

Improving Nutrition and Health Outcomes in Rural Honduras

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Major: Nutrition

Minor: Hispanic Studies

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Background and Goals

- Early childhood malnutrition can lead to irreversible developmental problems, including stunting and impaired cognitive development.
- This study provided an energy-dense nutrient fortified spread called Plumpy'doz to children of 6-18 months of age in rural Intibucá, Honduras.
- One of the study's goals is to introduce a product that not only significantly improves health outcomes, but is also culturally acceptable and one that Hondurans could sustain.
- Blood specimens (nutritional biomarkers), cognitive and gross motor development, and food insecurity assessments were conducted at baseline, 3 months, and 6 months. Nutritional outcomes measured on a monthly bases included child's weight and height, dietary intake, and diarrheal and respiratory illnesses.
- Specific aims of my research are to determine how the supplement was incorporated into the child's diet and how this affected the child's overall nutrient intake.

Results

- We were able to make home-visits to some of the participants to talk with the mothers and observe feedings. Most mothers reported their children enjoyed eating the Plumpy'doz. It was difficult for them not to share the spread with their other children (as instructed), and most of them did.
- According to the dietary recalls, many mothers were not feeding their child the quantity that was instructed. As a result (and also because of the sharing) many ran out of the Plumpy'doz weeks early.
- More often than not, mothers served the Plumpy'doz in addition to meals or breastfeeding.
- The dietary data are presently being analyzed.
- The study received additional funding and will be continued for another 6 months. Nutrition and health outcomes will be evaluated at the end of the study.