

## SUPPLEMENTARY FEEDING WITH FORTIFIED SPREADS RESULTS IN HIGHER RECOVERY RATES THAN WITH A CORN/SOY BLEND IN MODERATELY WASTED CHILDREN

Matilsky, D., Maleta, K., Castleman, T. and Manary, M. J.

*Supplementary feeding with fortified spreads results in higher recovery rates than with a corn/soy blend in moderately wasted children.*

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### ABSTRACT

Moderate childhood wasting is defined as having a weight-for-height Z-score (WHZ)  $< -2$ , but  $\geq -3$ . These children are typically given fortified corn/soy blended flour (CSB), but this intervention has shown limited effectiveness. Fortified spreads (FS) can be used as supplementary foods instead; they are energy-dense, lipid-based pastes with added powdered micronutrients. In this randomized clinical effectiveness trial, the recovery rates were compared among children with moderate wasting who received either milk/peanut FS, soy/peanut FS, or CSB. Children received isoenergetic quantities of food,  $314 \text{ kJ}\cdot\text{kg}^{-1}\cdot\text{d}^{-1}$ , for up to 8 wk with biweekly follow-up. The primary outcome was recovery, defined as having a WHZ  $> -2$ . Time-event analysis was used to compare the recovery rate. A total of 1362 children were enrolled in the study. Children receiving soy/peanut FS had a similar recovery rate to those receiving milk/peanut FS and children in either FS group were more likely to recover than those receiving CSB (80% in both FS groups vs. 72% in the CSB group;  $P < 0.01$ ). The rate of weight gain in the first 2 wk was greater among children receiving milk/peanut FS ( $2.6 \text{ g}\cdot\text{kg}^{-1}\cdot\text{d}^{-1}$ ,  $n = 465$ ) or children receiving soy/peanut FS ( $2.4 \text{ g}\cdot\text{kg}^{-1}\cdot\text{d}^{-1}$ ,  $n = 450$ ) than among children receiving CSB ( $2.0 \text{ g}\cdot\text{kg}^{-1}\cdot\text{d}^{-1}$ ,  $n = 447$ ;  $P < 0.05$ ). Rates of length gain did not differ among the 3 groups. A total of 8% of children in each feeding group developed edema, indicative of severe malnutrition, while receiving supplemental feeding. We conclude that FS are superior supplementary foods to CSB for moderately wasted Malawian children.