Introduction: Household Food Insecurity (HHFI) is adversely associated with diet quality and can affect health status in adults and children. HHFI may become a source of stress in the family, which affects parenting behaviors and can lead to adverse outcomes for children. Relationship between mother’s mental health and infant feeding styles with child’s weight status in food insecure households is not well defined. This study was performed to investigate the association between household food insecurity and infant or toddler’s weight status, and the role of mother’s depression and maternal feeding style in mediating this association.

Methods: In this cross-sectional study, 423 mothers and their under 2 years old children, from different areas of Varamin city, Iran, were selected by a multistage sampling method. Data were collected by a questionnaire consisted of four valid instruments, including: Household Food Insecurity Access Scale (HFIAS), Comprehensive Feeding Practices Questionnaire (CFPQ), Beck Depression Inventory (BDI-III) and Food Frequency Questionnaire (FFQ).

Results: Of the studied households 52.3% were food insecure. There was a significant correlation between household food insecurity and mother’s depression (r=0.391, p<0.001) and mother’s Dietary Diversity Score (DDS) (r=-0.410, p<0.001). Mother’s DDS (r=-0.101, p=0.042) was associated with child’s weight for height z-score (WHZ). The study model had sufficient fitness with the data (CFI=0.990, RMSEA=0.029).

Conclusion: The findings suggest that food insecurity may alter the feeding environment through mother’s depression, maternal infant feeding styles and diet quality and this can affect child weigh status.