Can local Diets Meet the Nutrient Adequacy of Young Children in Ethiopia? Evidence from the National Food Consumption Survey

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ABSTRACT

Objectives: Infants from 6 months onwards need energy- and nutrient dense complementary foods. This is a challenge in Ethiopia, where monotonous diets of poor nutrient density are fed to young children. We used data of the National Food Consumption Survey to determine nutrient adequacy of young children's diet and develop local food-based complementary feeding recommendations (CFR).

Methods: Representative data were used on food intakes of children 12-23 months, from four regions. Linear goal programming (Optifood) was applied to develop population specific local food-based CFR based on local foods and identify critical nutrients, for which local foods cannot meet recommendations.

Results: Data were available from 1544 children. 40-47 different foods were frequently consumed by (>5%of children) and >85% still received breast milk. Portion sizes were small: 62-73% of the consumed foods were eaten in daily portion sizes below 15 gram. Foods consumed in larger quantities (>100 gram) differ per region. Dairy Milk was consumed in large quantities in each region. Wheat was consumed in all regions but in moderate quantities (25 grams per day in SNNP...
to >100 gram in Tigray). Due to low overall intakes micronutrient deficiencies are likely. Promising foods to contribute to micronutrient intake are chickpeas (iron), millet (iron and calcium) and teff (iron), but there are no local foods with meaningful zinc contents.

**Conclusions:** The findings indicate that improved CFR can probably meet the nutrient requirements of some nutrients in Ethiopian young children. However, additional interventions will be required to meet requirements of zinc and probably others.