No Oasis in the Desert: Identification and Implications of the Food Desert around an Urban Ohio Hospital

R. J. Sontag
Wright State University - Main Campus, sontag.3@wright.edu

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No Oasis in this Desert: Identification and Implications of the Food Desert around an Urban Ohio Hospital

RJ Sontag, MSII
Department of Family Medicine, Wright State University Boonshoft School of Medicine, Dayton, Ohio

Introduction
Montgomery County, Ohio’s diabetes prevalence outpaces the nation, and the incidence of adult obesity approaches 1/3. Access to healthy food in the impoverished neighborhood surrounding Dayton’s Good Samaritan Hospital, the site of the Food Deserts Medicine residency, is important when educating about health literacy.

Purpose: To determine whether the area was a food desert and to evaluate the implications of the label.

Prevalence of Type 2 Diabetes mellitus

Body Mass Index rates by category

Methods
Database search
- Review of current literature (2009-2014) using Web of Science database and selected terms “food desert”

Other sources considered
- Additional references considered in this narrative review include sources outside the date range, but which were referenced in review papers.

Food Atlas Search
- The Economic Research Service (ERS) of the U.S. Department of Agriculture (USDA) maintains a Food Access Research Atlas, searchable by address.

Community source accessed
- Multiple stakeholders are researching the Dayton food system, and they provide unique insights into the current environment.

Literature cited

Results

How a census tract qualifies as a food desert

- Low Income: More than 20% in poverty
- Low Access: More than a half mile from a supermarket
- Low Vehicle Access: More than 100 households without vehicle access

Supermarket Presence
- Existence of stores with more than $2 million in annual sales of food including produce, meat, dairy, dry or packaged foods, and frozen foods. In the area surrounding Good Samaritan Hospital, examples of stores meeting this definition include Kroger and Save A Lot.

Do food deserts matter?

Adding grocery options in a food desert may not improve fruit and vegetable consumption nor BMI.10

On average, Supplemental Nutrition Assistance Program (SNAP) participants lived 1.8 miles from the nearest supermarket but traveled 4.9 miles to the foodstore they most often used.11

Federal policy makers consider the current food desert research to be inconclusive, and they question the importance of food desert mapping.12

Local efforts

Young professional group UpDayton work to improve food access. They analyzed the Dayton food environment using the Food Access Research Atlas, and in the area surrounding Good Samaritan Hospital, they found that more than half the population lived more than a half mile from a supermarket, and more than 20% in poverty.

Conclusions

The implications of food deserts on diseases commonly seen in family physicians, including diabetes and obesity, are complex and may be part of the multifactorial causes of these diseases.

Physicians should consider food access, affordability, and quality when working with patients to develop plans for improving food choices.

Improved health literacy is essential to changing eating habits, and focusing solely on improving food access will not solve the problem.

Food access in a defined food desert may still be adequate, but food access in the defined food desert may be complex. These findings have significant implications for the current environment.

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