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AN ANALYSIS OF FOOD DIFFERENCES BETWEEN RURAL AND NON-RURAL COUNTIES IN MISSOURI

Melinique Walls

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Several studies have documented variances in health outcomes for residents living in rural versus non-rural settings, which may be linked to differences in the food landscape between these two settings. The objective of this study was to determine if there are rural-non-rural differences in the food environment in Missouri. We used 2016 County Health Rankings data to evaluate differences across the three domains of interest (food environment, food insecurity, and access to health food) for rural and non-rural counties in Missouri. This is a cross-sectional study employing chi-square analysis and logistic regression.

We found that there is a significant difference ($p < 0.05$) in the food landscape for rural and non-rural counties. Rural Missouri counties are at increased likelihood of being ranked in the lowest quartile for food environment, food insecurity, and access to health food than non-rural counties. The largest difference was seen in food environment, after adjusting for socioeconomic factors, health behavior factors, and physical environmental factors, with rural counties being 5.40 times (OR = 5.40, 95% CI = 1.08, 27.13) more likely to be in the lowest quartile than non-rural counties.

Our analysis revealed that rural counties were ranked worse in food environment than non-rural counties. This study highlights the food disparities between rural and non-rural settings and therefore the need to address these disparities to improve the overall health of Missouri residents. Further study of health outcomes in terms of food environment may inform non-clinical approaches to improving health in Missouri.