

July 2021 Resource Review

The **REFINE Resource Review** is a collection of materials to keep you updated on research related to food assistance products and malnutrition. Resources identified and added between April and June 2021 are detailed below and are available on the [REFINE website](#).

The goal of Research Engagement on Food Interventions 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 Bureau for Humanitarian Assistance (USAID/BHA) and provides actionable recommendations on ways to improve nutrition among vulnerable populations for whom the direct distribution of food assistance can make a significant impact.

Feel free to direct any questions, comments, and additional resources you come across to Natalie Volin, the REFINE Research Assistant, at natalie.volin@tufts.edu or at REFINEnutrition@gmail.com.



Ongoing Clinical Trials

This section includes ongoing trials on clinical trial registries searched by REFINE.

Evaluation of Nutritional Status in Chimalhuacán Children: Anthropometric, Biochemical, and Molecular Approaches, Chimalhuacán, Mexico

- [NCT04915638](#): This study aimed to evaluate the effect of a 4-week intervention with cookies enriched with a micronutrient formula on the nutritional status in Maya schoolchildren aged 8-10 years. The enriched food products aim to reduce micronutrient deficiencies and help in prevention or treatment of metabolic conditions.
- Principal Investigator: Marta Alicia Menjivar Iraheta, Universidad Nacional Autonoma de Mexico

Supplementing Maternal and Infant Diet With High-energy, Micronutrient Fortified Lipid-based Nutrient Supplements (LNS) (iLiNS-DYAD-M), Malawi and Ghana

- [NCT01239693](#): This study aims to detect the long-term effect of prenatal LNS supplementation on their 9-year-old children. This study will examine whether the intervention had an effect on children's growth, cardiometabolic and respiratory status and neurocognitive development.
- Principal Investigator: Per Ashorn, Tampere University



Published Food Assistance Product Studies

This section includes publications from clinical trials testing food assistance products and peer-reviewed evidence, including reports and evaluations from programs using these products. On REFINE, these resources are tagged according to country, nutritional problem studied, intervention used, study type, year, and author.

Affonfere, M., Chadare, F.J., Fassinou, F.T.K., Talsma, E.F., Linnemann, A.R. and Azokpota, P., 2021. **A complementary food supplement from local food ingredients to enhance iron intake among children aged 6–59 months in Benin.** *Food Science & Nutrition*.

<https://refinenutrition.org/content/complementary-food-supplement-local-food-ingredients-enhance-iron-intake-among-children-aged>

Banda, T., Chawanda, K., Tsuchida, W. and Kathumba, S., 2021. **Report of a Pilot Program Using a Milk-Free Ready-to-Use Therapeutic Food Made From Soya, Maize, and Sorghum to Treat Severe Acute Malnutrition.** *Food and Nutrition Bulletin*, 42(1), pp.91-103.

<https://refinenutrition.org/content/report-pilot-program-using-milk-free-ready-use-therapeutic-food-made-soya-maize-and-sorghum>

Griswold, S.P., Langlois, B.K., Shen, Y., Cliffer, I.R., Suri, D.J., Walton, S., Chui, K., Rosenberg, I.H., Koroma, A.S., Wegner, D. and Hassan, A., 2021. **Effectiveness and cost-effectiveness of 4 supplementary foods for treating moderate acute malnutrition: results from a cluster-randomized intervention trial in Sierra Leone.** *The American Journal of Clinical Nutrition*.

<https://refinenutrition.org/content/effectiveness-and-cost-effectiveness-4-supplementary-foods-treating-moderate-acute>

Hussain, I., Habib, A., Ariff, S., Khan, G.N., Rizvi, A., Channar, S., Hussain, A., Fazal, S., Kumar, D., Alvarez, J.L. and Guerrero, S., 2021. **Effectiveness of management of severe acute malnutrition (SAM) through community health workers as compared to a traditional facility-based model: a cluster randomized controlled trial.** *European Journal of Nutrition*, pp.1-8.

<https://refinenutrition.org/content/effectiveness-management-severe-acute-malnutrition-sam-through-community-health-workers>

Lelijveld, N., Godbout, C., Krietemeyer, D., Los, A., Wegner, D., Hendrixson, D.T., Bandsma, R., Koroma, A. and Manary, M., 2021. **Treating high-risk moderate acute malnutrition using therapeutic food compared with nutrition counseling (Hi-MAM Study): a cluster-randomized controlled trial.** *The American Journal of Clinical Nutrition*.

<https://refinenutrition.org/content/treating-high-risk-moderate-acute-malnutrition-using-therapeutic-food-compared-nutrition>

Li, X., Hui, Y., Leng, B., Ren, J., Song, Y., Che, L., Peng, X., Huang, B., Liu, S., Li, L. and Nielsen, D.S., 2021. **Millet-based supplement restored gut microbial diversity of acute malnourished pigs.** *Plos one*, 16(4), p.e0250423.

<https://refinenutrition.org/content/millet-based-supplement-restored-gut-microbial-diversity-acute-malnourished-pigs>

Nikiéma, V., Fogny, N.F., Salpéteur, C., Lachat, C. and Kangas, S.T., 2021. **Complementary feeding practices and associated factors of dietary diversity among uncomplicated severe acute malnourished children aged 6–23 months in Burkina Faso.** *Maternal & Child Nutrition*, p.e13220.

<https://refinenutrition.org/content/complementary-feeding-practices-and-associated-factors-dietary-diversity-among-uncomplicated>

Suri, D.J., Potani, I., Singh, A., Griswold, S., Wong, W.W., Langlois, B., Shen, Y., Chui, K.H.K., Rosenberg, I.H., Webb, P. and Rogers, B.L., 2021. **Body Composition Changes in Children during Treatment for Moderate Acute Malnutrition: Findings from a 4-Arm Cluster-Randomized Trial in Sierra Leone.** *The Journal of Nutrition*, 151(7):2043-2050.

<https://refinenutrition.org/content/body-composition-changes-children-during-treatment-moderate-acute-malnutrition-findings-4>

Young, M.F., Mehta, R.V., Gosdin, L., Kekre, P., Verma, P., Larson, L.M., Girard, A.W., Ramakrishnan, U., Chaudhuri, I., Srikantiah, S. and Martorell, R., 2021. **Home Fortification of Complementary Foods Reduces Anemia and Diarrhea among Children Aged 6–18 Months in Bihar, India: A Large-Scale Effectiveness Trial.** *The Journal of Nutrition*.

<https://refinenutrition.org/content/home-fortification-complementary-foods-reduces-anemia-and-diarrhea-among-children-aged-6-18>



REFINE Resource Library

The REFINE Resource 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 assistance products and interventions. On REFINE, these resources are tagged according to country, nutritional problem studied, intervention used, study type, year, and author.

Hodgins, S. and Klemm, R., 2021. **Micronutrient Powders for Infants and Young Children.** *Global Health: Science and Practice*. 9(2):216-219

<https://refinenutrition.org/content/micronutrient-powders-infants-and-young-children>

Nel, E. and Lombard, M., 2021. **Ready-to-use therapeutic foods for the treatment of malnourished children and infants.** *Current Opinion in Clinical Nutrition & Metabolic Care*, 24(3), pp.276-280.

<https://refinenutrition.org/content/ready-use-therapeutic-foods-treatment-malnourished-children-and-infants>

Nikooyeh, B. and Neyestani, T.R., 2021. **Effectiveness of various methods of home fortification in under-5 children: where they work, where they do not. A systematic review and meta-analysis.** *Nutrition Reviews*, 79(4), pp.445-461.

<https://refinenutrition.org/content/effectiveness-various-methods-home-fortification-under-5-children-where-they-work-where-they>

Potani, I., Spiegel-Feld, C., Brix, G., Bendabenda, J., Siegfried, N., Bandsma, R.H., Briend, A. and Daniel, A.I., 2021. **Ready-to-Use Therapeutic Food (RUTF) Containing Low or No Dairy Compared to Standard RUTF for Children with Severe Acute Malnutrition: A Systematic Review and Meta-Analysis.** *Advances in Nutrition*.

<https://refinenutrition.org/content/ready-use-therapeutic-food-rutf-containing-low-or-no-dairy-compared-standard-rutf-children>

Webb, P., Danaei, G., Masters, W.A., Rosettie, K.L., Leech, A.A., Cohen, J., Blakstad, M., Kranz, S. and Mozaffarian, D., 2021. **Modelling the potential cost-effectiveness of food-based programs to reduce malnutrition.** *Global Food Security*, 29, p.100550.

<https://refinenutrition.org/content/modelling-potential-cost-effectiveness-food-based-programs-reduce-malnutrition>

REFINE tracks ongoing studies and collects relevant publications based on the following criteria:

- **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 on REFINE:

- **Interventions:** Those that use food assistance products, use foods that have been nutritionally enhanced, or study specific ingredients that are intended for use in food assistance.
- **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.



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