Cochrane review on Specifically formulated foods for treating MAM

This is to share new evidence from the Cochrane review on Specifically formulated foods for treating children with moderate acute malnutrition (MAM) in low-and middle-income countries


These conclusions were based on review of data from eight randomized controlled trials, which are as under:

Author’s conclusions: “The provision of foods in addition to standard care or simple counseling improve a number of key outcomes in children with moderate acute malnutrition. Different types of foods may be equally effective in the short term nutritional rehabilitation of children with MAM.”

Key findings: Lipid based nutrient supplements (LNS) use in MAM,

- Did not Reduce Mortality
- Did not Reduce the risk of default or progression to severe acute malnutrition (SAM)
- Did induce vomiting

However LNS shows modest improvement in weight, weight for height, and mid-upper-arm-circumference, which could be probably attributed to increase in body fat and slightly increased number recovered. Author mentions “Rapid weight gain due to adipocyte deposits rather than to lean body mass increase may lead to adult adiposity, obesity, and metabolic syndrome especially in malnourished subjects (Uauy 2002; Ekelund 2006; Victora 2007; Gordon-Larsen 2012, Adair 2013). The evaluation of lean body mass increase - in comparison to fat body mass increase - would be an accurate measure to assess body composition (Jensen 2012) and to evaluate possible side effects of energy-dense foods, in particular, foods with very high lipid content such as LNS. Unfortunately, there is little evidence on the effect of different foods on fat-free mass compared to fat-mass, and on long-term outcomes of treatment with foods characterised by high lipid content in malnourished children.”

Authors’ of Cochrane review mentions, “most of the research so far has focused on industrialized foods, and on short term outcomes of MAM. There are no studies evaluation interventions to improve the quality of the home diet, an approach that should be evaluated in settings where food is available and nutritional education and habits are the determinants of malnutrition. There were no studies from Asia, where moderate acute malnutrition is most prevalent.”