

# Nudging Customers Towards healthy options:

## Supermarkets and Public Health

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The Food Trust



# Questions driving the presentation

- Why is public health interested in supermarkets?
- Where can public health researchers, funders or behavior change specialists best work with industry?



# The Food Trust

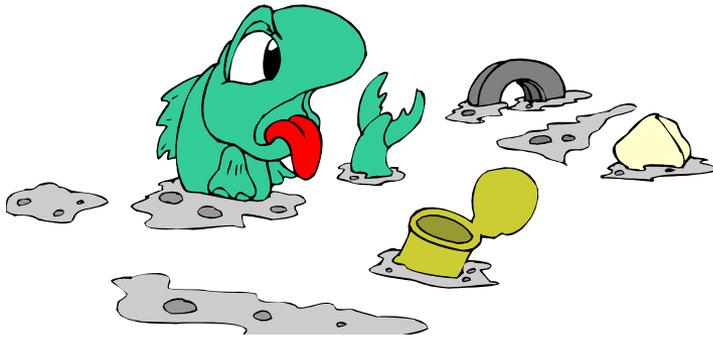
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THEFOODTRUST.ORG

# How did Public Health end up here?



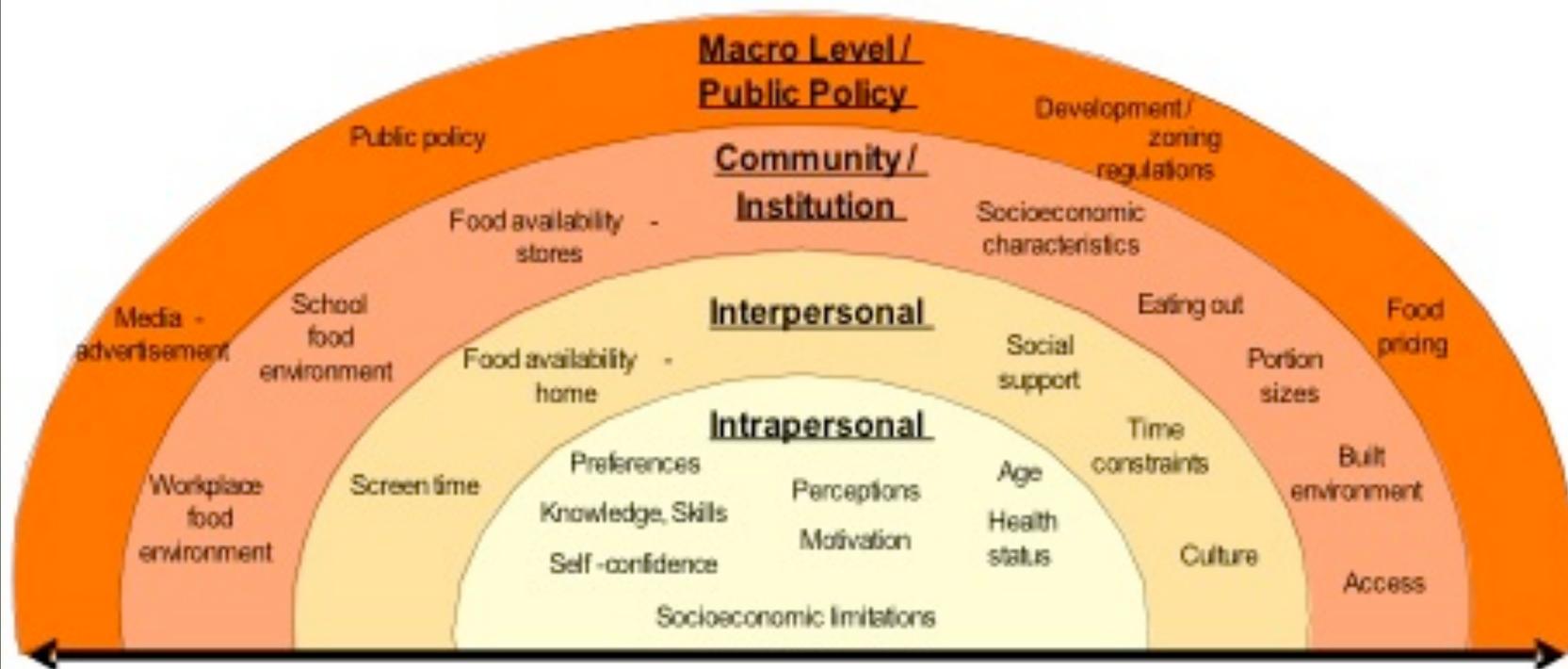
Public Policy



PUBLIC HEALTH'S EMPHASIS



# Ecological Model of Prevention



# How the built environment influences obesity

Scale	Energy Intake	Energy Expenditure
Macro scale	Food Systems	Transportation
	Commodity chains	Communications
	Food complexes	Mass Media
Meso scale	Food Landscapes	Exercise Landscapes
	Food Sheds	Neighborhoods
	Food Deserts	Facilities
Micro scale	Kitchenscapes	Rooms
	Tablescapes	Furniture
	Platescapes	Clothing

Sobal J, and Wansink B. 2008. Built Environments and Obesity. In EM Blass (Ed), Obesity: Causes, Mechanisms, Prevention, and Treatment. Sunderland, MA: Sinauer Associates.

# CDC's Recommended Strategies to Prevent Obesity

1. Increase availability of healthier food and beverage choices in public service venues
2. Improve availability of affordable healthier food and beverage choices in public service venues
3. Improve geographic availability of supermarkets in underserved areas
4. Provide incentives to food retailers to locate in and/or offer healthier food and beverage choices in underserved areas
5. Improve availability of mechanisms for purchasing foods from farms
6. Provide incentives for the production, distribution, and procurement of foods from local farms

Keener, D., Goodman, K., Lowry, A., Zaro, S., & Kettel Khan, L. (2009). Recommended community strategies and measurements to prevent obesity in the United States: Implementation and measurement guide. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.



41.6%

2009  
33.3%

1 OUT OF  
ARE OVER



2 OUT OF  
ARE OVER



3%

OF ADULTS THAT  
HAVE TYPE 2 DIABETES  
ARE UNDIAGNOSED.

PHYSICAL AC

PERCENT OF INDIVIDUAL  
WALKING TO WORK

4.1%

2.8%

FOOD AND B

CALORIES CON  
PER DAY BY A

1,996

MARKETING



### 5 SOLUTIONS FOR CHANGING OUR COMMUNITIES

INTEGRATE PHYSICAL ACTIVITY  
EVERY DAY IN EVERY WAY.

STRENGTHEN SCHOOLS AS  
THE HEART OF HEALTH.

MARKET WHAT MATTERS  
FOR A HEALTHY LIFE.

EAT WELL!

ON THEIR OWN, ANY ONE OF THESE FIVE  
SOLUTIONS MIGHT HELP SPEED UP PROGRESS  
IN PREVENTING OBESITY, BUT TOGETHER, THEIR  
EFFECT WOULD BE REINFORCED, AMPLIFIED,  
AND MAXIMIZED.

ACTIVATE EMPLOYERS AND  
HEALTH CARE PROFESSIONALS.

MARKET  
FRESH  
PRODUCE  
AVAILABLE!  
MAKE HEALTHY FOODS  
AVAILABLE EVERYWHERE.

ANYONE AND EVERYONE CAN BE A LEADER AND PLAY A PART IN IMPLEMENTING THESE FIVE SOLUTIONS.  
WHAT CAN YOU DO TO HELP SOLVE OUR OBESITY PROBLEM?

FOR SPECIFIC ACTION STEPS NECESSARY TO IMPLEMENT THESE SOLUTIONS, SEE THE IOM REPORT  
ACCELERATING PROGRESS IN OBESITY PREVENTION: SOLVING THE WEIGHT OF THE NATION  
[IOM.EDU/ACCELERATINGOBESITYPREVENTION](http://IOM.EDU/ACCELERATINGOBESITYPREVENTION)

SOURCES: FULL CITATIONS FOR REFERENCES CAN BE FOUND IN ACCELERATING PROGRESS IN OBESITY PREVENTION: SOLVING THE WEIGHT OF THE NATION

# Food Access as a National Issue

United States  
Department of  
Agriculture



Economic  
Research  
Service

WRS-09-0212

## Access to Affordable and Nutritious Food

### Updated Estimates of Distance to Supermarkets Using 2010 Data

Elizabeth W. Frong, Yvonne Benerose, Paula Duffin, Piyali Mukherjee,  
Samantha Stocker, Chris Dixon, Phil Kastman



29.7 million Americans do not have access to a grocery store within 1 mile of their home.



**"For real, I don't want to be 209 pounds, but like I said, I'm going to eat more salads and go running more."**

-Adaezia Flowers,  
15yr old Cincinnati Student

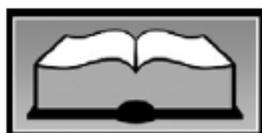




“When I found out that **my sister and my mom had diabetes** that **made me want to eat healthier**. I believe that every store should be like The Fresh Grocer because when I walk in the front **all you see are the healthy things**. A supermarket like that around where I would live at would change a lot of people to eat healthier.”



## Research and Professional Briefs



*Meets Learning Need Codes 4000, 4010, 4040, and 5370. To take the Continuing Professional Education quiz for this article, log in to ADA's Online Business Center at [www.eatright.org/obc](http://www.eatright.org/obc), click the "Journal Article Quiz" button, click "Additional Journal CPE Articles," and select this article's title from a list of available quizzes.*

# Examining Associations among Obesity and Per Capita Farmers' Markets, Grocery Stores/Supermarkets, and Supercenters in US Counties

STEPHANIE B. JILCOTT, PhD; THOMAS KEYSERLING, MD, MPH; THOMAS CRAWFORD, PhD; JARED T. McGUIRT, MPH; ALICE S. AMMERMAN, DrPH, RD

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### ABSTRACT

Fruit and vegetable consumption is an important component of a healthful diet, yet fruits and vegetables are underconsumed, especially among low-income groups with high prevalence rates of obesity. This study used data from the US Department of Agriculture Economic Research Service Food Environment Atlas to examine county-level associations among obesity prevalence and

metro) or for metro counties alone, but were significantly inversely related to obesity rates in the model for non-metro counties. In this ecologic study, density of food venues was inversely associated with county-level obesity prevalence. Thus, future research should examine similar associations at the individual-level.

*J Am Diet Assoc. 2011;111:567-572.*

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Contents lists available at SciVerse ScienceDirect

## Appetite

journal homepage: [www.elsevier.com/locate/appet](http://www.elsevier.com/locate/appet)



### Research report

# What foods are US supermarkets promoting? A content analysis of supermarket sales circulars <sup>☆</sup>



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### ARTICLE INFO

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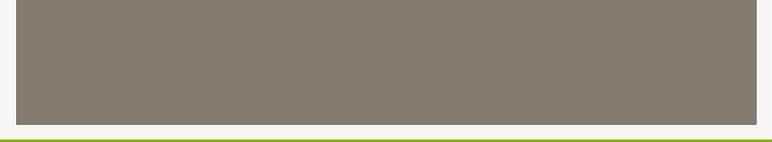
Received in revised form 25 October 2012

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Available online 8 December 2012

### ABSTRACT

This study compared the types of foods advertised in supermarket newspaper circulars across geographic region (US Census regions: northeast [ $n = 9$ ], midwest [ $n = 15$ ], south [ $n = 14$ ], and west [ $n = 13$ ]), obesity rate region (i.e., states with CDC adult obesity rates of  $<25\%$  [ $n = 14$ ], 25 to  $<30\%$  [ $n = 24$ ], and  $\geq 30\%$  [ $n = 13$ ]), and with MyPlate recommendations. All food advertisements on the first page of each circular were measured ( $\pm 0.12$ -in.) to determine the proportion of space occupied and categorized according to food group. Overall,  $\geq 50\%$  of the front page of supermarket sales circulars was devoted to protein food



Underlying Policy:  
Health disparities, health  
inequities and social  
determinants of health

# Health Disparities

- ◀ Differences in the incidence and prevalence of health conditions and health status between groups, based on:
  - Race/ethnicity
  - Socioeconomic status
  - Sexual orientation
  - Gender
  - Disability status
  - Geographic location
  - Combination of these

Reference: Braveman P. (2006)<sup>1</sup>

# Health Inequities

- Systematic and unjust distribution of social, economic, and environmental conditions needed for health
  - Access to healthcare
  - Employment
  - Education
  - Access to resources (e.g., grocery stores, car seats)
  - Income
  - Housing
  - Transportation
  - Positive social status
  - Freedom from discrimination

Reference: Whitehead M. et al<sup>7</sup>

# Social Determinants

Life-enhancing resources, such as food supply, housing, economic and social relationships, transportation, education and health care, *whose distribution across populations* effectively determines length and quality of life.

Reference: James S. (2002)<sup>6</sup>

# Obesity

- More than one-third of U.S. adults (35.7%) are obese.
- Obesity-related conditions include heart disease, stroke, type 2 diabetes and certain types of cancer, some of the leading causes of preventable death.
- In 2008, medical costs associated with obesity were estimated at \$147 billion; the medical costs for people who are obese were \$1,429 higher than those of normal weight.

## **Obesity affects some groups more than others**

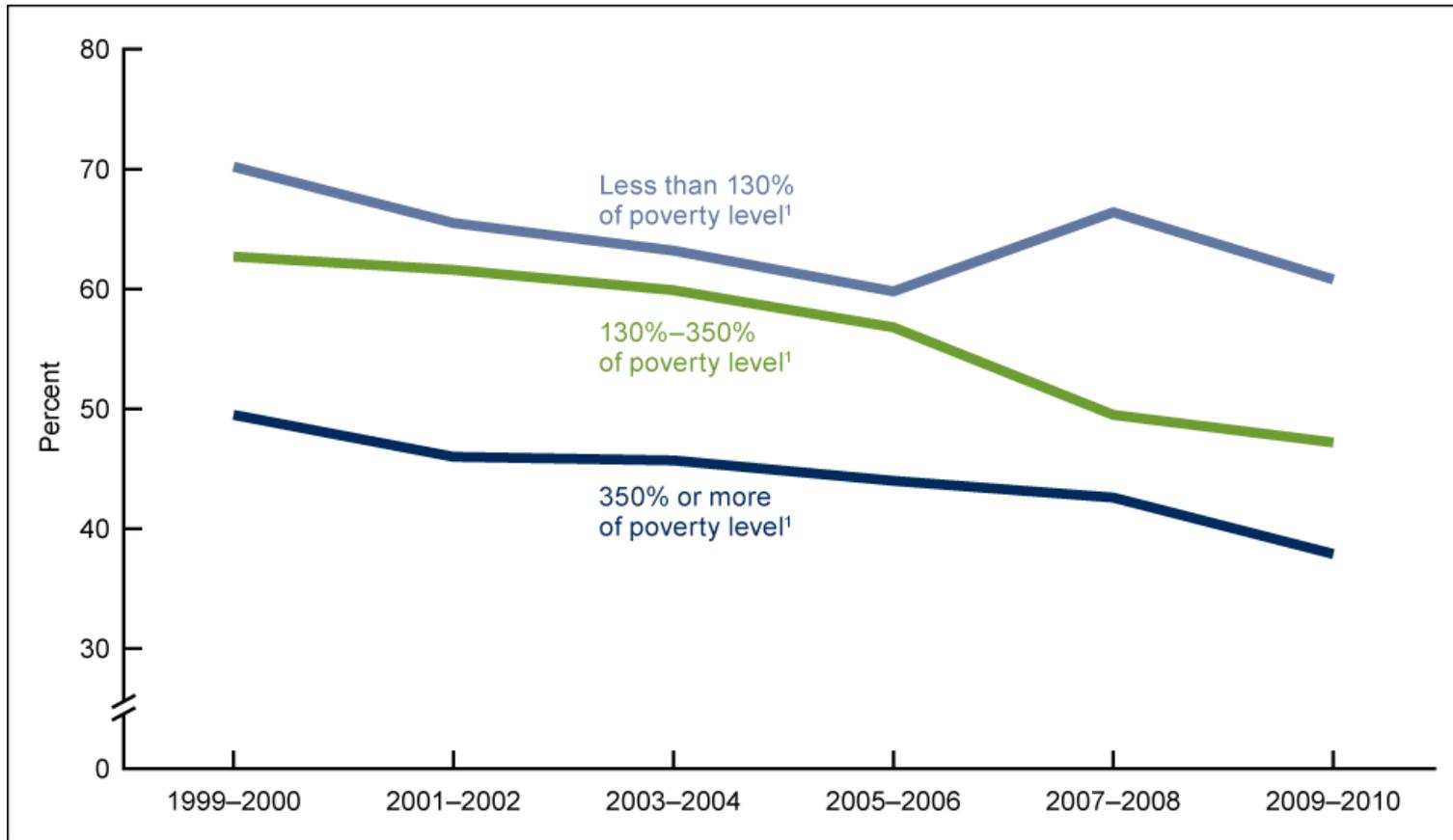
- Non-Hispanic blacks have the highest age-adjusted rates of obesity (49.5%) compared with Mexican Americans (40.4%), all Hispanics (39.1%) and non-Hispanic whites (34.3%)

## **Obesity and socioeconomic status**

- Among non-Hispanic black and Mexican-American men, those with higher incomes are more likely to be obese than those with low income.
- Higher income women are less likely to be obese than low-income women.
- There is no significant relationship between obesity and education among men. Among women, however, there is a trend—those with college degrees are less likely to be obese compared with less educated women.
- Between 1988–1994 and 2007–2008 the prevalence of obesity increased in adults at all income and education levels.

# Uncontrolled Risk Factors, by poverty

Figure 3. Age-adjusted percentage of adults aged 20 and over who have uncontrolled high blood pressure or uncontrolled high LDL cholesterol, or who currently smoke, by income: United States, 1999–2010



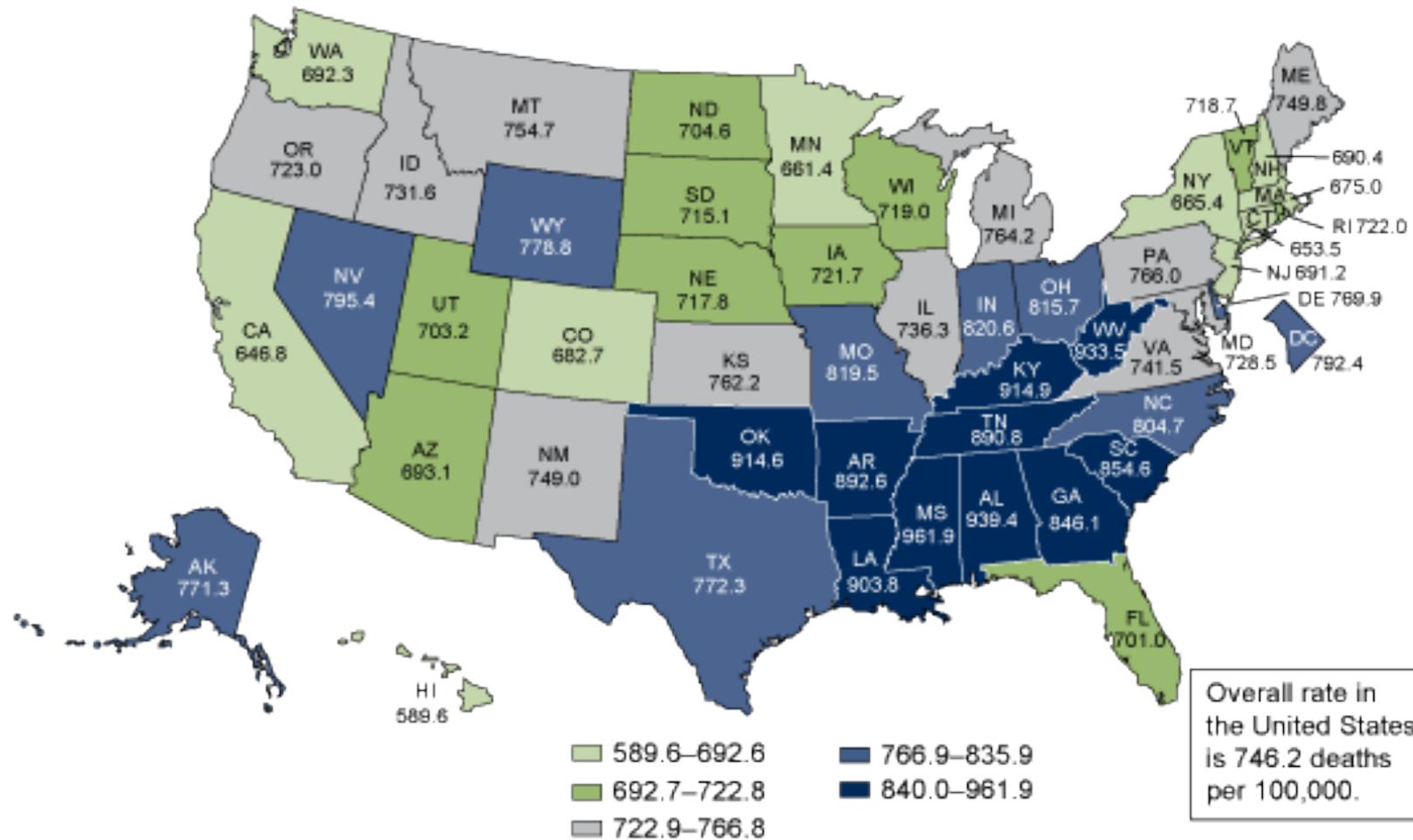
<sup>1</sup>Significant decreasing linear trend ( $p < 0.05$ ), and in 2009–2010, all income groups significantly different.

NOTES: Data include participants examined as part of the morning fasting subsample only and exclude pregnant women. Data are age-adjusted to year 2000 U.S. Census Bureau estimates using age groups 20–39, 40–59, and 60 and over. LDL is low-density lipoproteins.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey, 1999–2010.

Fryar CD, Chen T, Li X. Prevalence of uncontrolled risk factors for cardiovascular disease: United States, 1999–2010. NCHS data brief, no 103. Hyattsville, MD: National Center for Health Statistics. 2012.

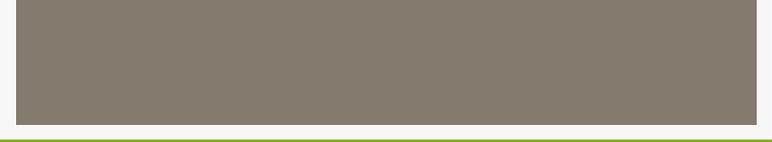
# Death Rates, by state, 2010



Hoyert DL. 75 years of mortality in the United States, 1935–2010 NCHS data brief, no 88. Hyattsville, MD: National Center for Health Statistics. 2012.

# Key Take-Aways

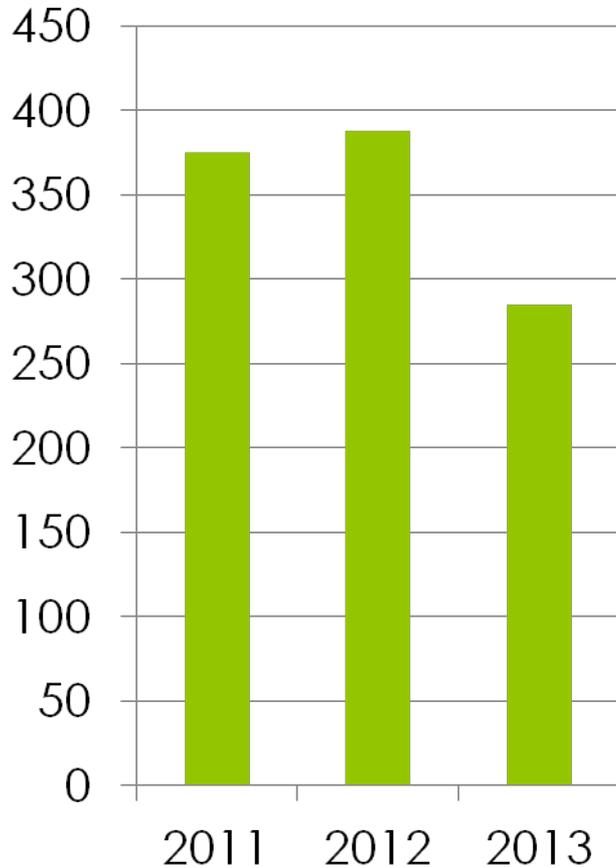
- Public health is very concerned with obesogenic environments, supermarkets are a key element in the solution
- Income, Race, Age, Gender and to some extent geography guide public health priorities.



Programs where there may  
be synergy

# SNAP Education

## Federal SNAP-Ed Allocations (\$Mil)

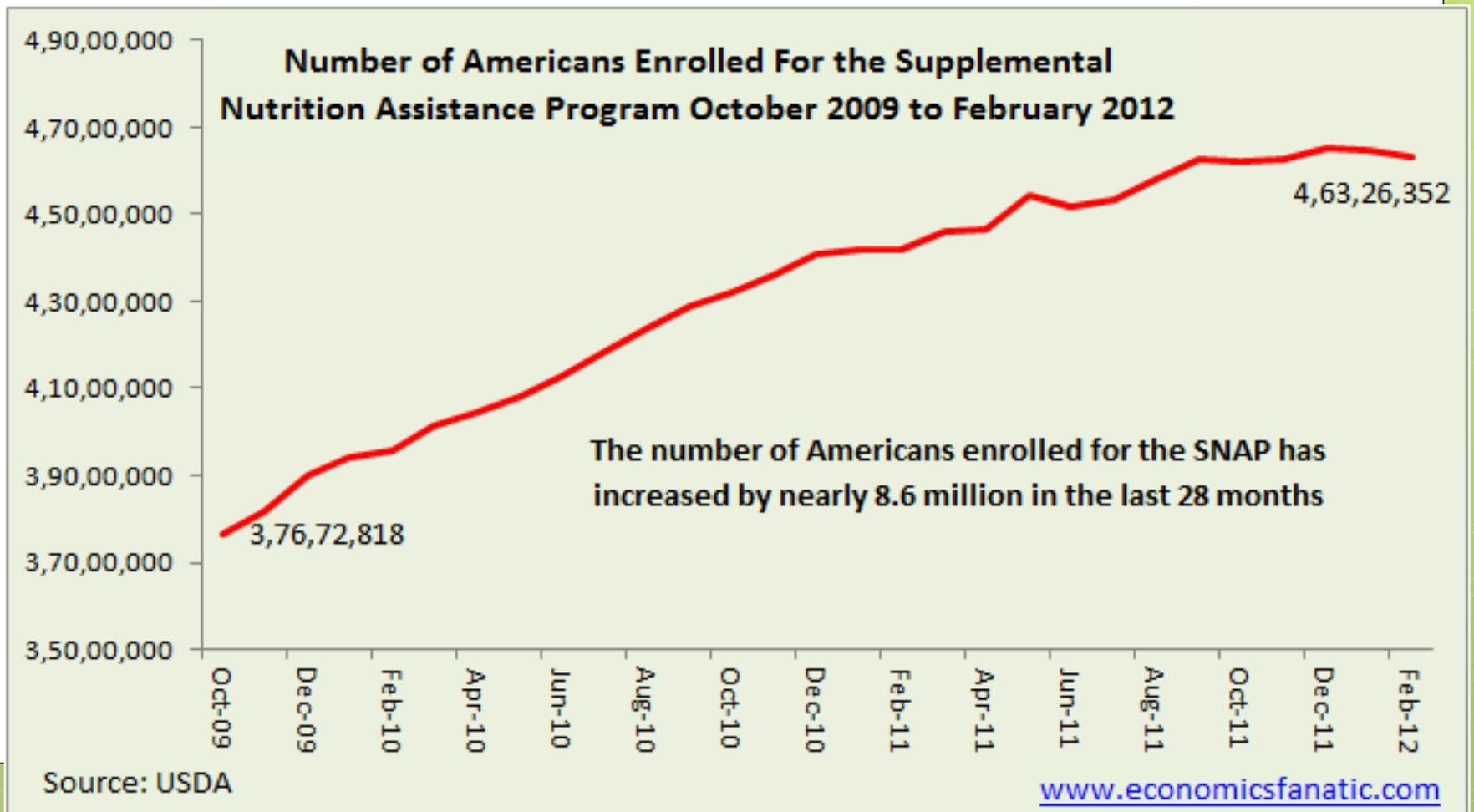


Administered by FNS to Educate families about healthy food choices and active lifestyles

- Provides nutrition education to millions of SNAP eligible consumers each year
- Currently at risk of continuing

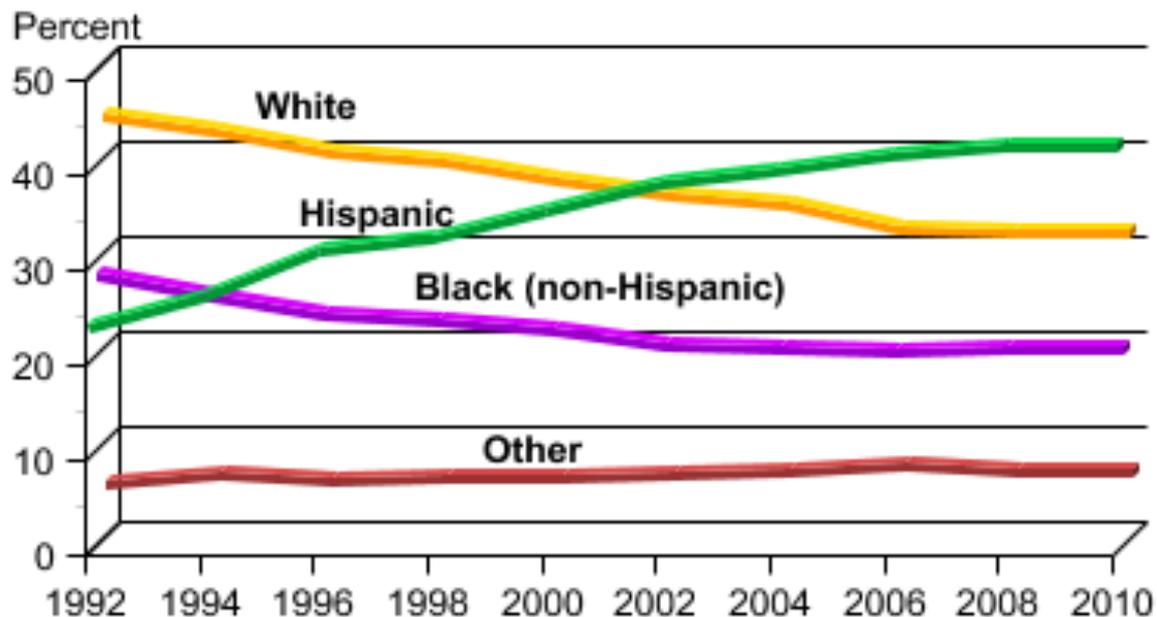
# SNAP

- In fiscal year 2011, on average, SNAP provided \$134 per person to 44.7 million individuals in 21.1 million households each month. SNAP served 1 in 7 Americans.



- In fiscal year 2011 WIC served 9.17 million Women, Infants and Children. 2012 allocations were \$6.6 billion.

**Hispanics make up the largest percentage of WIC participants (42 percent) in 2010**



Source: ERS estimates from WIC Participation and Program Characteristics 2010, USDA, Food and Nutrition Service (see Exhibit A2.7b).



# Healthy Food Financing Initiative

- \$32 million was approved in the final fiscal year 2012 budget for HFFI through Treasury and Health and Human Services.
- \$22 million from Treasury for CDFIs to work on healthy food access in low-income communities, and
- \$10 million will be available through the Community Economic Development Program at Health and Human Services for CDCs doing this work.

# New Food Access Web Portal

## Healthy Food Access Portal

PolicyLink



Get Started

Resources

Find Money

Policy Efforts

Retail Strategy

News & Events



### Welcome to the nation's first comprehensive healthy food access retail portal.

Find resources designed to improve healthy food access in communities, build local economies, and enhance public health. Tap into a learning network that's using retail strategies to connect consumers to healthy food.

#### Treasury NOFA

Up To \$165 Million to Support Community Development in Low-Income Communities



Resources

Find Money



#### New Markets Tax Credits And Urban Supermarkets

A detailed guide to New Market Tax Credit (NMTC) transactions to finance urban supermarkets. The guide describes the power

News

Events



#### LISC launches three-year healthy food initiative to improve quality of life for low-income NYC residents

LISC NYC's *Communities for Healthy Food NYC* program was recently awarded a \$1.6

Policy Efforts

Retail Strategy

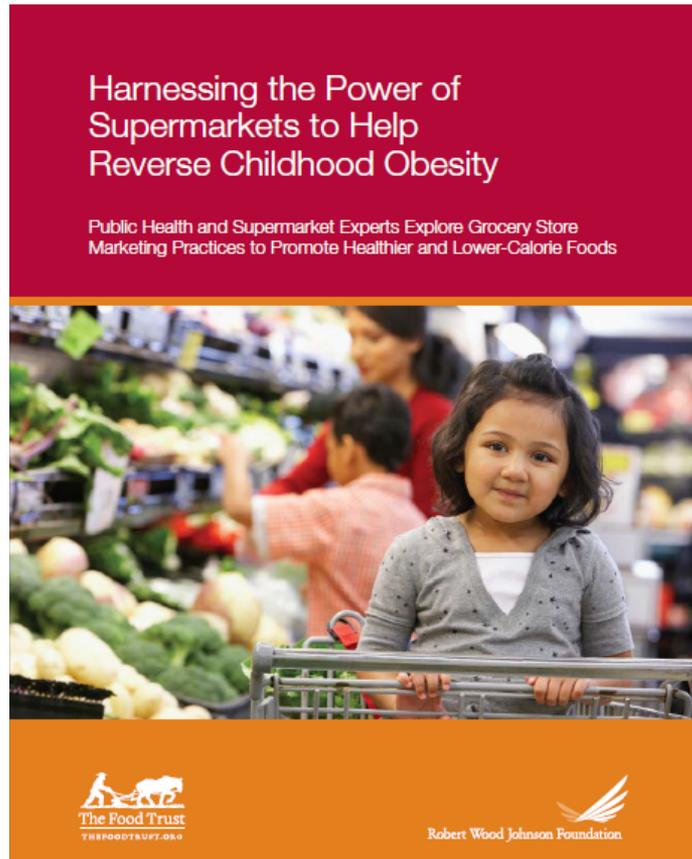


#### Tennessee

*Policy Efforts to Watch: Tennessee Grocery Access Task Force*

The Tennessee Grocery Access Task Force, convened by the Tennessee Grocery and...

# In-Store marketing and behavioral economics



- Driving consumer choices through price, promotion, placement and product
- Exploring incentive Strategies connected to health

# Studies we are currently involved with

- USDA, ICFI looking at shelf tagging systems, front of pack labeling and in-store incentives particularly for SNAP consumers
- Study in Philadelphia with milk, cereal, beverages and frozen foods to promote healthier items in category.
- Partnership with Bashas chain to test a milk couponing strategy for full fat milk buys to switch.

“We've had 30 years of increasing rates of obesity, but we might be seeing the turning point for this epidemic.”

- Jim Marks

# Promising impacts

The screenshot shows the USA Today website interface. At the top is a navigation bar with categories: NEWS, SPORTS, LIFE, MONEY, TECH, TRAVEL, OPINION, and a weather widget showing 60°. The main article title is "Childhood obesity declines in several states, cities" by Nanci Hellmich. The article text discusses nutritional improvements in schools and lists several states and cities where obesity rates have declined. A photo of a child is included. To the right is a Nikon advertisement for the Nikon 1 camera series.

**USA TODAY** NEWS SPORTS LIFE MONEY TECH TRAVEL OPINION 60°

## Childhood obesity declines in several states, cities

Nanci Hellmich, USA TODAY 16 Comment

*Some cities and states are trying to make their schools and communities healthier to reduce childhood obesity.*



6:18PM EDT October 24, 2012 - Nutritional improvements made in the foods served at schools could help reverse the nation's childhood obesity epidemic, and the first evidence of that is in places that have implemented changes early.

Childhood obesity rates have declined slightly in several cities and states that are tackling the issue including Mississippi, California, New York City, Philadelphia, El Paso and Anchorage, according to two groups that are tracking the trend.

"We've had 30 years of increasing rates of obesity, but

**ADVERTISEMENT**

**Nikon 1**  
A different kind of a Nikon.

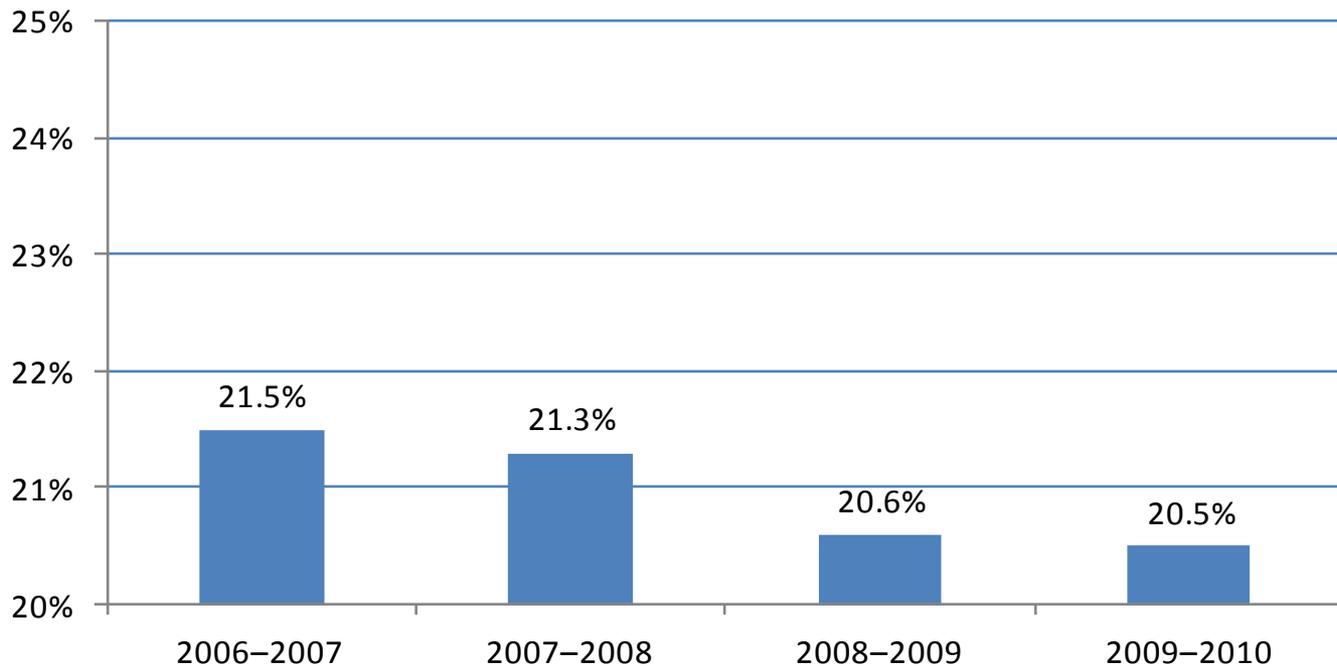


EXPLORE NIKON

**STORY HIGHLIGHTS**

- About a third of kids and teens are overweight or obese

## Decline in Obesity Among Philadelphia School Children, 2006-2010 $(p < 0.001)$



Data Source: Robbins, et al. Prevalence, Disparities, and Trends in Obesity and Severe Obesity Among Students in the Philadelphia, Pennsylvania, School District, 2006-2010. *Prev Chronic Dis*, Sept 2012.

[http://www.cdc.gov/pcd/issues/2012/12\\_0118.htm](http://www.cdc.gov/pcd/issues/2012/12_0118.htm)

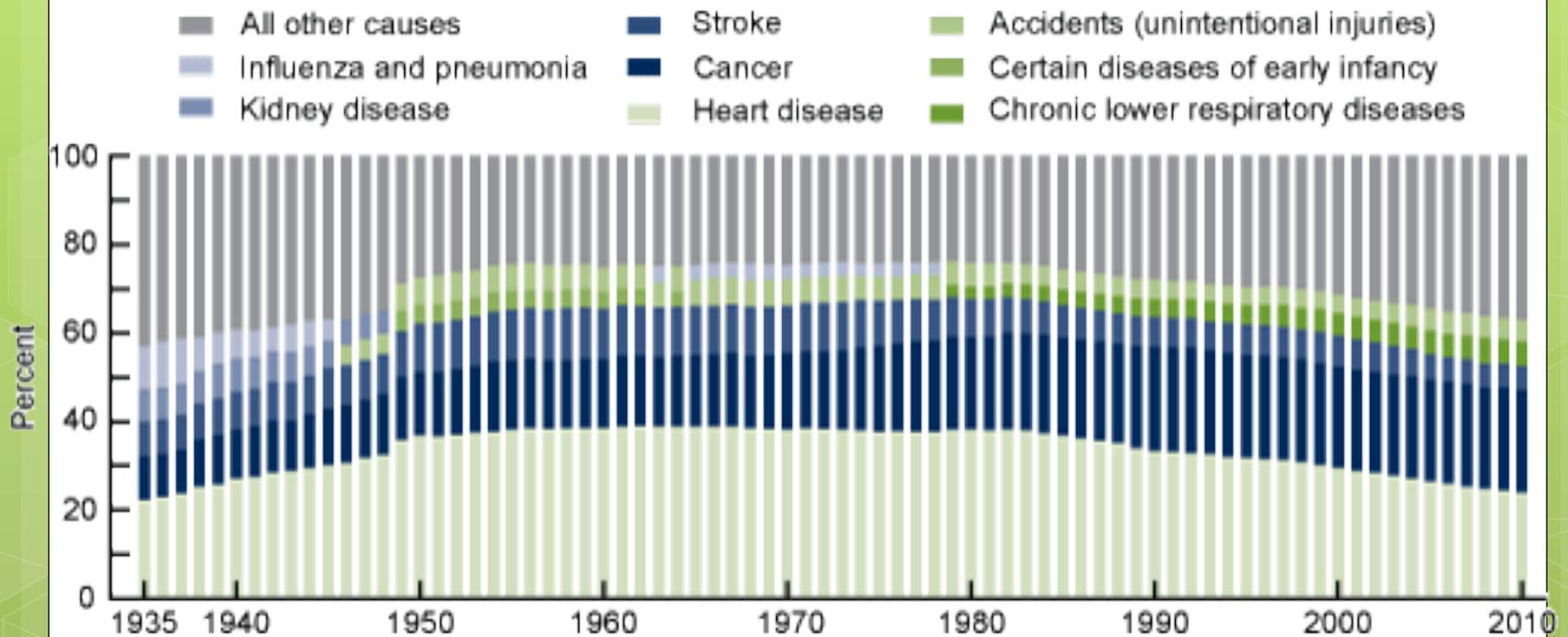
We need a comprehensive Approach –  
no silver bullet





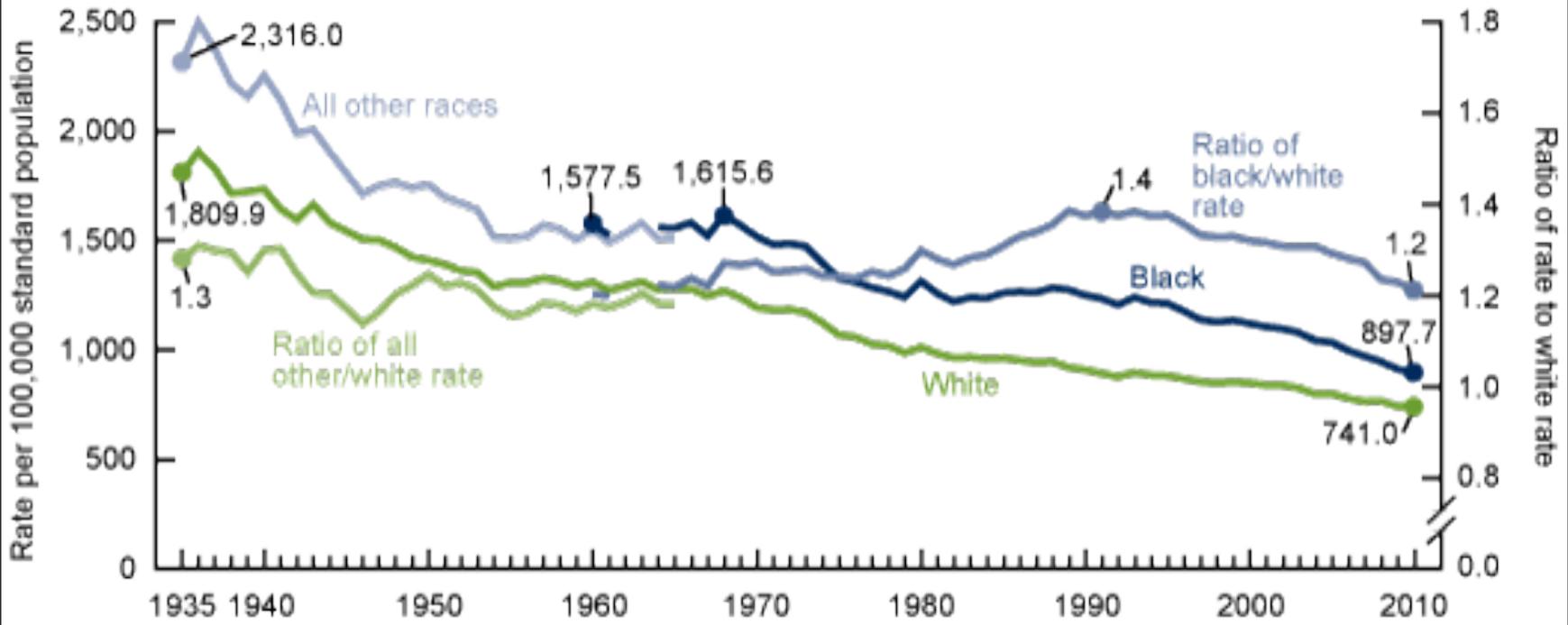
Ensuring that everyone has access to affordable, nutritious food.

# Leading causes of death in the US 1935-2010



Hoyert DL. 75 years of mortality in the United States, 1935–2010 NCHS data brief, no 88. Hyattsville, MD: National Center for Health Statistics. 2012.

# Age-adjusted death rates and ratio of rates by race: United States, 1935–2010



Hoyert DL. 75 years of mortality in the United States, 1935–2010 NCHS data brief, no 88. Hyattsville, MD: National Center for Health Statistics. 2012.