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Ohio Cardiovascular and Diabetes Health Collaborative

SCHOOL OF MEDICINE
CASE WESTERN RESERVE UNIVERSITY

In partnership with:

THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

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OHIO COLLEGES OF MEDICINE GOVERNMENT RESOURCE CENTER

Ohio Department of Medicaid

Project ECHO®

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Cardi-OH ECHO

Your Patient with Diabetes at Risk for Heart Disease: A Series of Case Discussions

November 18, 2021

Cardi-OH ECHO Team and Presenters

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Case Western Reserve University

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Disclosure Statements

- The following planners, speakers, and/or content experts of the CME activity have financial relationships with commercial interests to disclose:
  - Marilee Clemons reports receiving consulting fees from Novo Nordisk.
  - Kathleen Dungan, MD, MPH reports receiving consulting fees from Eli Lilly, Novo Nordisk and Boehringer, research support from Sanofi, , Viacyte, and Abbott and presentation honoraria from UpToDate, Elsevier, ACHL, and CMHC.
  - Adam T. Perzynski, PhD reports being co-owner of Global Health Metrics LLC, a Cleveland-based software company and royalty agreements for book authorship with Springer Nature publishing and Taylor Francis publishing.
  - Christopher A. Taylor, PhD, RDN, LD, FAND reports grant funding for his role as a researcher and presenter for Abbott Nutrition and grant funding for research studies with both the National Cattleman's Beef Association and the American Dairy Association Mideast.
  - Jackson T. Wright, Jr., MD, PhD reports receiving fees for serving as an advisor to Medtronic.
  - These financial relationships are outside the presented work.
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Person-Centered Language Recommendations

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The ADA and the APA recommend language that emphasizes inclusivity and respect:

- **Gender**: Gender is a social construct and social identity; use term “gender” when referring to people as a social group. Sex refers to biological sex assignment; use term “sex” when referring to the biological distinction.
- **Race**: Race is a social construct that is broadly used to categorize people based on physical characteristics, behavioral patterns, and geographic location. Race is not a proxy for biology or genetics. Examining health access, quality, and outcome data by race and ethnicity allows the healthcare system to assist in addressing the factors contributing to inequity and ensure that the health system serves the needs of all individuals.
- **Sexual Orientation**: Use the term “sexual orientation” rather than “sexual preference” or “sexual identity.” People choose partners regardless of their sexual orientation; however, sexual orientation is not a choice.
- **Disability**: The nature of a disability should be indicated when it is relevant. Disability language should maintain the integrity of the individual. Language should convey the expressed preference of the person with the disability.
- **Socioeconomic Status**: When reporting SES, provide detailed information about a person’s income, education, and occupation/employment. Avoid using pejorative and generalizing terms, such as “the homeless” or “inner-city.”

Flanagin A et al., 2021, JAMA; Dickinson JK et al., Diabetes Care, 2017; American Psychological Association, 2021; ODM, 2021.

Food Sources, Diabetes, and Cardiovascular Health

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Objectives

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1) Describe how available food sources influence cardiovascular risk.

2) Describe how taste preferences influence body weight and control of type 2 diabetes.

3) Describe the impact of public health efforts to improve the healthfulness of the food supply.

Disparities in Obesity are Well-Known

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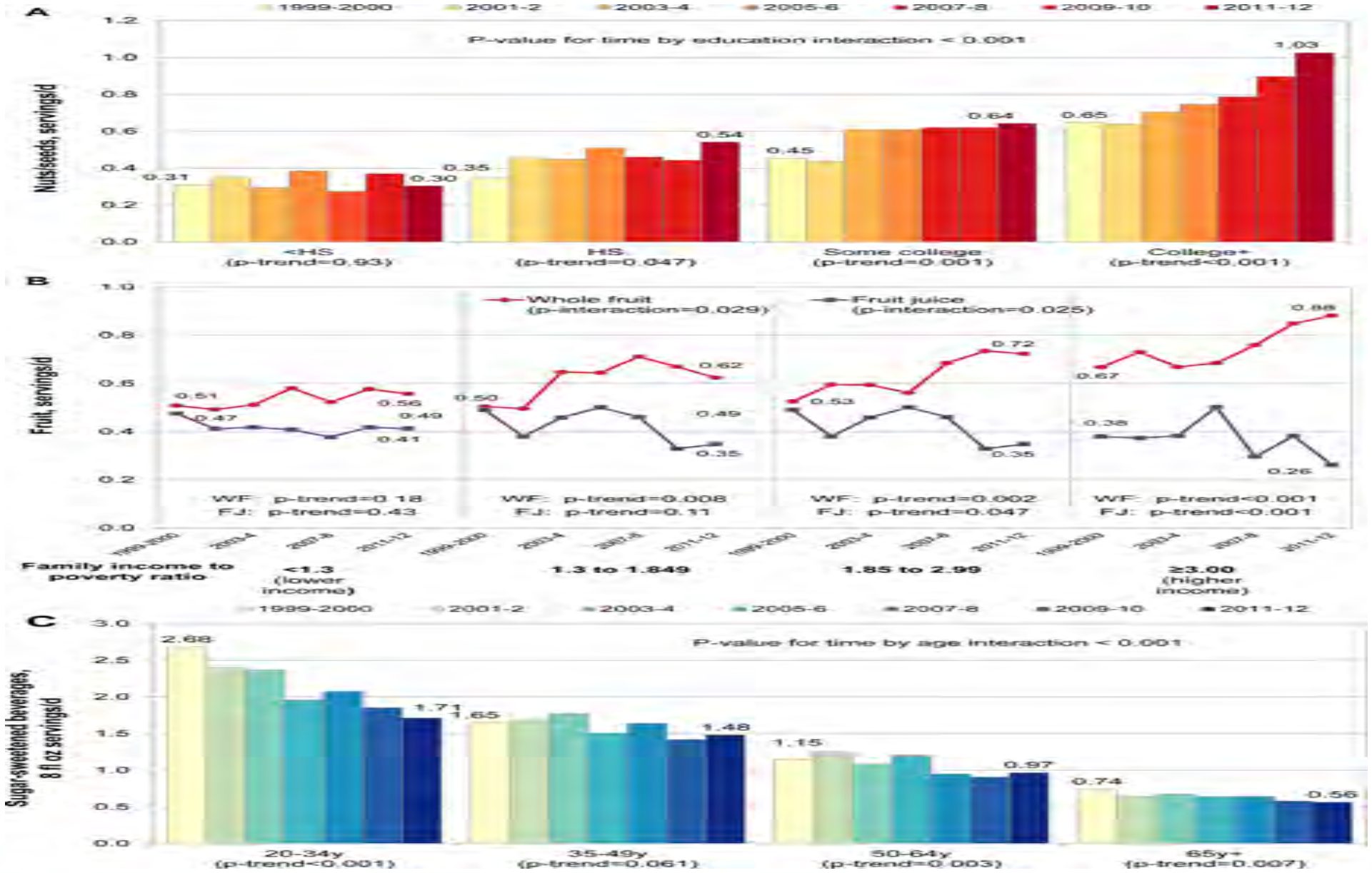
- Overall adult obesity prevalence is 42.4%
- Black – 49.6%
- Latinx – 44.8%
- Native American – 48.1%



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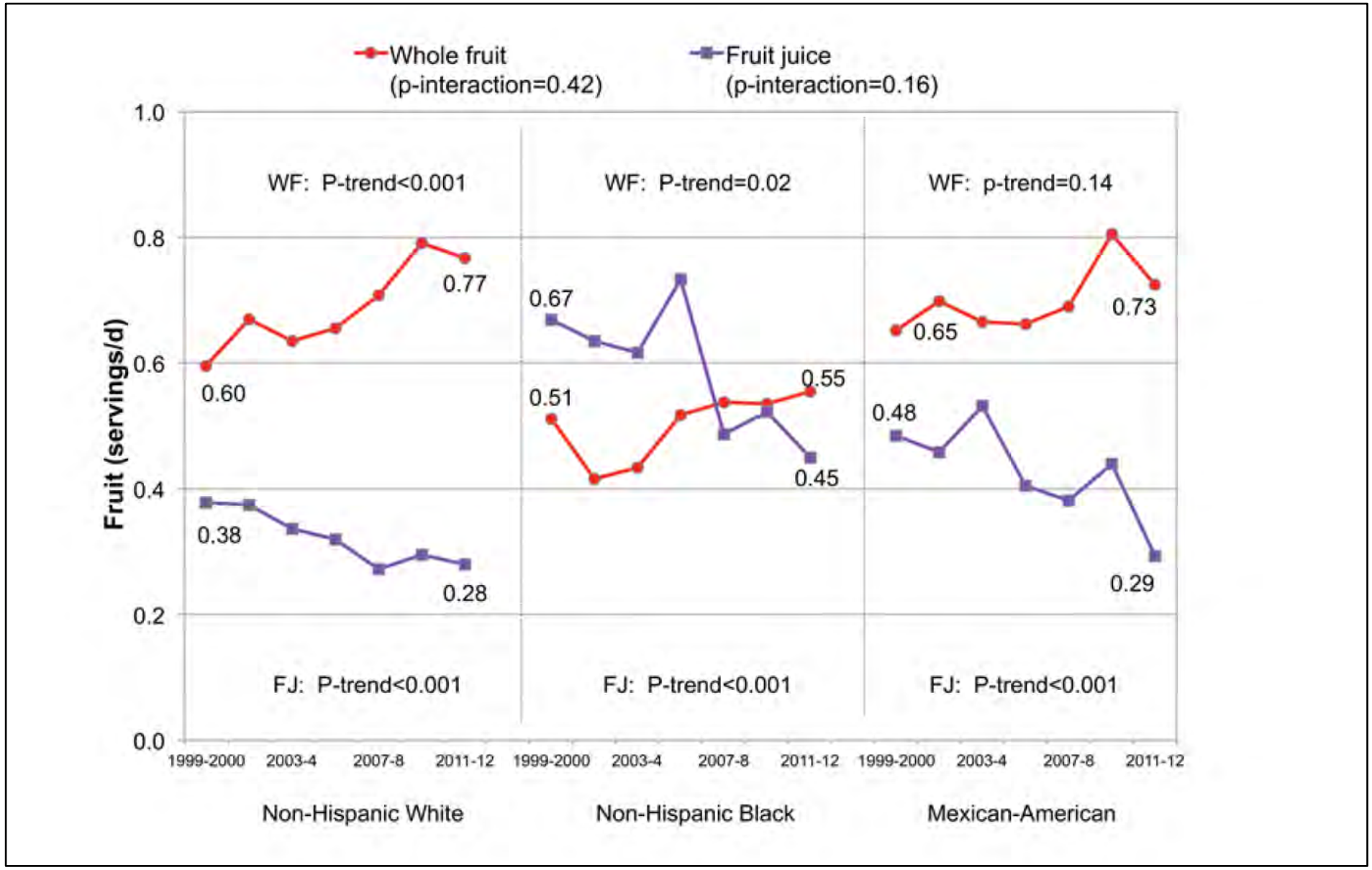

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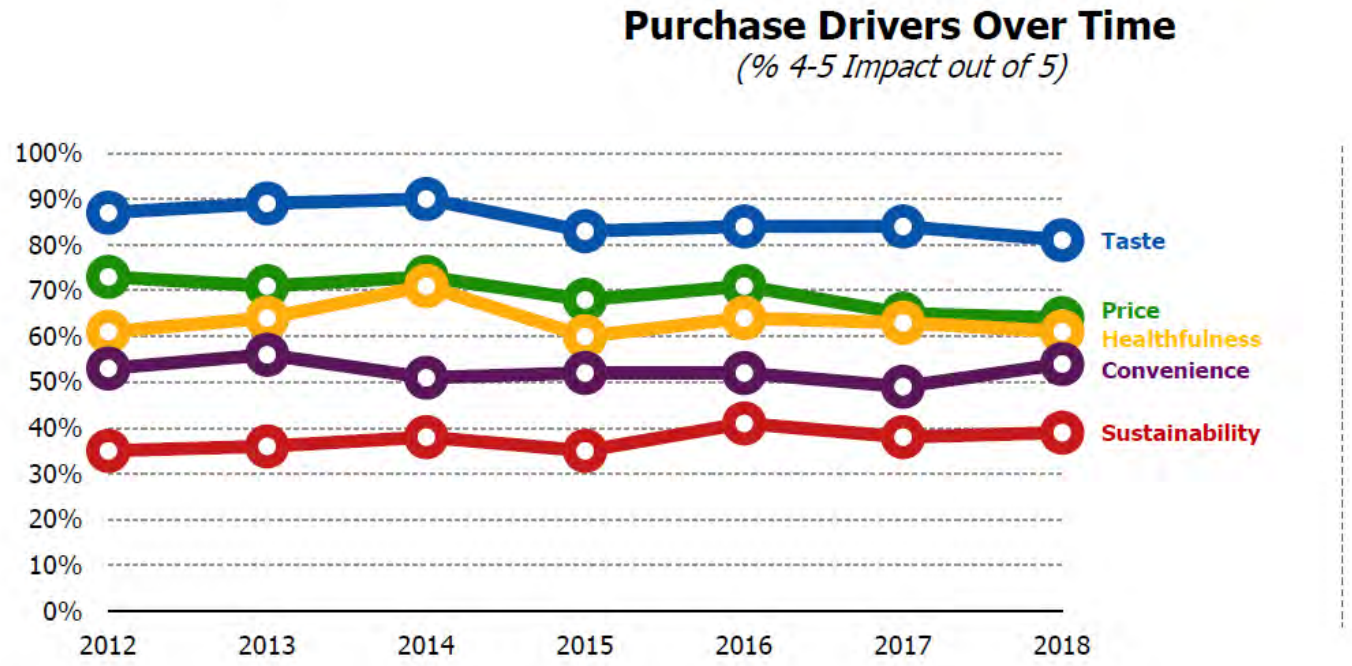
Taste and Price Remain Top Drivers

Although price is a top driver, it again comes in at a lower level than was seen before 2017



TheUpshot

FOOD DESERTS

Giving the Poor Easy Access to Healthy Food Doesn't Mean They'll Buy It

By Margot Sanger-Katz

May 8, 2015

110

In 2010, the Morrisania section of the Bronx was what is commonly called a food desert: The low-income neighborhood in New York's least-healthy county had no nearby grocery store, and few places where its residents could easily buy fresh food.

That's why it was the target of a city tax incentive program designed to bring healthy food into underserved neighborhoods. In 2011, a 17,000-square-foot supermarket opened, aided by city money that paid some 40 percent of the costs of its construction. The neighborhood welcomed the addition, and perceived access to healthy food improved. But the diets of the neighborhood's residents did not.

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2016

We Built it and They Did Not Come: Using Governance Theory in the Fight for Food Justice in Low-Income Communities of Color

Deborah N. Archer

Tamara Belinfanti
New York Law School, tamara.belinfanti@nyls.edu

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Videos

Goutham Rao, M.D.,Congressional Briefing: The State of ...

YouTube · Physicians Committee

May 6, 2014

Two Potential Strategies

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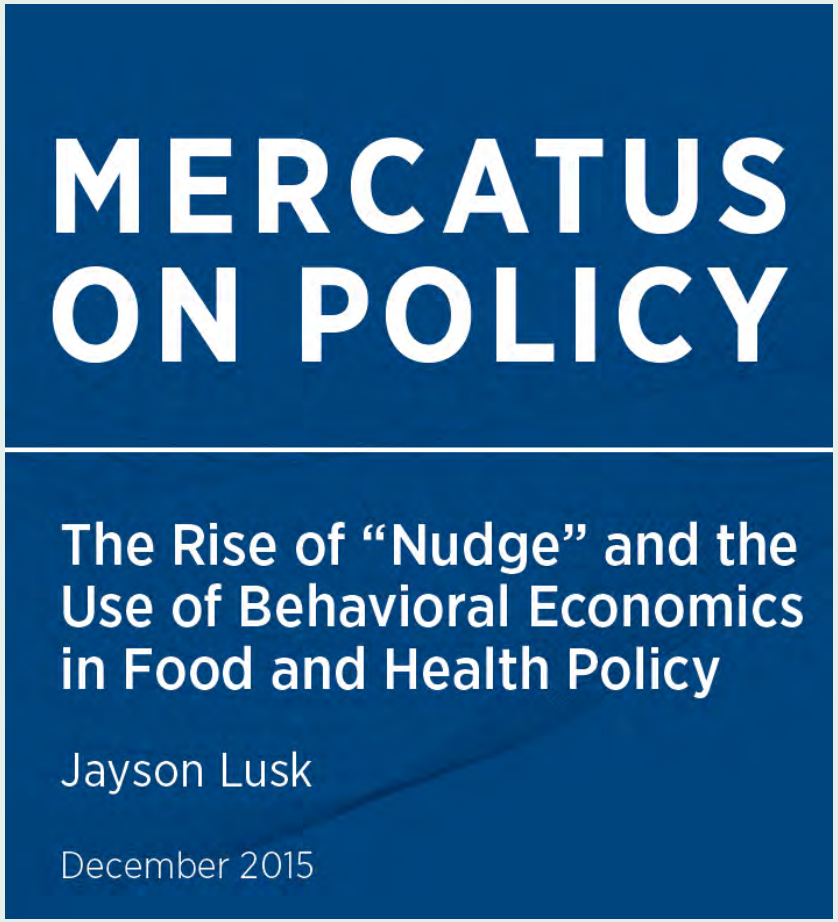
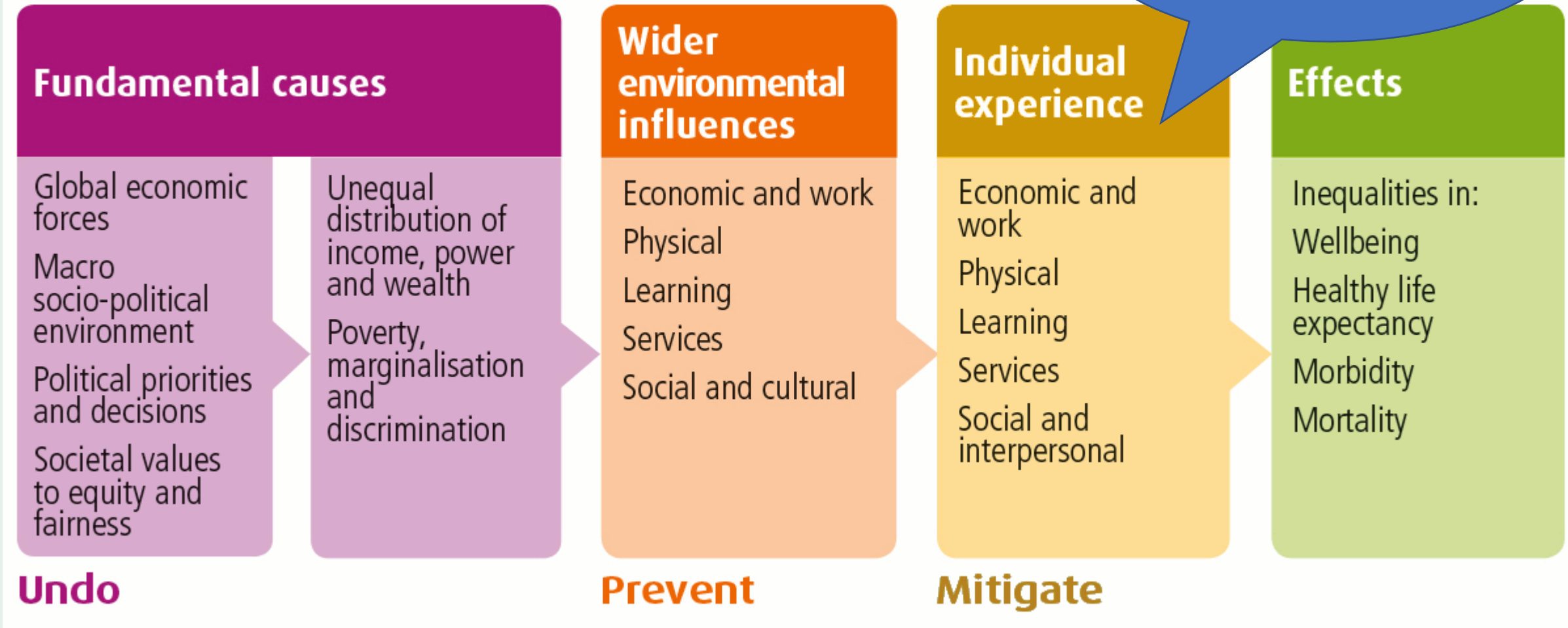


- Redefining food justice:
- **"Food Justice** is communities exercising their right to grow, sell, and eat healthy **food**. Healthy **food** is fresh, nutritious, affordable, culturally-appropriate, and grown locally with care for the well-being of the land, workers, and animals."
- "Food justice involves refusing to purchase and consume unhealthy foods which are marketed and sold aggressively in poor communities and communities of color."

Contextual Understanding of Food and Nutrition

MOST CURRENT SDOH EFFORTS IN US HEALTHCARE ARE FOCUSED HERE!



From National Health Service, Scotland

Community Structures are Critically Important for Health and Food Choice

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Neighborhood socioeconomic conditions influence:

1) Cardiovascular disease outcomes
2) Diabetes onset and management
3) Food retail environments

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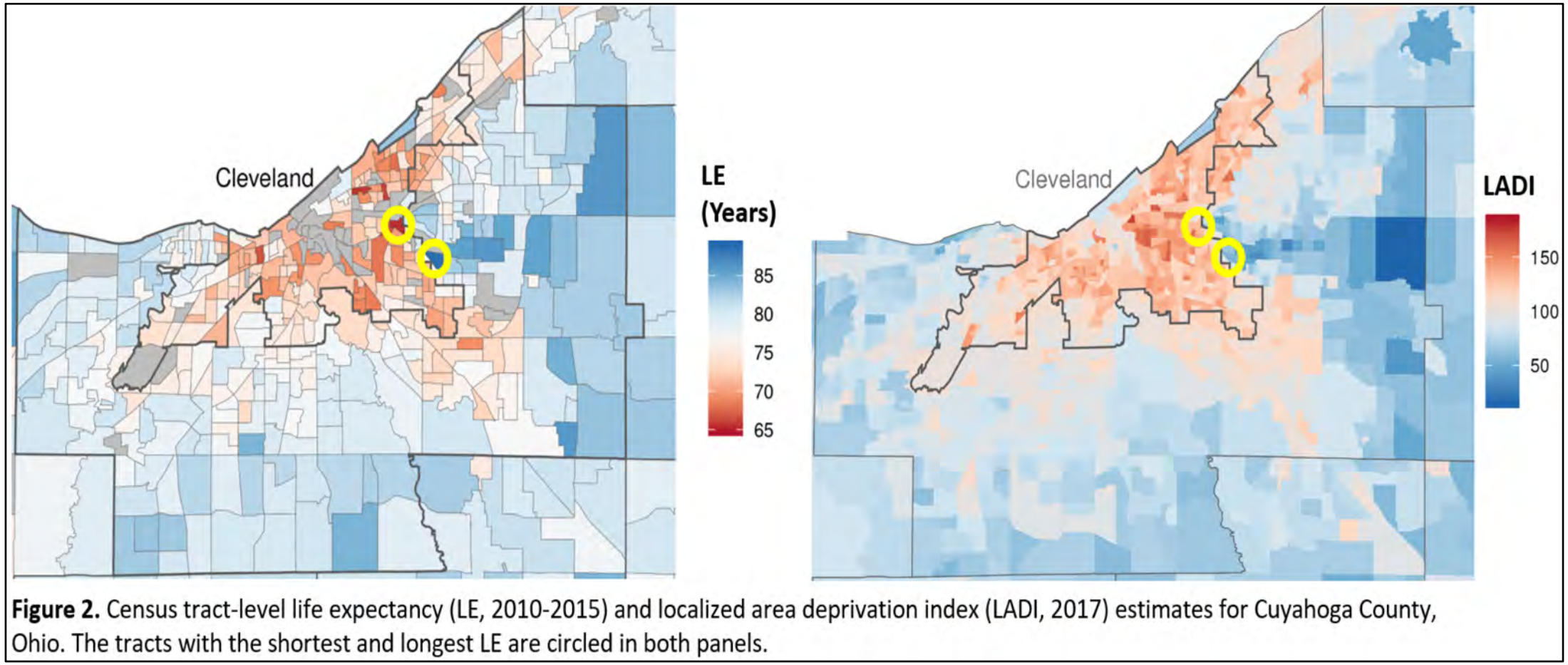

Figure 2. Census tract-level life expectancy (LE, 2010-2015) and localized area deprivation index (LADI, 2017) estimates for Cuyahoga County, Ohio. The tracts with the shortest and longest LE are circled in both panels.

The Retail Food Environment Index (RFEI)

The Retail Food Environment Index is constructed by dividing the total number of fast-food restaurants and convenience stores by the total number of grocery stores (including supermarkets) and produce vendors (produce stores and farmers' markets) within a radius around an individual CHIS respondent's home (0.5 mile in urban areas, 1 mile in smaller cities and suburban areas, and 5 miles in rural areas).

$$\text{RFEI} = \frac{\text{\# Fast-Food Restaurants} + \text{\# Convenience Stores}}{\text{\# Grocery Stores} + \text{\# Produce Vendors}}$$

The average local RFEI for California adults is approximately 4.5, meaning that for each grocery store or produce vendor around Californians' homes, there are more than four fast-food restaurants and convenience stores.

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Babey SH, Diamant AL, Hastert TA, Harvey S. 2008. Designed for disease: the link between local food environments and obesity and diabetes.

CDC 2011
National Center for Chronic Disease Prevention and Health Promotion Division of Nutrition, Physical Activity, and Obesity

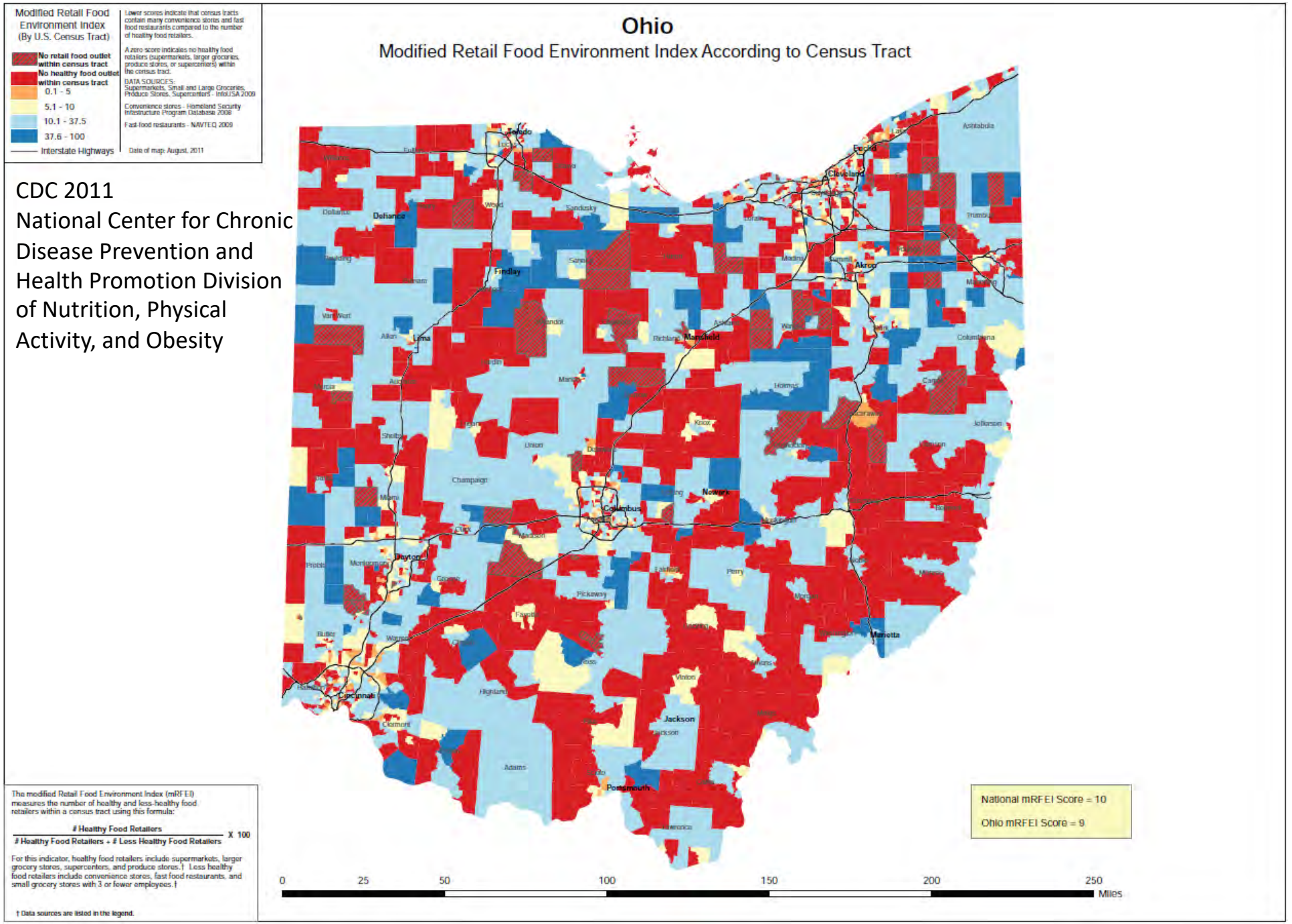

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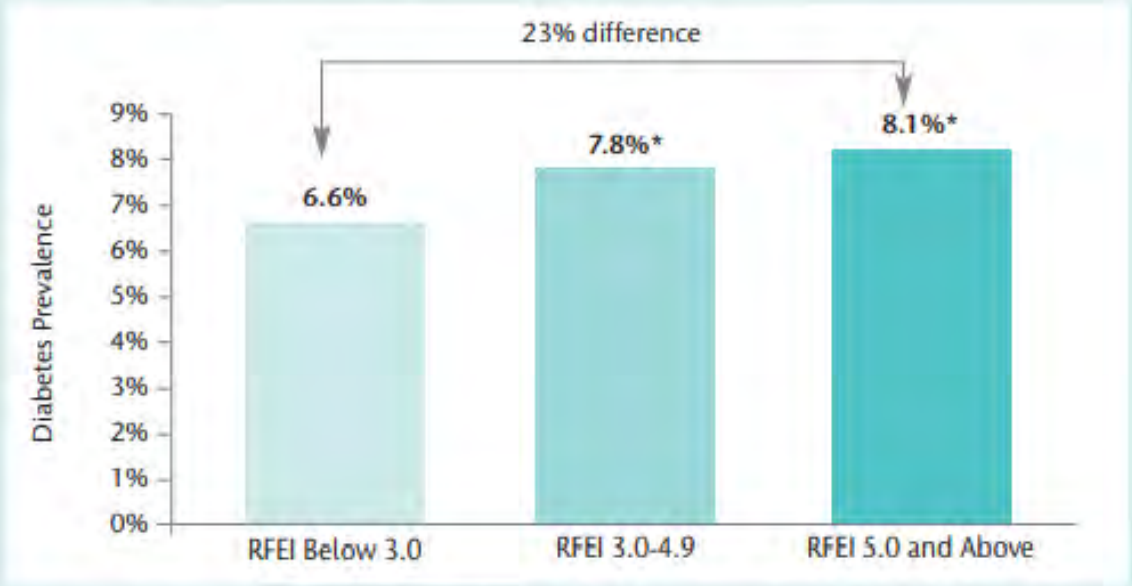
FIGURE 2

Diabetes Prevalence by Retail Food Environment Index, Adults Age 18 and Over, California, 2005



**Significantly different from "RFEI Below 3.0"; p<0.05. RFEI was calculated using buffers of 0.5 mile for respondents in urban areas, 1 mile for respondents in smaller cities and suburban areas and 5 miles for respondents in rural areas.*

Source: 2005 California Health Interview Survey and 2005 InfoUSA Business File

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Babey SH, Diamant AL, Hastert TA, Harvey S. 2008. Designed for disease: the link between local food environments and obesity and diabetes.

Fig. 1: ‘Distance’ (rural). ‘It is difficult for me to eat healthy because the stores are far. So I have to spend money on transport. The spaza shop do not sell healthy food.’

Mark Spires, Peter Delobelle, David Sanders, Thandi Puoane, Using photography to explore people with diabetes’ perspectives on food environments in urban and rural South Africa, *Health Promotion International*, , daaa035, https://doi.org/10.1093/heapro/daaa035

Fig. 2: ‘Street vendor’ (urban). ‘I prefer to have a fruit and veg street vendor that makes it easy for me to buy vegetables in the street. It makes it easy for me to cook because I don’t have to go to town to get vegetables. It is also good for people like me to have veggies for my health as I am diabetic’.

Mark Spires, Peter Delobelle, David Sanders, Thandi Puoane, Using photography to explore people with diabetes’ perspectives on food environments in urban and rural South Africa, *Health Promotion International*, , daaa035, https://doi.org/10.1093/heapro/daaa035

Babey, Susan H., Joelle Wolstein, and Allison L. Diamant. "Food environments near home and school related to consumption of soda and fast food." (2011).

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- People who live in poor food environments consume more weekly servings of sweetened beverages like sodas.
- People who live in poor food environments consume more fast food.
- At the state-level, these neighborhood influences account for millions of additional unhealthy meals per week.

Improvement is Possible!!

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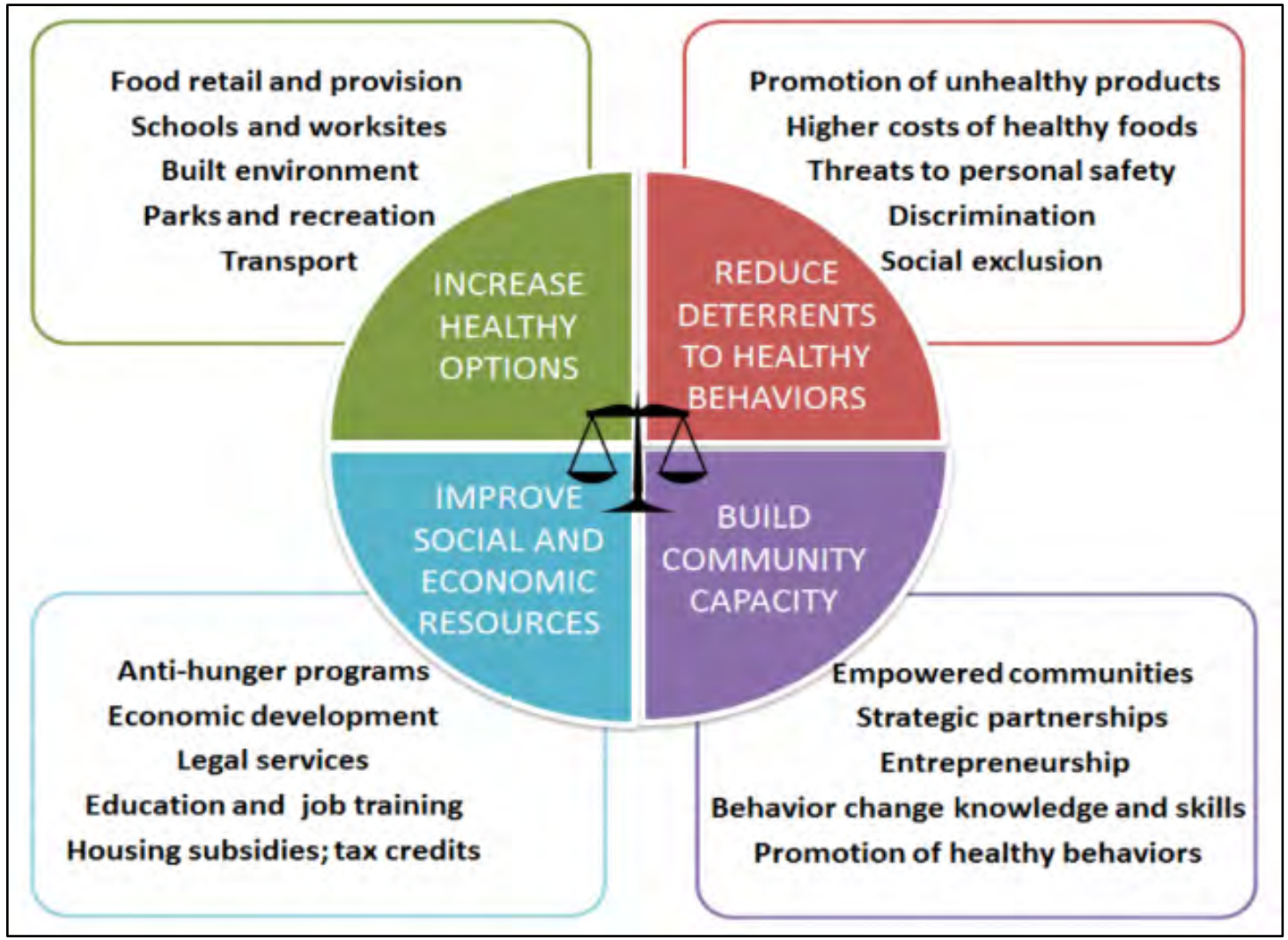
- Efforts to improve healthy food availability and reduce cost of healthy food are generally associated with small improvements

- Partnerships between clinics, community members and with retail (e.g. farmer's markets) are generally met with a positive community response and are more likely to show improvements

- Activity-based understandings of food environments are needed (not just where people live, but where they work, learn, play and engage in other activities)

Kumanyika, S. 2017. Getting to Equity in Obesity Prevention: A New Framework. *NAM Perspectives.* Discussion Paper, National Academy of Medicine, Washington, DC. doi: 10.31478/201701c



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Screen and Refer Models Help Resolve Individual Challenges but Structural Challenges and Hazardous Food Environments Remain

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- Approaches that utilize an SBIRT-type model (screening, brief intervention, referral to treatment)
  - have potential value
  - Are becoming more common
  - Require local food partnerships
- These approaches do not address underlying characteristics of communities that place individuals at risk and limit healthy options

- Maximize benefit through partnerships to transform retail environments in communities

Thank you!

Questions/Discussion