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

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

ABSTRACT

Moderate childhood wasting is defined as having a weight-for-height Z-score (WHZ) < –2, but ≥–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 kJ·kg⁻¹·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 g·kg⁻¹·d⁻¹, n = 465) or children receiving soy/peanut FS (2.4 g·kg⁻¹·d⁻¹, n = 450) than among children receiving CSB (2.0 g·kg⁻¹·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.