



# A Scoping Review of Fortified-Blended Food Supplementation and Child Development Outcomes in Maradi, Niger: Linear Growth and Cognition in Infants and Young Children

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## Abstract

The Maradi region of Niger faces a high burden of undernutrition among infants and young children. Fortified-blended foods (FBFs) are a widely used nutritional intervention, yet their specific effect on key developmental outcomes in this setting remains unclear. This scoping review aimed to systematically map and synthesise available literature on the impact of FBF supplementation on linear growth and cognitive development in children aged 6–24 months in Maradi, Niger. Its objectives were to identify key concepts, types of evidence, and gaps in the research landscape. The review was conducted according to the Joanna Briggs Institute methodology for scoping reviews. A systematic search was performed across multiple electronic databases, and grey literature sources were also consulted. Studies of any design examining FBFs and the specified outcomes in the target population were considered. Data were extracted and analysed thematically. The search identified a limited number of relevant studies. The available evidence, while not extensive, suggests a potential positive association between FBF supplementation and improved linear growth indicators, with one study reporting a reduction in stunting prevalence. Evidence on cognitive development outcomes was especially scarce, with no studies providing robust measurement of developmental milestones or cognitive function. There is a scarcity of high-quality, focused research evaluating the impact of FBFs on child development in Maradi, Niger. While some evidence indicates potential benefits for linear growth, the effect on cognitive development is largely unexamined, representing a significant evidence gap for policy and programming. Future research should employ rigorous longitudinal or experimental designs to directly assess the causal impact of FBFs on both linear growth and cognitive development. The use of standardised outcome measures is essential. Further investigation into contextual factors influencing supplementation efficacy is also needed. fortified-blended food, supplementary feeding, child development, linear growth, cognitive development, stunting, Niger, scoping review. This review maps the current evidence and identifies critical research gaps regarding a common nutritional intervention in a high-burden setting, providing direction for future investigation and programme evaluation.

**Keywords:** *fortified-blended foods, linear growth, cognitive development, infant and young child nutrition, Sahel, complementary feeding, stunting*

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