# Diet and Health Research at the USDA's Economic Research Service

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#### Overview

- What is ERS?
- Data Investments
- Four research questions

#### What is ERS?

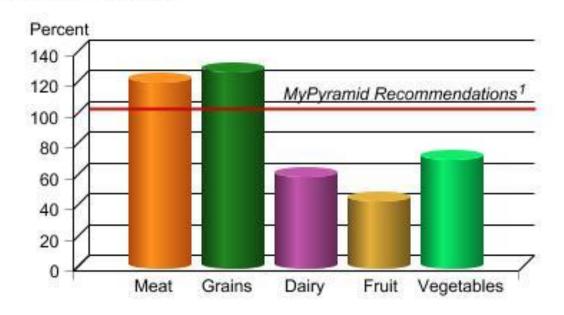
- Part of USDA's Research mission area
- Federal statistical agency
- Mission: ERS conducts a research program to inform public and private decision making on economic and policy issues involving food, farming, natural resources, and rural development.

#### **Consumer Data Investments**

- Maintain important data series about food choices and markets
  - Food Availability
  - Retail Prices
  - Food Expenditures
- Invest in new sources of information
  - Time Use
  - Diet Knowledge
  - Retail Purchases

## Food Availability and Diet Quality

#### American diets are out of balance with dietary recommendations

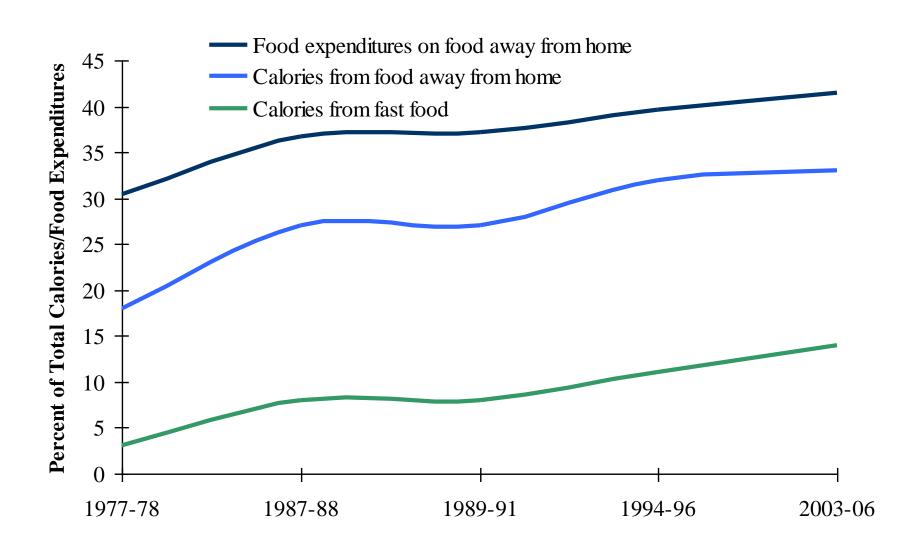


Note: Food availability data serve as proxies for food consumption.

12006 data based on a 2,000-calorie diet.

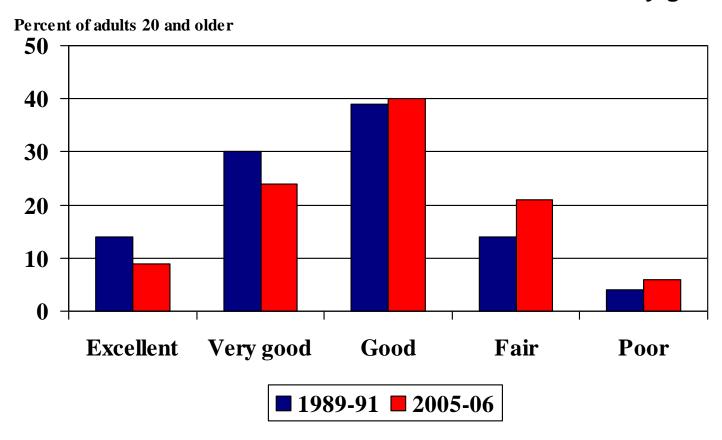
Source: USDA, ERS.

## Food Away From Home



## Diet Knowledge

When asked "How healthy is your overall diet?" fewer Americans rated their diets as excellent or very good

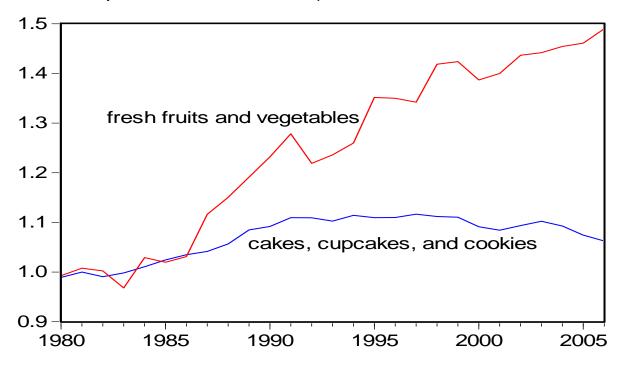


Source: Calculated by USDA, Economic Research Service using data from the 1989-1991 Continuing Survey of Food Intakes by Individuals and the 2005-06 National Health and Nutrition Examination Survey.

How do consumers respond to changes in food prices, income, and information?

#### **FOOD PRICES**

Consumer price index for fresh fruits and vegetables and for cakes, cupcakes, and cookies (both relative to CPI-U for all items)



Source: BLS Consumer Price Index-All Urban Consumers data.

## Fruits and Vegetables

- A 10% decrease in the prices of fruits and vegetables leads to a 2-5% increase in consumption by low income households
- A 10% discount through coupons leads to more frequent purchases and a 2-10% increase in consumption

## Sweetened Beverages

- Taxes would cause consumers to substitute non-taxed beverages such as bottled water, juice, and milk
- A 20% tax on caloric-sweetened soft drinks, juice drinks, and sports drinks would reduce consumption by 24%
- It might reduce childhood overweight prevalence from 16.6% to 13.7%

What is the impact of food assistance programs on nutrition and health outcomes and how can these programs be more effective?

#### **FOOD ASSISTANCE**

## Food Assistance and Obesity

- WIC participation is not associated with the rise in obesity in early childhood, but low income children are at higher risk for obesity
- SNAP is not associated with an increase in BMI or the likelihood of overweight for most participants; but may for women

## **Nutritional Quality of School Meals**

Only 20% of schools meet the guidelines for fat content of lunches. A national survey shows the fat content of school lunches is lower with:



- Promotion of fresh fruits and vegetables/local foods
- Providing lowfat milk only
- No french fries or dessert in the meal
- Using newer methods of meal planning from the school meal initiative in the 1990s
- No a la carte foods available (elementary)
- No vending machines (middle/high school)

Source: Schools that Meet and Don't Meet USDA Total Fat Requirements for School Lunches; Newman et al. ERR87, 2009.

What is the role of food markets, food access, and the local food environment in food choices and health outcomes?

#### **FOOD MARKETS**

## **Food Deserts**



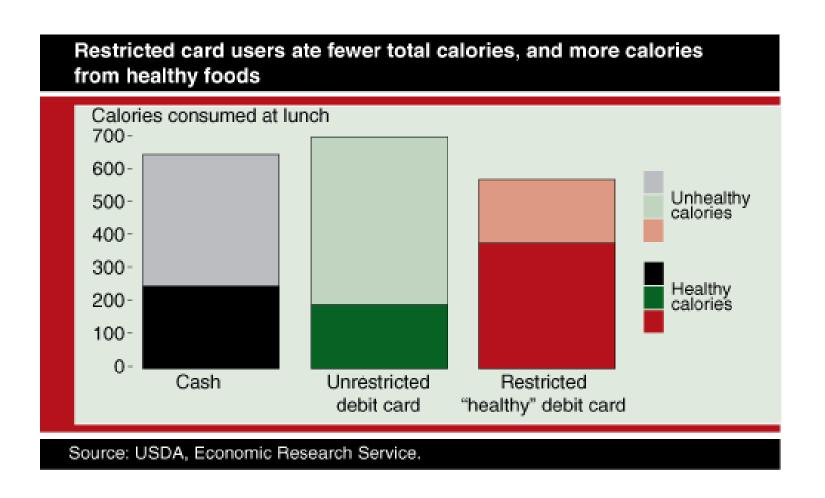
## **FAFH** and Diet Quality

- Eating away from home associated with reduced diet quality and increased calories in many studies
- New data from NHANES support these associations
  - A meal away from home adds about 134 calories
  - Effect is larger for obese individuals

How can behavioral economics help us to understand consumer choices and to improve program and policy effectiveness?

#### **BEHAVIORAL CUES**

## Using Pre-Commitment to Encourage Healthy Choices



Source: When Nudging in the Lunch Line Might Be a Good Thing, Lisa Mancino And Joanne Guthrie, Amber Waves, March 2009.

#### Other Behavioral Cues

- Information in restaurants
- Financial incentives for weight loss
- Stress and self-control

## Behavioral Economics Workshop

- Incorporating Behavioral Economics into Federal Food and Nutrition Policy, Apr 15-16
  - Early Results: Findings from ERS Supported
     Behavioral Economics Research on Food Choice
     and Obesity
  - A Nudge in the Right Direction: Using Behavioral Economics and Targeted Incentives to Improve School Food Choices

THANK YOU!

#### FOR MORE INFORMATION:

HTTP://WWW.ERS.USDA.GOV/BRIEFING/DIETQUALITY/