

**Association between food insecurity and child cognitive development  
in Kenyan community on Lake Victoria**

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## **Executive Summary**

Food insecurity is widespread as 600 million people are food insecure, mostly in developing countries. Food insecurity is associated with malnutrition, and malnutrition has been linked to poor child development outcomes. However, the association between food security and child development is not well defined, particularly in developing countries and in early childhood. This thesis is part of a larger two year longitudinal cohort study assessing the impact of fishery access on livelihoods, food security, and child nutrition and cognitive development on Mfangano Island in Lake Victoria in Kenya. Baseline sociodemographic, food security, dietary, anthropometric, and cognitive development data collected on 309 children were used to test the hypothesis that household food security status is associated with child cognitive development. Child dietary intake and growth were tested as pathways through which food security status is linked to cognitive development. The prevalence of food insecurity in the study population was higher than the national prevalence, while the prevalence of stunted, underweight, and wasted children was similar to national rates. Results indicate that household food insecurity is associated with worse gross motor development, but not personal social or communication development. The strength and significance of the association between food security status and gross motor scores did not substantially change when controlling for growth, sociodemographics, or a crude measure of dietary intake. Findings suggest that there may be an association between food security status and child development, but more research is needed to assess pathways through which the association occurs. Incorporating longitudinal data and other covariates from the larger study will further inform these results and targets for policies and programs to improve child development in Kenya.