IMPROVEMENTS TO THE USAID/FFP FOOD BASKET:
PRODUCT UPGRADES AND INNOVATIONS, PROCESSES FOR
MODIFYING THE FOOD BASKET, AND COMMUNICATIONS WITH
PARTNERS

A Report from the Food Aid Quality Review

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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AMS</td>
<td>Agricultural Marketing Service</td>
</tr>
<tr>
<td>ARRs</td>
<td>Annual Results Reports</td>
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<td>CAC</td>
<td>Codex Alimentarius Commission</td>
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<tr>
<td>CSB</td>
<td>Corn-Soy Blend</td>
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<tr>
<td>CSB+</td>
<td>Corn-Soy Blend Plus</td>
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<td>FACG</td>
<td>Food Aid Consultative Group</td>
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<td>FAQR</td>
<td>Food Aid Quality Review</td>
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<td>FAS</td>
<td>Foreign Agricultural Services</td>
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<td>FBF</td>
<td>Fortified-Blended Foods</td>
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<td>FFP</td>
<td>Office of Food for Peace</td>
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<tr>
<td>FY</td>
<td>Fiscal Year</td>
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<tr>
<td>GMO</td>
<td>Genetically Modified Organism</td>
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<tr>
<td>HEB</td>
<td>High-Energy Biscuits</td>
</tr>
<tr>
<td>IUNS</td>
<td>International Union of Nutritional Sciences</td>
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<tr>
<td>MAM</td>
<td>Moderate Acute Malnutrition</td>
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<tr>
<td>MFFAPP</td>
<td>Micronutrient Fortified Food Aid Pilot Project</td>
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<tr>
<td>MQ-LNS</td>
<td>Medium-Quantity Lipid-Based Nutrient Supplement</td>
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<td>MT</td>
<td>Metric Ton</td>
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<tr>
<td>NGOs</td>
<td>non-governmental organizations</td>
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<tr>
<td>NSRDEC</td>
<td>U.S. Army Natick Soldier Research Development and Engineering Center</td>
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<tr>
<td>PDCASS</td>
<td>Protein Digestibility-Corrected Amino Acid Score</td>
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<tr>
<td>PREP</td>
<td>Pipeline Resource and Estimate Proposal</td>
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<tr>
<td>RUSF</td>
<td>Ready-to-Use Supplemental Food</td>
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<td>RUTF</td>
<td>Ready-to-Use Therapeutic Food</td>
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<tr>
<td>SC+</td>
<td>Super Cereal Plus</td>
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<tr>
<td>SNF</td>
<td>Specialized Nutritious Food</td>
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<tr>
<td>SQ-LNS</td>
<td>Small-Quantity Lipid-Based Nutrient Supplement</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNICEF</td>
<td>United Nations Children's Fund</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>USDA</td>
<td>United States Department of Agriculture</td>
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<td>USG</td>
<td>U.S. Government</td>
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<tr>
<td>WBSCM</td>
<td>Web-Based Supply Chain Management</td>
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<tr>
<td>WFP</td>
<td>World Food Programme</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>WSB</td>
<td>Wheat-Soy Blend</td>
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I. EXECUTIVE SUMMARY

Why FAQR Undertook This Activity

The Food Aid Quality Review (FAQR) is a partner of United States Agency for International Development Office of Food for Peace (USAID/FFP), which seeks to support the agency with actionable recommendations for improving food aid products, programs, and processes. Under contract AID-OAA-C-16-00020, USAID/FFP tasked FAQR with recommending updates and potential improvements to the mix of products available for procurement and use in USAID/FFP programs often called the “food basket”. The USAID/FFP food aid programs benefit millions of people around the world, and the aid environment of high demand and limited funding necessitates that the products used are as efficient as possible. Thus, the food basket should contain a diverse range of cost-effective products suited to meet the nutritional needs of recipients, and these products should be programmed as intended.

Conclusions

FAQR identified a) upgrades that USAID/FFP can make to existing products, b) cutting-edge research on product formulation and nutrition science, and updates to food standards that should guide product development, c) a process for incorporating additional products into the food basket, and d) strategies for communicating food basket updates and changes to partners.

Recommendations

FAQR recommends that USAID/FFP incorporate the findings of this report into its overall mandate through three overarching actions:

1. **Implement advanced data systems for tracking and sharing food aid information.** This will allow USAID/FFP to track food aid programming in real time, monitoring and proactively responding to product-related issues and trends. If systems were built to record programmatic details (such as program type, frequency of product distribution, etc.), intended and actual outcomes, it would facilitate periodic, agency-wide impact evaluations and other advanced systematic analyses.

2. **Institutionalize a new product approval process.** It should be based on the process FAQR and USAID/FFP has developed in partnership, and will create transparency, objectivity, and accountability while facilitating product innovations that could lead to more cost-effective programming.

3. **Modify the product mix to meet evolving global standards and program needs.** The first step in making food basket changes is to institutionalize processes for approving new products. Once a process is in place, changes to products should be driven by standards set by normative bodies (e.g., World Health Organization, or WHO, and Codex
Alimentarius Commission, or CAC) and participant or program need. Improvements can best be achieved by partnering with the private sector and other stakeholders.

4. **Continue to host meetings and activities around the food basket.** Two new recommended activities that can be combined with existing USAID/FFP activities are 1) a “Next-Generation Food Aid” meeting to establish business relationships for specialized nutritious food (SNF) production, research, and development, 2) an annual Food Aid Basket roundtable or presentation to ensure partners are aware of all the products available for programming, the nutritional differences between products, and how they should be used. Three activities that should continue are the 1) semiannual Food Aid Consultative Group (FACG) meetings, the 2) USDA-USAID interagency working group, and 3) the international food assistance conferences that have been held in the past and should be revived. These are valuable forums for sharing updates to the food basket, sustaining supplier and implementing partner engagement, and catalyzing collaborative problem-solving. In addition, USAID/FFP should support a training series on a) what is in the basket of food aid products, b) what principles partners should follow when making food choices, and c) how to use different food aid decision-making tools. Make this training available and work to ensure annual completion by key personnel within implementing partner agencies.
II. RECOMMENDED ACTIONS

In this table, we prioritize the 18 recommended actions made in this report based on two factors: Urgency (defined by a need to act within the next 6 months) and combined Effort and Cost (defined by the resources needed to complete the activity in terms of man hours, number of involved individuals, timeline to implement, and cost investment). While all these actions are important and should be pursued by USAID/FFP, the five actions that are high urgency, low resource should be pursued as a top priority, followed by high urgency, high resource actions, then low urgency, low resource actions, and finally the low urgency, high resource actions.

<table>
<thead>
<tr>
<th>Urgency (high / low)</th>
<th>Effort &amp; Cost (high resource/low resource)</th>
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</thead>
<tbody>
<tr>
<td>1) Hold an regular Food Aid Basket roundtable, ensuring that each prime awardee organization participates with at least one representative. This event would review the full menu of products, the nutrient content, technical guidance for how the products should be used, and information on their effectiveness and cost-effectiveness. Ideally this would be an annual event or held on a regular, predictable basis if annually is not possible. This could be accomplished by incorporating it into the FACG meetings or larger food-assistance conference (described in Action 10).</td>
<td>High Urgency Low Resource</td>
</tr>
<tr>
<td>2) Develop a training series on a) what is in the basket of food aid products, b) what principles partners should follow when making food choices, and c) how to use different food aid decision-making tools. Make this training available annually, and work to ensure participation by implementing partner agencies.</td>
<td>High Urgency Low Resource</td>
</tr>
<tr>
<td>3) Re-issue the A20 paste pouch, A28 rice bar, and A29 wheat bar product specifications. Work with interested manufacturers to make potential products appropriate for emergency response.</td>
<td>High Urgency Low Resource</td>
</tr>
<tr>
<td>4) Regularly update nutritional content information for all food aid products in the USDA Agricultural Research Service National Nutrient Database for Standard Reference and enhance other public communications to include PDCAAS score, omega-3 and omega-6 fatty acid content, grams of carbohydrate, and grams of free sugar. Having updated, accurate, detailed information about products will make it easier to evaluate the feasibility of changing products when the WHO or CAC make changes to food standards. It will also help to ensure that partners involved in product programming are informed of product content and create transparency for the recipients of USAID/FFP products.</td>
<td>High Urgency Low Resource</td>
</tr>
</tbody>
</table>
5) Reach out to additional food manufacturers to explore their ability to supply high-demand SNF products.  

6) Continue working toward an online system for proposing novel products or product updates. USAID/FFP might consider bringing in consultants from learning management systems used at universities, such as Canvas (https://www.canvaslms.com/); these systems operate using many of the functionalities mentioned here.

7) Implement a Web-based dashboard for agency (and possibly partner) use that visually represents important procurement trends and product use analysis in real-time. The dashboard would be integrated with procurement data to provide geospatial visualizations of procurements, deliveries, warehouse stocks, cumulative annual volumes of individual product procurements across the entire menu of products, and volume of individual products by country and program type. Such a system would dovetail with efforts to implement a barcode tracking system. With this, USAID/FFP will be able to track how products are being used, allowing for rapid response and troubleshooting. If the system were designed to incorporate program variables such as target recipient, ration size, intervention duration, and outcomes, it could ultimately be used to conduct regular cross-program reviews of how products are used and how they can be used more effectively.

8) Establish a single USAID/FFP landing Web site and partner management system and assign relevant staff to maintain the site. Important food basket-related links should include relevant technical guidance materials such as the FFP Management Information System Ration Calculator, the FFP Modality Selector Tool, the Country Desk Reviews, information bulletins issued by USAID/FFP, and a mechanism for eliciting feedback about products and programs from partners and recipients.

9) Institute the process described here, or one similar, to review and accept novel products in the food aid product mix. Identify and appoint key personnel to complete specific roles and identify a roster of external experts on whom to call when needed. The process could be formalized by developing an interagency policy in coordination with necessary staff at USDA and USAID. Annex 10. Approval Process Policy Directive Template provides an example policy directive and Terms of Reference that can be used as a template.

10) Host regular (every 2 years) conferences on food assistance programming, similar to the International Food Aid and Food Security Conference that has historically taken place in Kansas City. During these regular conferences, USAID/FFP should host a product usage workshop, where all food assistance operations over the previous fiscal year are reported, along with an assessment of how well
programs are meeting fit-for-purpose goals and where there is room for improvement. Leverage the USAID-USDA interagency partnership to get agency buy-in for this activity.

| 11) Finalize the development of HEB 2.0 so that it can be programmed as soon as possible. | High Urgency | High Resource |
| 12) Work with manufacturers to optimize the nutrient content and product shelf life of RUSF, making it appropriate for emergency response. | High Urgency | High Resource |
| 13) Require partners to include more detailed ration information in PREPs and ARRs. This would enable better monitoring of product effectiveness and facilitate regular reviews of whether products are being used appropriately and effectively. | Low Urgency | Low Resource |
| 14) Continue to participate in industry conferences and meetings, and possibly convene a “Next Generation of Food Aid” meeting with global experts, to monitor the innovations listed here and determine strategies for implementing promising innovations. | Low Urgency | Low Resource |
| 15) Develop a communication flow for alerting partners to product updates and changes and identify what information will be shared about each new product that is made available for procurement. | Low Urgency | Low Resource |
| 16) Continue funding research to understand the cost-effectiveness of SNFs for relevant nutritional outcomes, such as preventing wasting, treating moderate acute malnutrition (MAM), and preventing low birth weight. This will deter partners from relying so heavily on the price per unit when selecting products and encourage partners to consider cost-effectiveness as a core element of programming decisions. | Low Urgency | High Resource |
| 17) Innovate the range of products available by 1) adding non-GMO products, such as the already developed sorghum-cowpea blend, 2) adding a micronutrient powder, 3) adding SQ-LNS and MQ-LNS products, 4) pursuing measures to minimize product mycotoxin content and fumigant exposure, and 5) enforcing a standard product shelf life of at least 18 months. | Low Urgency | High Resource |
| 18) Consider establishing annually awarded, publicly announced, short-term (e.g., 1-2 year) innovation “incubator” grants to product and packaging manufacturers. | Low Urgency | High Resource |
III. BACKGROUND

For more than 60 years, the USAID/FFP has brought food assistance to the far reaches of the world through a mission to reduce hunger and malnutrition by ensuring that adequate safe and nutritious food is widely available. Since 2009, USAID/FFP has also partnered with Tufts University to implement the FAQR project. FAQR provides USAID/FFP and its partners with actionable recommendations for improving nutrition in vulnerable people through food aid products, programs, and operational processes.

IV. OBJECTIVES AND METHODS

As part of FAQR Phase III, the project was tasked with providing recommendations for improving the selection of food products available for USAID/FFP procurement. This report addresses the following FAQR objectives of contract AID-OAA-C-16-00020:

- Produce recommendations on potential upgrades to discontinued/unused commodities.
- Explore innovations in product development and technologies that could enhance the food aid basket.
- Help FFP define a process by which products should be assessed for addition to the basket, bearing in mind the need for streamlining and/or updating existing processes.
- Define a process for periodic review of scientific and programmatic evidence on products, programming, and process issues.
- Provide guidance on public announcements of new products and the preparation and distribution of “when and how to use” materials, as well as recommendations regarding monitoring and evaluation of the effectiveness of such products.

This report summarizes what was learned about the food basket – the mix of products available for procurement and use in USAID/FFP programs. It reviews broad product procurement trends, potential product improvements, how product changes are made, and how that information is communicated to partners. At the close of each section, the report offers recommendations for both improving USAID/FFP operations and supporting a food basket that is fit-for-purpose — that is, able to prevent or resolve various forms of malnutrition. To address these objectives, FAQR engaged in 18 activities (See Annex 1. List & Description of Workstream Activities and Annex 2. Engagement Activity Methodology Details) between July 2016 and September 2018, ranging from desk reviews and product analyses, to stakeholder interviews and focus group discussions. These activities were accomplished through close collaboration with essential stakeholders, including: USAID, the United States Department of Agriculture (USDA), United Nations (UN) entities, U.S. Army Natick Soldier Research, Development and Engineering Center (NSRDEC), food aid industry players, implementing partners, non-governmental organizations (NGOs), and others.
IV.a. Potential Upgrades to Discontinued and Unused Products

To recommend potential improvements to infrequently used or unused commodities, the FAQR team needed to itemize all products currently available for procurement. Procurement data were subsequently analyzed to determine food aid procurement trends, including which products are not used, and which are no longer available. Stakeholders were also interviewed to understand why they choose to use or not use certain products.

What are the USAID/FFP food aid products?

The list of products available for procurement is published quarterly on the USAID/FFP Web site, under the title Commodity and Ocean Freight Price Estimates. There are currently 33 products listed there – 16 commodity products and 17 SNF products (Table 1). USAID/FFP also maintains a Food Aid Product Information Guide, which contains information on 25 of these products, including their nutrient content and general programming uses.

The commodity products are milled, fortified grains and legumes intended to be used in blanket feeding programs — not intended to target specific recipient groups — that shore up food security. The SNFs contain different mixes of nutrients specially formulated to prevent and treat child undernutrition and support the health of nutritionally vulnerable groups.

Of the commodity products, there are nine staple grains (some of which are fortified), five pulses or legumes, and two types of oil (one fortified). The SNFs include two soy-fortified products, five fortified-blended foods (FBFs), five ready-to-use foods, four nutritional “modulars” (i.e., additives), and fortified rice.

Eleven products are fortified with a micronutrient premix: wheat, flour, bulgur, cornmeal, soy-fortified bulgur, corn-soy blend (CSB), CSB plus, super cereal plus (SC+), CSB instant, wheat-soy blend (WSB), and fortified rice. Five of these — wheat, flour, bulgur, cornmeal, and soy-fortified

<table>
<thead>
<tr>
<th>COMMODITIES (16)</th>
<th>PULSES / LEGUMES</th>
<th>Beans packaged (9 varieties)</th>
<th>Lentils packaged</th>
<th>Peas packaged (4 varieties)</th>
<th>Soy flour packaged</th>
<th>Soybeans packaged</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STAPLE GRAINS, GRAIN PRODUCTS &amp; TUBERS</td>
<td>Bulgur packaged</td>
<td>Corn bulk and packaged</td>
<td>Cornmeal packaged</td>
<td>Potato Flakes packaged</td>
<td>Potato Granules</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ripe bulk and packaged (7 varieties)</td>
<td>Sorghum bulk and packaged</td>
<td>Wheat bulk (7 varieties); packaged (7 varieties)</td>
<td>Wheat Flour packaged (2 varieties)</td>
<td></td>
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<tr>
<td></td>
<td>OIL</td>
<td>Soybean Oil bulk</td>
<td>Vegetable Oil (fortified) packaged</td>
<td></td>
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<td></td>
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<tr>
<td>SNFs (17)</td>
<td>SOY</td>
<td>Soy-fortified Bulgur</td>
<td>Soy-fortified Cornmeal</td>
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<td></td>
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<tr>
<td></td>
<td>FORTIFIED-BLENDED FOOD</td>
<td>Corn-Soy Blend (CSB)</td>
<td>CSB Plus (CSB+)</td>
<td>CSB Plus or Super Cereal Plus (SC+)</td>
<td>CSB Instant</td>
<td>Wheat Soy Blend (WSB)</td>
</tr>
<tr>
<td></td>
<td>READY-TO-USE FOODS</td>
<td>A20 Paste Pouch</td>
<td>A28 Rice Bar</td>
<td>A29 Wheat Bar</td>
<td>High Energy Biscuit (HEB)</td>
<td>RUTF</td>
</tr>
<tr>
<td></td>
<td>OTHER</td>
<td>Soy Protein (isolate)</td>
<td>Soy Protein (concentrate)</td>
<td>Soy Protein (textured)</td>
<td>Fortified Rice (2 varieties)</td>
<td></td>
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</tbody>
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bulgur — share the same micronutrient premix. The FBFs do not share a single common micronutrient premix.

Overall procurement trends

FAQR reviewed the Web-Based Supply Chain Management (WBSCM) database, which is a record of food aid product purchases and procurement information starting in May 2011. This information shows that from FY 2011 through FY 2016, staple grains accounted for an average 80 percent of total metric tons (MT) procured and 55 percent of costs (as percent of total MT procured among Title II and Bill Emerson Humanitarian Trust programs).

Over this time, SNFs (excluding fortified vegetable oil) only accounted for 6 percent of procured MT and 11 percent of costs. CSB and CSB+ were the most procured SNF products, accounting for 74 percent of the total MT of SNFs procured. In FY 2016, just 6,500 MT of RUTF and 4,750 MT of RUSF were procured.

In recent years, most food aid has supported emergency programs, with the resources dedicated to emergency operations increasing significantly. In FY 2017, 92 percent (2.8 million MT) of programmed food products were allocated to emergency programs at an average cost of $1.107 per MT. This is double the amount programmed in FY 2016 (1.2 million MT at $1.167 per MT).

The WBSCM system currently tracks the products that are procured, their receiving port location, and the organization responsible for distributing the product in-country. However, it does not track the “last mile” of product delivery — where products are distributed to end-users (e.g., food distribution points, clinics), how frequently they are distributed, or in what types of programs they are used. Including this missing information in the WBSCM procurement tracking system, or a separate but linked system, would add significant value because it would allow USAID/FFP to identify which products are used in which programs. With this information, USAID/FFP would be able to conduct annual assessments to evaluate if products are being programmed appropriately to meet intended nutritional goals.

Discontinued products

Records from the WBSCM database and historical Commodity and Ocean Freight Price Estimates show there are 18 products that are discontinued (meaning they were once but are no longer available) since FY 2011 or unused (meaning they have been procured in relatively low volumes, or less than 50 MT annually). There are 12 discontinued products: barley, buckwheat, corn oil, sorghum grits, sunflower seed oil, tallow, dried skim milk, soy-fortified sorghum grits, wheat-soy milk, canned pink salmon, dehydrated soup mix, and processed raisins.

Unused Products
Overall, five products on the current list of available products were not procured for use in USAID/FFP programs from FY 2011 through FY 2016: CSB instant, potato flakes, soy protein concentrate, soy protein isolate, and textured soy protein. Through interviews with stakeholders involved in making decisions about which products to program (Annex 3. Key Takeaways from Partner Interviews), FAQR learned that these products were not programmed for the following reasons: not knowing they were available, not knowing what need they serve, not seeing them as viable options for the context, not seeing them as viable options because the unit cost is too high, and/or not know how to program them.

In FY 2016, just 18 of the 28 the available products were procured in significant volumes. Based on our interviews, the best explanations for this are that partners are not taking advantage of the full flexibility of the USAID/FFP product mix and that some products are, for various reasons, not viewed as useful in current FFP programs. To fill the knowledge gaps that prevent partners from using potentially appropriate products, USAID/FFP should take action to ensure that training on all products and their uses is available, and information on these topics is disseminated to program designers and implementers. USAID/FFP should also support technical capacity-building activities, including events focused on the mix of products available and how they can be used.

**Products with Potential for Broader Application**

There are six highly-specialized products appropriate for specific situations and nutrition conditions that have historically been procured in limited quantities. These include ready-to-use therapeutic food (RUTF), ready-to-use supplemental food (RUSF), high-energy biscuits (HEBs), A28 rice bar, A29 wheat bar, and A20 emergency paste pouch.

Of these products, five have a potential broader application in future programming, especially around emergency response: HEBs, RUSF, A28 rice bar, A29 wheat bar, and A20 emergency paste. The three characteristics that make these products excellent candidates for emergency activities are that they: 1) can be delivered quickly, 2) have the possibility of servicing multiple populations (from young children to pregnant women to elderly), and 3) could be safe to consume and appropriate to prepare given limited resources or infrastructure (such as lack of clean water or access to cooking facilities).

USAID/FFP is actively collaborating with the World Food Programme (WFP) to develop HEB 2.0, which is an updated version of the current HEB formulation, to meet these programming parameters. The remaining products - RUSF, A28 rice bars, A29 wheat bars, and the A20 emergency paste pouch - would each have to be adapted in certain ways (e.g., ensuring that the nutrient formulations are safe for different levels of consumption and the packaging supports a shelf life greater than 18 months) and tested before being widely used in emergencies. There is also an increased global focus on preventive nutrition programs that often use food supplements for maternal-age adolescents and pregnant or lactating women. This is also likely to increase the global demand for RUSF.
Recommendations

❖ Implement a Web-based dashboard for agency (and possibly partner) use that visually represents important procurement trends and product use analysis in real-time. The dashboard would be integrated with procurement data to provide geospatial visualizations of procurements, deliveries, warehouse stocks, cumulative annual volumes of individual product procurements across the entire menu of products, and volume of individual products by country and program type. Such a system would dovetail with efforts to implement a barcode tracking system. With this, USAID/FFP will be able to track how products are being used, allowing for rapid response and troubleshooting. If the system were designed to incorporate program variables such as target recipient, ration size, intervention duration, and outcomes, it could ultimately be used to conduct regular cross-program reviews of how products are used and how they can be used more effectively.

❖ Continue funding research to understand the cost-effectiveness of SNFs for relevant nutritional outcomes, such as preventing wasting, treating moderate acute malnutrition (MAM), and preventing low birth weight. This will deter partners from relying so heavily on the price per unit when selecting products and encourage partners to consider cost-effectiveness as a core element of programming decisions.

❖ Hold an annual Food Aid Basket roundtables and presentations, asking each prime awardee organization to participate with at least one representative annually. This event would review the full menu of products, the nutrient content, technical guidance for how the products should be used, and information on their effectiveness and cost-effectiveness. Consider making this an annual event, incorporating it into the FACG meetings or larger food-assistance conference.

❖ Develop a training series on a) what is in the basket of food aid products, b) what principles partners should follow when making food choices, and c) how to use different food aid decision-making tools. Make this training available annually, and work to ensure participation by implementing partner agencies.

❖ Finalize the development of HEB 2.0 so that it can be programmed as soon as possible.

❖ Re-issue the A20 paste pouch, A28 rice bar, and A29 wheat bar product specifications. Work with interested manufacturers to make potential products appropriate for emergency response.

❖ Work with manufacturers to optimize the nutrient content and product shelf life of RUSF, making it appropriate for emergency response.
IV.b. Innovations in Product Development and Technologies That Could Enhance the Food Basket

To suggest innovations that could enhance the food aid basket, FAQR collected opinions from experienced implementing partners and manufacturers (Annex 3. Key Takeaways from Partner Interviews and Annex 4. Proceedings from a Side Meeting at the 2016 Food Aid and Food Security Conference), and participated in activities related to food technology, attending industry meetings and staying abreast of relevant literature. USAID/FFP should continuously monitor innovations in product formulations that could better meet recipient nutrient needs, improve short- and long-term nutritional outcomes, and increase the usefulness of products. The goal should not be to provide foods that are over-engineered, but rather to provide foods that have a sustained impact on the well-being of recipients.

**What innovative product changes would partners like to see?**

There were several potential product changes suggested by implementing partners. As a principal concern, partners often said that a major goal is to increase recipients’ intake of diverse, nutrient-dense foods. To this end, they would like to see more fortified commodities and a greater selection of SNFs (formulated with various grain bases) made available for procurement. According to partners, it is especially important have multiple commodity bases (i.e. rice, corn, wheat) available to meet the preferences of recipients in different countries, each of which is accustomed to having one or two specific staple grains for the basis of their diets. To achieve this, USAID/FFP might also consider adding a micronutrient powder to the selection of food aid products, to better support nutrition-specific programming, as well as consider sorghum- and rice-based FBF products.

Partners reported that they are facing anti-genetically modified organism (GMO) regulations in some contexts (particularly in parts of Africa), which has meant that some partners now avoid programming any products containing soy or corn. Alternatives such as the new sorghum-cowpea blend — which was developed through the Micronutrient Fortified Food Aid Pilot Project (MFFAPP) and is currently seeking product manufacturers — should be made available in these instances.

Stakeholders also expressed demand for foods that can be safely consumed by both mothers and children — as supplemental calories for mothers and as complementary foods for children. Although FBFs can be used in this way, this does not seem to be a common rationing approach according to our conversations with stakeholders. This highlights the need to educate partners on the different ways FBFs can be rationed to serve various recipient groups. It also illustrates the demand for two products that meet these needs and, unlike FBF, can be used across emergency and development settings: small-quantity and medium-quantity lipid-based nutrient supplements (SQ-LNS, MQ-LNS). These products, weighing about 20-50 g and providing approximately 100-300 calories daily, have been used safely and effectively for certain metrics of
undernutrition among mothers and children (Caiafa, et al., 2019). While SQ-LNS and MQ-LNS are not currently offered as part of the food basket, USAID/FFP should consider making them available for prevention-oriented programs.

Lastly, some partners expressed concern about food safety. Three specific areas of concern include mycotoxin levels, fumigation, and shelf life. Partners are wary about the effects of programming foods with high mycotoxin content, and USAID/FFP has been acting to address this. The agency recently added standards for acceptable levels of vomitoxin (a class of mycotoxin) to the product specifications sheet for RUTF, meaning that a sample of the product can only contain vomitoxin within predetermined levels. However, there are no such standards for the 31 other products. USAID/FFP should consider making similar changes to the specifications for all other food aid products that could be susceptible to harmful levels of mycotoxins. Furthermore, some concern was expressed regarding the fumigation practices that are used at shipping ports and the potential health risks these practices pose to warehouse staff and recipients. Given the large constituency of stakeholders interested in this issue, USAID/FFP may want to consider alternative strategies for controlling pests in food aid products.

Furthermore, partners commonly reported that product shelf life, especially for CSB and CSB+, is actually shorter than the product packaging indicates. USAID/FFP can work with manufactures to identify formulation and packaging solutions that ensure these foods are safe when they reach the point of consumption.

Research trends and product innovations

FAQR has stayed abreast of cutting-edge science and food technology by collaborating with colleagues in the nutrition sphere and participating in international events, such as the 2016 International Food Security and Food Assistance Conference, the IUNS 21st International Congress of Nutrition, the 2018 Food and Nutrition Conference and Expo, and meetings of the Inter-Agency Working Group for Specialized Nutritious Foods. FAQR has also engaged with scientists at the U.S. Army NSRDEC and Edesia Nutrition, attended the New England Food Technology Forum, and reviewed literature. Through these activities, the team has learned about new developments relevant to food aid and potential food aid innovations on the horizon, which are described in the following sections and included in a memo-style format in Annex 5. The Next Generation of Food Aid: Hot Topics & Potential Formula Innovations.

The following emerging issues are relevant to USAID/FFP programming and should be tracked through participation in industry and food aid conferences. USAID/FFP should consider meeting with relevant stakeholders to determine strategies and protocols for addressing the following issues and innovations.

Relevant issues that should be discussed include:

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1 Mycotoxins are substances formed by certain types of fungi that can cause disease or death in humans.
A newly established Protein Digestibility-Corrected Amino Acid Score (PDCAAS) target score for FBF and RUF products (FAO, 2018)

Newly established amino acid patterns for FBF and RUF products (FAO, 2018)

Increased understanding of the influence of essential fatty acid content in food aid products (Hsieh, et al., 2015) (Jones, et al., 2015)

Investigations into how macronutrient proportions in food aid products influence nutrition outcomes (Fabiansen, et al., 2017)

2015 WHO guidance that calls for limiting free sugar\(^2\) intake to less than 5 percent of total calories consumed (World Health Organization, 2015) (Vos, et al., 2017)

Formula innovations that should be explored include:

- Novel grain bases for FBFs and RUFs (e.g., rice, sorghum (Amegoyu, et al., 2014), corn (Randomized Controlled Trial in South Africa Comparing the Efficacy of Complementary Food Products on Child Growth (TSWAKA), 2019), and amaranth (Zebdewos, et al., 2015) (Omollo, 2014))
- Novel legume ingredients for FBFs and RUFs (e.g., soy meal, chickpea meal (Christian, et al., 2015), lentil meal (Ahmed, et al., 2014))
- Novel fat sources for LNSs (e.g., sesame paste, coconut butter, etc.)
- Novel protein ingredients (e.g., caterpillar (Bauherman M., et al., 2015) (Bauherman M., et al., 2015), cricket powder (Caparros Medigo, et al., 2016), shrimp powder (Sulistiyono, Herawati, & Arya, 2017), and algae (Wells, et al., 2016))
- Individual protein or amino acid additives (Bahwere, et al., 2017)
- Alternative milk powders (i.e., milk fat globule membrane) (Timby, Domellöf, Hernell, Lönnerdal, & Domellöf, 2014) (Timby, et al., 2015) (Hernell, Timby, Domellöf, & Lönnerdal, 2016)
- Anti-parasitic ingredients (Jourdan, Lamberton, Fenwick, & Addiss, 2018) (ClinicalTrials.gov, 2019)
- Probiotics & prebiotic ingredients (Kerak, et al., 2009)

**Working with partners to facilitate product innovations**

Product changes cannot be made without consideration for, and input from, food manufacturers and packaging suppliers. Conversations with manufacturers suggested a widely held perception that there are significant challenges to supporting product innovation (Annex 4. Proceedings from a Side Mtg at the 2016 Food Aid and Food Security Conference). However, there is little incentive for suppliers to make changes to products. From the supplier perspective, the costs of bringing new products and packaging into the market are prohibitively high, especially in the absence of external funding, subsidization, or support. Even without these financial barriers, suppliers do not want to invest in making changes to products. This is partly

\(^2\) Defined by WHO to include monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook, or consumer, and sugars naturally present in honey, syrups, fruit juices, and fruit juice concentrates
because USAID/FFP does not engage in long-term contracts that would guarantee the purchase of products. Companies may be more willing to invest in changes if they have confidence in the ability to sell the product in the long term. Suppliers are also wary of manufacturing food aid products because they have such a specialized purpose that suppliers have no guarantee that products can be sold on the commercial market if USAID/FFP decides not to purchase them. In this way, too, being able to engage in long-term contracts with USAID/FFP is advantageous.

Procurement data shows that in FY 2016, USAID/FFP had 44 commodity suppliers but only 9 SNF suppliers. Within the category of SNFs, there are 4 FBF suppliers (Bunge Milling, Inc., Challenge Dairy Products, Inc., Didion, Inc., and Semo Milling, Inc.), 3 RUSF suppliers (Tabatchnick Fine Foods, Inc., Edesia, Inc., and Mana Nutritive and Products, Inc.) and 3 soy-fortified commodity suppliers (Archer-Daniels-Midland Company, Bungee Milling, Inc., and Semo Milling, LLC). Increasing the number or diversifying these suppliers within SNF sub-categories could benefit USAID/FFP by stimulating healthy competition amongst suppliers, making them more amenable to meeting USAID/FFP’s requests for changes to products. Increasing the number of suppliers could also increase the ability to fill unexpected supply gaps.

FAQR reviewed U.S. suppliers registered with the Agricultural Marketing Service (AMS) and identified 155 suppliers potentially capable of producing food aid products. There are opportunities for USAID/FFP to issue open calls for new products that would engage with additional, new, suppliers.

Another suggestion for stimulating manufacturer-driven engagement is to establish annual USAID-awarded short-term innovation grants, using the United States Department of Agriculture’s (USDA) Foreign Agricultural Services (FAS) Micronutrient Fortified Food Aid Pilot Program (MFFAAP) program as an example. Through this grant program, USAID/FFP could proactively research high-potential new formulations and packaging.

Product changes should also be made through consultation with implementing partners. The partners we spoke with expressed interest in supporting product development by trialing novel products in their programs. When a new product is being considered for approval, USAID/FFP could establish a small-scale pilot period where select partners can procure the new product but would be allowed to change it if it is not accepted by recipients.

**Recommendations**

- Innovate the range of products available by 1) adding non-GMO products, such as the already developed sorghum-cowpea blend, 2) adding a micronutrient powder, 3) adding SQ-LNS and MQ-LNS products, 4) pursuing measures to minimize product mycotoxin content and fumigant exposure, and 5) enforcing a standard product shelf life of at least 18 months.

- Regularly update nutritional content information for all food aid products in the USDA Agricultural Research Service National Nutrient Database for Standard Reference and enhance other public communications to include PDCAAS score, omega-3 and omega-6
fatty acid content, grams of carbohydrate, and grams of free sugar. Having updated, accurate, detailed information about products will make it easier to evaluate the feasibility of changing products when the WHO or Codex Alimentarius Commission (CAC) make changes to food standards. It will also help to ensure that partners involved in product programming are informed of product content and create transparency for the recipients of USAID/FFP products.

❖ Explore the ability of additional food manufacturers to supply high-demand SNF products.

❖ Consider establishing annually awarded, publicly announced, short-term (e.g., 1-2 year) innovation “incubator” grants to product and packaging manufacturers.

❖ Continue to participate in industry conferences and meetings, and possibly convene a “Next Generation of Food Aid” meeting with global experts, to monitor the innovations listed here and determine strategies for implementing promising innovations.

IV.c. Process for Adding Products to the Product Mix

FAQR has worked with USAID/FFP and USDA to devise a formal process for adding new products to the available product mix in the food aid basket. In the past, solicitations for new products have been reviewed by USAID/FFP on a case-by-case basis, usually starting with a company contacting USAID/FFP and then being invited to meet with select USAID/FFP decision-makers. However, the number of solicitations received by USAID/FFP is beyond the agency’s capacity to respond through the existing ad-hoc review system.

To recommend a process, we reviewed policies being used by the WFP New Foods Committee and processes used by United Nations Children’s Fund (UNICEF) and grocery chain Trader Joe’s. We also consulted with USAID/FFP, the USDA, the Inter-Agency Working Group for Specialized Nutritious Food Products, product manufacturers, and experts on the FAQR team.

Based on this expert input, FAQR proposes a three-step process (Figure 1): 1) Solicitors or prospective vendors review food aid product requirements online and can submit a proposal only if their product meets these requirements. 2) Appointed technical experts review the proposal to determine if the product warrants further discussion. 3) An external and internal review committee uses an assessment tool to evaluate if the product should be made available and makes a final recommendation to the USAID/FFP Director.
Step 1: Prospective vendors review USAID and USDA product requirements and submit an online proposal if appropriate.

It is important that interested vendors know up front what USAID/FFP needs from its suppliers and the products it programs. FAQR developed a set of “Guiding Principles for Novel Food Aid Products” describing the types of programs that use food aid products and what characteristics or minimum requirements USAID/FFP needs from any products it uses (Annex 8. Suggested Guiding Principles for Considering Novel Food Aid Products). USAID/FFP should amend this document as necessary, share it with partners, and post it on a publicly accessible Web page.

After reviewing these product requirements, a prospective vendor would submit a proposal. FAQR has worked with USAID/FFP and USDA to develop a set of questions that any prospective vendor would need to answer about their product in order to be considered. The form has seven major sections:

1. A description of basic product requirements
2. The proposer’s contact information
3. Essential information about the product being proposed
4. Product packaging information
5. Product performance and safety information
6. Product nutrient information
7. Information on how the product is to be programmed

The proposal form is intentionally divided by technical area, with the idea that a packaging expert would be called on to review section 4, a food scientist would review section 5, a nutritionist would review section 6, and a programming specialist would review section 7.

To improve interagency system efficiencies and more readily foster new business relationships, USAID/FFP and USDA have agreed that an online system should be established to manage these proposals. To this end, FAQR has prepared both a paper-based proposal form (Annex 7. Form
to Submit a Proposal for a Novel Product) and a Web-based questionnaire (which can be found at https://form.jotform.com/81693183105153). The Web-based form differs from the paper-based form in two significant ways. First, because the Web-based form asks applicants to identify up front the type of product being proposed, the form’s internal skip-logic ensures that the applicant is only asked questions relevant to that type of product. Second, it asks a set of critical “gatekeeper” questions that the applicant must respond to in a certain way to continue in the application. Both features simplify the proposal process by reducing the burden on an applicant and minimizing the information that needs to be reviewed. Additionally, electronic forms can require the applicant to answer all or certain questions before being allowed to submit.

For such a system to be most effective, USAID/FFP and USDA would need to have the electronic proposal system accessible from both agencies’ Web sites, and both agencies would need to have access to the forms submitted. To be most successful, this system would require functionalities for efficiently submitting and reviewing proposals. For example, in addition to the functionalities noted above, the electronic proposal form should accommodate open-ended responses and provide the ability to save applications in progress and upload documents. The information submitted would ideally funnel into a back-end database that confidentially logs all the information submitted. The system would be set up so that each time a proposal is submitted, the prospective vendor automatically receives an email confirmation of it with an electronic copy of the submitted form, and the proposal is sent to designated point people within both USAID/FFP and USDA. On the reviewer end, the system should automatically send the proposal to assigned reviewers, and there would be a system that allows the reviewer to use an embedded assessment tool for evaluating proposals.

As they currently stand, both the paper and electronic proposal forms are simple, asking applicants to respond to basic questions about the product without requiring them to submit supporting documentation. However, the forms are thorough enough that most pertinent decision-making information is included.

**Step 2: Appointed technical experts review the proposal.**

The second step of the process involves a proposal review. FAQR recommends a two-phase review through which USAID first seeks preliminary confirmation that the proposed product is viable and then holds a comprehensive review to make an agency-wide determination.

In the first phase, a coordinator at USAID/FFP would receive notice that a new proposal has been submitted. That coordinator would call on appointed technical experts at USAID to review the basic information about the product along with sections of the proposal relevant to their areas of expertise. When USAID internal technical capacity is not sufficient, USAID would request support from external experts. Each expert would review the proposal content, ensuring all relevant questions are answered adequately, noting relevant questions that need additional information, and ultimately providing a recommendation on whether the product
should be considered. The coordinator would collect these recommendations and determine if the proposal warrants committee evaluation. Before the product moves to committee evaluation in Step 3, the coordinator should make sure to collect all relevant product information, described in Annex 8. Recommended Questions to Ask of Novel Products.

**Step 3: A review committee evaluates the product based on an assessment tool to decide if the product should be made available.**

If further review is recommended, the coordinator would schedule an expert committee meeting to evaluate the product using a standard predetermined assessment tool (see Annex 9, Template Rubric for Evaluating a Novel Product Proposal for an example). The committee would come to a consensus recommendation, deciding if the product is provisionally approved or not approved. The coordinator would share this consensus recommendation with USAID leadership, who make a final decision.

To maintain adequate records of these reviews, the coordinator would complete an annual internal report with an overview of the products that have been reviewed, the process followed for their review, their current review status, and a summary of each submitted product application, including evaluation rubric records.

**What will this process achieve?**

Establishing this formal process, or something similar, will reduce the current burden posed by new product solicitations, transparently communicate product needs, and lay the foundation for an objective product approval process. The process accounts for understanding of operational conditions, cost-effectiveness, and international, regional, and/or national needs.

Ideally, this process would be hosted through a Web-based platform for communicating with prospective vendors, track a proposal through each step in the review process, send automated notifications of proposal submissions, and house all related documents, such as assessment tools, terms of reference, and historical review records.

**Recommendations**

- Institute the process described here, or one similar, to review and accept novel products in the food aid product mix. Identify and appoint key personnel to complete specific roles and identify a roster of external experts on whom to call when needed. The process could be formalized by developing an interagency policy in coordination with necessary staff at USDA and USAID. Annex 10, Approval Process Policy Directive Template provides an example policy directive and Terms of Reference that can be used as a template.
- Continue working toward an online system for proposing novel products or product updates. USAID/FFP might consider bringing in consultants from learning management
systems used at universities, such as Canvas (https://www.canvaslms.com/); these systems operate using many of the functionalities mentioned here.

IV.d. Communicating Updates and Changes to Partners

One of the questions FAQR sought to answer through this work was, are stakeholders (including USDA offices, implementing partners, suppliers, shippers, and international partners such as members of the Inter-Agency Working Group for Specialized Nutritious Food Products) able to stay up to date on information about USAID/FFP products and programming?

Partners receive important information through both formal and informal channels. There is constant communication through a vibrant community of practice, technical groups including the Commodity Management Task Force, InsideNGO, and Core Group’s Nutrition Working Group; Technical Operational Performance Support program email listserver notifications; and commodity groups that push out information about their products independently. Partners also rely on several USAID/FFP-supported channels, including direct communications with program Award Officer Representatives or from the USAID/FFP office to headquarters, individual staff, and through public documents and presentations. The semiannual FACG meetings and regular Commodity Working Group meetings were cited as major sources of information and updates. Many of the partners we spoke with cited the International Food Aid and Food Security Conference, last held in 2016 in Kansas City, as an important venue for staying up to date on USAID/FFP operations and changes.

Communicating with partners

USAID/FFP communicates information to partners through several avenues, but partners did not refer to any one information source above all others. USAID should have one consistent, fixed resource for collating and disseminating information critical to USAID/FFP food aid programming.

As a solution to this, FAQR has recommended a Web site “portal,” or section of the USAID/FFP Web site dedicated to food aid programming, which USAID/FFP is working to establish. This portal would function as a one-stop-shop for all food aid-related information, serving as i) a source of institutional memory and a location where all stakeholders could go for needed information, ii) a central location for prospective vendors to access all the necessary materials for proposing a novel product or modifications to an existing product and iii) a venue for eliciting feedback from field offices, which would be especially helpful for learning from recipient needs and preferences, and local experience rolling out new products.

Having all relevant information readily available in one location would be especially helpful for those who make decisions about products. Because partners are especially interested in learning from each other’s challenges and successes, the Web site portal should include a resource that aggregates historical programming information at the country level. It could hold
a record of every food assistance program that has been completed or is underway, the form of assistance used and why, and any lessons learned. Having more historical context about programs would support better decision-making (both within USAID/FFP and among implementing partners) about appropriate food assistance responses.

FAQR also conducted a scan of popular resources to identify strategies for fostering effective communication across large organizations, which are reviewed further in Annex 11, Memo on Good Communication Practices. Five common communications strategies are: 1) Project clarity on a common goal, 2) Engage in three-way conversation that is top-down, bottom-up, and cross-checked to ensure all partners are understood, 3) Foster a sense of community, 4) Make use of technology, and 5) Invest in leadership. These are detailed in the memo, which should be reviewed among USAID/FFPs knowledge-sharing teams.

Public announcements of new products

The Food Security and Nutrition Network and other technical groups are useful resources for disseminating information throughout the network of food aid practitioners. However, because these groups do not have sustainable funding mechanisms and do not target all stakeholders (such as manufacturers, shippers, and commodity managers), they should not be relied on as the sole source of information.

USAID/FFP should identify a strategic communication flow that will be followed to notify stakeholders when a new product is made available for procurement. This is because, for example, when a fortified rice product was recently made available for procurement, there was confusion among partners we spoke with about whether the product was available and how it should be programmed.

One way the agency can eliminate confusion is by releasing an official information bulletin with the publication of each quarterly freight price estimator, including any changes to the availability of food aid products, any new products that have become available, and a link to the product information sheet in the Food Aid Product Information Guide. All the newly released bulletins can be reviewed at semiannual FACG meetings.

We also learned from our discussions with decision-makers that their primary question about new products is, will recipients eat this food? Partners will not procure foods if there is any uncertainty that the product will be accepted by recipients. Therefore, USAID/FFP should make certain to communicate the results of any trials of product acceptability and any cases where the product has been programmed successfully. Additional questions that partners have when considering whether to use new products in programming include:

- How is the product different from other products?
- What is the nutrient content?
- How does the nutrient content relate to daily dietary needs?
- What can the product be used for in USAID/FFP programs?
- What is the evidence for its effectiveness at addressing nutritional issues?
- What evidence is there for the product’s cost-effectiveness?
- Has it been used successfully?
- What is the anticipated supply of the product?
- What, if any, other products are interchangeable with the product?

One way to help ensure that all this information is captured about each new product is by recording a new product Webinar that answers each of the above questions and posting the recording to the USAID/FFP portal Web site. This information should also be recorded through a written template that is made publicly available on the USAID/FFP portal Web site.

Additionally, stakeholders we spoke with expressed an interest in hearing from groups that have experience using products the stakeholders were unfamiliar with and sharing that experience broadly. They also suggested that USAID/FFP provide an opportunity to view a cooking demonstration and participate in a tasting experience. To meet these requests, USAID/FFP might consider hosting a standard workshop at regular international stakeholder meetings, to review the full product mix and the different ways each product can be programmed and allow partners to taste the products. This type of activity could be held at a regular conference (possibly every two years), much like those that have been hosted by USDA and USAID in the past.

Additionally, FAQR created a matrix that contains the nutrient content of each food aid product available for procurement that includes the sources of this information (USAID/FFP Food Aid Products Nutrient Table). This type of nutrient content table has been approved by USAID/FFP as one of the top three priority components of the new USAID/FFP portal. It should be included in a new USAID/FFP Web site and be considered a living document, where the nutrient information of new products is added as they are approved for procurement. This table will improve knowledge about the nutrient content of products, increasing the technical capacity of implementing partners regarding their awareness of the nutritional differences between products. Ultimately, this activity will help to ensure that each food that is programmed is the most appropriate for the intended nutrition goals.

**Monitoring and evaluating the effectiveness of products**

In terms of monitoring and evaluating the effectiveness of specific USAID/FFP products, these types of analyses have typically been conducted as one-off research inquiries by the agency. One way of increasing USAID/FFP’s ability to conduct more regular, systematic evaluations of product effectiveness is to increase reporting requirements about how products are programmed. Although USAID/FFP requires Title II awardees to submit several reports throughout the life of an award, only in the annual Pipeline Resource and Estimate Proposal (PREP) are program awardees instructed to provide an explanation for the proposed quantity and type of products being used in the upcoming project award year (Table 2).
Even though USAID/FFP Requests for Proposals can include specific instructions about the products and rations that are intended for the given program, the documentation of how the planned rations change, and what recipients receive, is lacking. Therefore, USAID/FFP should strictly require PREPs and Annual Results Reports (ARRs) to include documentation of the following:

- What product(s) was decided on for the funding period and why?
- What product(s) was actually used for the funding period, and if there was a change, why it was changed?
- Who was the recipient population?
- What methods were used to distribute the products?
- What ration quantity was provided?
- How frequently was the product distributed?
- Over what period of time were rations provided?
- What changes will be made to the product or program as a result of performance from the reporting period?

Reporting product rationing in more detail will allow for more formal, agency-wide evaluations to determine if products are being under- or over-used. This is especially important to program cost-effectiveness because USAID/FFP should strive to provide enough rations, but not more than is necessary, to reach program goals. In fact, assessments of product rationing should be done regularly to track USAID/FFP product impacts and identify potential for improvements.
**Recommendations**

❖ Develop a communication flow for alerting partners to product updates and changes and identify what information will be shared about each new product that is made available for procurement.

❖ Host regular (every 2 years) conferences on food assistance programming, similar to the International Food Aid and Food Security Conference that has historically taken place in Kansas City. During these regular conferences, USAID/FFP should host a product usage workshop, where all food assistance operations over the previous fiscal year are reported, along with an assessment of how well programs are meeting fit-for-purpose goals and where there is room for improvement. Leverage the USAID-USDA interagency partnership to get agency buy-in for this activity.

❖ Establish a single USAID/FFP landing Web site and partner management system and assign relevant staff to maintain the site. Important food basket-related links should include relevant technical guidance materials such as the FFP Management Information System Ration Calculator, the FFP Modality Selector Tool, the Country Desk Reviews, information bulletins issued by USAID/FFP, and a mechanism for eliciting feedback about products and programs from partners and recipients.

❖ Require partners to include more detailed ration information in PREPs and ARRs. This would enable better monitoring of product effectiveness and facilitate regular reviews of whether products are being used appropriately and effectively.

**V. CONCLUSIONS**

FAQR Phase III undertook several activities to recommend updates and improvement to the USAID/FFP food basket. The team identified upgrades that USAID/FFP can make to existing products; global topics and innovations that should guide the development of future products; a plausible process that USAID/FFP can adopt for adding new products to the food basket; and strategies for improving communication with operational partners. The team anticipates that these recommendations will support a food basket that is flexible and responsive to recipient needs.
References

Ahmed, Tahmeed; Choudhury, Nuzhat; Hossain, M. Iqbal; Tangsuphoom, Nattapol; Islam, M. Munirul; de Pee, Saskia; Steiger, Georg; Fuli, Rachel; Sarker, Shafiqul A.M.; Parveen, Monira; West, Keith P. Jr.: and Christian, Parul. Development and acceptability testing of ready-to-use supplementary food made from locally available food ingredients in Bangladesh. BMC Pediatrics. 2014. 14(1):164.

Amegoyu, Andrew Kiri; Ochola, I Sophie; Ogwok, Patrick; Yiga, Peter; Musalima, Juliet; and Juliana, Mandha. Efficacy of sorghum peanut blend and corn soy blend plus in the treatment of moderate acute malnutrition in children aged 6–59 months in Karamoja, Uganda: a cluster randomized trial. Nutrition and Dietary Supplements. 2014. 6:75-84.


Bahwere, Paluku; Akomo, Peter; Mwale, Mwawi; Murakami, Hitoshi; Banda, Chrissy; Kathumba, Sylvester; Banda, Chimwemwe; Jere, Solomon; Sadler, Kate; and Collins, Steve. Soya, maize, and sorghum–based ready-to-use therapeutic food with amino acid is as efficacious as the standard milk and peanut paste-based formulation for the treatment of severe acute malnutrition in children: a noninferiority individually randomized controlled efficacy clinical trial in Malawi. American Journal of Clinical Nutrition. 2017. 106(4), 1100-12.

Bahwere, Paluku; Balaluku, Bisimwa; Wells, Jonathan C.K.; Mbiribindi, Chobohwa N.; Sadler, Kate; Akomo, Peter; Dramaix-Wilmet, Michèle; and Collins, Steve. Cereals and pulse-based ready-to-use therapeutic food as an alternative to the standard milk- and peanut paste-based formulation for treating severe acute malnutrition: a noninferiority, individually randomized controlled efficacy clinical trial. American Journal of Clinical Nutrition. 2016. 103(4):1145-61.

Bauserman, Melissa; Lokangaka, Adrien; Gado, Justin; Close, Kelly; Wallace, Dennis; Kodondi, Kule-Koto; Tshefu, Antoinette; and Bose, Carl. A cluster-randomized trial determining the efficacy of caterpillar cereal as a locally available and sustainable complementary food to prevent stunting and anaemia. Public Health Nutrition. 2015. 18(10):1785-92.


Brenna, J Thomas; Akomo, Peter; Bahwere, Paluku; Berkley, James; Calder, Phillip C; Jones, Kelsey D; Lui, Lei; Manary, Mark; Briand, André. Balancing omega-6 and omega-3 fatty acids in ready-to-use therapeutic foods (RUTF). BMC Medicine. 2015. 13:117.


Christian, Paul; Shaikh, Saijudden; Shamim, Abu AHmed; Mehrara, Sucheta; Wu, Lee; Mitra, Maithileee; Ali, Hasmot; Merrill, Rebecca D.; Choudhury, Nuzhat ; Parveen, Monira ; Fuli, Rachel D.; Hossain, Md Iqbal ; Islam, Md Munirul; Klemm, Rolf; Schulze, Kerry J.; Labrique, Alain B.; de Pee, Saskia; Ahmed, Tahmeed; and West, Keith. (2015). Effect of fortified complementary food supplementation on child growth in rural Bangladesh: a cluster-randomized trial. *International Journal of Epidemiology*. 2015. 44(6):1862-76.


Fabiansen, Christian; Yaméogo, Charles; Iuel-Brockdorff, Ann-Sophie; Cichon, Bernardette; Rytter, Maren; Kurpad, Anura; Wells, Jonathan; Ritzi, Christian; Ashorn, Per; Filteau, Suzanne; Briend, André; Shepherd, Susan; Christensen, Vibeke.; Michaelson, Kim; Friis, Henrik. Effectiveness of food supplements in increasing fat-free tissue accretion in children with moderate acute malnutrition: a randomised 2x2x3 factorial trial in Burkina Faso. *Plos Medicine* 2017. 14(9): e1002387.


Hsieh, Ji-Cheng; Liu, Lei; Zeilani, Mamane; Ickes, Scott; Trehan, Indi; Maleta, Ken; Craig, Christina; Thakwalakwa, Chrissie; Singh, Lauren; Brenna, J. Thomas; and Manary, Mark J. High-oleic ready-to-use therapeutic food maintains docosahexaenoic acid status in severe malnutrition. *Journal of Pediatric Gastroenterology and Nutrition*. 2015. 61(1):138-43.

Jones, Kelsey. D; Ali, Rehema; Khasira, Maureen A.; Odera, Dennis; West, Annette L.; Koster, Grielof; Akomo, Peter; Talbert, Alison W.A.; Goss, Victoria M.; Ngari, Moses; Thitiri, Johnstone; Ndoro, Said; Garcia Knight, Miguel A.; Omollo, Kenneth; Ndungu, Anne; Mulongo, Musa M.; Bahwere, Paluku; Fegan, Greg; Warner, John O.; Postle, Anthony D.; Collins, Steve; Calder, Philip C. and Berkley, James A. Ready-to-use therapeutic food with elevated n-3 polyunsaturated fatty acid content, with or without fish oil, to treat severe acute malnutrition: a randomized controlled trial. *BMC Medicine*. 2015. 13:93.


Kerak, Marko; Bunn, James; Seal, Andrew J.; Thindwa, Mariam; Tomkinds, Andrew; Sadler, Kate; Bahwere, Paluku; and Collins, Steve. Probiotics and prebiotics for severe acute malnutrition (PRONUT study): a double-blind efficacy randomised controlled trial in Malawi. *The Lancet*. 2009. 374(9684):136-44.


Portillo-Reyes, Veronica; Pérez García, Miguel; Loya-Méndez, Yolanda; and Puente, Antonio E. Clinical significance of neuropsychological improvement after supplementation with


Timby, Niklas; Hernell, Olle; Vaarala, Outi; Melin, Merit; Lönnerdal, Bo; and Domellöf, Magnus. Infections in Infants Fed Formula Supplemented With Bovine Milk Fat Globule Membranes. Journal of Pediatric Gastroenterology and Nutrition. 2015. 60(3):384-9.


Wells, Mark L.; Potin, Philippe; Craigie, James S.; Raven, John A.; Merchant, Sabeeha S.; Helliwell, Katherine E.; Smith, Alison G.; Camire, Mary Ellen; and Brawley, Susan H.

https://apps.who.int/iris/bitstream/handle/10665/149782/9789241549028_eng.pdf?sequence=1

https://apps.who.int/iris/bitstream/handle/10665/44295/9789280641479_eng.pdf?sequence=1&isAllowed=y


Zebdewos, Alemseleam; Singh, Pragya; Birhanu, G.; Whiting, S. J.; Henry, C. J.; and Kebebu, A.
Acknowledgements

The authors would like to thank USAID/FPP, part of the Bureau for Democracy, Conflict, and Humanitarian Assistance, for awarding the Food Aid Quality Review (FAQR) Phase III project. The FAQR team is grateful to support USAID/FFP’s efforts to strengthen food aid programming, which affects so many around the world. USAID/FFP’s ongoing efforts to improve its service to others remain a hallmark of its continued success. The Food Basket Workstream could not have been completed without the involvement and support of Ruffino Perez, FAQR Phase III Contract Officer Representative, and Elizabeth Brown, Award Officer Representative; many individuals within partner organizations, agencies, and businesses, who took the time to participate in our interviews or share opinions and expertise; the extended FAQR team, who supported the authors in completing many of the activities of this workstream; and FAQR interns Jaimie Pellerin, Grace (Haeun) Yang, Meghan Thode, and Ayten Salahi, who each contributed to meeting critical objectives of this workstream.
List & Descriptions of Food Basket Work Stream Activities

Between July 2016 and September 2018, FAQR engaged in 18 major activities that informed FAQR’s recommendations provided in the report [Food Basket Work Stream Report Title].

1. Organized a formal side meeting with stakeholders held in October 2016 at the USDA-USAID International Food Assistance & Security Conference (IFASC) (Des Moines, IA; October 2016)

   **Description:** The Food Aid Quality Review (FAQR) project held a meeting with stakeholders alongside the IFASC with the goal of engaging in discussion on future directions and opportunities for food aid product innovations. The meeting brought together 32 participants representing 24 organizations including commodity suppliers, U.S. government, nongovernmental organizations, consulting firms, shipbrokers, and research institutions. FAQR team members led discussions in focus groups using a guided question format.

   **Result:** Participant responses were systematically aggregated and consolidated into a proceedings report that was shared with participants (*IFASC Side Meeting Proceedings*).


   **Description:** FAQR visited the U.S. Army Natick Soldier Research Development and Engineering Center in Natick, MA to learn about the research lab’s relevant food and packaging research. The lab shared with us their advances in food science and nutrition, processing and packaging, logistics, and human physiology, and participants discussed the feasibility of applying these developments to food aid products and programming.

   **Result:** Multiple areas of synergy were identified in relation to FAQR’s knowledge-sharing, research, packaging, food basket, and food matrix activities.


   **Description:** The FAQR team facilitated planning and organizing the 10th USAID-USDA Interagency Coordination Meeting on March 28, 2017. The meeting brought together 35 representatives from several U.S. Government agencies, offices and branches within USAID, USDA, National Institutes of Health (NIH) and others. The meeting focused on ongoing interagency efforts that streamline, facilitate and support continuing U.S. Government quality improvement activities related to food aid products, programs and processes. The meeting also included discussion of mechanisms to institutionalize interagency collaboration through the presentation of the USAID-USDA Food Safety Network Participating Agency Program Agreement (PAPA) and the USAID-USDA McGovern Dole Memorandum of Understanding (MOU). Finally, FAQR organized a side meeting for suppliers and U.S. government representatives from USDA and USAID. The purpose of the meeting was to hold an open discussion on product innovations, sharing perspectives on future directions and addressing opportunities to translate research findings into product innovations.

   **Result:** Interagency stakeholders developed a list of high priority areas for ongoing and future interagency collaboration and discussed strategy for institutionalization of the group. The side meeting highlighted progress and elicited input on potential product innovations.
4. Participated in the New England Food Technology Forum (Boston, MA; May 2, 2017)

**Description:** FAQR attended the New England Food Technology Forum where new foods and new technologies for food processing, storage, and safety were showcased: Several companies are developing portable and improved food safety/testing tools; There is a lot being done in the food packaging and technology world, but it requires more research (four to eight years) to develop, scientifically and commercially, into viable options for USAID; There is research conducted to improve the shelf life of perishable foods including a startup developing an edible silk coating for improved shelf life; It was suggested that private business is moving into the food aid products for development sector; Potential innovative ingredients were explored which could be used in food aid products, i.e. lutein for the improvement of cognitive function, dairy-alternative protein sources (such as algae) which are cheaper, sustainable and rich in protein and Omega-3s.

**Result:** The Forum offered valuable insight into the current innovation trends in food technology.

5. Analyzed USAID/FFP procurement reports (Boston, MA; March – April 2017)

**Description:** FAQR analyzed administrative data from the USAID/FFP Procurement Office Division to produce a report of food aid procurement trends from 2011-2017.

**Result:** FAQR shared the “Food Aid Basket Brief” with USAID/FFP in August 2017 and agreed that USAID/FFP can work toward having this information linked to the procurement data management system so that it updates automatically on the USAID/FFP portal landing page.

6. Conducted scoping activities: a series of interviews, focus groups, and presentations of results (Boston, MA & Washington, DC; June – October 2017)

**Description:** From June to October 2017, FAQR held a series of key informant interviews to gain an understanding of how partners conceptualize, use, and program food aid products. FAQR sent emails to targeted contacts at all of USAID’s prime awardees of Title II programs from Fiscal Year 2011 through Fiscal Year 2016 inviting their participation. Thirty-five representatives (Nutrition Advisors, Program Directors, Chiefs of Party, and Commodity Managers) from 11 prime awardee organizations (ACDI/VOCA, ADRA, CARE, CRS, Food for the Hungry, Mercy Corps, PCI, Save the Children, UNICEF, WFP, and World Vision) were interviewed. The interviews were semi-structured and held as one-time one-on-one sessions or focus-groups over the phone or in-person.

**Results:** After completing all interviews, FAQR collated responses, identified areas of consensus, and determined preliminary takeaways, which were distilled into a memo presented to USAID/FFP’s Nutrition Team in May 2018.

7. Visited Edesia Nutrition (RI; October 6, 2017)

**Description:** FAQR visited Edesia Nutrition’s new facility to learn about the potential for RUF suppliers to perform research and development on novel product formulations. Edesia is a 501(c) nonprofit social enterprise that was founded in 2009. They produced their first LNS in 2010. They were based in Providence, RI but outgrew their original facility and moved to a new location in North Kingstown, RI (20 minutes from Providence) in the Spring of 2016. Edesia is part of the PlumpyField Network, led by the parent company Nutriset (based in France) who licenses the technology mostly in Africa to build up local capacity. There was no LNS producer in the US at the time, and having a company in the States enabled USAID procurement. Edesia has one main plant with five production lines, one “Plant B” that they see mostly as the pilot plant for small production runs or to scale up new formulas, and a test kitchen in which they develop new recipes/formulas.

**Result:** Overall, this was an invitation extended by Edesia that FAQR used to inform its activities and strategy for working with other manufacturers. Building relationships with suppliers promotes...
efficient partnerships and interagency harmonization. Edesia provided frank feedback on the challenges faced by RUF manufacturers in driving food aid innovation.

8. Hosted a webinar produced by TOPS and CORE Nutrition Group (Boston, MA; November 16, 2017)

**Description:** FAQR hosted a webinar “The USAID Food Aid Product Mix: Presentation of Stakeholder Feedback” on November 16, 2017. The webinar, produced jointly by the Technical and Operational Performance Support program (TOPS) and the Nutrition Core Group, had 56 registrants and 34 participants. In this webinar, FAQR shared preliminary conclusions from key informant interviews and elicited feedback on these conclusions from webinar participants. Feedback from this webinar indicated that FAQR had correctly interpreted the input from respondents and had come to sound conclusions. FAQR also explored with participants possible solutions to identified challenges.

**Result:** FAQR finalized the key takeaways from the interview activities and identified recommended actions into a memo presented to USAID/FFP’s Nutrition Team in May 2018 (see [Partner Perspectives Presentation](slide) slides and [Partner Perspectives memo](memo)).

9. Created a nutrient content table for existing food aid products (Boston, MA; December - February 2018)

**Description:** FAQR created a matrix that contains the nutrient content of each food aid product available for procurement that includes the sources of this information ([USAID/FFP Food Aid Products Nutrient Table](table)). This type of “nutrient content table” has been approved by USAID/FFP as one of the top 3 priority components of the new USAID/FFP portal.

**Result:** FAQR recommends that this nutrient table is made available and easily accessible to implementing partners via the USAID/FFP portal. This table will improve knowledge about the nutrient content of products, increasing the technical capacity of implementing partners in regard to their awareness of the nutritional differences between products. Ultimately, this activity will help ensure that each food that is programmed is the most appropriate for the intended nutrition goals.


**Description:** The FAQR team facilitated planning and organizing the 11th USAID-USDA Interagency Coordination Meeting on March 22, 2018 in Washington, D.C. The meeting brought together 32 representatives from U.S. Government agencies, offices and branches within USAID and USDA, as well as other food aid players. The meeting focused on how to sustain the Interagency Working Group and how to promote collaboration around issues identified by Interagency stakeholders and working group participants as priority areas. Presentations included: USAID and USDA agency updates; food aid product research updates; product updates and development, new product introduction and packaging issues; latest developments in food safety, auditing and testing; current supplier and procurement issues; and discussion about options for sustaining the Interagency Working Group collaboration. In discussing institutional agreements and potential interagency institutionalization mechanisms, presenters and stakeholders emphasized: 1) the importance of identifying common goals and issues to address through interagency work; 2) the need for leaders and “champions” within agencies, departments and missions to push forward on common interagency priorities; 3) the terms of reference and identification of resources to sustain the interagency institutionalization process; and 4) the benefits to incorporating interagency work into existing structures and working groups, when appropriate and possible, while maintaining a nimble structure that continues to work effectively on technical issues.
Result: Interagency stakeholders agreed that the current approach of small groups working on specific technical areas of mutual interest was effective and working well. The technical areas relevant to FAQR are: packaging innovation, web-based new product development process, shelf life testing of fortified milled rice and long-term procurement mechanisms.

11. Reviewed products funded through the Micronutrient-fortified Food Aid Pilot Project (MFFAPP) (Boston, MA; December 2017 – April 2018)

Description: As part of the Food Basket work stream, FAQR was asked to review the MFFAPP products for inclusion in the USAID/FFP procurement list. FAQR completed a review of the 6 MFFAPP products and a 7th novel product based on questions that should be asked of all new products using information provided directly from suppliers and from final report documents submitted to USDA and USAID.

Result: FAQR provided a recommendation on which MFFAPP products to consider incorporating into USAID/FFP operations (see Completeness of Proposals for Novel Food Aid Formulations).

12. Participated in the International Inter-Agency Working Group for Specialized Nutritious Food Products (IAWG) meeting (Brussels, Belgium; September 2018)

Description: The IAWG met in Brussels, Belgium on September 10 and 11, 2018. The goal of the Working Group is to ensure that specialized nutritious food products (SNFPs) are formulated, produced and used in a manner that complies with international standards and is consistent with guidance from normative bodies on nutritional value and food safety. The Working Group also takes into account advances in science, including product-related research and development, agencies’ operational needs, and empirical understanding of costs and effectiveness. During the meeting, the IAWG provided updates on the harmonized ready-to-use food (RUF) specifications, recent Codex and World Health Organization (WHO) activities relevant to SNFPs, shared perspectives on programming considerations and research related to SNFPs, discussed the potential for new formulations of “next generation” RUFs.

Result: FAQR gave two presentations and led discussion on 1) the need for harmonizing dosing and ration guidance documents for SNFPs and 2) a strategy evaluating new SNFPs to consider integrating them into standard programming. Other relevant takeaways included: Agreeing to no longer pursue a harmonized micronutrient premix across all lipid-based nutrient supplements (LNS) products due to organoleptic changes that result in dosing for larger LNS products; Identifying a need for interagency alignment on the level and types of evidence needed for altering or developing new SNFPs; Recognizing high-energy biscuits (HEB) 2.0 as a product of interest for programming.

13. Conducted a review of ration guidance (Boston, MA; August – October 2018)

Description: In the early stages of designing a food assistance intervention, program implementers select which foods to program and determine how the product will be “rationed” to each recipient over a specific period of time. Rationing is an important component of programming costs, because providing any less than necessary is a waste of valuable resources and providing any more than necessary means the donor is not using resources efficiently. FAQR conducted scoping interviews and a desk review to understand what the existing guidance is on how foods should be rationed and how products are actually rationed in the field. Documents reviewed in the desk review included documents related to USAID/FFP reporting requirements such as USAID/FFP Information Bulletins (FFP1B), report guidance, select chapters from the Goodenough Guide, and the USAID/FFP Strategic plan.
Result: FAQR gave a presentation on the findings from this activity to the Inter-agency Working Group for Specialized Nutritious Food Products (IAWG) in Brussels, Belgium, and also prepared a memo summarizing these findings that was shared with USAID/FFP and the IAWG (see SNF Ration Guidance Summary and Detailed SNF Ration Guidance Summary).


Description: FAQR coordinated between the USDA AMS' Nutrition and New Products Development Branch to include the office in the USAID-USDA inter-agency meeting on May 22, 2018. FAQR continued to collaborate with this agency to keep them informed of USAID/FFP activities.

Result: FAQR advanced inter-agency collaboration across USAID/FFP and USDA relating to new product procurement and development.

15. Developed new products and new supplier proposal materials (online and documents) (Boston, MA & Washington, DC; February 2017 – October 2018)

Description: FAQR consulted with industry, technical experts, and USAID and USDA staff to develop a new online application that suppliers can use to propose novel products for use in food aid programming.

Result: The online forms were presented to key staff in USDA and USAID on June 20, 2018, and the paper-based forms were shared with key USAID personnel on October 19, 2018 (see Proposal for Novel Food Aid Product and Proposal for Existing Product).

16. Proposed a process for reviewing and evaluating product and supplier proposals, presented to key staff in USDA and USAID (Boston, MA & Washington, DC; February 2017 – October 2018)

Description: FAQR reviewed the existing processes of UNICEF and WFP to develop a suggested process for evaluating proposals for new suppliers and products.

Result: FAQR presented the suggested process in a phone meeting with USAID/FFP on September 5, 2017, and at the IAWG meeting in Brussels, Belgium in September 2018.

17. Conducted business development activities (Boston, MA; September 2017 – February 2019)

Description: FAQR engaged in continuous email exchange and meetings with Edesia Nutrition, USDA’s Foreign Agricultural Service, Ajinomoto, Wise company, USAID’s procurement division, and Natick Research Labs to identify areas of business development. FAQR also created a spreadsheet of potential suppliers of food aid products.

Result: FAQR fostered improved working relationships with partnering businesses and uncovered potential business partnerships previously unknown to USAID/FFP.

18. Collected literature (Boston, MA; September 2017 – February 2019)

Description: FAQR collected peer-reviewed and grey literature on novel food aid product developments and programming modalities.

Result: This literature informs what opportunities there are for food aid products and interventions to be more efficient and effective.
## Engagement Activity Methodology Details

<table>
<thead>
<tr>
<th>Domain 1: Research team and reflexivity</th>
<th>IFASC Side Meeting</th>
<th>Interviews</th>
<th>Webinar</th>
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<tbody>
<tr>
<td>Personal Characteristics</td>
<td>Kristine Caiafa, Bea Rogers, Patrick Webb, Shelley Walton, Lindsey Green, Nina Schlossman</td>
<td>Kristine Caiafa, Bea Rogers</td>
<td>Kristine Caiafa</td>
</tr>
<tr>
<td>1. Which author/s conducted the interview or focus group?</td>
<td></td>
<td></td>
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<tr>
<td>2. What were the researcher's credentials? E.g. PhD, MD</td>
<td>MS, RD; PhD; PhD, MA; MS, RD; MS; PhD</td>
<td>MS, RD; PhD</td>
<td>MS, RD</td>
</tr>
<tr>
<td>3. What was their occupation at the time of the study?</td>
<td>All were employees of the Food Aid Quality Review project</td>
<td>All were employees of the FAQR project</td>
<td>Kristine was an employee of the FAQR project</td>
</tr>
<tr>
<td>4. Was the researcher male or female?</td>
<td>Female; female; male; female; female; female</td>
<td>Female; female</td>
<td>Female</td>
</tr>
<tr>
<td>5. What experience or training did the researcher have?</td>
<td>The researchers were all employees of FAQR with relevant experience in development and/or food aid.</td>
<td>Kristine is a registered dietitian with two years of clinical experience and research expertise in the field of food aid as an employee of FAQR since 2014. Bea Rogers is a professor at Tufts University’s Friedman school and a well-respected researcher in the field of food aid.</td>
<td>The researcher was an employee of FAQR with relevant experience in development and/or food aid.</td>
</tr>
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</table>

### Relationship with participants

| 6. Was a relationship established prior to study commencement? | Some participants had established relationships with researchers prior to the side meeting. | A few participants had professional relationships with Bea or were familiar with her because she was a professor of theirs. Otherwise, relationships were not established prior to commencing interviews. | No. |

| 7. What did the participants know about the researcher? E.g. personal goals, reasons for doing the research | The participants were informed of the purpose of the side meeting in the invitation. | Participants knew the interviewers’ reason for doing the research. | Participants were informed of the purpose of the webinar in the invitation. |

| 8. What characteristics were reported about the interviewer/facilitator? E.g. Bias, assumptions, reasons and interests in the research topic | The researchers shared their reasons for doing the research. | The researchers shared their reason for doing the research with all participants in the introductory email and as a start to each interview. | The researchers shared their reasons for doing the research. |

**Domain 2: Study Design**

Theoretical framework

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<th>Question</th>
<th>Description</th>
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<td>9.</td>
<td>What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis</td>
</tr>
<tr>
<td></td>
<td>The team did not identify a methodological orientation.</td>
</tr>
<tr>
<td>10.</td>
<td>How were participants selected? e.g. purposive, convenience, consecutive, snowball</td>
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<tr>
<td></td>
<td>FAQR used both purposive and convenience selection. Prior to IFASC, FAQR emailed an invitation to select contacts we knew were attending the conference. During the meeting, FAQR staff handed out invitations to conference attendees.</td>
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<td></td>
<td>Our intention was to speak with each of the 18 organizations that programmed food aid through FFP since FY2011. We conducted semi-structured interviews with 33 individuals from 11 organizations (of total 18) that have programmed food aid through USAID/FFP since FY2011. FAQR used a purposive selection method. We first created a list of potential informants and then gathered input and contact information from colleagues and our USAID AORs. We sent out 23 interview requests to at least one contact at each of the 18 partner organizations that called forward food aid products from FY2011 through FY2016. 9 requests led immediately to interviews, 6 were forwarded to colleagues within the organization before identifying an appropriate interview subject, 3 did not lead to an interview, 4 were not responded to, 1 bounced back (the person no longer worked at the organization).</td>
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<tr>
<td></td>
<td>FAQR did not select participants. Core Nutrition group and TOPS (producers of the webinar) sent the invitations over email to relevant contacts and listservs.</td>
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<td>11.</td>
<td>How were participants approached? e.g. face-to-face, telephone, mail, email</td>
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<td>FAQR contacted potential participants over email, and invitations were given out face-to-face at the conference.</td>
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<td></td>
<td>We contacted prospective participants via email.</td>
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<td>Participants received notice of the webinar through email.</td>
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<td>12.</td>
<td>How many participants were in the study?</td>
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<td></td>
<td>There were 32 participants in the side-meeting. They were primarily food aid supplier representatives, commodity group representatives, USDA staff, and implementing partner representatives.</td>
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<td>35 people were interviewed.</td>
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<td>58 people registered for the webinar; 35 people were logged into the live webinar. 40% registered participants were from partner organizations, 24% were from companies or organizations involved with food aid efforts, 8% were USAID/USDA employees, 7% were from academic institutions, and 21% were affiliated with other groups.</td>
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<tr>
<td>13.</td>
<td>How many people refused to participate or dropped out? Reasons?</td>
</tr>
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<td></td>
<td>None.</td>
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### Setting

14. Where was the data collected? *e.g. home, clinic, workplace*

   - At a national conference.
   - The interviews took place as one-on-one interviews or in small focus groups from June through September 2017 over the online platform, Webex. In one case, the interview was held over the phone and was not recorded but notes were taken. During focus groups, data was collected in the workplace. All interviews were conducted in English.
   - During the webinar, participants were in the setting of their choice.

15. Was anyone else present besides the participants and researchers?  

   - No.

16. What are the important characteristics of the sample? *e.g. demographic data, date*

   - Participants represented the supply-side of food aid programming.
   - Participants were people who have been involved with the management of food aid programs.
   - Participants were mostly associated with the implementation side of food aid programming.

### Data Collection

17. Were questions, prompts, guides provided by the authors? Was it pilot tested?

   - Yes. The authors provided 6 questions. These were not piloted on potential participants.
   - Using a semi-structured design, we asked participants a pre-determined set of open-ended questions, and allowed the interviewer to ask defined or undefined follow-on questions to explore responses. The interview questions were provided to participants after the interview. These questions were pilot-tested twice on members with the FAQR project.
   - Questions were not provided to participants in advance of the webinar.

18. Were repeat interviews carried out? If yes, how many?

   - No.

19. Did the research use audio or visual recording to collect the data?

   - No.
   - Yes. All but one interview was recorded at the consent of the interviewees.

20. Were field notes made during and/or after the interview or focus group?

   - Yes. Extensive notes were taken by the interview team during the focus group.
   - Notes were taken during the interview.
   - Yes. Notes were taken by team members.

21. What was the duration of the interviews or focus group?

   - The data collection period was 45 minutes.
   - Interviews and focus groups ranged from 20 minutes to 2 hours.
   - The webinar presentation was 2 hours.

22. Was data saturation discussed?

   - Multiple researchers gathered all the information simultaneously so there was no opportunity to identify saturation during the information-gathering exercise. When compiling researchers’ notes, those notes that were repeated multiple times were considered the most salient and were heavily
   - Because this was not a formal research exercise, we did not evaluate the extent to which data saturation was reached. However, when analyzing the interview transcripts, comments and concepts that were repeated multiple times were considered most salient and were used to develop key takeaways used in the Webinar.
   - This activity did not offer any opportunity to consider data saturation. It was meant to allow informants to offer feedback to the initial conclusions we had gathered from the semi-structured interviews.
considered in the development of recommendations.

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<td>23. Were transcripts returned to participants for comment and/or correction?</td>
<td>Notes and takeaways from the side meeting were sent to participants over email and participants were asked to make corrections or give feedback.</td>
<td>Yes. Transcripts were sent to participants over email and they were asked to make corrections or give feedback.</td>
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<td>No.</td>
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**Domain 3. Analyses and Findings**

**Data Analysis**

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<td>24. How many data coders coded the data?</td>
<td>Not applicable. The data was not coded.</td>
<td>Not applicable. The data was not coded.</td>
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<td></td>
<td>Not applicable. The data was not coded.</td>
<td>No.</td>
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<td>25. Did authors provide a description of the coding tree?</td>
<td>Not applicable. The data was not coded.</td>
<td>Not applicable. The data was not coded.</td>
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<td>Not applicable. The data was not coded.</td>
<td>No.</td>
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<td>26. Were themes identified in advance or derived from the data?</td>
<td>Themes were derived from the data. We collated all the notes taken under each question, and pulled out the most consistent and emphasized points that participants made.</td>
<td>Themes were derived from the data. First, we reviewed the interview transcripts and identified themes from within the responses. Then we went back to each transcript and categorized responses into the identified themes.</td>
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<td>Themes were pulled out of the interviews and presented in 4 major themes: product guidance, product mix, product quality, and product information.</td>
<td>No.</td>
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<td>27. What software, if applicable, was used to manage the data?</td>
<td>Not applicable. Software was not used to manage the data.</td>
<td>Not applicable. Software was not used to manage the data.</td>
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<td></td>
<td>Not applicable. Software was not used to manage the data.</td>
<td>No.</td>
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<tr>
<td>28. Did participants provide feedback on the findings?</td>
<td>We did not receive feedback from participants.</td>
<td>Yes.</td>
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<td></td>
<td>Yes. The webinar was meant to be an opportunity for participants to confirm, deny, or respond to the content that was presented.</td>
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**Reporting**

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<tr>
<td>29. Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. <em>participant number</em></td>
<td>Quotations are not presented.</td>
<td>Quotations are presented but not attributed in order to maintain speaker anonymity.</td>
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<td>Quotations are not presented.</td>
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<td>30. Was there consistency between the data presented and the findings?</td>
<td>We strove to achieve consistency between the data presented and the findings.</td>
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<tr>
<td>31. Were major themes clearly presented in the findings?</td>
<td>We strove to present the major themes clearly.</td>
<td>We strove to present the major themes clearly.</td>
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<tr>
<td>32. Is there a description of diverse cases or discussion of minor themes?</td>
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Introduction

To fulfill its mandate of mobilizing America’s resources to predict, prevent, and respond to hunger overseas, United States Agency for International Development/Office of Food for Peace (USAID/FFP) works with a wide range of stakeholders in the United States (U.S.) and around the world. These include product suppliers, shippers, implementing partners, recipient governments, and in-country collaborators.

In 2016 and 2017, the Food Aid Quality Review project (FAQR) interviewed dozens of international and U.S.-based stakeholders. Specifically, we met with individuals within organizations who determine what food aid products or programming approaches are included in their organization’s operations.

Our questions aimed to contribute to understanding: How can the basket of food aid products and their programming be improved?

This memo synthesizes what we heard from partners, whose responses reinforce past assessments (from 2002 and 2006), shed light on remaining challenges in using food aid products, and highlight opportunities for improvement.

Background

In total, we elicited input from 102 stakeholders from 61 different organizations, sought through 3 activities:

1) **A series of semi-structured interviews and focus groups** held from June to September 2017 with 35 Nutrition Advisors, Program Directors, Chiefs of Party, Commodity Managers, and others (Table 2), from 11 implementing partner organizations (Table 1).

2) **A webinar** held in November 2017, hosted jointly by the Technical and Operational Performance Support program (TOPS) and the Nutrition Core Group, with 36 participants (Table 1). In this webinar, FAQR shared preliminary conclusions from the interviews and elicited feedback on these conclusions from webinar participants.

3) **A formal side meeting** held in October 2016 at the United States Department of Agriculture (USDA)-USAID International Food Assistance & Security Conference (IFASC) that brought together 32 participants representing 24 organizations, including commodity suppliers, U.S. government, nongovernmental organizations, consulting firms, shipbrokers, and research institutions (Table 1).

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1 The Food Aid Quality Review project (FAQR) is part of a series of United States Government activities aimed at improving food and nutrition programs under Title II of Public Law 480. The FAQR contract, administered by USAID/FFP, was first awarded to Tufts University’s Friedman School of Nutrition Science and Policy in 2009. Two follow-on awards have since been administered; the project is in its third phase.


Methods

In October 2016, the Food Aid Quality Review (FAQR) held a meeting with stakeholders alongside the IFASC. The goal of this meeting was to engage in discussion on future directions and opportunities for food aid product innovations. FAQR team members led discussions in focus groups using a guided question format. Participant responses were systematically aggregated and distilled into 6 major takeaways (Appendix 2).

From June to October 2017, interviews were held with key informants (primarily at implementing partner organizations) to gain an understanding of the qualitative aspects of their use of the “food basket”. FAQR sent emails to targeted contacts at all of USAID’s prime awardees of Title II programs from Fiscal Year 2011 through Fiscal Year 2016 inviting their participation. Representatives from 11 prime awardee organizations were interviewed: ACDI/VOCA, ADRA, CARE, CRS, Food for the Hungry, Mercy Corps, PCI, Save the Children, UNICEF, WFP, and World Vision. The interviews were semi-structured, and held as one-time one-on-one sessions or focus-groups over the phone or in-person. After completing all interviews, FAQR collated responses, identified areas of consensus, and determined preliminary takeaways (Appendix 3).

To ensure that these preliminary takeaways were accurate, FAQR presented them in a webinar cohosted by TOPS and the Nutrition Core Group. Feedback from this webinar indicated that FAQR had correctly interpreted the input from respondents and had come to sound conclusions. Given this confirmation, FAQR finalized the conclusions and identified recommended actions (delineated in the following sections).

A full description of the methods used to carry out each stakeholder engagement activity is detailed in Appendix I.

What did we learn?

These engagement activities elucidated 7 key takeaways corresponding with 11 priority actions that USAID/FFP should consider taking in the near term in order to enhance the life-saving aid it currently provides. Not all of these actions can be taken by USAID/FFP alone; some call for active collaboration with, and cooperation from, USDA and other partners or stakeholders.

Key takeaways

Takeaway #1 USAID/FFP’s current standards of operating enable uninterrupted and rapid food aid response

USAID/FFP’s efforts to preposition food aid stocks and its flexibility in allowing partners to engage in “commodity swaps” has been critical for maintaining product delivery pipelines and responding quickly to emergencies.

Takeaway #2 USAID/FFP provides useful tools for managing programs

The tools partners find most valuable for operating their programs are: the Commodity Calculator; the Food for Peace Management Information System Ration Calculator; the Food for Peace Modality Selector Tool; and Country desk reviews.

Takeaway #3 More technical guidance for IPs will support “fit-for-purpose” goals

Building technical capacity is one way to help ensure that the foods programmed are most appropriate for the nutrition goals and context. However, partners are not aware of all the foods available for programming, and they are missing information on the nutritional difference between foods and how to use them (e.g. in what circumstances? for which populations?). When asked, partners said that enhanced product guidance their most important and most urgent need.

Priority actions for USAID/FFP

i. Develop a training series focused on a) what is on the menu of food aid products, b) what principles partners should follow when making food choices, and c) how to use different food aid decision-making tools. Require that a representative from all partners take the training annually as part of their contract with USAID/FFP.

ii. Build up written technical guidance for the products: e.g., for specific nutrition goals, which products are appropriate and make these resources available on a single USAID/FFP landing website.
Takeaway #4 Better transparency & communications improves programming

Partners seem well aware of the complicated procedures involved with managing their own food aid programs, but different partners do not have the same information about USAID/FFP food aid products & operations.

Priority actions for USAID/FFP
i. Establish a single USAID/FFP landing website. Make the full menu of products, technical guidance for their use, and information on their effectiveness available at this webpage. Update this information regularly.
ii. Create a subscription service that automatically sends alerts about order solicitations, changes to the list of available products, and other important announcements.

Takeaway #5 Implementers can best respond to recipient needs with an innovative menu of food aid products

Implementers desire cost-effective, culturally acceptable products that are easy to transport and distribute. They are interested in working with novel products that better meet the needs of their recipients and supply chains.

Priority actions for USAID/FFP
i. Invest more in non-GMO food product formulations, particularly for use in Africa.
ii. Invest more in determining the cost-effectiveness of products for specific outcomes in various contexts.
iii. Devise a component of USAID/FFP contracts that enables implementing partners to pilot test novel products in such a way as to determine their effectiveness and cost-effectiveness relative to alternatives.

Takeaway #6 Changes to food aid products are best made collaboratively

Manufacturers are interested in supplying new products to USAID/FFP. However, a major challenge is identifying new products or improvements in existing ones that meet the needs of all stakeholders in the decision-making chain.

Priority actions for USAID/FFP
i. When developing or making changes to foods, packaging, and specifications, work to include a wide range of stakeholders involved in all steps from production to distribution before final changes are made.
ii. Adopt a set of guidelines for USAID/FFP products. Make these publicly available.

Takeaway #7 There are opportunities to support institutional learning

Partners need forums for solving shared challenges and learning from each other’s successes. They also need more historical context to make better decisions about an appropriate food assistance response.

Priority actions for USAID/FFP
i. In coordination with USDA, continue to host an annual forum where partners can share lessons learned.
ii. Develop a web tool (accessible via a single USAID/FFP landing website) that aggregates comprehensive historical programming information at the country level. For every program that has been completed there should be information on: i) what food assistance programs have taken place, ii) what form of assistance was used and why, and iii) what lessons were learned.

APPENDICES

Table 1. Organizations represented in information-gathering activities
Table 2. Job titles of participants in semi-structured interviews & focus groups
Appendix 2. IFASC Side Meeting Proceedings https://tuf.ts.app.box.com/s/uz56dh7y4wttw96mdaoszam6cg4xcls
Appendix 3. Food Basket Interview Webinar Slides https://tuf.ts.app.box.com/s/cmrjaeeu2hf0dmb4c3zq4m5smulrrl0
Appendix 4. Interview Questions for semi-structured interviews and focus groups https://tuf.ts.app.box.com/s/ssqj4m9g98hcmgosf2tk4hr6i427vqfs
Table 1. Organizations represented in information-gathering activities

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<tr>
<th>IFASC Side Meeting (24)</th>
<th>Interviews (11)</th>
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<tr>
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<td>Food for the Hungry</td>
<td>Detroit Food Policy Council</td>
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Table 2. Job Titles of Respondents (with # of people reporting that job title)

- Director Food Operations Technical Unit
- Director of Food Security (2)
- Director of Nutrition
- Acting Director, Food, Nutrition, and Livelihood Security
- Director of Programme Development and Quality
- Chief of Party (3)
- Deputy Director of Food Security
- Deputy Director of Food Security and Livelihoods
- Deputy Director, Operations, Food Security & Livelihoods
- Business Development Manager
- Health and Nutrition Coordinator
- Program Management Officer
- Program Manager
- Regional Technical Advisor
- Senior Director for Programs and Innovations
- Senior Director, Food Security and Livelihoods
- Senior Nutrition Advisor (4)
- Senior Program Officer for Logistical Support
- Senior Programs Manager
- Senior Technical Advisor in Nutrition
- Senior Technical Director of Nutrition
- Technical Advisor
- Technical Director of Commodity Management
- Technical Specialist
On October 10th, 2016, the Food Aid Quality Review (FAQR) held a meeting alongside the International Food Assistance & Security Conference, bringing together 32 participants representing 24 organizations, including commodity suppliers, U.S. government, nongovernmental organizations, consulting firms, shipbrokers, and research institutions. The goal of this meeting was to highlight progress on food aid product innovations, share perspectives on directions for product innovations, and address opportunities to translate research findings into product innovations.

Members of FAQR facilitated the meeting. The following questions guided the discussion:

- What challenges do suppliers face in meeting USAID’s requirements related to food safety, quality, and packaging?
- What new product innovations and research are you interested in? Where do you see the industry moving in terms of innovations?
- What are the challenges suppliers face related to new product innovations?
- What information gaps are there in terms of how research influences new product, packaging, or safety specifications?
- What are the pathways for translating research - like FAQR’s - into new product innovation?
- What future collaboration is needed between food assistance stakeholders?

MAJOR TAKEAWAYS

- The business risks of producing specialized food aid products must be reduced
- Strict product specifications and inadequate packaging pose critical challenges to suppliers
- Supplier motivation to create new products can be stimulated through funding partnerships
- Suppliers need improved guidance, especially regarding product market potential and how research influences the food aid agenda
- Better communication or branding of the intended use and cost-effectiveness of products is needed
- There are many opportunities for stakeholder collaboration that are yet to be fully harnessed
### WHAT CHALLENGES DO SUPPLIERS FACE IN MEETING USAID’S REQUIREMENTS RELATED TO FOOD SAFETY, QUALITY, AND PACKAGING?

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<tr>
<th>Category</th>
<th>Challenges</th>
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| **Production** | - Ingredient availability—especially since premix needs to be imported  
- Food safety requirements are strict and possibly unrealistic  
  - Yeast and mold requirements for product are even more strict than baby food  
  → Drives up costs  
- Supplier facilities outside of the U.S. and Europe need production improvements |
| **Packaging**  | - Rigid, cost-intensive requirements  
  - So different for USAID products that it takes years of dedication to comply  
  - Introducing new packaging often requires a costly change in equipment  
  - This can be a decision point for suppliers to decide if they want to stay in the market  
- Inadequacies  
  - Packaging material is not sturdy enough for long-term or heavy use  
  - Cumbersome size  
  - Susceptible to infestation |
| **In-Country Storage** | - Theft & spoilage between destination port and end point                                     |
| **Distribution** | - Theft  
- Contamination of product once it leaves the strict controls of the factory  
- There is no quality control over product distribution/use in the last mile |

### WHAT NEW PRODUCT INNOVATIONS AND RESEARCH ARE YOU INTERESTED IN? WHERE DO YOU SEE THE INDUSTRY MOVING IN TERMS OF INNOVATIONS?

<table>
<thead>
<tr>
<th>Category</th>
<th>Innovations/Research</th>
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| **Products** | - Easier to prepare  
- Inexpensive  
- Ongoing studies in four countries to improve grain protection  
- Creation of more locally available options  
- Aflatoxin prevention  
- New FBF blends & types |
| **Packaging** | - Hermetic storage  
- Hermetic options |
| **Shipping**  | - Bulk shipping using supersacks/container liners  
- Fumigation of the entire ship before it reaches port  
- Eliminating fumigation |
WHAT ARE THE CHALLENGES SUPPLIERS FACE RELATED TO NEW PRODUCT INNOVATIONS?

▪ There is little incentive for suppliers to create or change products.
  - Suppliers are not really focused on innovation. They leave the research up to Universities and comply with specs given to them.
  - These are specialized foods with specialized market, so suppliers can’t really make something new. They only make a product after someone asks for it.
▪ And in general, producing food aid is a high-investment enterprise (for which there is no external funding support) ...
  - New ideas for food aid products require extensive testing, development, and assessment, but there are no good funding sources to do so.
  - The budget needed to bring a product into a market is prohibitively high.
  - Producers also need seed funding to tailor existing products for food aid use.
  - “Product sophistication” comes with many associated cost increases, such as increased costs to meet packaging requirements or to buy special equipment.
▪ …that is also high risk because demand is not guaranteed, demand volumes are typically low, and PVO interest in new products is lukewarm
  - There is no assurance anyone, including USAID, will buy a new product.
  - Specialized products that are considered “innovations,” like fortified rice, are only for food aid, so demand can’t be guaranteed and when it is demanded it’s in small volumes.
  - Suppliers need a guaranteed volume that will be purchased; without this it is difficult to forge agreements with packagers.
  - Suppliers need to know the market potential of a product (what countries and regions has it been tested in?)
  - Even if a supplier does invest in R&D of a new product, they don’t know who will use it.
  - When a contract for a specialized product comes out, commercial mills can’t stop their current product line to shift to food aid products.
  - Creating a new product supply chain is hard for PVOs.
▪ So the economic equation doesn’t balance.
  - Suppliers have to decide if they want to participate in the food assistance market and if they can make it economically viable.
▪ Overall, commodities need to be offered at an affordable price and marketed by affordability (taking all aspects of product lifespan into account).

WHAT INFORMATION GAPS ARE THERE IN TERMS OF HOW RESEARCH INFLUENCES NEW PRODUCT, PACKAGING, OR SAFETY SPECIFICATIONS?

▪ Suppliers have no way of knowing if a product innovation is needed
▪ There is no standardized pathway for translating ideas into research or research into practice
▪ It is not obvious to suppliers:
  - What government shelf life requirements are
  - What the cost-benefit in impact per dollar of each product is
  - What the needs, finances, and programming landscape of the PVO community are
  - What role different products play in addressing PVO programming needs
  - Why certain products are not used
  - How USAID uses these research findings on products
  - How LRP fits into the supplier equation
WHAT ARE THE PATHWAYS FOR TRANSLATING RESEARCH - LIKE FAQR’S - INTO NEW PRODUCT INNOVATION?

- Translating product costs into cost/beneficiary and cost/impact, rather than cost/ton
- Presenting research findings in a way that allows suppliers to build on existing products while staying close to those products

WHAT FUTURE COLLABORATION IS NEEDED BETWEEN FOOD ASSISTANCE STAKEHOLDERS?

- Supplier Industry + USG
  - USG can provide seed funding for new product proof of concept
- PVOs + Suppliers + USG
  - Research by PVOs can inform more effective product advertising
  - Research by PVOs can help suppliers understand the product market
  - PVOs can assist in the roll-out of new products
- Academia + USG
  - Can work with the USG to issue “Grand Challenges” for food aid innovations
  - Can do research for USG
  - Can work as an information surrogate to educate governments on products
  - Can help ensure stakeholders are aware of the research findings and are connected
  - Can help suppliers and packagers understand the conditions, constraints, or opportunities involved with handling food aid products
- Commercial Market + Suppliers
  - Are there supply opportunities within the commercial market? What would that process be?
  - If a product were commercially viable, it could play a role in regulating demand
  - But there could be constraints, such as high costs of commercial-scale marketing and high tariffs commercial entities may pay on micronutrient premixes
  - The commercial industry can be a source of valuable information regarding food safety, quality, and packaging
- Commercial Industry + Suppliers
  - Can work together on large-scale food aid campaigns, like the Hershey-funded Project Peanut Butter factory and accompanying national level school feeding program in Ghana
- USG + partners
  - USG can work better with implementing partners to identify supply needs in advance of when they are needed to allow suppliers to respond

CONTACT

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Kristine Caiafa, Food Basket Research Assistant: Kristine.Caiafa@tufts.edu
Leah Koeppel, Project Associate: Leah@gfandn.com
## APPENDIX I. SIDE MEETING ATTENDEE LIST

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<th>Organization/Agency</th>
<th>Email</th>
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<td>Franklin Moore</td>
<td>Africare</td>
<td><a href="mailto:fmoore@africare.org">fmoore@africare.org</a></td>
</tr>
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<td>Bruce Schactler</td>
<td>Alaska Seafood</td>
<td><a href="mailto:bschactler@AK.net">bschactler@AK.net</a></td>
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<tr>
<td>Chris Goldthwait</td>
<td>American Peanut Council</td>
<td><a href="mailto:Goldthwaitice@yahoo.com">Goldthwaitice@yahoo.com</a></td>
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<td>Jordan Teague</td>
<td>Bread for the World</td>
<td><a href="mailto:jteague@bread.org">jteague@bread.org</a></td>
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<td>Julie Cerenzia</td>
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<td><a href="mailto:julie.cerenzia@bryantchristie.com">julie.cerenzia@bryantchristie.com</a></td>
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<tr>
<td>David Silver</td>
<td>Didion Milling Inc.</td>
<td><a href="mailto:dsilver@didionmilling.com">dsilver@didionmilling.com</a></td>
</tr>
<tr>
<td>Jennifer Esterle</td>
<td>Edesia</td>
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<tr>
<td>Tom Stehl</td>
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</tr>
<tr>
<td>Kristine Caiafa</td>
<td>FAQR</td>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Marilyn Shapley</td>
<td>Interaction</td>
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</tr>
<tr>
<td>Brian Lindsheild</td>
<td>Kansas State University</td>
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<td>Paul Green</td>
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<tr>
<td>Kelle Horn</td>
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<tr>
<td>Nelson Randall</td>
<td>Randall Consulting</td>
<td><a href="mailto:randallconsulting@kc.rr.com">randallconsulting@kc.rr.com</a></td>
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<tr>
<td>Reid Christopherson</td>
<td>SD Wheat</td>
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<td>Trevor White</td>
<td>Sorghum</td>
<td><a href="mailto:trevor@combost-sell.com">trevor@combost-sell.com</a></td>
</tr>
<tr>
<td>Cade Fields-Gardner</td>
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<td><a href="mailto:tceconsult@gmail.com">tceconsult@gmail.com</a></td>
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<tr>
<td>Rebecca Bratt</td>
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<tr>
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Hot Topics & Potential Formula Innovations to Inform the Next Generation of Food Aid

Food Aid Quality Review Phase III
Tufts University Friedman School of Nutrition Science and Policy, Boston, MA
January 2019

Background

Between July 2016 and September 2018, the Food Aid Quality Review (FAQR) met with scientists at the United States Army Natick Soldier Research Development and Engineering Center (NSRDEC) and Edesia Nutrition, attended the New England Food Technology Forum, and continuously reviewed new literature to look beyond what may be possible with current food matrices (as reported through the FAQR Phase III Food Matrices Work Stream) to identify food aid innovations that will inform the next generation of food aid products. This briefing highlights i) global topics related to food aid products, and ii) formulation innovations being researched that are highly relevant to the United States Agency for International Development’s Office of Food for Peace (USAID/FFP).

Relevant global topics related to USAID/FFP food aid products

- **An established PDCAAS target score for FBF and RUF products.** A Food and Agricultural Organization of the United Nations (FAO) Expert Working Group convened in 2017 and determined that Protein Digestibility-Corrected Amino Acid Score (PDCAAS) should be used to guide the formulation of RUFs and Follow-up Formula for Young Children (which FBFs can fall in the category of) (FAO, 2018). These products should have a PDCAAS score of ≥90, and in formulation with PDCAAS < 90 the protein quantity should be adjusted to achieve this value. Even though digestible indispensable amino acid score (DIAAS) is the ideal metric for protein quality assessment, more data is needed before transitioning to using this metric. USAID/FFP should ensure that all food aid products intended for consumption by young children meet these protein quality standards. The PDCAAS of food aid products is not reported in product specifications or the United States Department of Agriculture Agricultural Research Service National Nutrient Database for Standard Reference. USAID/FFP should start reporting the PDCAAS scores in the nutrient tables of all food aid products.

- **Established amino acid patterns for FBF and RUF products.** The FAO Expert Working Group also determined that Follow-up formula for Young Children and RUTF should have specific amino acid patterns, which differ depending on the desire for recipients to achieve catch-up growth. USAID/FFP should review these patterns to identify that relevant products meet these reference amino acid patterns.

- **Increased understanding of the influence of essential fatty acid content in food aid products.** Balanced omega-6 and omega-3 fatty acids are increasingly understood to play a role in
neurocognitive development and immune function. Experimental trials have tested the effects of RUTFs formulated with altered fatty acid content on child development (Hsieh, et al., 2015) (Jones, et al., 2015). More research is needed to understand what role these nutritional components can play in food assistance programs, but fatty acid content may well be a factor that will need to be considered in future program design and product selection. USAID/FFP should consider reporting the fatty acid content of current food aid products.

- **Investigations into how macronutrient proportions in food aid products influence nutrition outcomes.** Recent research has shown that the macronutrient ratio of food aid products influences the accretion of fat and lean tissue, but scientists still do not know what optimum accretion of fat and lean tissue is to optimize short- and long-term health outcomes. In a recent study treating undernourished children, fat-based LNS led to a greater gain in fat-free tissue and higher recovery rates compared to carbohydrate-based CSB (Fabiansen, et al., 2017). As new evidence becomes available, USAID/FFP should consider changing product formulations to better meet nutritional goals. Additionally, USAID/FFP might consider assessing the macronutrient ratios of current food aid products. FAQR developed a Food for Peace Product Formulary that aims to achieve this but was unable to do so because carbohydrate content is not reported for many products.

- **2015 World Health Organization guidance that calls for limiting free sugar\(^1\) intake to less than 5% of total calories consumed** (World Health Organization, 2015). Furthermore, the American Heart Association recommends that children 2-18 years consume ≤25 grams of added sugars per day and to avoid added sugars for children <2 years of age (Vos, et al., 2017). The free sugar content of food aid products is currently not reported in product specifications or the United States Department of Agriculture Agricultural Research Service National Nutrient Database for Standard Reference. USAID/FFP should start reporting the free sugar content in the nutrient tables of all food aid products.

**Possible formulation innovations being researched**

- **Novel grain bases for FBFs and RUFs**
  There are several rationales for formulating SNFs with grains that are not corn or wheat (the base ingredients for most SNF products). Products are being researched that use locally-produced, readily available grain crops, such as amaranth, rice, and sorghum. Nutritionally, different grains offer different nutrient profiles and food matrices that might produce a superior product. Using local ingredients also has the potential to lower product costs and may create products that are more culturally acceptable. Using non-genetically modified grains has the additional benefit of being able to bypass non-GMO regulations in place in several African countries.

- **Novel Legumes for FBFs and RUFs**
  Soybeans and peanuts are the primary legumes used in FBFs and RUFs. However, some research has been done using lentils, chickpeas, and mung bean. Developing products with these ingredients may lead to SNFs that are nutritionally superior, less expensive, are more culturally acceptable among certain populations, and possibly contribute to longer shelf life.

- **Novel fat sources for LNSs**
  Peanuts are the primary ingredient in all LNS products produced on a large scale. However, peanut-based LNSs cannot be used to treat patients with peanut allergies. To achieve a lipid-dense matrix

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\(^1\) Defined by WHO as: Free sugars include monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook or consumer, and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates
that does not contain allergens, formulas with alternative seed and nut butters, such as coconut butter and sesame paste, are being discussed (and likely researched) by manufacturers.

- **Novel protein ingredients**
  Researchers have experimented with creating complementary foods that derive their protein content from culturally acceptable ingredients, such as caterpillar (Bauersman M., et al., 2015) (Bauersman M., et al., 2015), cricket (Caparros Medigo, et al., 2016), and shrimp powder (Sulistiyono, Herawati, & Arya, 2017). Certain algae, such as spirulina, have also started to be used as a protein-rich ingredient in commercial products (Wells, et al., 2016).

- **Individual protein or amino acid additives**
  Research has been conducted to test the effectiveness of a non-dairy RUTF enriched with specific crystalline amino acids on treating undernourished children, and has found that these products are not inferior to standard milk-based products in recovery rates or length of treatment stay, and was superior to treating anemia, at a lower cost (Bahwere, et al., 2017). Indeed, hospitals rely on nutritional supplements formulated with proteins in a variety of forms (whole, hydrolyzed, and individual amino acids) to treat a range of nutritional problems. Given the vast clinical literature on clinical products containing these ingredients and recent FAO guidance that RUTF and complementary foods should contain specific amino acid profiles, this is a promising innovation that USAID/FFP should consider incorporating into current products.

- **Alternative milk powders**
  Guidance published by the UN in 2007 generally advises the inclusion of dairy ingredients in therapeutic and supplementary SNFs (World Health Organization and UNICEF, 2007). Typically, food aid formulas contain dried skim milk powder or whey protein, which tend to be expensive ingredients. As an alternative, researchers have considered a less expensive milk fraction called “milk fat globule membrane” (MFGM), which is a byproduct of commercially produced milk removed during industrial processing (Zavaleta, et al., 2011) that is considered a remarkable advancement in optimizing infant formulas and closing the gap between formula and breastmilk (Fewtrell, 2015). It is rich in protein with antimicrobial properties and has shown positive outcomes for cognitive development (Timby, Domellöf, Hernell, Lönnnerdal, & Domellöf, 2014), and infection (Timby, et al., 2015) in infants (Hernell, Timby, Domellöf, & Lönnnerdal, 2016). It is available as a commercial dairy fraction by Arla Food Ingredients.

- **Anti-parasitics**
  Parasitic helminth infections are known to contribute to and aggravate malnutrition (Stephenson, Latham, & Ottesen, 2000). While recent studies investigating deworming medications as a component of SNF programs but have not shown significant effects on sustaining recovery from undernutrition in children (Stobaugh, et al., 2017), deworming medications are considered a critical component of public health management (Jourdan, Lamberton, Fenwick, & Addiss, 2018). Incorporating deworming medications with SNFs should continue to be studied.

- **Probiotics & prebiotics**
  The gut microbiota is increasingly recognized as a contributor to malnutrition (Million, Diallo, & Raoult, 2017). Prebiotic and probiotic foods, which have beneficial effects on gut-related factors for certain individuals, are hypothesized to also be beneficial for contributing to the prevention or treatment of undernutrition (Kerak, et al., 2009). Significant effects have not been demonstrated, but this is a promising field of study.
References


USAID FOODS: HOW TO GET YOUR PRODUCT CONSIDERED

The U.S. Agency for International Development (USAID) Office of Food for Peace (FFP) strives to create partnerships that end extreme poverty, and promote resilient, democratic societies while advancing U.S. security and prosperity. USAID works with the U.S. Department of Agriculture (USDA) Agricultural Marketing Service (AMS) to purchase food aid products, including food aid ingredients, formulations, and packaging technologies. If your product is not yet being purchased by USDA, please review the list below to determine if your product meets the minimum criteria for consideration.

In order to be considered as a USAID food, the product must:

1. Be produced by a vendor registered with the USDA Agricultural Marketing Service.
2. Be 100% grown and processed in the United States or its territories, with limited exceptions.
3. Be suitable for consumption by nutritionally vulnerable individuals. These include severely undernourished to healthy children and women (including pregnant women).
4. Require few materials for preparation, including little to no potable water.
5. Not require special treatment during transport (such as cold-chain technology).
6. Withstand harsh storage conditions that include long storage periods, high risk of infestation, and high heat and humidity.
7. Endure multiple handlings before it reaches the consumer.

If your product meets all of the above criteria, you may submit an application to USAID: link here. Applications that can further demonstrate the following will receive highest consideration:

8. The product is efficacious or effective. For a food product, there should be evidence (substantiated through registered clinical trials published in legitimate peer-reviewed journals) that the ingredient or food improves outcomes relating to nutritional status in the regions where USDA and USAID work. For a packaging technology, there should be evidence that the packaging is an improvement over existing food aid packaging in some way.
9. The product contributes to meeting nutrition needs of target recipients. It should not interfere with recipients’ ability to meet minimum dietary requirements, nor interfere with breastmilk consumption.
10. The product meets the standards of Codex Alimentarius, including below threshold levels of specific toxins and nutritional requirements.
11. The product does not contain antinutrients or contaminants at levels understood to be harmful to humans.
12. The product (as packaged) has a shelf life of at least two years. Ideally, all products will be capable of retaining nutritional and organoleptic properties through conditions of at least 110 degrees Fahrenheit and at least 50% humidity, without need for refrigeration or special accommodation for at least 9 months.
13. The product is socially and culturally acceptable among possible consumers and in the regions of programming. This demand is documented.
14. The product meets a programming need.
15. The product improves on existing products.
16. The product is waste-neutral. Packaging should ideally be biodegradable, reusable, or recyclable.
# Proposal to Supply a Novel Product (food formulation or packaging)

## Part I. Determine eligibility

### Step 1

Thank you for your interest in U.S. Government food aid programs. This proposal should be completed by vendors interested in supplying a novel packaging or food formulation. Before you contact us, please read the following important basic requirements:

- Products must be produced in FDA or USDA licensed and approved commercial manufacturing facilities that possess a variety of food safety certifications, including GMP and HACCP.
- Food products must be produced by a vendor registered with the USDA Agricultural Marketing Service.
- Food products must be 100% grown and processed in the United States or its territories, with limited exceptions.
- Food products must be suitable for consumption by nutritionally vulnerable individuals, including undernourished to healthy children and women (including pregnant women).
- Food products must require few materials for preparation, including little to no potable water.
- Food products must withstand harsh storage conditions.
- Food products must have a shelf-life of at least 18 months.

### Step 2

Read the [Master Solicitation for Commodity Procurements](#) to ensure that you have an appropriate understanding of bidding processes relevant to USDA commodity tenders.

### Step 3

USAID and USDA procure food aid products from food vendors registered with the United States Department of Agriculture Agricultural Marketing Service. Confirm that you are a registered vendor with the USDA Agriculture Marketing Service (AMS) or start the process to become a registered vendor at the [AMS website](#).

### Step 4

After completing Steps 1 – 3, complete the remainder of this proposal. Please note:

1. Any information shared in this submission will be kept confidential.
2. The U.S. Government is under no obligation to use the product being submitted for consideration. Any investment made by prospective suppliers or interested companies to complete this form is made at the will of the company.
<table>
<thead>
<tr>
<th>Part II. Provide contact information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 5</strong> Name of prospective vendor/company</td>
</tr>
<tr>
<td><strong>Step 6</strong> Name of contact person for this application</td>
</tr>
<tr>
<td><strong>Step 7</strong> Phone number of contact person</td>
</tr>
<tr>
<td><strong>Step 8</strong> Email of contact person</td>
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<table>
<thead>
<tr>
<th>Part III. Provide information about the product</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 9</strong> What product are you proposing to supply?</td>
</tr>
<tr>
<td><em>Note: If you would like to supply more than one product, you must submit separate proposals for each product</em></td>
</tr>
<tr>
<td>☐ a food formulation or whole product <em>not currently used in USAID or USDA operations</em> (i.e. micronutrient sprinkles, blended food with premix)</td>
</tr>
<tr>
<td>☐ a packaging technology <em>not currently used in USAID or USDA operations</em></td>
</tr>
<tr>
<td>☐ Other [Please describe]</td>
</tr>
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</table>

| **Step 10** Please explain in 5-6 sentences: How will this product meet the needs of the U.S. Government’s food assistance activities? | [Click here to enter text] |
| **Step 11** Please explain in 5-6 sentences: How does this product add to the portfolio of U.S. food aid products? | [Click here to enter text] |

| **Step 12** What changes would manufacturers need to make to production lines to incorporate this product? | [Click here to enter text] |

| **Step 13** If your proposal is for a food formulation, Are you already a registered vendor with the USDA Agricultural Marketing Service (AMS)? |
| *Note: You must be a registered USDA foods vendor to have your proposal considered.* |
| If your proposal is for a novel packaging, skip this step. |
| ☐ Yes |
| ☐ No |

| **Step 14** What additional information would you like to share with USDA and USAID about your product? | [Click here to enter text] |
### Part V. Provide packaging information

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Yes/No Options</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>If your proposal is for a food formulation, do you intend to supply the product in packaging?</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes [Please explain in 3-5 sentences how the product is packaged, including packaging dimensions] ☐ No [Explain]</td>
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<tr>
<td>16</td>
<td>If your proposal is for a novel packaging, what are the dimensions of the packaging?</td>
<td>☐</td>
<td>[Click here to enter text]</td>
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<tr>
<td>17</td>
<td>If your proposal is for a novel packaging, what other packaging dimensions would be possible to produce?</td>
<td>☐</td>
<td>[Click here to enter text]</td>
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<tr>
<td>18</td>
<td>How is packaging refuse managed? Is it reusable, recyclable, or biodegradable?</td>
<td>☐</td>
<td>[Click here to enter text]</td>
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### Part IV. Provide product performance and safety information (complete only if this proposal is for a food formulation)

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<tr>
<th>Step</th>
<th>Description</th>
<th>Yes/No Options</th>
<th>Additional Information</th>
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<tbody>
<tr>
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<td>What is the minimum and maximum order capacity of the product that you can accommodate?</td>
<td>☐</td>
<td>[Click here to enter text]</td>
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<td>20</td>
<td>What is an average estimate of production time from order to production?</td>
<td>☐</td>
<td>[Click here to enter text]</td>
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<td>21</td>
<td>If 15 metric tons of the product were purchased today, what is your best estimate of the price range for this purchase (in $ per ton)?</td>
<td>☐</td>
<td>[Click here to enter text]</td>
</tr>
<tr>
<td>22</td>
<td>If 100 metric tons of the product were purchased today, what is your best estimate of the price range for this purchase (in $ per ton)?</td>
<td>☐</td>
<td>[Click here to enter text]</td>
</tr>
<tr>
<td>23</td>
<td>What type of shelf-life studies have you performed on the product?</td>
<td>☐ Real-time ☐ Accelerated ☐ Other</td>
<td>☐ Yes [Explain] ☐ No [Explain]</td>
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<tr>
<td>24</td>
<td>Is the product shelf-stable through at least 110 degrees Fahrenheit and 50% humidity for at least 9 months?</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes [Explain] ☐ No [Explain]</td>
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<tr>
<td>25</td>
<td>What is the water activity of the product?</td>
<td>☐</td>
<td>[Click here to enter text]</td>
</tr>
<tr>
<td>26</td>
<td>Please list any known antinutrients or contaminants contained in this product.</td>
<td>☐</td>
<td>[Click here to enter text]</td>
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</table>

### Part V. Provide nutrition information (complete only if this proposal is for a food formulation)
### Part IV. Agree to the terms of submission

**Step 34** By submitting this proposal, you agree that the entity seeking consideration is:

- i. willing and able to comply with legal requirements imposed on USAID and
- ii. willing to be audited by USDA or any contracted parties.

### Part V. Notice of next steps

**Step 35** Upon submission, your proposal will be reviewed. You will be contacted if your product warrants further consideration. If you have questions, please contact the Program Operations Division of USAID.
SUGGESTED QUESTIONS TO ASK OF NOVEL PRODUCTS

USAID/FFP has been working with the Food Aid Quality Review (FAQR) Phase III project to envision a process for adding new products to the USAID/FFP product mix. FAQR is proposing that USAID/FFP adopt a process that involves the following 3 steps: 1) Solicitors or prospective vendors review food aid product requirements and submit a proposal if their product meets these requirements, 2) Appointed technical experts review the proposal to determine if the product warrants further discussion, and 3) An external and internal review committee evaluate the product based on a pre-defined rubric to determine if the product should be made available.

FAQR assembled a list of questions most relevant to USAID/FFP in determining the eligibility of a newly proposed product. This list includes basic questions that should be asked at the initial proposal stage, as well as additional questions that are more time-intensive to respond to but nevertheless should be asked before a product is brought up for broader agency consideration.

Filter Questions asked in proposal

Can you guarantee that your product is fit for consumption at the end of 24 months?
In 5-6 sentences: How does this product meet the needs of U.S. Government food assistance?
In 5-6 sentences: How does this product add to the portfolio of U.S. food aid products?

Contact Information requested in proposal

1. Name of prospective vendor/company
2. Name of contact person for this application
3. Phone Number
4. Email
5. Are you already a registered vendor with the USDA Agricultural Marketing Service (AMS)?

Additional Contact Information that should be provided before full evaluation

1. Address of prospective vendor’s headquarters or main office
2. If applicable, copy of the relevant vendor license or permit

Food Safety & Performance Information requested in proposal

1. Do you have a HACCP plan for your product or facility?
2. What type of shelf-life studies have you performed on the product?
3. Is the product shelf-stable through at least 110 degrees Fahrenheit and 50% humidity for at least 9 months?
4. What is the water activity of the product?
5. Please describe any known antinutrients or contaminants contained in this product.

Additional Food Safety & Performance Information that should be provided before full evaluation

1. Please have a HACCP plan for the proposed product ready for inspection
2. What are the toxin levels of the proposed product?
3. What are the chemical and physical characteristics of the proposed product?
4. What is the shelf life of the product (in months)?
5. Please share any reports or documentation on product shelf-life
6. What is the Bostwick Flow Rate of the prepared product at 45 degrees Celsius at the proposed preparation dosage?
### Packaging Information requested in proposal

1. Do you intend to supply the product to USAID in packaging?
   - (yes). Please explain in 2-3 sentences how your product is packaged.
2. How is the refuse from the product managed?

**Additional Packaging Information that should be provided before full evaluation:**

1. Can the following information be included on the product’s packaging, as required by USAID?
2. Attach any reports on packaging durability
3. Is the packaging biodegradable?
4. Is the packaging reusable?
5. Is the packaging recyclable?
6. What materials is the product packaging composed of?
7. What are the dimensions of the packaged product?
8. What other packaging dimensions would be possible to produce for this product?
9. What is the weight (in grams or kilograms) of the packaged product?
10. Has the durability of the product packaging been tested?
11. How is the refuse from the product managed?

### Nutrition Information requested in proposal

1. What consumer group is this product intended for?
2. Is the product fortified with a fortification premix?
3. What is the volume of a single serving size or dose in mL?
4. What is the serving size or dosage in kilocalories?
5. What is the energy density of the product?
6. Have trials been performed to evaluate this product’s efficacy or effectiveness for outcomes relating to nutritional status?

**Additional Nutrition Information that should be provided before full evaluation**

1. (yes). Be prepared to share a table of the content of the fortification premix
2. Please provide the nutrient content of the product:
3. What is the product’s Protein Digestibility Corrected Amino Acid Score (PDCAAS)?
4. What is the product’s Digestible Indispensable Amino Acid Score (DIAAS)?
5. (yes). Be prepared to share trial reports of product efficacy or effectiveness
6. Please share any peer-reviewed publications on this product

### Programming Information requested in proposal

1. How is this product prepared?
2. What is known about the acceptability of the products sensory characteristics (i.e. taste, texture, smell, etc)?
3. What is known about the product’s social or cultural acceptability?
4. Does the product have special transportation or storage needs?
5. (yes). Please describe any special transportation or storage needs

**Additional Programming Information that should be provided before full evaluation**

1. What materials (i.e. pots, kerosene, wooden spoon) are needed to prepare this product?
2. If cooked, what is the total cooking time of the product?
3. How much potable water is needed to prepare the product?
4. Attach any reports on the product’s sensory characteristics
5. Attach any reports on product social or cultural acceptability testing
6. How much fuel is needed to prepare the product?
RUBRIC FOR EVALUATING A NOVEL PRODUCT PROPOSAL

Product: 
Reviewer: 
Technical Area Reviewed: 
Date: 

INSTRUCTIONS:
1. Respond to questions in Section A, “Filter Questions”
2. Respond to questions in assigned technical area
3. Respond to questions in Section B, “Additional Considerations”
4. Respond to Section C, “Recommendation”

<table>
<thead>
<tr>
<th>A Filter Questions</th>
<th>Yes</th>
<th>No*</th>
<th>Not clear *</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The product is fit for consumption at the end of 24 months</td>
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<tr>
<td>2. The product appears to meet the needs of U.S. Government food assistance</td>
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<tr>
<td>3. The product is likely to add to the portfolio of U.S. food aid products</td>
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</tbody>
</table>

Technical Area 1: Food Safety & Performance

1. There is an acceptable HACCP plan for the product or facility
2. Acceptable shelf-life studies have been performed on the product
3. The product is shelf-stable through at least 110 degrees Fahrenheit and 50% humidity for at least 9 months
4. The water activity is at an acceptable level that does not interfere with product shelf-life
5. It can be reasonably assumed that the product’s antinutrient content will not significantly harm recipients

Technical Area 2: Packaging

1. The product packaging is acceptable for USAID/FFP procurement needs
2. There are reasonable methods for managing the refuse from this product

Technical Area 3: Nutrition

1. The intended consumer group is a population of interest to USAID/FFP operations
2. The volume of a single serving size is appropriate for the target recipient population
3. The energy density of the product is appropriate for the target recipient population

*Please explain all "No" and “Not clear” responses in this section
Trials have been completed to evaluate the product’s efficacy or effectiveness for meeting relevant nutrition outcomes

**Technical Area 4: Programming**

1. There are reasonable requirements for preparing the product
2. The product’s sensory characteristics seem acceptable
3. The product seems to be socially or culturally acceptable
4. The product does not have unreasonable transportation or storage needs

**B Additional Considerations**

1. The product is produced entirely within the United States.
2. The product is suitable for consumption by nutritionally vulnerable individuals.
3. The product requires few materials for preparation.
4. Food aid products require little to no potable water for preparation.
5. The product does not require special treatment during transport.
6. The product can withstand harsh storage conditions.
7. The product can endure multiple handlings.
8. The product has demonstrated efficacy or effectiveness.
9. The product does not interfere with ability to meet minimum dietary requirements, nor breastmilk consumption.
10. The product meets the standards of Codex Alimentarius and other normative guidance.
11. The product does not contain antinutrients or contaminants at levels understood to be harmful to humans.
12. The packaged product has a shelf life of at least 2 years.
13. The product is socially and culturally acceptable among possible consumers in the regions of programming.
14. The product can be used to meet a programming need.
15. The product improves on existing products.
16. The product is waste-neutral.

**C Should USAID/FFP consider this product?**

Additional Notes:

Reviewer Signature: __________________________ Date: ________________
Effective Date: XXXXXXXXXXXXXXXXXXXXXXX

Policy on the Establishment of Procedures
for Proposing and Reviewing Novel Food Aid Ingredients, Formulations, Whole Packaged Products, and Packaging
for use in United States Agency for International Development Operations

1. OBJECTIVE

1.1. This policy covers the steps that prospective contractors follow to submit an application for a novel ingredient, formulation, whole packaged product, or packaging technology for use in USAID operations.

1.2. Additionally, this policy outlines the strategy for reviewing novel products\(^1\) to improve the access, availability, and consumption of nutritious, safe, and affordable foods in USAID operations.

2. BACKGROUND

2.1. USAID is deepening efforts to meet the nutrition needs of vulnerable populations around the world, in accordance with the Global Food Security Act of 2016 and the Sustainable Development Goals. To do so, USAID is working with academia, NGO partners, cooperating sponsors, and the private sector to increase access, availability, demand, and consumption of nutritious foods by vulnerable populations.

2.2. The number and range of new foods proposed for use in USAID operations has been increasing. In order to enhance the alignment of new, or existing, foods with USAID specifications and/or guidance, there is a need to proactively support product development initiatives in an early stage.

3. THE STRUCTURE FOR PROPOSING AND REVIEWING NOVEL PRODUCTS, AND SUPPORTING PRODUCT DEVELOPMENT

3.1. This process will take place under the leadership of [LEADERSHIP POSITIONS]. The Terms of Reference for the [LEADERSHIP POSITIONS] is described in ANNEX X.

3.2. To ensure continued leadership, the [LEADERSHIP POSITIONS] will appoint a Coordinator to manage the product review tasks. The Terms of Reference of the Coordinator is described in Annex X.

3.3. There will be two formal groups supporting this process:

   a. The [INTERNAL GROUP] will consist of internal experts that will review applications for novel products. The [INTERNAL GROUP] will provide feedback that supports product development in early stages through providing technical advice on the improvement of proposed products. This will enhance the alignment of novel products with USAID specifications and/or guidance.

\(^1\)“Novel products” are food ingredients, formulations, whole products, or packaging technologies that are not yet registered by USDA for food procurement or not yet used in USAID operations.
b. The [EXTERNAL COMMITTEE] will consist of external experts who will be consulted in cases where the [INTERNAL COMMITTEE] requires additional expertise.

3.4. [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE] will facilitate USAID’s decision-making process to evaluate the suitability of novel product proposals and support the development of novel products for use in USAID operations, in line with nutrition and supply chain requirements and capabilities.

3.5. The nutrition and supply chain requirements and capabilities are outlined in Annex X.

**Internal and external expertise**

3.6. To ensure a comprehensive approach in reviewing and supporting the product development process, [LEADERSHIP POSITIONS] will assemble an interdivisional entity - [INTERNAL COMMITTEE] - that draws on expertise from the [X division] and [X division] Offices in USAID and [X division] and [X division] offices in USDA. The Terms of Reference and governance of the [INTERNAL COMMITTEE] are outlined in Annex X.

3.7. A [EXTERNAL COMMITTEE] is composed of external (non-USAID) experts and provides, when requested, support to the [INTERNAL COMMITTEE] on specific technical questions. The Terms of Reference of [EXTERNAL COMMITTEE] are described in Annex X.

**Ensuring Public confidence**

3.8. The process for proposing and reviewing novel products to be made eligible for procurement for USAID’s operations will be i) objective and transparent, ii) guided by scientific rigor, and iii) understanding of operational conditions, cost-effectiveness, and international, regional and/or national needs.

3.9. To promote transparency of the [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE] review process and guide interested applications, a description of the process will be publicly accessible (ANNEX X), as well as [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE] guidance.

3.10. To ensure objective decision-making and mitigate the risk of actual, perceived, and/or potential conflict of interests, each [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE] will submit a Declaration of Interest (DoI) that will be evaluated by the [LEADERSHIP POSITIONS], in consultation with the [appropriate ethics office] when necessary. These procedures will be established with the [appropriate ethics office] and will added to this policy as an addendum.

**4. THE PROCESS FOR PROPOSING AND REVIEWING NOVEL PRODUCTS, AND SUPPORTING PRODUCT DEVELOPMENT (ANNEX X)**

4.1. Part I. USAID’s Response to Interest

4.1.1. Any prospective contractor shall contact [LEADERSHIP POSITIONS] at [EMAIL ADDRESS].

4.1.2. The [LEADERSHIP POSITIONS] will communicate USAID’s relevant food specifications and/or guidance, information about the review process, and the “Application for Prospective Contractors Selling Novel Food Aid Ingredients, Formulations, or Whole Packaged Products to the United States Agricultural Marketing Service”. See Annex X, X, X.
4.1.3. [LEADERSHIP POSITIONS] will not raise expectations with regard to interest or potential future approval of a proposed novel product.

4.2. Part II. Application
4.2.1. The prospective contractor will complete the Application and submit it electronically to the [LEADERSHIP POSITIONS].

4.3. Part III. Application Review
4.3.1. The Coordinator will convene a first evaluation to review the suitability of the new food for use in USAID operations using the “Rubric for Evaluating Proposed Product Applications”. This rubric, as completed by all [INTERNAL COMMITTEE] Members, will be submitted to the Coordinator.

4.3.2. The first evaluation will result in one of the following three recommendations:
   1) Provisional Approval: The novel product aligns with USAID specifications and/or guidance. The product will be added into the procurement system for a period of five years and potential procurement is subject to the procurement process (see 4.4).
   2) Research Approval: The novel product is approved only under certain conditions (e.g. for research and development purposes).
   3) No Decision – more information is required (see 4.5).
   4) Disapproval: The novel product does not align with USAID specifications and/or guidance, based on more than three criteria in the “Rubric for Evaluating Proposed Product Applications”.

4.4. In the case that provisional approval is granted, the Leadership team will work with the prospective contractor to develop a Commodity Reference Document for the product. If, after a period of five years, the product has not been procured, the product will be removed from the procurement system.

4.5. In the case that more information is required after the first evaluation (see 4.3-2), the Leadership team will send specific questions to the prospective contractor. When the prospective contractor responds to these questions, these responses will be reviewed by the [INTERNAL COMMITTEE] and again be evaluated using the “Rubric for Evaluating Proposed Product Applications”. The second evaluation will result in one of the following four recommendations:
   1) Provisional Approval (see 4.3.2-1)
   2) Research Approval: (see 4.3.2-2)
   3) No Decision: The product meets most, but not all, USAID food specifications and/or guidance, or further aspects need to be explored to fully assess suitability. The [NAME OF ENTITY] will identify next steps to enable further product development to meet USAID specifications and/or guidance, which the Coordinator will communicate to the involved parties, following the procedures outlined in section 5.
   4) Disapproval (see 4.3.2-4)

4.6. When USAID internal technical capacity is not sufficient, the [INTERNAL COMMITTEE] will request [EXTERNAL COMMITTEE] support. Depending on the identified need, the [INTERNAL COMMITTEE] convenes with [EXTERNAL COMMITTEE] on an annual basis or conference calls can be convened on an ad-hoc basis. [EXTERNAL COMMITTEE] advice and recommendations will be used to inform the [INTERNAL COMMITTEE] recommendations.
4.7. The [INTERNAL COMMITTEE] recommendations will be submitted to the Coordinator, who will communicate this to the [LEADERSHIP POSITIONS] for a final decision.

4.8. The [LEADERSHIP POSITIONS] will communicate the final decision to the prospective contractor and other relevant parties.

5. M&E RECORDING APPLICATIONS & APPROVALS

5.1. The Coordinator will submit an annual report to [LEADERSHIP POSITIONS] complete with:

5.1.1. An overview of the products that have been reviewed, the process followed for their review, and their current review status.

5.1.2. For each submitted product application, a summary of the application with evaluation Rubrics attached.

6. GENERAL

6.1. The review of novel products is managed by [DIVISION] and [DIVISION] in alignment with [X STRATEGY].

6.2. These procedures serve to protect USAID’s credibility and transparency, and the quality and safety of foods provided in USAID operations.

6.3. These procedures take effect immediately.

[LEADERSHIP POSITIONS - Signature]
[LEADERSHIP POSITIONS - Name]
[LEADERSHIP POSITIONS - Position]
[LEADERSHIP POSITIONS - Office]
[LEADERSHIP POSITIONS - Division]
[LEADERSHIP POSITIONS - Agency]
## ANNEX X. Process for Proposing & Reviewing Novel Products and Supporting Product Development

<table>
<thead>
<tr>
<th>Applicant/Prospective Contractor</th>
<th>Leadership</th>
<th>Coordinator</th>
<th>Internal Committee</th>
<th>External Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Applicant contacts</strong> the Leadership team</td>
<td></td>
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<td></td>
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<tr>
<td><strong>2. Leadership responds via email, communicating:</strong></td>
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<tr>
<td>a. relevant food specifications and/or guidance, including i) a general “Solicitation Response Letter” with instructions and ii) “Guiding Principles for Considering Novel Food Aid Ingredients, Formulations, and Packaging Technologies”</td>
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<tr>
<td>b. The “Application for Prospective Contractors Selling Novel Food Aid Ingredients, Formulations, Whole Packaged Products, and Packaging”</td>
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<td><strong>3. Applicant completes the “Application” and submits it electronically to Leadership</strong></td>
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<td><strong>4. Leadership communicates with the Coordinator with instruction to convene the Internal Committee for evaluation</strong></td>
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<td><strong>5. Coordinator activates the Internal Committee, sending out the application for formal evaluation, providing all necessary materials</strong></td>
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<td><strong>6. Internal Committee individually evaluates the product, coming to</strong></td>
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<tr>
<td>Step</td>
<td>Description</td>
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</tbody>
</table>
| 1.   | One of four possible conclusions:  
      i. Provisional Approval  
      ii. Research Approval  
      iii. No Decision  
      iv. Disapproval  
      Each Internal Committee Member submits their completed Evaluation Rubric to the Coordinator. Internal Committee members identify a need for External Committee input in the Evaluation Rubric. |
| 2.   | 7. After collecting all Evaluation Rubrics, coordinator convenes a meeting of the Internal Committee. Coordinator activates External Committee if needed. |
| 3.   | 8. Internal Committee meets to come to a consensus, and provides a consensus recommendation to the Coordinator. Committee consolidates any remaining questions or comments for the applicant. |
| 4.   | 9. Coordinator shares the consensus recommendation, questions and comments with Leadership. |
| 5.   | 10. Leadership make a final decision, and communicates the decision to the applicant. The applicant may submit one revised application as part of the same review process. |
ANNEX X.

Terms of Reference
Leadership Positions
for the Process of Proposing and Reviewing a Novel Product
for Use in USAID Operations
Effective Date: XXXXXXXXXXXXXXXXXXXXXXXXX

The [LEADERSHIP POSITIONS] will support the Coordinator and oversee all functions of the [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE].

Membership

The Leadership team will consist of:

1. [IDENTIFIED POSITION A]
2. [IDENTIFIED POSITION B]
3. [IDENTIFIED POSITION C]

Terms of Reference

The Leadership team will have the following Terms of Reference:

1. Accepting completed applications and sharing them with the Coordinator.

2. Facilitating communication between USAID and applicants. This includes communication of the [INTERNAL COMMITTEE] procedures and [INTERNAL COMMITTEE] review outcomes with applicants.

3. Appointing the Coordinator.

4. Funding the Coordinator position.

5. Reviewing all [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE] Declarations of Interest, and coordinating with the [appropriate ethics office] when necessary.
ANNEX X.

Terms of Reference
Coordinator
Effective Date: XXXXXXXXXXXXXXXXXXXXXXXX

The Coordinator will support the [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE].

Appointment

1. [LEADERSHIP POSITIONS] will appoint a Coordinator as needed.

Terms of Reference

The Coordinator will have the following Terms of Reference:

1. Draft updates and revisions of the Directive for establishing the governance for [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE], and prepare related documents for facilitating these processes.

2. Organize [INTERNAL COMMITTEE] meetings on a regular basis:
   - Draft meeting agendas
   - Ensure relevant materials are collected and available for [INTERNAL COMMITTEE] members prior to [INTERNAL COMMITTEE] meetings
   - Prepare Notes for the Record of [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE] meetings to ensure discussion outcomes are well-documented and action items are clear
   - Disseminate Notes of Record of all meetings to the appropriate group


4. Manage the [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE] email account.

5. Draft decision memos and other communication materials.

6. Ensure adequate membership in the [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE].

7. Ensure the timely collection of the Declarations of Interests (DoIs) of the [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE] members.

8. This position is jointly funded by [IDENTIFIED FUNDING SOURCES].
ANNEX X.

Terms of Reference
USAID external [INTERNAL COMMITTEE] Members
Effective Date: XXXXXXXXXXXXXXXXXXXXXXXX

The [INTERNAL COMMITTEE] has been established to support the “Procedures for Proposing and Reviewing Novel Food Aid Ingredients, Formulations, Whole Packaged Products, and Packaging for use in United States Agency for International Development Operations.”

The [INTERNAL COMMITTEE] will evaluate the suitability of novel product proposals and support the development of novel products for use in USAID operations, in line with nutrition and supply chain requirements and capabilities.

Membership

1. Based on knowledge and expertise, two representatives from the following divisions/services have to be nominated as [INTERNAL COMMITTEE] Members:
   • [DIVISION A];
   • [DIVISION B];
   • [DIVISION C].
   Additional functional divisions/services, or colleagues with particular knowledge or expertise, can be requested to join the [INTERNAL COMMITTEE] permanently, if deemed necessary by the [LEADERSHIP POSITIONS].

2. Of the two representatives from each division/service, one should be appointed as core member and one as alternate member. To facilitate the decision-making process, at least one representative from each division/service should join each [INTERNAL COMMITTEE] meeting. Alternate members can join all meetings or in lieu of the core member if he/she is unavailable. The core member is responsible for briefing the alternate member before the meeting. In case both core and alternative [INTERNAL COMMITTEE] members are not able to join a meeting, the proposed recommendations can be outlined in the meeting notes, but can only be implemented after endorsement by the respective absent core member from the division/service.

3. [INTERNAL COMMITTEE] members could be USAID staff or consultants. [INTERNAL COMMITTEE] members, core and alternate member, from each division/service will be appointed by the [LEADERSHIP POSITIONS]. The [INTERNAL COMMITTEE] members appoint an [INTERNAL COMMITTEE] chair and [INTERNAL COMMITTEE] vice-chair, i.e. one [INTERNAL COMMITTEE] member from each participating Division/Service. Appointment of a new [INTERNAL COMMITTEE] chair and vice-chair can be considered every two years, or as re-assignment occurs. In case the [INTERNAL COMMITTEE] chair is unable to join, the [INTERNAL COMMITTEE] vice-chair will take over
the responsibilities. The [INTERNAL COMMITTEE] chair and vice-chair will serve as the Secretary to the external [EXTERNAL COMMITTEE] for technical communication and will chair [INTERNAL COMMITTEE] and [EXTERNAL COMMITTEE] meetings.

Terms of Reference

The [INTERNAL COMMITTEE] will have the following Terms of Reference:

1. Any food that is new to USAID operations shall be reviewed by [INTERNAL COMMITTEE], including new foods that are not procured by USAID (e.g. provided to USAID in-kind or through other transfer modalities such as voucher programs). Any new formulation of vitamin and mineral premixes and certain ingredients, as part of food products also fall under the scope of [INTERNAL COMMITTEE]’s work.

2. The [INTERNAL COMMITTEE] will evaluate applications for new products and support product development in order to help ensure that USAID’s global, regional or national recommendations on the introduction and development of foods are based on confirmed product quality and appropriate scientific evidence.

   a. When evaluating applications, Members will assess:

      i. Completeness of the application;
      ii. Vendor Qualifications of the applicant;
      iii. Scientific evidence of product efficacy or effectiveness;
      iv. Scientific evidence of product acceptability;
      v. Product composition and formulation, such that:

         1. The product, as intended to be used, is appropriate for consumption by target recipients;
         2. The product is safe for human consumption and can be safely prepared by beneficiaries;
         3. The product requires few materials for preparation;
         4. The product requires little to no potable water for preparation;
         5. The product’s nutritional profile (including validity of nutrition claims) contributes to meeting the nutritional requirements of the target recipients;
         6. The product is in compliance with national, regional and international guidelines, standards or recommendations (e.g. Codex Alimentarius) and legislation.

      vi. Food characteristics and packaging, such that:

         1. The product does not require special treatment during transport;
         2. The product is likely to withstand adverse transportation conditions;
         3. The product is likely to withstand adverse storage conditions for prolonged periods;
4. The product has a suitable shelf life.

vii. Suitability for satisfying programming and distribution channels and modalities, such that:
   1. The product is likely to be acceptable to USAID beneficiaries who will be consuming the product;
   2. The product cost or cost-effectiveness is reasonable;
   3. There is a reliable supplier base;
   4. There are minimal market and regulatory constraints (i.e. distribution chains, patents, etc.);
   5. There is potential need;
   6. The product adds value to the existing portfolio of products.

viii. Product manufacturing processes to ensure that appropriate food quality and safety risk management is in place.

ix. Product packaging, such that it:
   1. Complies with USAID specifications and/or international, regional or national standards;
   2. Poses reasonable certainty of no harm to human health throughout shelf-life;
   3. Withstands the often adverse environmental conditions likely to be encountered during transport, storage and handling in USAID operations;
   4. Poses no, or least feasible, burden on the environment;
   5. Is able to include mandatory labelling information.

3. MEETINGS [INTERNAL COMMITTEE] meetings are convened approximately once every quarter. When relevant, external and internal participants can be invited to join [INTERNAL COMMITTEE] meetings to provide information which could facilitate the [INTERNAL COMMITTEE] review process. However, only [INTERNAL COMMITTEE] members can participate in the decision-making process. [INTERNAL COMMITTEE] members are invited to attend face-to-face or video conference meetings with the [EXTERNAL COMMITTEE].

4. TRANSPARENCY AND PROCESS INTEGRITY To assure the highest standards of independence and adherence to USAID’s rules and regulations, when nominated for [INTERNAL COMMITTEE] membership USAID employees are requested to submit a Declaration of Interests (DoI) (see Appendix X) where they disclose any circumstances that could give rise to an actual, perceived and/or potential conflict of interests. The DoI is updated annually in the event of any change during the terms of their membership.

   a. The [LEADERSHIP POSITIONS] review the DoI of USAID employees under their respective reporting lines, in consultation with the [appropriate ethics office] as appropriate. Any conflicts of interest, or any other concerns, are mitigated or otherwise addressed in the best interests of USAID. Based on the information disclosed, the [LEADERSHIP POSITIONS] can decide, in consultation with [appropriate ethics office] as appropriate,
whether or not to appoint the USAID employee as [INTERNAL COMMITTEE] member. A high level summary of the outcomes of the review is annually disclosed on an internally accessible page.

b. [INTERNAL COMMITTEE] members are required not to disclose any confidential information acquired or otherwise exchanged in the context of [INTERNAL COMMITTEE] meetings and deliberations.

5. DECISION MAKING The [INTERNAL COMMITTEE] can decide whether or not additional expertise is required from the [EXTERNAL COMMITTEE], on the basis of the above considerations and product characteristics. If [EXTERNAL COMMITTEE] expertise is requested, the [INTERNAL COMMITTEE] chair will share all relevant information, including the product application and a summary of [INTERNAL COMMITTEE]’s discussion on the product, with the [EXTERNAL COMMITTEE]. If recommendations and advice is provided by the [EXTERNAL COMMITTEE], this information will be included in [INTERNAL COMMITTEE] recommendations.

a. Depending on the type of approval, the [INTERNAL COMMITTEE] can recommend how the approved new foods shall be promoted in case the food is unknown to USAID in the field.

b. The [INTERNAL COMMITTEE] has an advisory role and does not have final decision-making authority. [INTERNAL COMMITTEE] recommendations will be submitted to the [LEADERSHIP POSITIONS]. The [LEADERSHIP POSITIONS] are responsible for informing [USAID’s Assistant Executive Director] on any of these decisions and can decide, e.g. in case the [LEADERSHIP POSITIONS] do not reach an agreement, to request the USAID’s Assistant Executive Director to make a final decision.

c. The [INTERNAL COMMITTEE] can recommend approval of a novel product only when [INTERNAL COMMITTEE] members agree unanimously.

6. COMMUNICATION Only when the [INTERNAL COMMITTEE] recommendations are approved by the [LEADERSHIP POSITIONS] the outcomes will be shared by the [INTERNAL COMMITTEE] with the food applicant and USAID stakeholders, as appropriate, by means of letter from [LEADERSHIP POSITIONS]. Approved decision memos will be made available on the USAID website.

7. The review process for an individual product should take approximately three months. In case external consultation is required, such as from the [EXTERNAL COMMITTEE], the review process should take no more than 12 months.

The [INTERNAL COMMITTEE] Terms of Reference do not include:
8. Developing or reviewing USAID food specifications, which remains the responsibility of [RESPONSIBLE ENTITIES].

9. Supporting food production, marketing, and programming of novel products. These functions will continue to be supported when necessary by the relevant responsible units.
ANNEX X.

Terms of Reference
USAID external [EXTERNAL COMMITTEE] Members
Effective Date: XXXXXXXXXXXXXXXXXXXXXXXXXXXX

The [EXTERNAL COMMITTEE] has been established to support the “Procedures for Proposing and Reviewing Novel Food Aid Ingredients, Formulations, Whole Packaged Products, and Packaging for use in United States Agency for International Development Operations.”

Membership

1. The [EXTERNAL COMMITTEE] is composed of experts external to USAID. [EXTERNAL COMMITTEE] membership is voluntarily and unpaid, except for reimbursement of expenses for travel and accommodation when in function of [INTERNAL COMMITTEE]. These expenses are jointly covered by [IDENTIFIED ACCOUNTS OR DIVISIONS].

2. Recruitment and selection of new [EXTERNAL COMMITTEE] members is usually organized through communication with the TAG chair, based on specific expertise requested by the [INTERNAL COMMITTEE]. The TAG chair can reach out to other TAG members who all use their professional networks to find someone who has the required expertise.

3. USAID and TAG members will be responsible for keeping the identity of TAG members confidential to ensure anonymity.

4. To assure the highest standards of independence in the activities of the TAG, TAG members are required to submit to the [INTERNAL COMMITTEE] Coordinator, prior to any meeting, a Declaration of Interests (DoI) (see Annex 5) where they disclose any circumstances that could give rise to an actual, perceived and/or potential conflict of interests with regard to the matters that will be discussed in the meeting.

5. The Directors of the Supply Chain and Nutrition Divisions review the TAG DoI, in consultation with the Ethics Office as appropriate. Any actual, perceived or potential conflicts of interest, or any other concern, are mitigated or otherwise addressed in the best interests of USAID.

6. TAG members will be required to not disclose any confidential information received from the [INTERNAL COMMITTEE] or otherwise exchanged in the context of the TAG meetings and deliberations.

It is guided by the following revised Terms of Reference:
7. The [EXTERNAL COMMITTEE] provides technical advice on specific topics (e.g. regulatory affairs, food processing, packaging, microbiology and toxicology) in case in-house expertise is not sufficient. The [EXTERNAL COMMITTEE] may also be asked by [INTERNAL COMMITTEE] to review applications that use new technologies or represent new types of foods or food groups when external expertise is required. The [EXTERNAL COMMITTEE] is not involved in the decision-making process.

8. The [EXTERNAL COMMITTEE] preferably convenes with the [INTERNAL COMMITTEE] by face-to-face meetings on an annual basis or can convene with the [INTERNAL COMMITTEE] through conference calls on an ad-hoc basis.

9. The [EXTERNAL COMMITTEE] communicates official responses or recommendations with the Coordinator.

10. Official communications of [EXTERNAL COMMITTEE] can be incorporated as part of a decision memo as an evidence-base for [INTERNAL COMMITTEE] recommendations.
ANNEX X.

Declaration of Interests (DoI) for [EXTERNAL COMMITTEE] members

Pursuant to the Terms of Reference of the [EXTERNAL COMMITTEE] of the United States Agency for International Development (USAID), the purpose of this Declaration of Interests (DoI) is to ensure adherence to the requirements of independence related to the position of [EXTERNAL COMMITTEE] Member.

Kindly complete and submit this DoI to the NFC Coordinator via email […] by [dd/mm/yy] at the latest, prior the [EXTERNAL COMMITTEE] meeting to be held on [dd/mm/yy]. Please note that answering “Yes” to a question on this DoI does not automatically disqualify you or limit your participation in a [EXTERNAL COMMITTEE] activity. Your answers will be reviewed by the [LEADERSHIP POSITIONS], in consultation with the [appropriate ethics office] as appropriate, to determine whether any actual, perceived potential conflict of interests exist. A conflict of interest refers to any real or apparent incompatibility between a [EXTERNAL COMMITTEE] member’s private interests and either his/her official duties or the interests of USAID. It includes holding financial or family interests, or representing any other interest(s) of a non-USAID entity with an interest related to the subject/work of the [EXTERNAL COMMITTEE] meeting concerned. If any is found to exist, conflicts of interests will be mitigated or otherwise addressed in the best interests of USAID.

Contact Information

<table>
<thead>
<tr>
<th>Name:</th>
<th>Current Work Position and name of employer (if applicable):</th>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surname:</td>
<td>[EXTERNAL COMMITTEE] Member since:</td>
<td>Telephone:</td>
</tr>
</tbody>
</table>

Declaration:

As a [EXTERNAL COMMITTEE] Member, I hereby declare that:

- I have read and understand the independence requirements as provided in the Terms of Reference of the USAID [EXTERNAL COMMITTEE];
- I recognize that I have the responsibility to disclose to the [LEADERSHIP POSITIONS] any actual, perceived or potential conflicts of interest with respect to the matters to be discussed during the [EXTERNAL COMMITTEE] meeting of [...].

Accordingly, I hereby declare, to the best of my knowledge and belief, that:

- I currently have no direct or indirect personal conflicts interest, which may impair my independence in the course of the performance of my duties and responsibilities as a member of the [EXTERNAL COMMITTEE]; or
- I have an actual, perceived or potential conflict of interests with respect to the following:

____________________________________________________________________________________

Commitments

As a [EXTERNAL COMMITTEE] Member, I:

- undertake to perform my duties in a manner consistent with the highest standards of integrity and independence, in the best interests of USAID;
- serve in my personal capacity and not seek or accept any instructions in regard to my work on the [EXTERNAL COMMITTEE] from any government or other authority internal or external to USAID; and
- undertake not to disclose any confidential information received from the [INTERNAL COMMITTEE] or otherwise exchanged in the context of the [EXTERNAL COMMITTEE] meetings and deliberations.

This Declaration of Interests will remain in effect throughout my term as [EXTERNAL COMMITTEE] member and I undertake to immediately inform the Coordinator if any material change occurs subsequent to its submission.

Certification

I hereby certify that the information provided is true, complete and correct to the best of my knowledge and belief, and I understand that any non-disclosure or misrepresentation may have consequences, including on my participation in the [EXTERNAL COMMITTEE].

Signature: Date: (dd/mm/yyyy):

First and Last Name

☐ I understand that checking this box constitutes a legal signature confirming that I adopt the contents of this form and confirm the truthfulness of the information provided herein.
Memo: Potential Strategies for Improving USAID/FFP Communications

Food Aid Quality Review Phase III
Tufts University Friedman School of Nutrition Science and Policy, Boston, MA
January 2019

The Food Aid Quality Review (FAQR) was tasked with providing USAID/FFP with advice for improving communication with partners. To do this, we reviewed resources commonly used in this field and identified the following five strategies considered to be best practice for communicating effectively within an organization and to outside stakeholders. The United States Agency for International Development Office of Food for Peace (USAID/FFP) should consider how these strategies fit into current communications plans.

1) **Project clarity on a common goal** - Management should espouse a common purpose with a long-term focus, communicating a common objective from management to staff that is consistent and contextual. While the message should be simple, it should also include depth and meaning.

2) **Engage in three-way conversation** - Communication should occur in both a top-down method from management to employees as well as bottom-up. This two-way dialogue is especially important to minimizing information gaps between the two parties. Strategies for achieving inclusive conversation include open-door policies and activities that encourage employee engagement and input. In addition to effective communication between the employers and employees, companies and organizations should also be attentive to the public, market, and consumers. One strategy that leads to greater engagement with the public is disseminating the organization’s stories and goals.

3) **Foster a sense of community** - Providing a sense of community that generates better personal connection increases motivation among employees. This can be accomplished by giving employees more opportunities to interact on a daily basis, for example through regular team meetings, lunches, and newsletters sent out to staff. It can also be achieved through executive support and improving the Human Resources department.

4) **Make use of technology** - Large companies and organizations can take advantage of innovative technologies to communicate. Using the media, such as video simulcasts especially in large organizations is an effective way for the CEO to disperse important information.

5) **Invest in leadership** - Enforcing a framework to inspire, educate, and reinforce can empower staff members and overall lead to better performance and development. To enforce this framework, qualified leaders who are both “task- and relationship-oriented” should be chosen. Investment of time to assign such crucial roles to the people who are best fit as well as money to carry out programs that engage staff is also necessary.

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