Healthy, Breast Fed Bangladeshi Children Can Regulate Their Food Consumption in Each Meal and Feeding Duration When Offered with Varied Energy Density and Feeding Frequency of Complementary Foods

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Abstract : Information is required on the effects of dietary energy density (ED) and feeding frequency (FF) of complementary foods (CF) on food consumption during individual meals and time expended in child feeding. We evaluated the effects of varied ED and FF of CFs on food intake and time required for child feeding during individual meals. During 9 separate, randomly ordered dietary periods lasting 3-6 days each, we measured self-determined intakes of porridges by 18 healthy, breastfed children 8-11 mo old who were fed coded porridges with energy densities of 0.5, 1.0 or 1.5 kcal/g, during 3, 4, or 5 meals/d. CF intake was measured by weighing the feeding bowl before and after every meal. Children consumed greater amounts of CFs per meal when they received diets with lower ED (p = 0.044) and fewer meals per day (p < 0.001). Food intake was less during the first meal of the day than the other meals. Greater time was expended per meal when fewer meals were offered. Time expended per meal did not vary by ED, but the children ate the lower ED diets faster (p = 0.019). Food intake velocity was also greater when more meals were offered per day (p = 0.005). These results provide further evidence of young children's ability to regulate their energy intakes, even during infancy; and they convey information on factors that affect the amount of time that caregivers must devote to child feeding.

Keywords : complementary foods, energy density, feeding frequency, young children

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