

Abstract

This analysis of the local food environment in Lane County, OR aimed to investigate inequalities associated with access to healthy food. The findings suggest that the problem is complex and is not simply a lack of healthy food stores. Retail food environments evolve quickly and research approaches to evaluate the phenomena are nimble with advanced technology and high quality data. Spatial access to healthy food is a key factor for dietary decisions. Previous research linked diet related diseases in disadvantaged communities to disparities in food access. Disadvantaged residents were associated with low access to healthy food outlets and high access to unhealthy food stores. Neighborhood food access was tracked through statistical analysis of economic and demographic characteristics that were collected in the federal census. This analysis quantified the food environment in Lane County, Oregon. The primary assessment measured residential proximity to five different food store types over the road network in Esri's Network Analyst. The distances were aggregated into Census Block Groups to determine whether access to healthy food decreased in disadvantaged neighborhoods. This research aimed to fill the gap in the literature for distance-based food access analyses using residential address points at a local scale. This work employed systematic methods that addressed food retail dispersion across heterogeneous space to determine food outlet presences and absences at various distance bands across the study area. This research contributes to methodological developments that would eliminate the standard practice of compartmentalizing urban and rural food environment research into silos that are evaluated separately. The primary finding of the study was that neighborhoods in Lane County characterized as high deprivation with higher minority compositions had better access to healthy food store types. Future research should consider the affordability of healthy foods and include farmers' markets, roadside stands, and community supported agriculture.