Level of neighborhood deprivation predicts adherence to *2020-2025 Dietary Guidelines for Americans* in children under two

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The first USDA *Dietary Guidelines for Americans* for children under 2 were released in December, 2020. We analyzed data from the CDC-funded PREVAIL birth cohort in Cincinnati, OH to assess diet quality in line with recommendations for breastfeeding initiation, fruit and vegetable (FV), and sugar-sweetened beverage (SSB) intake by the socioeconomic position (SEP) of subject neighborhoods.

Breastfeeding initiation was self-reported by the mother post-delivery. Diet was assessed using a validated food frequency questionnaire at 12, 18, and 24 months of age. Home addresses were geocoded and merged with the Deprivation Index, a validated measure of census tract-level SEP, with residence classified as being high SEP (least deprived), low SEP (most deprived) or the middle quartiles of deprivation score.

Residents in high SEP neighborhoods differed from those in low SEP neighborhoods by race, income, and education (all $p<0.001$). Breastfeeding initiation data was available for 245 subjects and dietary data was available for 207 children from research visits at 12, 18, and 24 months. Comparing children from low SEP to high SEP neighborhoods, breastfeeding initiation was 22% lower ($p=0.004$), while FV consumption from 12-24 months was one-third lower ($p<0.001$). Low SEP children were 5 times more likely to consume SSB ($p=0.001$) compared to children in high SEP neighborhoods.

In the PREVAIL Cohort, children in low SEP neighborhoods were less likely to initiate breastfeeding and consumed fewer FV and more SSB than those in more affluent neighborhoods. Efforts to improve diet quality in infants and young children should focus on high risk neighborhoods.

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