Using Scanner Data To Answer Food Policy Questions

Conference

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Economic Research Service
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Thrifty Food Plan: Development and Use of Nielsen Data

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Thrifty Food Plan (TFP)

- Provides a healthy, minimal-cost meal plan that shows how a nutritious diet can be achieved with limited resources
- Used as basis for SNAP (food stamp) allotments
- 1 in 7 people receive SNAP
Dietary Standards of TFP

- 1997-2005 Dietary Reference Intakes (e.g. RDAs for vitamins)
- 2005 Dietary Guidelines for Americans (e.g. saturated fat and cholesterol recommendations)
- 2005 USDA Food Guidance System intakes (e.g. fruit and vegetable recommendations)
- Currently being updated to reflect 2010 Dietary Guidelines for Americans
TFP Does Not Contain

- Food away from home
- Dietary supplements
- Alcohol
TFP Market Baskets

- Plan has 15 market baskets (for 15 age-gender groups) specifying the type and quantity of foods that people could consume at home to obtain a nutritious diet.

- Ease of preparation and convenience factored in (e.g. frozen vegetables, ready-to-serve bread, canned beans)
Model

**Inputs**
- Average Consumption of 58 Food Categories for 15 Age-Gender Groups
- Cost per 100 Grams of 58 Food Categories
- Nutrient Profile of 58 Food Categories per 100 Grams
- MyPyramid Profile of 58 Food Categories per 100 Grams

**Constraints**
- Dietary Standards for 15 Age-Gender Groups
- MyPyramid Recommendations for 15 Age-Gender Groups
- Food Plan Maximum Cost Allotment for 15 Age-Gender Groups

**Mathematical Optimization Process**

**Optimization Process Solution Output**

**Conversion Process** (From 58 Food Categories to 29)

**Food Plan Market Baskets for the 15 Age-Gender Groups**
Example:
Thrifty Food Plan for Male, Age 51-70

• Weekly cost (March 2011): $44.40

• Market Basket (example items):
  • 2.1 lbs of whole-grain breads, rice, and pasta
  • 2.3 lbs of potatoes
  • 1.2 lbs of dark-green vegetables
  • 7.7 lbs of whole fruits
  • 11.0 lbs of lower fat and fat-free milk and yogurt
  • 1.0 lb of poultry
  • .05 lbs of sugars and candies, etc.
USDA Periodically Updates TFP Market Baskets

• To reflect latest dietary standards

• To reflect latest food consumption trends and food prices
Current TFP Based on

- 2001-02 National Health and Nutrition Examination Survey: contains food consumption and nutrient content of food information
- 2001-02 Food Prices Database: based on Nielsen Homescan data
- For TFP, food prices paid by low-income households are used
2001-02 Food Prices Database

• NHANES dietary intake data merged with national food price data from Nielsen Homescan Panel

• Cooking and waste conversion factors applied

• All brands, sizes, and purchase occasions by households used in determining prices
Where SNAP (Food Stamp) Benefits Spent (2009)

Source: FNS, “Benefit Redemption Patterns in the Supplemental Nutrition Assistance Program.”
“TFP a reliable baseline for establishment of SNAP benefits.... While noting a lack of statistical basis for the food pricing data obtained through the A.C. Nielsen Homescan Reporting Service, we were unable to identify any better source for use in developing a food price database.”
TFP Cost Updates

- Plan updated monthly using Consumer Price Indexes
- Indexes for each food group
- Cost of Plan increasing at high rate in recent months
Future Plans

• Update TFP with 2007-08 National Health and Nutrition Examination data and 2009 Food Prices data

• Cost targets of the TFP will not change

• New dietary standards of TFP:
  • 1997-2010 Dietary Reference Intakes
  • 2010 Dietary Guidelines for Americans
  • 2010 USDA Food Guidance System intakes