to prevent malnutrition, in emergency contexts this translates to protecting, maintaining, and potentially improving nutrition outcomes in children. Improving infant and young child feeding (IYCF) practices, exclusive breastfeeding (BF) and complementary feeding (CF) are key to achieving these objectives.

Recognizing the importance of protecting, maintaining, and potentially improving the diets of children under the age of two, there has been an increased focus on supporting IYCF in emergency contexts in recent years. However, the focus of activities has typically been on promoting exclusive breastfeeding with relatively less emphasis on complementary feeding practices. In 2020, funded by the former United States Agency for International Development Office of Foreign Disaster Assistance (USAID-OFDA), the Infant Feeding in Emergencies Core Group (IFE-CG) and the Emergency Nutrition Network (ENN) published a "Review of experiences and direction on complementary feeding in emergencies." This review found that a key barrier to complementary feeding programming in emergencies (CFE) was implementing partners' perception that they lacked 1) knowledge on what an effective and efficient CFE intervention consists of, and 2) the tools needed to implement CFE programming in emergency contexts (ENN 2020a).

In response to these first two identified needs, IFE-CG and the United Nations Children's Emergency Fund (UNICEF) documented two case studies of Complementary Feeding Programming in Emergencies contexts using UNICEF's 2020 guidance as a framework. In addition, USAID Advancing Nutrition aims to produce case studies of complementary feeding programming in two additional contexts. This report seeks to fill the second identified challenge by identifying the tools that are available to support CFE programming and assessing where there are gaps and additional resources needed. Two global guidance documents provide operational guidance and a framework toward improving implementation of infant and young child feeding programming in emergencies (IYCF-E):

- The *Operational Guidance on Infant Feeding in Emergencies (OG-IFE)* V.03 published in 2017 outlines responsibilities and recommended actions for those with IFE coordination authority as well as those undertaking infant and young child feeding in emergencies (IYCF-E) activities directly or indirectly (IFE Core Group 2017a).
- UNICEF published Programming Guidance *(Improving Young Children's Diets During the Complementary Feeding Period*) in 2020 to provide a framework to go beyond household level interventions to articulate actions to improve the availability, accessibility, affordability, and consumption of nutritious and safe complementary foods (UNICEF 2020b). This framework (referred to as the Action Framework for the purposes of this report) outlines actions across the health, water and sanitation, food, and social protections systems.

Together, these two documents form the framework for delivery of complementary feeding actions in emergencies. As such, they provided the structure for this resource mapping. We also present perspectives among key stakeholders on current complementary feeding resources used across both humanitarian and development programs and map existing tools for complementary feeding programming.

The tools identified and presented in this report are organized and categorized in alignment with the program cycle "practical steps" outlined in the OG-IFE. Program interventions are further sub-categorized based on the UNICEF Action Framework. A subset of the identified tools is available in an online repository to improve access to these resources by implementing partners and practitioners. This report also provides recommendations to address identified gaps in tools for complementary feeding programming. It complements work being carried out by the IFE-CG and UNICEF and aims to improve global complementary feeding programming in emergencies (CFE).

Background

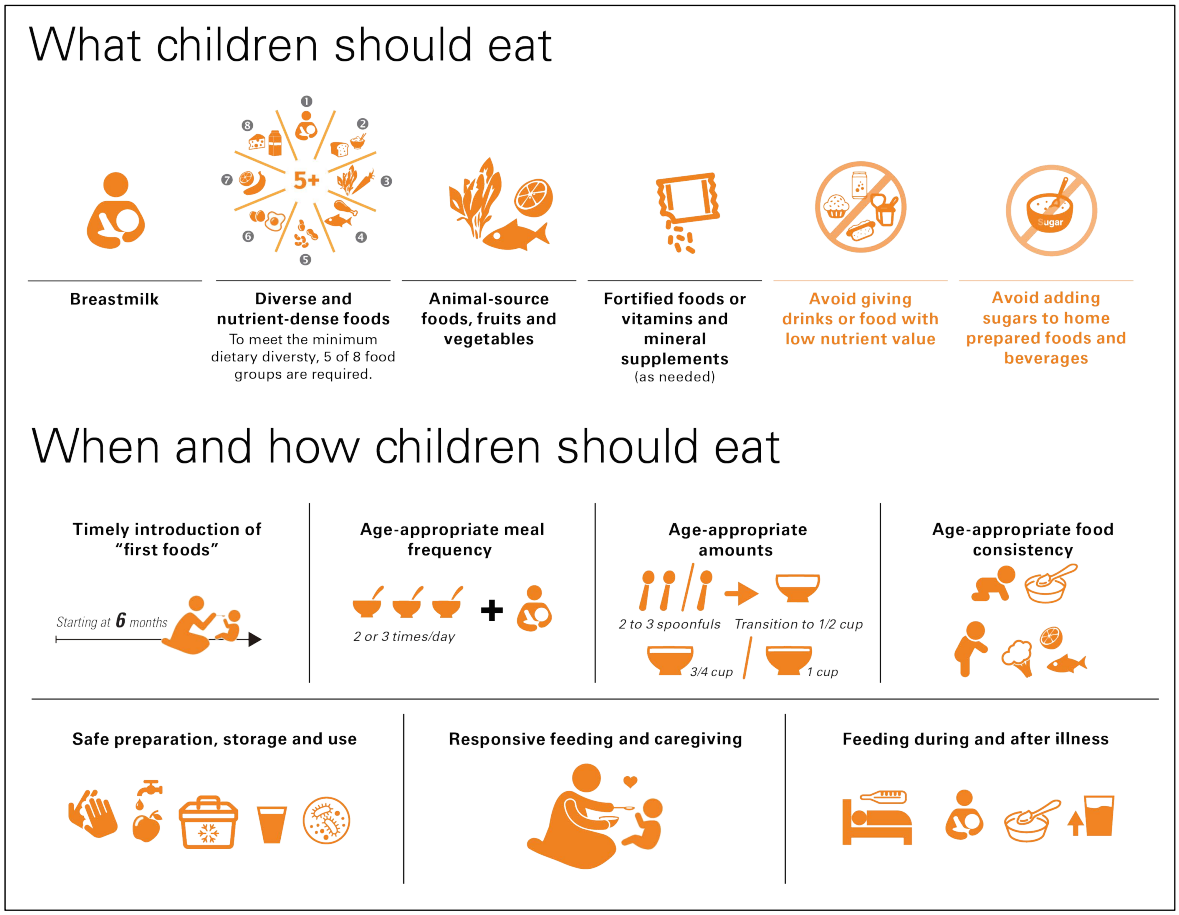
Complementary Feeding and Why It Is Important

The CF period from six to 23 months of age when a child is introduced to food is a critical window for child health, growth, and development. How children are fed and the quality of the food that they receive affects their linear growth and cognitive development. During this time, children are at heightened risk of infections (such as diarrheal diseases), and they have greater nutrient needs per kilogram of body weight than at any other time in life. As a result, this period encounters high risk of wasting and growth faltering that is potentially irreversible (UNICEF 2021a).

However, many children under age two have poor diets lacking in nutrients. Many challenges limit the quality of young children's diets, including lack of availability of fresh, nutritious food; lack of accessibility due to poverty; misinformation and cultural taboos; inadequate water and cooking equipment; the time constraints faced by caregivers. During crises, the situation may be changing rapidly with increased barriers to providing an adequate diet to children. Without support, ensuring adequate nutrition for children may be impossible for some families.

The World Health Organization (WHO) and UNICEF recommend that infants be exclusively breastfed from birth to 6 months of age. At 6 months, children should be introduced to age-appropriate, nutritious, and safe complementary foods, alongside continued breastfeeding.

Figure 1. Complementary Feeding Practices as Recommended by UNICEF



Source: United Nations Children's Fund (UNICEF). 2020. *Improving Young Children's Diets During the Complementary Feeding Period. UNICEF Programming Guidance.* New York: UNICEF.

Challenges to Complementary Feeding in Emergencies

During the critical complementary feeding period, many children do not receive an adequate diet. Analysis by UNICEF found that 27 percent of children aged 6–8 months were not fed solid food. Among children aged 6–23 months, 48 percent were not fed the minimum meal frequency, and 71 percent did not have minimally diverse diets (UNICEF 2021a). Low consumption of nutritious foods was found to be a particular challenge with 41 percent of children not consuming fruits and vegetables, and 55 percent not receiving eggs, fish, and meat as part of their diet (UNICEF 2021a)

The same research identified key obstacles to good diets for young children as being 1) availability and accessibility of foods; and 2) social, cultural, and gender barriers.

Added to these challenges, unhealthy processed foods and drinks are increasingly available and affordable, even to poorer households. Research by UNICEF found that one in three young children in Australia, Ethiopia, Ghana, India, Mexico, Nigeria, Serbia, and Sudan were fed at least one processed or ultra-processed food or drink daily (UNICEF 2021a). Lack of availability of fresh foods in poor urban neighborhoods or host communities, along with time pressures on caregivers can increase reliance on processed convenience foods. Provision of these foods in the complementary feeding period can displace other more nutritious foods resulting in nutrient deficiencies in the short term, as well as setting children on a path to unhealthy food preferences and weight management and diet-related diseases later in life.

However, many children may be living under extremely difficult circumstances for part of or the entire duration of this life stage as a result of humanitarian crises. In humanitarian settings, challenges to complementary feeding may be exacerbated and barriers to following the recommended CF practices can be extreme with many children living under these circumstances for part of or the entire duration of the CF period. In such situations, routines may be disrupted and circumstances may lead to an increase in both the stress and the workload of caregivers, a breakdown of social support structures, stretched household resources, and a lack of availability and affordability of familiar and nutritious foods.

In addition, the distribution of foods of low nutrient value as part of relief efforts, poor access to health care and counseling services, as well as insufficient equipment and water for safe preparation of food can aggravate challenges providing safe and nutritious diets in the 6–23 months period. Early action after the onset of an emergency is critical to support caregivers and children to meet their basic needs and ensure risks to feeding children are minimized. Actions to support IYCF- E should be sustained throughout the emergency response and phase out.

Objectives and Purpose of the Review

The objective of this review was to understand the range of tools available to support recommended actions for complementary feeding and to assess gaps based on recommended actions for humanitarian response. This review aimed to map existing tools for complementary feeding programming and document perspectives among key stakeholders on current resources used across both humanitarian and development programs. This work is complementary to the work being carried out by the IFE-CG and UNICEF and aims to ensure ongoing collaboration in improving global complementary feeding programming.

In addition, this report provides recommendations to address identified gaps in tools for complementary feeding programming.

The objectives were to—

- Assess the range of tools available for complementary feeding for all stages of programming across the humanitarian and development "nexus."
- Map globally available tools against the program cycle suggested in the OG-IFE and the programmatic interventions recommended by the UNICEF Action Framework for complementary feeding programming.
- Complete a gap analysis of the tools against recommended actions or interventions and understand barriers to using existing tools.
- Provide a curated resource list of complementary feeding tools for humanitarian implementing partners.
- Make recommendations for further developing tools for CFE programming and their rollout.

Methods

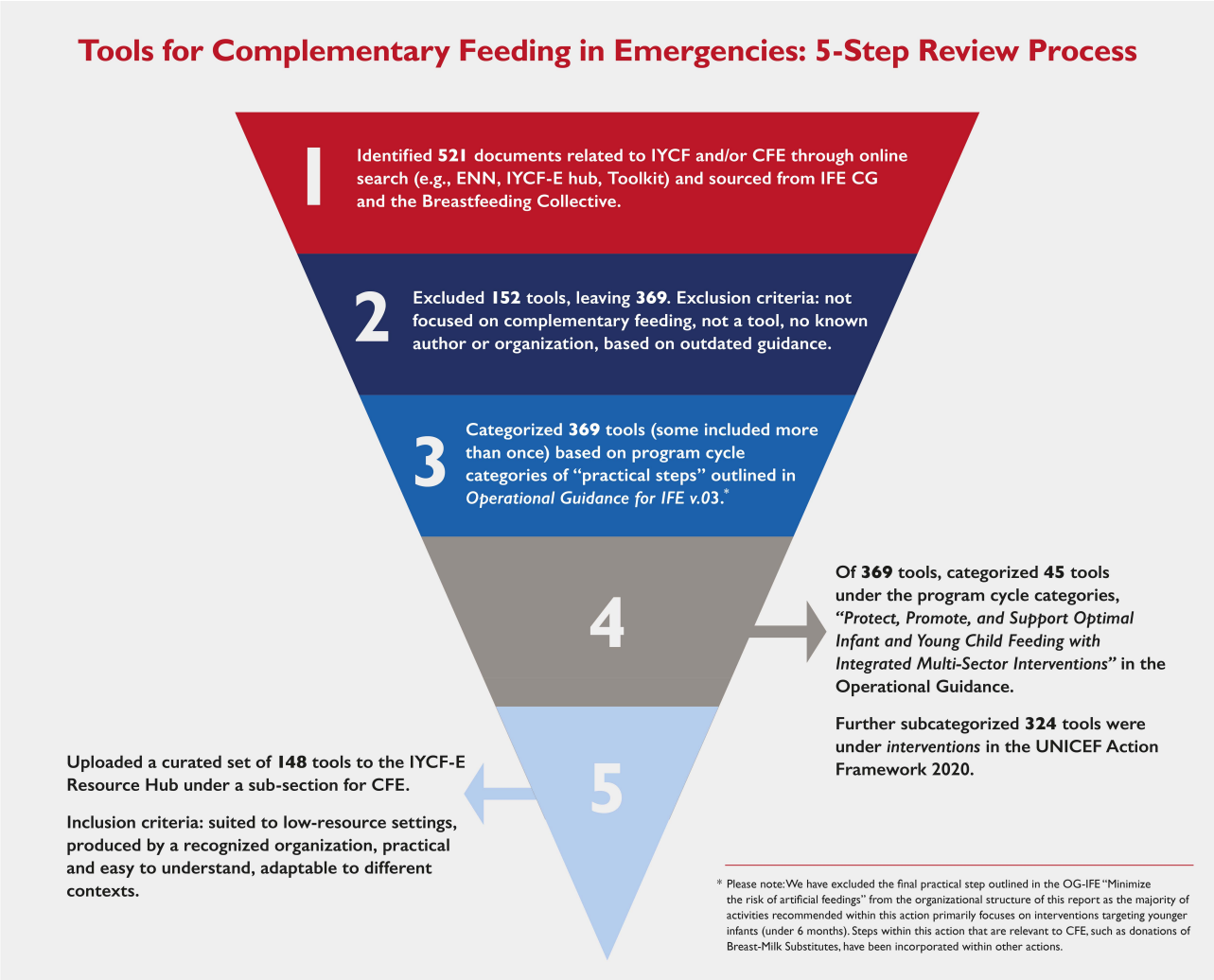
For the purpose of this analysis, a "tool" was defined as a "resource that assists a field practitioner in *how* to implement global guidance and recommendations." Tools included resources that staff responsible for performing different roles or functions in a humanitarian response (technical leads, program managers, trainers, and frontline staff) could use. These tools could support complementary feeding, general IYCF, or multi-sectoral actions to ensure safe and appropriate feeding.

USAID Advancing Nutrition used the following methods to conduct this review and gap analysis:

- Conducted discussions and coordination meetings with UNICEF, the IFE-CG, and the Global Breastfeeding Collective to develop the methodology and to jointly decide how to identify and map resources. During these meetings, it was decided to map the tools against the OG-IFE and subcategorize program actions based on the UNICEF Action Framework. Due to time constraints, stakeholders could submit their views by email or use an online survey. The approach to identifying resources (outlined below) was also agreed.
- Identified tools through the following approaches:
  - searching commonly used nutrition and IYCF websites and resources as identified through planning calls at sites supported by ENN; UNICEF; World Food Programme (WFP); the Food and Agriculture Organization of the United Nations (FAO); USAID IYCN and Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Projects; the Infant and Young Child Feeding in Emergencies Hub (IYCF-E Hub); and Save the Children's IYCF- E Toolkit, Alive and Thrive, and Global Health Media
  - presentation of the planned review in the IFE-CG and Global Breastfeeding Collective meetings along with provision of a google sheet for participants to enter details of resources and a request to share any relevant tools not available online by email
  - an online search using the following search terms: "complementary feeding," "Infant and Young Child Feeding," "IYCF," "IYCF-E," "Infant and Young Child Feeding in Emergencies," "weaning," "weaning foods," "weaning recommendations," "nutrition-sensitive agriculture," "nutrition-sensitive WASH [water, sanitation, and hygiene], "nutrition-sensitive Cash," "nutrition-sensitive voucher," and "nutrition-sensitive CVA [cash and voucher assistance]."
- Conducted an interview with the two Bureau for Humanitarian Assistance (BHA) team members. Due to time constraints, email discussions took place with the remaining 17 key stakeholders for CF in development and humanitarian contexts (identified through USAID and the IFE-CG). The primary objective of these discussions was to identify tools being used. A secondary objective was to understand perceptions about these tools and gaps in resources and their use. Stakeholders received a long list of IYCF materials to determine whether any items were missing. As such, stakeholders were asked the following three questions: 1) Are there any items missing on this list? 2) What is your opinion on the use of existing tools? Are there any enablers or barriers to their use? 3) Are there any gaps in tools for complementary feeding programming and do you have any suggestions for tools that might need to be developed?
- Collected responses from posts on listservs, including the USAID Advancing Nutrition email distribution list, Core Group Nutrition Working Group, and the en-net forum hosted by ENN.
- Performed a desk review of resources to support complementary feeding where resources included or excluded those categorized.

Categorization of Tools

Figure 2. Tools for Complementary Feeding in Emergencies: Five-Step Review Process



The research team reviewed a total of 521 resources for content related to complementary feeding, including resources focused on IYCF as a whole. They categorized all tools in a matrix that captured the intended audience, the content type, context (humanitarian or development), and whether a global, regional, or country tool.

The review team then decided whether to include or exclude the tool in or from the review using inclusion and exclusion criteria. They provided the rationale for any exclusion. Resources were excluded from the review if: 1) they did not include complementary feeding (General IYCF-E tools were frequently rejected for this reason); 2) the resource was not a tool (such as guidance or a research paper; 3) there was no known author or organization responsible for the tool; 4) the tool followed outdated guidance. Based on these criteria, the research team excluded 152 tools from further review and categorization.

The resulting 369 resources to include in the review were categorized in the following way (with the possibility of multiple categories):

Tier 1 Categorization: Program Cycle

As the *Operational Guidance for IFE v.03* is the reference point for practitioners on actions to take in protecting and promoting IYCF in an emergency context, tool categories follow the program cycle "Practical Steps" outlined in this document. As there was significant overlap between categories, for this exercise, the "minimize the risk of donations" action falls under "endorse and develop policies."

- Endorse and develop policies
- Train staff
- Coordinate operations
- Assess and monitor
- Protect, promote, and support optimal infant and young child feeding with integrated multi-sector interventions (Tier 2 below).

Tier 2 Sub-categorization of "Protect, Promote, and Support Optimal Infant and Young Child Feeding with Integrated Multi-Sector Interventions"

The UNICEF report *Improving Young Children's Diets During the Complementary Feeding Period – UNICEF Programming Guidance* provides up-to-date, specific recommendations for program interventions across different sectors. Thus, tools for the category "Protect, Promote, and Support Optimal Infant and Young Child Feeding with Integrated Multi-Sector Interventions" contain further sub-categories to reflect these themes (UNICEF 2020b):

- Nutrition counseling and social and behavior change communication
- Counseling and education on responsive feeding and stimulation
- Access to diverse and nutritious complementary foods at household level
- Use of vitamin and mineral supplements in settings where nutrient-poor diets prevail
- Access to fortified foods as needed, aligned with global and national standards
- Access to affordable and nutritious foods through social protection programs and counseling services
- Access to safe water and clean household environments for young children.

The research team also selected a list of 148 recommended resources for curating into a CFE Collection housed on the IYCF-E Hub. Tools in the curated resource list reflect the following criteria:

- Applicability in low-resource settings
- Publication by a recognized organization
- Accessibility—practical and easy to understand
- Adaptability to different contexts.

A complete list of resources is available in Annex A.

Limitations

A number of factors guided the search and selection of tools. Some limitations included—

- The online search for resources was conducted only in English.
- The primary intention was to capture tools at the global level that could be adapted and used at regional or country level. Country examples were considered if they were filling a gap in tools at the global level, but language barriers limited the ability to capture all country-level tools.
- Resources included those publicly available and accessible online. There are likely a significant number of tools for complementary feeding not in the public domain, either internal to specific agencies, in the gray literature, or under development.
- Some tools were not constructed for the initial weeks of an emergency response. However, the mapping included a broader range of tools where adaptation and contextualization was feasible.
- The mapping does not categorize the tools based on when in an emergency they may be applied or in what type of emergency a tool could be used. Given the fluidity of needs and resources in emergencies and the reality that practitioners will contextualize and adapt tools based on their specific requirements, the mapping valued breadth of tools to facilitate this contextualization rather than narrowing down the categorization further.

Gap Analysis Findings

Stakeholder Perspectives on the Availability and Accessibility of Tools

Stakeholders provided wide-ranging feedback on the availability and accessibility of tools, as summarized in table 1. A commonly held view was that there were many existing tools, but their quality varied and they were often long and difficult to use. There also appeared to be inadequate guidance on using these tools. Many tools were designed for development settings and not well adapted to emergency contexts. There was also a concern that within IYCF-E tools for emergencies, support for exclusive breastfeeding was prioritized over complementary feeding and that the focus of conveying CF information is often one-way using rather than dialogue-oriented.

Other views on enablers and barriers in terms of access to and availability of tools the different gaps identified by stakeholders included the need to improve rapid assessment tools to incorporate CF considerations, adaptation of decision-making guidance for emergency settings, as well as better tools to support monitoring and surveillance. Stakeholders also requested simplified tools to support cost assessments and highlighted the lack of tools to build the counseling and psychosocial care skills of nutrition fieldworkers. Simplifying and prioritizing tools, improving access, and providing guidance on their use were some of the key recommendations made by stakeholders.

Table 1. Stakeholder Perspectives on Existing Tools, Barriers and Enablers to Their Use, and the Need for Additional Tools

Question	Answers
What is your opinion on the use of existing tools? Are there any enablers and/or barriers to their use?	• There are many existing tools, but they are of variable quality. • There are more tools that focus on policies, and what to do for CF rather than how to implement CF activities; tools are more theoretical than practical. • Focus of conveying CF information is often didactic rather than dialogue-oriented. • Tools are not sufficiently contextualized for the local contexts or available in local languages. • Documents and tools are long and not user-friendly. • Content from development settings is not always adapted to or suited to emergency contexts. • There is a need to ensure greater access to existing tools, that there be guidance on how to use these tools, and ensuring tools are integrated within existing services. • A broader concern is the CF is not prioritized in humanitarian contexts relative to exclusive breastfeeding. • Have a global repository or clearinghouse for a curated set of tools.

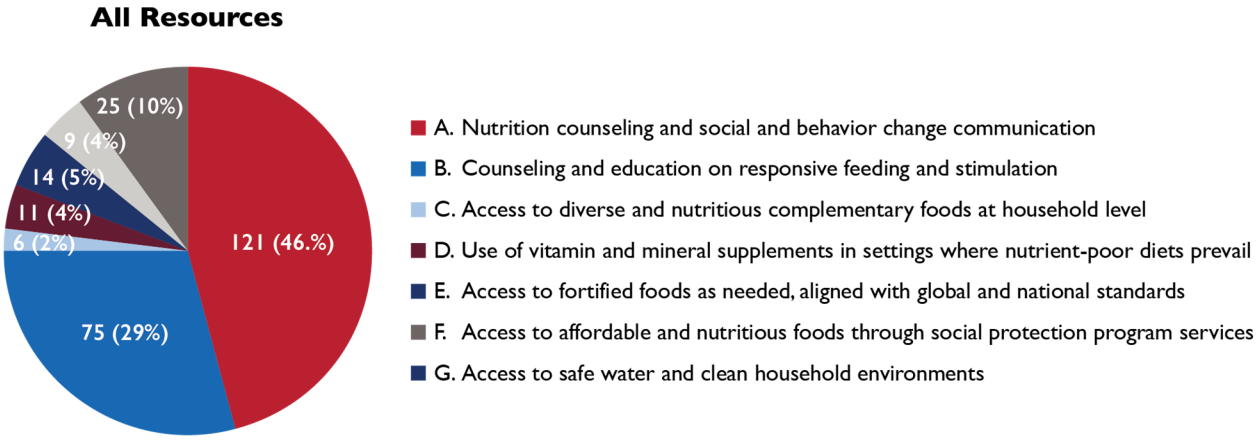
Question	Answers
Are there any gaps in tools for complementary feeding programming and do you have any suggestions for tools, which might need to be developed?	• Simple rapid context assessment tools for CF to assess drivers of malnutrition and food insecurity and to understand existing interventions in other sectors that could allow for integration of or coordination with CF programming in humanitarian contexts • Adapt existing decision-making guidance from non-emergency contexts to emergency contexts • Better tools for M&E/surveillance of complementary feeding • Simplified roadmap with short, succinct, user-friendly tools for CF (for example by ages and life-stages) • Tools to create local recipes and contextualize complementary foods • Simplified tools to assess the cost of adequate diets and cost and cost-effectiveness of different approaches • Adaptable tools in different languages to make them more context-specific • Lack of tools and approaches to strengthen counseling and psychosocial care skills of nutrition fieldworkers • Simplifying and prioritizing tools

Availability and Accessibility of Tools

Overall, the research team identified and assessed 521 resources for their potential to support complementary feeding. As shown in Figure 1, tools were mapped against the actions identified in the operational guidance. Among those identified, the greatest number of tools (140) support programming interventions, with the next largest number supporting the endorsement and development of policies, and conducting assessments and monitoring.

Figure 2: Tools Reviewed by OG-IFE Recommended Actions Categories (Numbers and Percentages)

Figure 3: Program Intervention Tools by Sub-Categorized by Recommendations in the UNICEF Action Framework (numbers and percentages)



Tools for program interventions were sub-categorized based on the multi-sector actions identified in the UNICEF Improving Diets report. As shown in Figure 2, the largest number of tools identified were focused on household level actions to support nutrition counseling and social behavior change. A significant number were also identified to support counseling and education for responsive feeding and stimulation. Fewer tools were identified to support field practitioners in the other recommended areas of complementary feeding programming. In particular, there were few resources to support interventions or activities beyond the household level to facilitate access to nutritious food.

Of the 19 stakeholders consulted, 10 commented that a barrier to using tools for CFE was knowing where to access and how to use tools. Many tools identified were embedded in long documents, were perceived as not "field-friendly" or too complex, or were only available in one language.

The following sections outline the findings of the mapping and related gap analysis, using the taxonomy described above of the five OG-IFE Actions and the further analysis of the fifth action using the UNICEF Action Framework on complementary feeding cited above. Table 2 shows the number of tools reviewed by category and the number of tools selected for the curated list for the IYCF-E Hub repository.

Table 2. Number of Tools Reviewed by Category and the Number of Tools Included in the Curated List by Category

	Tools Reviewed by Category (Number)	Tools included in the Curated List by Category (Number)
Tier 1 Categorization: OG-IFE Recommended Actions Guidelines		
Endorse And Develop Polices	71	46
Train Staff	51	39
Assess and Monitor Situation Analysis and Assessment and Monitoring	64	48
Coordinate Operations	10	9
Protect, Promote, And Support Optimal Infant and Young Child Feeding With Integrated Multi-Sector Interventions	140	102
Tier 2 Sub-categorization by UNICEF Action Framework Recommendations (Protect, Promote, And Support Optimal Infant and Young Child Feeding with Integrated Multi-Sector Interventions)		
Nutrition counseling and social and behavior change communication	121	37
Counseling and education on responsive feeding and stimulation	75	31
Access to diverse and nutritious complementary foods at household level	6	3
Use of vitamin and mineral supplements in settings where nutrient-poor diets prevail	11	9
Access to fortified foods as needed, aligned with global and national standards	11	7
Access to affordable and nutritious foods through social protection programs	9	3
Access to safe water and clean household environments for young children (including food preparations and storage interventions)	25	12

Note: Tools could be included more than once if they had content relevant or were applicable to more than one category.

Tier 1 Categorization: OG-IFE Recommended Actions Guidelines

Endorse or Develop Policies

This category consists of two sub-components. One focused on policy, recommendations, and guideline endorsement and the other on strategic response planning (including resource mobilization). Under this category, a total of 71 tools were identified and reviewed, and ultimately 46 were included in the curated list of tools on the IYCF-E Hub repository.

Policy, Recommendation, and Guideline Endorsement	
How Is This Defined?	This sub-component ensures adherence to international policies and guidance in an emergency response. In particular, this adherence includes implementing the International Code on the Marketing of Breastmilk Substitutes and the prevention of the distribution of breastmilk substitutes (BMS), subsequent World Health Assembly resolutions (Sixty-Ninth World Health Assembly 2016), and the Operational Guidance on Infant Feeding in Emergencies. A number of actions are recommended within the operational guidance with the nutrition cluster or sector lead agency and the government responsible for coordinating or undertaking these actions. These actions include assessing and updating national policies, reviewing and updating implementation and preparedness plans, developing a joint statement on protecting and promoting IYCF in emergencies, and disseminating key policy guidance to all relevant responders across sectors, including media groups, private sector, donors, military, and volunteer groups.
Why Is This Important?	The first phase of an emergency response is a critical point for mitigating risks faced by affected populations. Updating, upholding, and widely communicating national and international policies and guidance that protect, promote, and support complementary feeding is essential. Preparedness and advocacy ensure communication of guidance and resulting actions that support CFE.
Examples of Tools Available	There are a number of IYCF-E tools to support preparing for IYCF, endorsing and developing policies, and establishing a monitoring system for code violation (see Annex A for a complete list of tools). To illustrate the variety of tools available, the following tools highlight applicability in low-resource settings and usability and adaptability under this category: • A template to support a national capacity assessment for IYCF-E, including analysis of existing national policies, implementation plans and preparedness (Technical Rapid Response Team, Save the Children, and Irish Aid 2020b). • The IYCF Standard Operating Procedures published in 2020 include steps to be taken to support emergency preparedness, policy endorsement and development (Technical Rapid Response Team, Save the Children, and Irish Aid 2020a). • Example joint statements on the protection and promotion of IYCF in emergencies, example guidance notes on key policies to different actors. Guidance on the roles and responsibilities of different actors in the prevention and management of BMS distributions, including complementary foods was also recently published by the IFE-CG (ENN 2020b). Tools were also available for establishing a system to report code violations and BMS distributions (ENN 2020b; IFE Core Group 2017b).
Gaps	• The IYCF-E tools in this category focus predominantly on protecting and promoting breastfeeding practices in the under 6 months exclusive breastfeeding period.

	When included, language on complementary feeding typically focused on descriptions of recommended practices rather than on how to support affected communities to follow these practices. • The majority of tools have limited focus on the prevention and management of complementary feeding donations/distributions. Although the Code and Operations Guidance also include regulation/guidance on the distribution of complementary foods, there is a lack of clarity on what type of food should not be distributed (all foods or just packaged food) and the reasons why. Related to the above-mentioned gap, most tools focus on the prevention of distribution of commercial milk and milk products and the protection of breastfeeding.

Recommendations:
Policy, Recommendation, and Guideline Endorsement

1. Clarify what constitutes a code violation in relation to complementary feeding, develop key information or guidelines, and update tools to reflect these points.
2. Expand the focus in the joint statement briefings with clear steps to support complementary feeding based on the latest guidance. Update the joint statement template to include guidance on appropriately managing donations for complementary feeding.
3. Update information on complementary feeding in the existing IYCF-E tools to support policies, international recommendations, and guidelines based on the latest Operational Guidance (v.03 2019) and the UNICEF CF Framework.

Strategic Response Planning (including Resource Mobilization)	
How Is This Defined?	During this stage of the program response, we determine the scope and direction for the response based on an understanding of humanitarian needs. This stage also includes developing response strategies, designing program plans and interventions, and mobilizing resources to meet identified needs.
Why Is This Important?	Developing the response strategy and program design is critical to the humanitarian response. This step ensures needs identified in assessments translate into actions and services for children and their care providers. In addition, these strategies communicate the magnitude of need and type of response to support resource mobilization and advocacy efforts. Factors affecting CFE may span across response sectors and require careful analysis and integrated strategy development. Programming design templates support responders to quickly incorporate actions to support CFE.
Examples of Tools Available	• Annex A contains a complete list of tools to support this stage. The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • Global Nutrition Cluster (GNC) guidance on how to develop humanitarian response plans and improve nutrition actions. However, this tool currently has limited content strategy development for complementary feeding (GNC 2020b). • IYCF-E Toolkit has tools to support program design, including resource mobilization and an example logframe and master budget. Components of

	complementary feeding are included in these tools (Save the Children 2018f). • An example IYCF strategy (developed for Somalia) (Ministry of Health Garowe-Puntland 2012). • An example of a decision tree for population-based programmatic options for improving nutrient quality of complementary foods and feeding practices in non-emergency situations exists in the Programming Guide Infant and Young Child Feeding (UNICEF 2011). Although designed for longer-term programming, this could be adapted to apply to the first phase of an emergency response and support decision-making for immediate actions for CFE programming (UNICEF 2011b). • The Unlocking WFP's Potential Guidance for nutrition-sensitive programming consists of three tools to guide nutrition-sensitive program design: a table listing criteria to classify a program as nutrition-sensitive, suggested outcome indicators, and a checklist for nutrition-sensitive programming (WFP 2017). • The International Baby Foods Action Network (IBFAN) World Breastfeeding Costing Initiative (WBCi) Tool can be used to support costing and financial planning for IYCF programs (IBFAN 2019). • The SPRING Nutrition-Sensitive Agriculture Training Resource Package has a number of tools as part of training handouts to support program design for development contexts. These include a handout with nutrition-sensitive outcomes in the agriculture sector and example interventions that may support increasing access to nutritious complementary foods. This package also contains guidance on designing programs and an activity design matrix (SPRING 2021). • The Nutrition Programme Design Assistant contains thorough assessment tools, including identifying sub-optimal complementary feeding practices and solutions for development programming (FANTA 2015).
Gaps	• Although a number of different resources are available to support aspects of this stage of the program cycle, only one tool was available to support decision-making on programming (UNICEF 2011). As this tool was developed in 2011, it may not reflect the latest frameworks and operational guidance and is limited to nutrition-specific activities. • No tools were identified to support strategy development or program design for complementary feeding that linked to existing context and needs assessments tools. Stakeholders interviewed indicated that guidance on selecting contextually effective, appropriate, and feasible CFE interventions was a critical gap. • There were few tools identified to support integrated, multi-sector program design to support CFE. The WFP guidance offers some potential areas of work, but it focuses on WFP's role in this area of work. Frameworks exist to advise on multi-sector, integrated programming (UNICEF's Complementary Feeding Framework; United Nations High Commission for Refugees (UNHCR)–Save the Children's "Infant and

	Young Child Feeding in Refugee Situation: A Multi-Sector Framework for Action"; and WHO, UNICEF, IRC, and ECDAN's "Nurturing care for children living in humanitarian settings"), but these do not yet have associated tools to support decision-making, program design and resource mobilization (WHO et al. 2020; UNHCR and Save the Children 2021; UNICEF 2020b).

Recommendations: Strategic Response Planning

1. In partnership with relevant sectors (such as food security, WASH, protection), jointly review and update existing IYCF tools to include nutrition-sensitive, integrated, multi-sector activities to support comprehensive strategy and program design for CFE.
2. Develop a decision tool to support strategic response planning and program design to improve complementary feeding practices in fragile and low-resource environments; build off and connect tools to available humanitarian needs assessment tools; include considerations for multi-sectoral interventions. Consider the decision tree in the UNICEF 2011 guidance and existing context assessment and planning tools used in development programming.
3. Develop or adapt and include an example response strategy and Humanitarian Response Plan with particular focus on activities to support CFE in curated list of tools for CFE.

Train Staff

Train Staff	
How Is This Defined?	Training tools identified in the review include resources for assessing competencies as well as those that strengthen capacity, such as curriculum and online training packages to improve skills. This section also includes tools to support supervision.
Why Is This Important?	Training and orientation are essential for rapid establishment of programs in humanitarian responses where staff may have limited or no previous experience in programming to support complementary feeding. Training and supervision are also important for ongoing technical and skills development.
Examples of Tools Available	This review found a range of tools and training packages that contain components or modules on complementary feeding. Under this category, the research team identified and reviewed 51 tools and included 39 in the curated list of tools on the IYCF-E Hub repository. The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • IYCF-E Individual Capacity Assessment tool includes aspects of complementary feeding to support organizations to understand technical capacity among staff (Technical Rapid Response Team, Save the Children, and Irish Aid 2020a). • The GNC has developed a competency framework for nutrition in emergencies that includes a number of components related to CFE,

	including knowledge of good complementary feeding practices and skills in counseling (GNC 2021). • Training packages are available for technical leads and program managers. UNICEF has an online course on IYCF that includes program development, program implementation, program evaluation, and other related activities. Save the Children is updating a training curriculum on IYCF-E that will be publicly available in mid-2022. This training package includes modules on CFE and integration. The Harmonized Training Package v02 (2011) has a module on IYCF-E and modules on working with the food sectors and interventions related to micronutrients (Brabandere, Astrid De, and Marie McGrath 2011). • There were a number of training packages available for the training of frontline health workers on IYCF with modules on complementary feeding that are not specific to humanitarian contexts. The UNICEF/WHO "Infant and Young Child Feeding Counselling: An Integrated Course" is used to train community health workers to counsel on optimal breastfeeding and complementing feeding practices (UNICEF/WHO 2021). However, the course focuses predominantly on breastfeeding counseling with six sessions on supporting breastfeeding compared to one session for complementary feeding (WHO and UNICEF 2006). The session focused on complementary feeding focuses on age-appropriate information provision. • Alive and Thrive also has an online training package that includes CF (2019). • There are also a number of training packages for development settings focused on agricultural interventions to increase access to food; aspects of these may be appropriate to humanitarian contexts and support CFE programming. These range from online training aimed at technical leads on designing and monitoring nutrition-sensitive programs to curricula for Farmer Field Schools aimed at community-level training (FAO 2015, 2020). • Training resources from Helen Keller International to support home gardening and Essential Nutrition Actions have components that focus on complementary feeding (Helen Keller International 2015). • A number of supervision tools are available in the IYCF-E Toolkit. These include observation checklists of varying IYCF-E activities (Mother-baby areas, IYF-E Support Group, Action Oriented Group) (Save the Children 2018a).
Gaps	• Currently, there is no publicly available, central reference training package for technical leads and program managers that focuses on interventions required for CFE, including multi-sector interventions. Training packages (such as the Harmonized Training Package v02 [2011]) include nutrition in emergencies (including a module on IYCF-E), micronutrients, and links with nutrition and the food sectors but have limited specific training on supporting complementary feeding practices (Brabandere, Astrid De, and Marie McGrath 2011). This package was developed in 2011 and many aspects of the training may not follow the latest guidance on CFE.

	Trainings specific to IYCF-E, such as the Save the Children training provide more in-depth information on general IYCF-E interventions (i.e., prevention and management of BMS donations, IYCF counseling in emergencies, supportive spaces) as well as modules specific to CFE, however the objectives of the training are broader than only CFE and therefore may not serve the same purpose as a targeted "CFE training." • Currently, there are limited training resources for frontline health workers on CFE. This mirrors gaps also noted by the IFE Core Group on updated trainings for counseling and other IYCF-E topics for frontline workers in emergencies. • There are few resources to train staff and community members to collaborate across sectors, such as how to use cash and vouchers, fortified foods, micronutrients, and WASH for improving complementary feeding practices. The Essential Nutrition Actions package is a good example but is used in development settings. • There is limited availability of training packages for initial, rapid start-up needs where time for training is constrained. Respondents reported that training guides were often very long and materials not suited to the first phase of responses. • Many training resources had limited content on the dangers of and the prevention of the use of unhealthy ultra-processed foods in complementary feeding. • The nutrition in emergencies competency framework has limited specific focus on competencies for CFE. • The individual capacity assessment tool is currently limited to health and nutrition sector staff and capacity-building around social and behavior change (SBC) activities. • Supervision tools exist for IYCF-E but they are limited to SBC activities to support complementary feeding (Save the Children 2018a).

Recommendations: Train Staff

1. Develop a multi-agency (IFE-CG) CFE training package based on the operational guidance (based on UNICEF and Save IYCF-E trainings) to be used as a central resource for technical leads and program managers. Include modules for integrated multi-sector programming for different levels of responsibility. This could draw on the recommendations from the "Improving Diets in the Complementary Feeding Period" report (UNICEF 2020b) and the "Infant and Young Child Feeding in Refugee Situations: A Multi-Sectoral Framework for Action" (Save the Children and UNHCR 2018).
2. Update available training materials to include a focus on the prevention of the use of unhealthy ultra-processed foods in complementary feeding programming
3. Develop e-learning training modules for quick start-up of CFE programming, highlighting international guidelines and recommendations related to CFE, best practice and case studies of

relevant programs with particular emphasis on integrated, multi-sector activities. These skills-based shorter e-learning modules can be followed up with more in-depth training as time allows.

4. Augment capacity assessment tools that assess skills and knowledge of IYCF-E programming generally, to include additional questions to assess staff capacity to deliver additional CFE interventions.
5. Update supervision tools to reflect different types of program activities for CFE.

Coordinate Operations

Coordinate Operations	
How is This Defined?	Coordination involves combining humanitarian actors to ensure a coherent response to emergencies. Operations related to complementary feeding are typically led by the Nutrition Cluster or Sector. National governments are usually the lead coordination authority for IYCF-E. Where support is needed, UNICEF or UNHCR have the mandated authority for coordination in close collaboration with the government and humanitarian partners. In many humanitarian responses, this group will have a Technical Working Group in IYCF-E.
Why Is This Important?	Coordination is essential to the success of humanitarian response. In most crisis situations, a large number of organizations will be working to provide support in the same area. In addition, complementary feeding is affected by the actions of many other sector responses and therefore collaboration beyond the nutrition sector is critical. At the country level, there may be limited previous experience in IYCF-E. Provision of tools to support the identified chair of the IYCF-E working group will support improved coordination and focus on issues related to CFE.
Examples of Tools Available	A limited number of coordination tools to support IYCF-E were available (see Annex A for a complete list of tools). Under this category, the research team identified and reviewed 10 tools and included 9 in the curated list of tools on the IYCF-E Hub repository. The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • The IYCF-E Toolkit has resources to support IYCF-E coordination, with a terms of reference (TOR) template for the group and short guidance notes on integration with other sectors (Save the Children 2018). • The Global Nutrition Cluster has a template TOR for an IYCF-E working group that includes components of complementary feeding and specifies that members of this group will coordinate with other sectors.
Gaps	• The actions the lead coordinating body (the government and/or UNICEF or UNHCR) should take to support CFE are not defined. Similarly, the responsibility of key actors (such as the government and/or UN agencies) for essential and linked actions (such as access to food) are not well defined in available coordination tools. This gap risks duplication of roles and responsibilities and delay or a compromised CFE response.

	• Examples of integration focus predominantly on the protection and promotion of breastfeeding. There are few tools available to guide IYCF-E working groups on the actions of CFE or on how to work with other sectors. Guidance documents (such as the IYCF-E Framework for Refugees settings) provide a starting point for this coordination but do not include detailed, practical tools to support implementing integrated activities (Save the Children and UNHCR 2018).

Recommendations: Coordinate Operations

1. Create a checklist of specific CFE actions for the lead IYCF coordinating body and for the leads in other relevant sectors, such as food security based on the operational guidance (UNICEF 2020b). Develop orientation sessions for other sectors to enhance their understanding in how they can contribute to improved complementary feeding practices.
2. Expand the existing TOR templates for the IYCF-E Working Group to include specific actions that reflect the priority of CFE such as coordination with priority sectors to ensure access to services to support complementary feeding.
3. Advocate globally with other sectors that standard objectives and activities be included in humanitarian response plans to improve access to nutritious food for complementary feeding.

Assess and Monitor

This category consists of two sub-components: one focused on situation analysis and early needs assessment and another on monitoring. Under this category, the research team identified and reviewed 64 tools and included 48 in the curated list of tools on the IYCF-E Hub repository

Situation Analysis and Early (Rapid) Needs Assessment	
How Is This Defined?	Situation analysis and early needs assessments refer to assessments that need to be undertaken at the onset of crises. These provide the evidence needed for humanitarian response planning. These data are necessary to prioritize the needs of affected populations and design relevant and efficient interventions.
Why Is This Important?	Available pre-crisis data and initial rapid assessment findings are critical to understand the pre-existing complementary feeding behaviors and impacts to those behaviors as a result of the emergency. It is important that initial assessments identify any challenges caregivers face to (re-)establish recommended feeding to better inform strategic planning and program design.
Examples of Tools Available	There are a number of tools available to support assessments across the humanitarian response cycle from pre-crisis/emergency preparedness to initial rapid assessments to in-depth assessments/research (see Annex A for a complete list of tools). The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • The IYCF-E Capacity Assessment Tool is a resource to compile information about the pre-crisis situation for IYCF. As described in the tool, this resource seeks to map the "IYCF programming environment,

	resources, and capacities to identify gaps, opportunities and provide contextual recommendations to enhance IYCF programming in emergencies." This is available in multiple languages and can be used during preparedness, response and/or recovery (Save the Children, GNC, and UNICEF 2020). • The IYCF-E Toolkit contains a range of rapid assessment tools, many with multi-sector questions to support an in-depth understanding of the situation for CFE (Save the Children 2018f). • The Harmonized Training Package Module 17 on IYCF contains a handout with a template for Community Focus Group Discussions that assesses barriers and enablers to recommended practices and could be used as part of a rapid assessment or during support group discussions (Brabandere, Astrid De, and Marie McGrath 2011). • A range of assessment tools ideal for programs of longer duration were available. These are often time-intensive and require having special skill sets as well as capacity to use software. Some of these tools assess food availability and affordability at household level (such as ProPAN1) and others at community, sub-national, and national level (Cost of the Diet/Fill the Nutrient Gap) (Save the Children 2021). The ProPAN tool developed by UNICEF includes a methodology to assess barriers and enablers to recommended feeding practices (PAHO and WHO 2013). • The Catholic Relief Services (CRS) Recipe Development Guide contains a number of formative research tools to be used for identifying sub-optimal complementary feeding practices and solutions for consideration in community-based nutrition programs, including recipe development (CRS 2020).
Gaps	• Although a number of assessment tools were available, short, clear guidance on which to use and when is needed. A guidance document is available, but it is long and potentially outdated (Technical Rapid Response Team 2016). • Few tools were available that could be used during a rapid assessment to identify barriers and solutions to optimal complementary feeding practice or to test SBC information and approaches used to support complementary feeding, a critical step in ensuring that information and materials recommend feasible practices. • While there are a number of tools for conducting formative research to design complementary feeding interventions in development contexts, these may be too time-intensive for emergency settings. • A critical gap appears to be in tools to guide the interpretation and use of assessment data to design and adapt emergency programming for complementary feeding.

[1] A set of research tools designed for ministries of health, nongovernmental organizations, and bilateral and international organizations working to improve the diets and feeding practices of children under 24 months old to prevent early childhood malnutrition.

Recommendations:
Situation Analysis and Assessment

1. Develop a short guidance note outlining the different assessment tools with an explanation of time, resources needed, and what they assess.
2. Consider developing tools with a "rapid" first phase context assessment that could be linked with more in-depth assessments for later in a response.
3. Develop a rapid assessment tool for identifying barriers and solutions to optimal complementary feeding practices suitable for the first phase of the emergency. Build on existing tools (ProPAN, NPDA, CRS recipe guide, ENA).
4. Advocate with coordinating bodies to update intercluster rapid assessment tools, such as the Multi-sector Integrated Rapid Assessment (MIRA) to include expanded questions on IYCF-E.

Monitoring	
How Is This Defined?	This component encompasses monitoring, evaluation, learning, and accountability to track progress and assess impact as well as measure the effectiveness of response strategies and interventions. The operational guidance and the UNICEF Action Framework recommend using a mixture of quantitative and qualitative indicators to assess progress on complementary feeding with assessments including measures of impact, efficiency, coverage, process, and causality.
Why Is This Important?	Through monitoring and evaluating project activities and their impact on the affected community, adjustments can be made to ensure that project design and activities do no harm and are relevant, effective, efficient, and yield meaningful results.
Examples of Tools Available	A limited number of tools were available to support monitoring (see Annex A for a complete list of tools). The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • As a backbone of this activity, indicator registries are available in a number of guidance documents. WHO recently published an updated list of indicators for IYCF in 2021 (WHO and UNICEF 2021). The IYCF-E Toolkit has "Summary of Humanitarian Indicators Registry" for quick reference and indicator lists also exist. In addition, donors, including USAID/ Bureau for Humanitarian Assistance, reflect these indicators in program monitoring requirements and include definitions and guidance based on the WHO reference. • Suggested indicators for nutrition-sensitive programming which support complementary feeding practices are included in "Unlocking WFP's Potential Guidance for nutrition-sensitive programming" (WFP 2017) and indicators to measure nutrition and WASH integration can be found in "Improving Nutrition Outcomes with Better WASH: Practical Solutions for Policy and Programmes" (WHO, UNICEF, and USAID 2015). WFP's Guidance also has a table listing criteria to classify a program as nutrition-

	sensitive, suggested outcome indicators, and a checklist for nutrition-sensitive programming.
Gaps	Additional tools are needed to support implementation of the operational guidance and UNICEF Action Framework recommendations on monitoring: • Indicator registries typically have quantitative (not qualitative) process indicators; the OG-IFE recommends using a mix of both. Additionally, these registries have not been widely applied in humanitarian response plans and other strategies due to challenges with indicator definitions and measurement. • Coverage assessment methodology is recommended in the operational guidance and in the UNICEF Action Framework to assess coverage of IYCF services, but there are currently no tools to support this action. • Feedback from stakeholders indicated that it was challenging to measure progress on CF as indicators are often based on achieving a minimum standard and do not reflect incremental achievements (such as minimum acceptable diet).
Recommendations: Monitoring	
1. Re-evaluate and consider refining and expanding indicator registries and monitoring methods to include ways to measure incremental change in behaviors rather than whether or not a minimum has been achieved. 2. Develop IYCF-E coverage monitoring tools to support the recommendation in the OG-IFE. 3. Update indicator registries to include qualitative indicators for complementary feeding as per the recommendation to use such mixed methods in the operational guidance and the UNICEF 2020 Framework.	

Tier 2 Sub-categorization by UNICEF Action Framework Recommendations

Protect, Promote, and Support Optimal Infant and Young Child Feeding with Integrated Multi-Sector Interventions.

Nutrition Counseling and Social and Behavior Change	
How Is This Defined?	SBC interventions influence key behaviors and social norms by addressing their individual, social, and structural determinants or factors. An SBC approach is based on behavioral science and entails a context assessment, building an understanding of participant groups' perspectives, creating a focused strategy through a social and behavioral analysis, delivering and facilitating strategic actions targeted to key audiences, and evaluating and adjusting. The process allows partners, communities, and key stakeholders to approach a problem from various angles to define key determinants or drivers of behaviors and to plan and implement a well-planned,

	comprehensive set of interventions that focus on these drivers at multiple levels to achieve the objectives (USAID Advancing Nutrition 2022b).
Why Is This Important?	Counseling and SBC play a central role in interventions to support complementary feeding and aim to address the behavioral and social determinants of feeding practices. In emergencies, where the circumstances of those affected have changed and continue to change, the provision of accurate, clear, relevant information on protecting children's diets is essential, along with offering support to follow guidance. This aspect of programming can also identify and address myths and misconceptions that may undermine the adoption of recommended IYCF practices. A systematic literature review conducted by SPRING in 2014 found the evidence of the effect of SBC on complementary feeding practices in development settings to be broad. This review highlighted that the varied measures of optimal complementary feeding make drawing conclusions on the effectiveness of particular SBC approaches challenging. However, the evidence suggested that in terms of overall impact on IYCF (BF and CF), using multiple SBC approaches and channels to change behaviors was more effective than using one, that targeting multiple contacts has a greater effect than targeting only the woman herself, and that more visits or contacts resulted in greater change (Lamstein et al. 2014). The UNICEF Action Framework outlines ten steps in ensuring "Best practices for enhancing the effectiveness of nutrition counseling and SBC in improving young children's diets." (UNICEF 2020b) These include formative research, field testing, adaptation as well as integration with other services to support CF such as food-based approaches."
Examples of Tools Available	The majority of program implementation tools identified for this review support Nutrition Counseling and Social and Behavior Change Communication. Annex A contains a complete list of tools. Under this sub-category, the research team identified and reviewed 121 tools and included 37 included in the curated list of tools on the IYCF-E Hub repository. The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • Resources to guide the establishment of different types of program activities, including different types of support groups, recipe development and cooking demonstrations, and one-on-one communication and counseling (CRS 2020; Save the Children 2018c). The Essential Nutrition Actions package is a central package used in many longer-term programs. Most of these were developed for non-humanitarian contexts (Helen Keller International 2015). • WHO/UNICEF will be releasing an updated integrated training course on IYCF in 2022/2023. • Resources for planning communications campaigns and designing media spots (UNICEF 2011a). • A video series on complementary feeding developed by UNICEF and Global Health Media that offers detailed guidance on complementary

	feeding. This video series contains videos on a number of different topics related to complementary feeding which are relevant for emergencies and translated into a number of languages (Global Health Media 2021b). • A counseling guide from Kenya provides an example of an assessment of barriers to optimal feeding practices and potential solutions to aid the counselor and caregivers in overcoming barriers (USAID 2017).
Gaps	• The tool review and stakeholder feedback indicate a lack of tools to support the design of contextualized SBC programming for the emergency context. • Many tools were available to support communication on recommended practices, but there were few tools to guide emergency implementers on methods for rapid field-testing and contextual adaptation of communication content and approaches in line with the recommendations in the UNICEF Action Framework for SBC best practice (UNICEF 2020a). • Some stakeholders questioned the use of tools designed for multi-year programming (such as IYCF counseling cards) in humanitarian responses and felt that the use of these resources may not be appropriate without prior understanding of whether practices promoted were feasible for the affected community. It was also perceived by some that tools often prescribe behaviors and do not promote an understanding of the situation of caregivers in terms of constraints, abilities, challenges, and resources. • It was also perceived that some information, education, and communication materials and counseling cards reinforced gender stereotypes by depicting the mother as the caregiver in the majority of cards. Only recently developed cards were viewed to have inclusion of male caregivers. • The emphasis of the communication around the feeding of children 6–23 months was on food (diversity, texture, frequency) in the majority of tools. Counseling cards for this age group contained breastfeeding information, but the predominant focus of the card was on food despite the importance of breastmilk during this phase. There is a risk that this emphasis could lead counselors to deprioritize support for continued breastfeeding in their activities. • Although the use of ultra-processed foods for complementary feeding is an increasing challenge, even in resource-poor settings, very few SBC resources address this issue.
Recommendations: Nutrition Counseling and Social and Behavior Change	
1. Develop tools to better support counselors to understand barriers to and identify solutions for recommended practices and incorporate this counseling into training packages. 2. Create counseling guides for emergency contexts based on initial assessments to support addressing identified barriers. Adapt the example from Kenya to provide a global template to guide practitioners in designing contextualized CFE counseling.	

3. Review and update available counseling tools to ensure adequate focus on continued breastfeeding and responsive feeding. Counseling cards should also recommend solutions. Given the increased usage of smart phones and access to the internet, cards could link to videos for additional support.
4. Ensure content on preventing the use of unhealthy ultra-processed foods are incorporated into tool updates and the development of new materials.
5. Review and update IYCF-E material to show positive models of father/male participation in CF. Review language and pictures to ensure that materials do not stigmatize or reinforce negative gender stereotypes against women.

Counseling and Education on Responsive Feeding and Stimulation	
How Is This Defined?	Responsive feeding and stimulation refers to caregivers providing encouragement to children to eat in response to their signals indicating appetite and satiety (UNICEF 2020b).
Why Is This Important?	Responsive feeding can improve nutrient intake and develop the child's skills for self-feeding. Stimulation and the emotional responsiveness of the caregiver are important for the growth and development of the child. In humanitarian situations with the likely increased stress and workload of caregivers, ensuring an environment conducive to feeding children with care is an important consideration in protecting complementary feeding practices.
Examples of Tools Available	Many of the tools available to support counseling and education contained some information or instructions on responsive feeding and stimulation. Annex A contains a complete list of tools. Under this sub-category, the research team identified and reviewed a total of 75 tools and included 31 in the curated list of tools on the IYCF-E Hub repository. The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • A number of frameworks exist to support the caregiver and child to follow this practice. The Nurturing Care Framework is a recent example of a holistic package of interventions to support mother and child (WHO, World Bank Group, and UNICEF 2021). • The UNICEF/Global Health Media video on "How to Feed Your Young Child with Care" provides extensive guidance to support this recommendation (Global Health Media 2021c). • The MAMI [management of at-risk mothers and infants] Pathway, while aimed at supporting children under 6 months, also provides a good example of how to assess a range of issues which may affect the mother and child (ENN and LSHTM 2021).
Gaps	• Training material for community counselors consistently highlights responsive feeding. However, materials such as counseling cards for IYCF contain very little information on this component of feeding. Notably, UNICEF plans to update the IYCF counseling cards to include the Nurturing Care Framework and responsive feeding in 2022.

	• The majority of IYCF-E materials do not make a link with early child development or convey that the importance of feeding a young child at this stage goes beyond nutrient intake. The social interaction component of this recommendation and relationship between mother and child are not represented in the majority of materials. • Tools do not appear to be linked to an assessment or understanding of potential barriers to behavior uptake. Stakeholders consulted in the mapping process responded that this component may be affected by the mental health and workload of the mother. There were no tools to support an assessment of the care provider and child dyad to make the link between mental health and responsive feeding. • While recent frameworks exist that outline a holistic approach to responsive feeding and stimulation (such as the Nurturing Care), they are relatively new and contain gaps in tools to support implementing recommended actions, particularly in emergency contexts. • Few tools specifically targeted at adolescent mothers and their unique needs.

Recommendations:
Counseling and Education on Responsive Feeding and Stimulation

1. Update existing IYCF-E materials to integrate responsive feeding and stimulation, child-parent social interactions, and "positive parenting behavior."
2. Update existing IYCF-E tools to support a 1:1 assessment of care provider and child dyad to incorporate barriers and enablers related to maternal mental health and responsive feeding in counseling materials.

Access to Diverse and Nutritious Complementary Foods at Household Level	
How Is This Defined?	This component of complementary feeding support refers to enhanced production and increased availability of nutritious and safe complementary foods. This type of programming may encompass the provision of agricultural inputs and extension services, small livestock production, and homestead food production.
Why This Is Important	Complementary feeding interventions typically focus on the promotion of specific practices and recommendations that rely on access to a diverse diet, including animal-source products or legumes, along with fruit and vegetables. Where these foods are not available, it is unlikely for households to adopt recommended practices for complementary feeding.
Examples of Tools Available	A number of tools are available to support nutrition-sensitive agriculture for development settings (see Annex A for a complete list of tools). The majority of nutrition-sensitive agriculture tools identified were components of training resources. Under this category, the research team identified and reviewed a total of six tools and included three in the curated list of tools on the IYCF-E

	Hub repository. The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • The Nutrition-Sensitive Agriculture Training Resource Package developed by SPRING Essential Nutrition Actions, and the FAO Training Package (Improving Nutrition Through Home Gardening) both include tools to support program implementation (FAO 2001, 2020).
Gaps	• Limited availability of tools to support practitioners in ensuring households have access to diverse and nutritious complementary foods in an emergency setting. • Guidance exists that outlines activities to support improved diets with recommended activities for food production, food handling, storage and processing, food trade and marketing, consumer demand, food preparation and preferences, and cross-cutting issues. This guidance is not intended for the emergency context and does not have associated tools (FAO 2020). • Very few tools are available to support collaboration with other sectors to improve access to food. The Operational guidance recommends: "Collaborate across multiple sectors to maximize synergies and opportunities to support recommended IYCF practices and minimize risks," but there are few tools to support unpacking the steps needed to support this recommendation. • Develop more targeted approaches to better support the unique needs of adolescent and young mothers.

Recommendations:
Access to Diverse and Nutritious Complementary Foods at Household Level

1. Develop a decision tool to support options appraisal for complementary feeding interventions. As part of the development of a decision tool, guide practitioners in identifying opportunities to improve household access to nutritious complementary foods (homestead production, animal husbandry, food processing and preservation practices of indigenous/wild foods).
2. Develop tools to support multi-sector, integrated programming that provide guidance and "asks" to guide programmers on working with other sectors to enhance access to complementary foods.

Use of Vitamin and Mineral Supplements in Settings Where Nutrient-poor Diets Prevail	
How Is This Defined?	Through this intervention, vitamin and mineral supplements are provided in tablet or powder form to enrich a child's diet. micronutrient powders (MNPs) are most commonly used for children 6–23 months with the recommendation that these are added to the complementary foods prepared at home for the child. MNP programs should also include counseling on their use as part of an SBC program.
Why This Is Important	When integrated into programs to improve complementary feeding, vitamin and mineral supplements can enhance the quality of children's diets by providing adequate nutrients to prevent micronutrient deficiencies that are essential for children's optimal growth and development.

Examples of Tools Available	A limited number of tools to support the use of vitamins and mineral supplements in nutrition programming were identified (see Annex A for a complete list of tools). Under this sub-category, the research team identified and reviewed 11 tools and included 9 in the curated list of tools on the IYCF-E Hub repository. The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • UNICEF's "East-Asia and Pacific – Nutrition in Emergencies Toolkit" contains resources to support implementers on the use of MNPs with an implementation planning template, supply calculator, implementation planning checklist, and briefing note. There is also a registry with recommended outcome indicators (UNICEF 2021b). • The Harmonized Training Package Module 4 focuses on micronutrients. This contains a number of tools for training which could also be used and job aids to recognize clinical signs of micronutrient deficiencies (Seal 2011). • The SPRING project also published a tool to support the development of a communications plan for the introduction of MNPs (USAID, UNICEF, and SPRING 2012). • The Community Infant and Young Child Feeding Package (UNICEF 2013) includes instructions on adding MNPs and has associated counseling cards with instructions on their use (UNICEF 2013).
Gaps	• Although programming tools exist, the majority are outdated (more than 5 years old) and may not reflect updated guidance. • The majority of program implementation templates are designed for the systems of a specific agency. • Tools are needed to address uptake and adherence in MNP interventions in emergency contexts.
Recommendations: Use of Vitamin and Mineral Supplements in Settings Where Nutrient-Poor Diets Prevail	
1. To assist with counseling related to the use of MNPs, create a tool with a list of questions to ask the caregivers to explore barriers and enablers to using MNPs. 2. Develop a short programming guide for emergencies, including which platforms to use and how to supervise and monitor MNP programming.	

Access to Fortified Foods as Needed, Aligned with Global and National Standards	
How Is This Defined?	Fortified foods (typically staple foods) are enriched with the addition of micronutrients. In humanitarian responses, fortified blended foods containing cereals and pulses are often used as part of the early response.
Why Is This Important?	In food insecure locations where there is limited availability of nutritious foods, fortified foods can support access to essential nutrients and play a role in preventing malnutrition during the complementary feeding period.

	Very few resources were identified in this area (see Annex A for a complete list of tools). The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • The MAM Decision Tool summarizes the different types of fortified blended food and lipid-based food supplement products (GNC 2017). • The USAID "Delivering Improved Nutrition Recommendations for Changes to U.S. Food AID Products and Programs" guide has decision trees and flow charts to understand which fortified foods to use depending on the type of program (USAID 2011). • The Cost of the Diet costing tool can be used to explore how fortified foods affect the affordability of diets. • The Alive and Thrive report "Engaging the Private Sector to Improve Access to Fortified Complementary Foods: Moving from the If to the How" has recommendations about working with the private sector on fortified foods, but currently there are no tools to support this area of work.
Gaps	• There are very few resources related to access to fortified foods and links to complementary feeding programming are not typically made. • Tools need to be better integrated with the private sector and the food security sector to address barriers to using fortified foods in complementary feeding.

Recommendations: Access to Fortified Foods as Needed, Aligned with Global and National Standards

1. Map unpublished resources related to this technical area with the aim to identify agency-specific resources that could be reviewed, adapted, or built up to create guidance for the public domain.
2. Work with the private sector and food sector to update tools to support the provision of fortified foods.

Access to Affordable and Nutritious Foods through Social Protection Programs and Counseling Services	
How Is This Defined?	Social protection programs include cash transfers, voucher programs, and microcredit. It is recommended that to have maximum impact on nutrition indicators, these programs are integrated with nutrition education and SBC activities.
Why Is This Important?	Social protection programs can increase the household budget available for the purchase of nutritious foods. In a humanitarian context, access to financial support can also prevent the adoption of negative coping strategies within households that may affect complementary feeding practices.
Examples of Tools Available	Although there is guidance available on nutrition-sensitive social protection, no associated tools were identified for this component. Guidance for cash-based programming is available but not specific to CFE. Under this category, the research team identified and reviewed nine tools and included three in

	the curated list of tools on the IYCF-E Hub repository. The following tools highlight applicability in low-resource settings and usability and adaptability under this category: • Tools are available to support cash-based programming. The Cash Learning Partnership Programme Quality Toolbox contains tools to support the entire program cycle, including preparedness, situation and response analysis, program design, implementation, monitoring, and evaluation. • The Shock-Responsive Social Protection Toolkit also provides tools to work with existing safety net schemes to use these programs to provide additional support in the event of a crisis (CaLP 2021).
Gaps	• The tools identified for social protection programs are not nutrition-sensitive. Evidence suggests that to ensure maximum impact for nutrition, cash-based programming should be linked to nutrition-specific programs, such as counseling and SBC (GNC 2020a). Although there is guidance on targeting and adding conditionality to programs, no tools were identified to support practitioners to optimize social protection programs for nutrition.
Recommendations: Access to Affordable and Nutritious Foods Through Social Protection Programs and Counseling Services	
1. Adapt existing guidance, tools, and case studies of social protection programs focused on CFE, including unpublished country and program examples, to better assist practitioners to implement nutrition-sensitive social protection programs.	

Access to Safe Water and Clean Household Environments for Young Children (Including Food Preparations and Storage Interventions)	
How Is This Defined?	Access to safe water, sanitation, and hygiene encompasses interventions to ensure the population receives the support necessary to have sufficient supply of water, food storage, preparation, and hygiene equipment. Program interventions also address knowledge and behavioral barriers to safe practices.
Why Is This Important?	Sufficient supply of safe water and adoption of good food storage and preparation practices are a critical component of complementary feeding as poor practices can expose children to pathogens that lead to infection or impaired structure and function of the small intestine. This can affect absorption of nutrients and ultimately lead to malnutrition and growth faltering.
Examples of Tools Available	Although many SBC packages include promotion messages on WASH, there are few specific tools to support practitioners and ensure communities have access to water and sanitation as part of nutrition programs. Annex A contains a complete list of tools identified under this category. Under this category, the research team identified and reviewed 25 tools and included 12 in the curated list of tools on the IYCF-E Hub repository. The following

	tools highlight applicability in low-resource settings and usability and adaptability under this category: • "Improving Nutrition Outcomes with Better WASH: Practical Solutions for Policy and Programmes" (WHO, UNICEF, and USAID 2015) outlines joint activities for development settings, including policy and advocacy, which may contribute to improved access to water and sanitation but does not have associated implementation tools. • The Nutrition-WASH Toolkit: Guide for Practical Joint Action developed by UNICEF and the Concern Worldwide "How to better link WASH and nutrition programmes" both provide suggestions for joint nutrition and WASH activities but do not have associated tools for implementers (UNICEF 2016). • UNICEF Baby WASH guidance makes recommendations for the specific needs of young children but currently is not linked to implementation tools (WHO, UNICEF, and USAID 2015). • The Essential Nutrition Actions Toolkit has a number of tools for programming to support hygiene and safe preparation and storage of food (Helen Keller International 2015).
Gaps	• Available tools focus on behaviors and SBC but do not advise on linking promotion of good practices to programs to increase access to water, hygiene, and storage equipment (Desai et al. 2015; SHINE 2014a; SHINE 2014b). • Tools identified had limited focus on managing the risks to young children from animal feces in the home. • No tools were available to support practitioners to assess the specific needs and risks to children 6–23 months and the actions to address these issues (Mbuya et al. 2015; SHINE 2014a; SHINE 2014b). • Few tools link support for complementary feeding promotion with access to water, sanitation, and food storage.
Recommendations: Access to Safe Water and Clean Household Environments for Young Children (Including Food Preparations and Storage Interventions)	
1. Together with the WASH sector, develop tools reflecting available guidance to support programmers and communities to advocate, access, and use necessary WASH resources to support the complementary feeding period.	

Online Repository of CFE Resources

Following the mapping of tools for CFE, the research team selected a list of 148 recommended resources to include in a CFE Collection housed on the IYCF-E Hub. These tools were selected based upon the following criteria: 1) Applicability in low-resource settings; 2) Publication by a recognized organization; 3) Accessibility: Practical and easy to understand; 4) Adaptability to different contexts. These resources are housed on the IYCF-E Hub.

Discussion

Summary of Findings

The aim of the gap analysis review was to understand the breadth of tools available for complementary feeding in emergencies, accounting for both the program cycle actions specified in the OG-IFE and the program interventions recommended in the UNICEF Action Framework.

The search identified 369 tools that support complementary feeding. Many of these tools were combined tools for IYCF-E (BF and CF) to support the different stages of an emergency response. The research team identified tools that could support many of the recommended steps to establish CF programming from the OG-IFE, as well as the program interventions suggested in the new UNICEF Action Framework. A subset of 148 of these tools have been uploaded to the IYCF-E Hub repository, which now includes a special section on CFE.

Tools to support the program interventions were the most widely available with 41 percent of tools that support the OG-IFE recommendation "Protect, Promote, and Support Optimal Infant and Young Child Feeding with Integrated Multi-Sector Interventions" containing the programmatic tools. The largest number available were those to support nutrition counseling and SBC with 46 percent containing support for this aspect of CF.

Combined tools for IYCF-E (for BF and CF) typically had a higher emphasis on breastfeeding and on children under 6 months. In particular, tools to support the endorsement and development of policies and training materials focused predominantly on breastfeeding. The content of these tools and packages related to CF was also usually limited to increasing awareness of the recommended practices rather than on actions to support caregivers and affected communities to follow these practices and to address challenges. Tools to support IYCF coordination also had greater focus on BF and did not clearly define the roles and responsibilities of coordinating bodies on ensuring good diets in the complementary feeding period and had little to support multi-sectoral coordination around CF.

No tools were identified to support strategy development or program design for complementary feeding in emergencies that linked to contextual analysis and needs assessments. This was also identified as a gap by stakeholders. Additionally, the review identified gaps in existing multi-sectoral tools to support implementation of CFE interventions beyond the health system. Critically, there was no publicly available, central reference training package that focused on all the interventions recommended for CFE, including multi-sector interventions. Where tools were available, barriers to their use identified by the desk review as well as feedback from stakeholders included:

- Lack of awareness of existing tools and the need to ensure greater access to those available at both the global and country level.
- Many tools were long and not "field-friendly" or embedded in long guidance documents. Additionally, stakeholders perceived many tools as intended for development settings where there is more time to plan and establish programs. However, these tools may not be practical in humanitarian settings, especially in the initial months of a response requiring rapid start-up.
- Availability of tools in languages other than English was also found to be a common barrier.

Implications of the Gaps

Children 6–23 months are highly vulnerable to sickness, malnutrition, and even death, particularly during emergencies. This age group has very high nutrient requirements and ensuring appropriate diets requires adoption of a variety of feeding recommendations. Following recommended practices is challenging for many families even in normal circumstances, but humanitarian situations exacerbate these constraints.

The UNICEF Action Framework, launched in 2021, goes beyond previous guidance for CF by recommending actions beyond the household and the health system with an increased focus on interventions through multiple systems to ensure the physical availability and financial access to nutritious foods and a holistic approach to supporting caregivers in the adoption of recommended behaviors. Prior to the launch of this guidance, the emphasis of interventions to support CF was on influencing practices through SBC.

This historic emphasis is reflected in the availability of tools with many resources to support SBC interventions for CF. Fewer resources were available to support implementing multi-sectoral interventions that increase access and availability to inputs and services for caregivers adopting recommended behaviors or for program designers and implementers advocating, assessing, and building capacity in holistic CFE interventions. Providing standard information for CF without addressing challenges to these recommendations will limit effectivity in protecting diets. Additionally, SBC interventions are less effective in areas where food, fuel, water, and cooking equipment may not be available or accessible. Tools to support the stages of IYCF emergency program establishment—from assessments to response plan development, resource mobilization, training, and implementation—are available but also have limited emphasis on CF.

The OG-IFE and Action Framework together provide detailed steps to improving CF in humanitarian situations. However, there is a need to further develop available tools to support these recommendations. Additionally, practitioners require easy access to understand which tools are available and how to use them.

Conclusions and Next Steps

Although there has been progress on improving IYCF-E, the emphasis has been on protecting and promoting exclusive breastfeeding rather than on CFE. This emphasis is reflected in the tools available to support CFE policy, planning, and programming. Given the updated OG-IFE and the new UNICEF Action Framework, there is a need to revisit and update existing tools, adapt CFE tools intended for development settings for emergency contexts, fill gaps by developing new resources, and ensure all tools are accessible and usable for humanitarian staff.

The following table includes a list of recommendations from this gap analysis. The research team built these recommendations from common stakeholder suggestions, observations of the desk review of existing tools, and feasibility of filling the gaps. This gap analysis report includes a longer list of recommendations throughout.

Overall Finding	Recommendation
1. Existing tools for CF programming are not easily accessible as they are embedded in a wide variety of resources.	1. Establish a repository for CF tools that is accessible to field practitioners (this has been partially addressed through the creation of a CFE section in the IYCF-E Hub).
2. A critical gap in programming for CFE is linking assessment findings to program design.	2. Develop a CFE Decision Tool to support practitioners in analyzing and applying assessment findings to design CFE programming. This should include consideration for multi-sectoral interventions.
3. There is no comprehensive training package focused on CFE for field practitioners.	3. Develop and promote brief e-learning training modules that support CFE programming.
4. While there are a number of tools for conducting formative research to design complementary feeding interventions in development contexts, these may be too time-intensive for emergency settings.	4. Develop a rapid assessment tool for identifying barriers and solutions to recommended complementary feeding practices suitable for the first phase of an emergency.
5. Few multi-sectoral assessments and response plans include a focus on CFE.	5. Advocate with the United Nations Office for the Coordination of Humanitarian Affairs (UN-OCHA) and relevant Clusters to include CFE in assessments and program actions in multi-sector emergency responses.
6. The majority of tools support actions through the health system and SBC. There are limited tools to support implementation interventions for CFE beyond the health system, such as food security, WASH, shelter non-food items (NFIs), and protection.	6. Assess how actions to support CFE may be embedded in core resources of key sectors (such as food security, health, shelter/NFIs, WASH, and protection). Advocate to embed tools and actions to support CFE in these resources and in multi-sector emergency response tools.

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January 2023

USAID Advancing Nutrition is the Agency s flagship multi sectoral nutrition project, addressing the root causes of malnutrition to save lives and enhance long-term health and development.

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