

REFINE Resource Review: July 2020

The **REFINE Resource Review** is a collection of materials to keep you updated on research related to food aid products and malnutrition. Resources identified and added between April and June 2020 are detailed below and are available on the [REFINE website](#).

The goal of Research Engagement on Food Innovations for Nutritional Effectiveness (REFINE) is to enhance the accessibility to, and exchange of, rigorous, operational and policy relevant research on **nutrition-directed interventions that improve nutrition in both emergency and non-emergency contexts**.

REFINE is a product of the [Food Aid Quality Review](#) (FAQR) project, which is funded by the United States Agency for International Development's Office of Food for Peace (USAID/FFP) and provides actionable recommendations on ways to improve nutrition among vulnerable populations for whom the direct distribution of food aid can make a significant impact.

Please direct all questions or comments to natalie.volin@tufts.edu.

Ongoing Clinical Trials Added to REFINE Roster

Effect of an Alternative RUTF on Intestinal Permeability in Children With Severe Acute Malnutrition, Sierra Leone

- [NCT04334538](#): To compare the effectiveness of a novel RUTF containing oats and no emulsifier and standard RUTF on recovery from severe acute malnutrition (SAM) and effects on intestinal health.
- Principal Investigator: David T Hendrixson, MD, Washington University School of Medicine
- Anticipated Study Completion Date: August 31, 2020

Published Food Aid Product Studies added to REFINE

This section includes publications from individual clinical trials testing food aid products, and reports and evaluations from programs using food aid products.

Miele, N.A., et al. 2020. **Sensory evaluation and volatile compounds of an alternative ready-to-use therapeutic food for malnourished children.** *Journal of Food Science*, 85(4), pp.1265-1273. <https://doi.org/10.1111/1750-3841.15110>

Roediger, R., et al. 2020. **Protein quality in ready-to-use supplementary foods for moderate wasting.** *Maternal & Child Nutrition*, p.e13019. <https://doi.org/10.1111/mcn.13019>

Other Publications Added to REFINE Library

The REFINE Library is a collection of resources relating to food-supported interventions, including systematic reviews, meta-analyses, organizational documents, and general discussion pieces on key topics related to food aid products and interventions.

Bergmans, R.S., et al. 2020. **Comparison of cricket diet with peanut-based and milk-based diets in the recovery from protein malnutrition in mice and the impact on growth, metabolism and immune function.** *Plos one*, 15(6), p.e0234559. <https://doi.org/10.1371/journal.pone.0234559>

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Das, J.K., et al. 2020. **Effectiveness of interventions to manage acute malnutrition in children under 5 years of age in low-and middle-income countries: A systematic review.** *Campbell Systematic Reviews*, 16(2), p.e1082. <https://doi.org/10.3390/nu12010116>

Toe, L.C., et al. 2020. **A prebiotic-enhanced lipid-based nutrient supplement (LNSp) increases Bifidobacterium relative abundance and enhances short-chain fatty acid production in simulated colonic microbiota from undernourished infants.** *FEMS Microbiology Ecology*, 96(7), p.fiaa105. <https://doi.org/10.1093/femsec/fiaa105>

Wrabel, M., et al. 2020. **Food aid for nutrition: A landscape review of current research and implications for future studies.** *Field Exchange* 62, p.38. https://www.ennonline.net/attachments/3517/FEX-62-Web_8Apr2020_38-40.pdf

Zuzarte, A., et al. 2020. **Reducing Oil Separation in Ready-to-Use Therapeutic Food.** *Foods*, 9(6), p.706. <https://doi.org/10.3390/foods9060706>

REFINE Search and Selection Criteria

Search Criteria for consideration for REFINE:

- **Condition:** malnutrition OR undernutrition OR stunting OR stunted OR wasting OR wasted
- **Intervention:** supplement OR food OR RUF OR RUTF LNS OR “nutrition program”

Selection Criteria for Inclusion in REFINE:

- **Interventions:** Those that use food aid products, use foods that have been nutritionally enhanced, or study specific ingredients that are intended for use in food aid.
- **Study population:** Restricted to those without chronic conditions that confound nutritional health (e.g., diabetes, HIV/AIDS, etc.)
- **Outcome measures:** Eligible studies report outcome measures including birth weight, weight gain, height gain, weight-for-age, height-for-age, weight-for-height/length, mid-upper arm circumference, lean body mass, recovery, mortality, default, nutritional intake, cognitive abilities, and product acceptability. Studies investigating the intergenerational effects of an intervention are considered if outcomes measures include wasted or stunted status of the participants, or body composition in addition to another measure of recovery.