

## EVIDENCE SUPPORTING THE USE OF PLUMPY'DOZ™

Defourny I et al. "Large-Scale Distribution of Milk-Based Fortified Spreads: Evidence for a New Approach in Regions with High Burden of Acute Malnutrition." PLoS ONE (2009); 4: e5455.

**OBJECTIVES**: There are 146 million underweight children in the developing world, which contribute to up to half of the world's child deaths. In high burden regions for malnutrition, the treatment of individual children is limited by available resources. Here, we evaluate a large-scale distribution of a nutritional supplement on the prevention of wasting.

**CONCLUSION**: These results demonstrate the potential for distribution of fortified spreads to reduce the incidence of severe wasting in large population of children 6–36 months of age. Although further information is needed on the cost-effectiveness of such distributions, these results highlight the importance of re-evaluating current nutritional strategies and international recommendations for high burden areas of childhood malnutrition.

## Isanaka S et al. "Reducing wasting in young children with preventive supplementation: a cohort study in Niger." Pediatrics (2010); 126: e442-50.

**OBJECTIVES**: To compare the incidence of wasting, stunting, and mortality among children aged 6 to 36 months who are receiving preventive supplementation with either ready-to-use supplementary foods (RUSFs) or ready-to-use therapeutic foods (RUTFs). Children aged 6 to 36 months in 12 villages of Maradi, Niger, (n = 1645) received a monthly distribution of RUSFs (247 kcal [3 spoons] per day) for 6 months or RUTFs (500-kcal sachet per day) for 4 months.

**CONCLUSION**: We found that the relative performance of a 6-month RUSF supplementation strategy versus a 4-month RUTF strategy varied with receipt of a previous nutritional intervention. Contextual factors will continue to be important in determining the dose and duration of supplementation that will be most effective, acceptable, and sustainable for a given setting.

Talley L et al. "Prevention of Acute Malnutrition During the Lean Season: Comparison of a Lipid-Based Nutrient Supplement and an Improved Dry Ration, South Darfur, Sudan. A quasi-Experimental Study." J Nutr Disorders Ther (2012); 2:3.

**OBJECTIVES**: To assess the nutritional impact of a Lipid-Based Nutrient Supplement (LNS) and an Improved Dry Ration (IDR) in blanket supplementary feeding programs.

MAIN FINDINGS: At baseline, 658 and 893 children were enrolled and 159 and 187 children were assessed at all 4 distributions in Otash and Al Salaam camps, respectively; There was no significant difference in mean WHZ between the two groups at baseline, (Otash=-1.18 and Al Salaam=-1.03, p=0.17). Children receiving LNS had higher mean WHZ than those receiving IDR. Significant differences were detected at months 2-4, for the mean WHZ of the LNS cohort, and at 4 months, for the difference of the difference in mean WHZ (-0.23) between camps, p= 0.02.

**CONCLUSION**: LNS may be an option for preventing acute malnutrition in humanitarian settings, however research is needed on the timing, duration of use and cost effectiveness.

## Grellety E et al. "Effect of mass supplementation with ready-to-use supplementary food during an anticipated nutritional emergency." PLoS ONE (2012); 7: e44549.

**OBJECTIVES**: Previous studies have shown the benefits of ready-to-use supplementary food (RUSF) distribution in reducing the incidence and prevalence of severe acute malnutrition. To compare the incidence of wasting, stunting and mortality between children aged 6 to 23 mo participating and not participating in distributions of RUSF, we implemented two exhaustive prospective cohorts including all children 60 cm to 80 cm, resident in villages of two districts of Maradi region in Niger (n = 2238).

**CONCLUSION**: Short-term distribution with RUSF for children 6 to 23 months improve the nutritional status of children at risk for malnutrition. Fewer children who participated in the RUSF distribution died than those who did not.









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