Food Deserts and Food Access Overview

Food Deserts

- Food deserts are areas with inadequate access to supermarkets

- How they are identified?
  - USDA: Area that is low income and low access
    - Low income: Poverty rate is at least 20%; median family income is at most 80% of state level median income
    - Low access: At least 500 people or 33% of the population lives more than ½ mile from a supermarket in an urban area or 10 miles from a supermarket in a rural area

- Why are they important?
  - People living in food deserts tend to consume less nutritious foods and have poorer health outcomes

Food Access

- How does access differ from food deserts?
  - Food deserts describe an area, food access describes possible barriers a household may face to obtaining a healthy food supply

- How is access measured?
  - Several possible methods
    - Accessibility – distance to nearest store
    - Availability – number of stores nearby
    - Affordability – price of food in nearby stores

- Relationship between distance to store (accessibility) and healthy food consumption or obesity is mixed
  - Mixed results means that only some studies find a significant relationship
    - Suggests there is not a consistent or generalizable relationship

- What may explain the mixed results?
  - Studies often measure distance to nearest store, rather than utilized store
    - Thus unclear if relationship with health and diet is related to store use, or other behavior
  - Past research focuses primarily on supermarket accessibility
    - Households also consider price when purchasing food, and price may have a greater influence on their food purchasing behavior
  - Distance to grocery may also capture other attributes of a community not related to food purchases, but may still influence health such as poverty or crime
Does building a grocery store help?

- Assessed using evaluation studies
  
  - Evaluation studies measure outcomes in a neighborhood before and after a new store opens and compare those changes to a neighborhood that does not receive a new supermarket

<table>
<thead>
<tr>
<th>Location</th>
<th>Funding Source</th>
<th>Year Store Opened</th>
<th>Store Utilization</th>
<th>Effect on Consumption</th>
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</thead>
<tbody>
<tr>
<td>Bronx, NYC</td>
<td>NYC Food Retail Expansion to Support Health (FRESH)</td>
<td>2011</td>
<td>13% of sample regularly used store</td>
<td>Small increase in consumption of total fat and protein rich foods 5 weeks after store opened</td>
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<tr>
<td>Pittsburgh, PA</td>
<td>Healthy Food Financing Initiative (HFFI)</td>
<td>2013</td>
<td>68% of sample regularly used store</td>
<td>Overall dietary quality improved, but couldn’t attribute change to use of supermarket</td>
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<tr>
<td>Philadelphia, PA</td>
<td>Pennsylvania Health Food Financing Initiative (PFFI)</td>
<td>2009</td>
<td>26.7% of sample adopted new store as primary store</td>
<td>No influence on consumption, improved perception of food accessibility</td>
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<tr>
<td>Flint, MI</td>
<td>Private investors</td>
<td>2010</td>
<td>Not reported</td>
<td>No influence on consumption. Store closed 17 months after opening</td>
</tr>
</tbody>
</table>

Why doesn’t building a grocery store seem to help?

- Building a new supermarket changes the distance to the store, but possibly not the price of groceries
  
  - If the supermarket households typically use has cheaper prices, they may not switch to the new store
  
  - Some research has found households are willing to travel beyond nearest store to find better prices

- Nationally, households seem to be split between primarily using a supermarket or supercenter (ex. Super Wal-Mart) as their primary food source
  
  - If households prefer a different type of store, they may not be willing to switch to a new supermarket, even if it is closer

- Most food access research assume households care about the distance from the home to a supermarket
  
  - But if households shop on their way home for work, or as part of weekend chores (i.e. shopping for other household goods at stores such as Target) they may not change their behavior when a supermarket opens closer to home

- Nationally, households use restaurants and fast-food for approximately 40% of their weekly food supply
  
  - Food from these sources may have a greater influence on health

Resources


HFFI link: https://www.acf.hhs.gov/ocs/programs/community-economic-development/healthy-food-financing
References: Food Deserts

References: Food Access

References: Grocery Store Experiments