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FOOD AID QUALITY REVIEW

MOTHERS IN MALAWI IMPROVE THE NUTRITION IN PORRIDGE BY ADDING MORE FORTIFIED OIL

Using Social Behavior Change Communication, Caregivers in Southern Malawi add more oil their child's corn soy blend porridge.



Figure 1: USAID Malawi Flickr/Grace Nachiola/U.S. Embassy

Deep pots of fortified porridge simmered in villages across Southern Malawi where the United States Agency for International Development (USAID) efforts to prevent and treat moderate acute malnutrition (MAM) rely on nutritionally fortified supplementary foods. Globally, an estimated 33 million children suffer from MAM, a low body weight level which puts them at a **3 times higher risk of death** than a well-nourished child. The Food Aid Quality Review (FAQR) is a USAID funded project of Tufts University Friedman School of Nutrition Science and Policy. The FAQR team worked with caregivers of children under 5 years of age in a USAID supplementary feeding program for MAM in Southern Malawi.

The goal of the intervention was to provide an increased oil ration along with targeted education and communication to encourage caregivers to prepare CSB porridge with more oil than is customary: a recommended ratio of 30 g. of oil to every 100 g of CSB. The study investigated the effectiveness of the intervention in getting caregivers to prepare the porridge as instructed. Why add more oil? Fortified oil increases the nutritional value of the porridge both by adding vitamins A and D and by helping children absorb fat soluble vitamins in the CSB: vitamins A, D, E, and K. Adding oil also increases the calorie density of the porridge, so that each spoonful contains more energy. In a population where malnutrition is high, improved nutrition is critical for child survival.

The FAQR project's education and communication intervention was successful. Providing intensive education along with increased oil resulted in caregivers preparing porridge with significantly more oil,

and a much higher percentage of caregivers met the target of 30 g per 100 g of CSB with the intervention.

Standard malnutrition interventions distribute the corn soy blend (CSB) for porridge in 25 kg bags which are then emptied into bins and scooped into containers the recipients bring from home. Half of the women in the intervention group received the CSB in 2 kg re-sealable packets with pictogram instructions for preparing the CSB. While the resealable packets did not significantly increase the amount fortified oil added to the CSB, distributing the individual packages had other benefits. In addition to reducing the time it took to distribute the CSB and oil ration, mothers reported liking the resealable packets because they were easier to carry home and seen as more hygienic than scooping rations from bins.

The results of this study have the potential to improve how supplementary foods are programmed in the future. The evidence from this study supports the conclusion that with targeted education and communication, along with the provision of sufficient oil, it is possible to achieve a higher content in CSB porridge, improving its nutrient and calorie density. Further, the study suggests programs consider repackaging CSB in individual bags to streamline distribution and increase good hygiene. These practices were cost-effective and have the potential to improve the effectiveness of programs to prevent and treat malnutrition.

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“Program changes are effective and cost-effective in increasing the amount of oil used in preparing corn soy blend porridge for treatment of moderate acute malnutrition in Malawi,” *Maternal and Child Nutrition*, January 2017 (<http://onlinelibrary.wiley.com/doi/10.1111/mcn.12393/full>)

ORGANIZATION

The Food Aid Quality Review is a project of Tufts University with collaboration and funding from United States Agency for International Development and the Office of Food for Peace, assessing the nutritional quality of food aid products used in the prevention and treatment of moderate acute malnutrition in children.

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