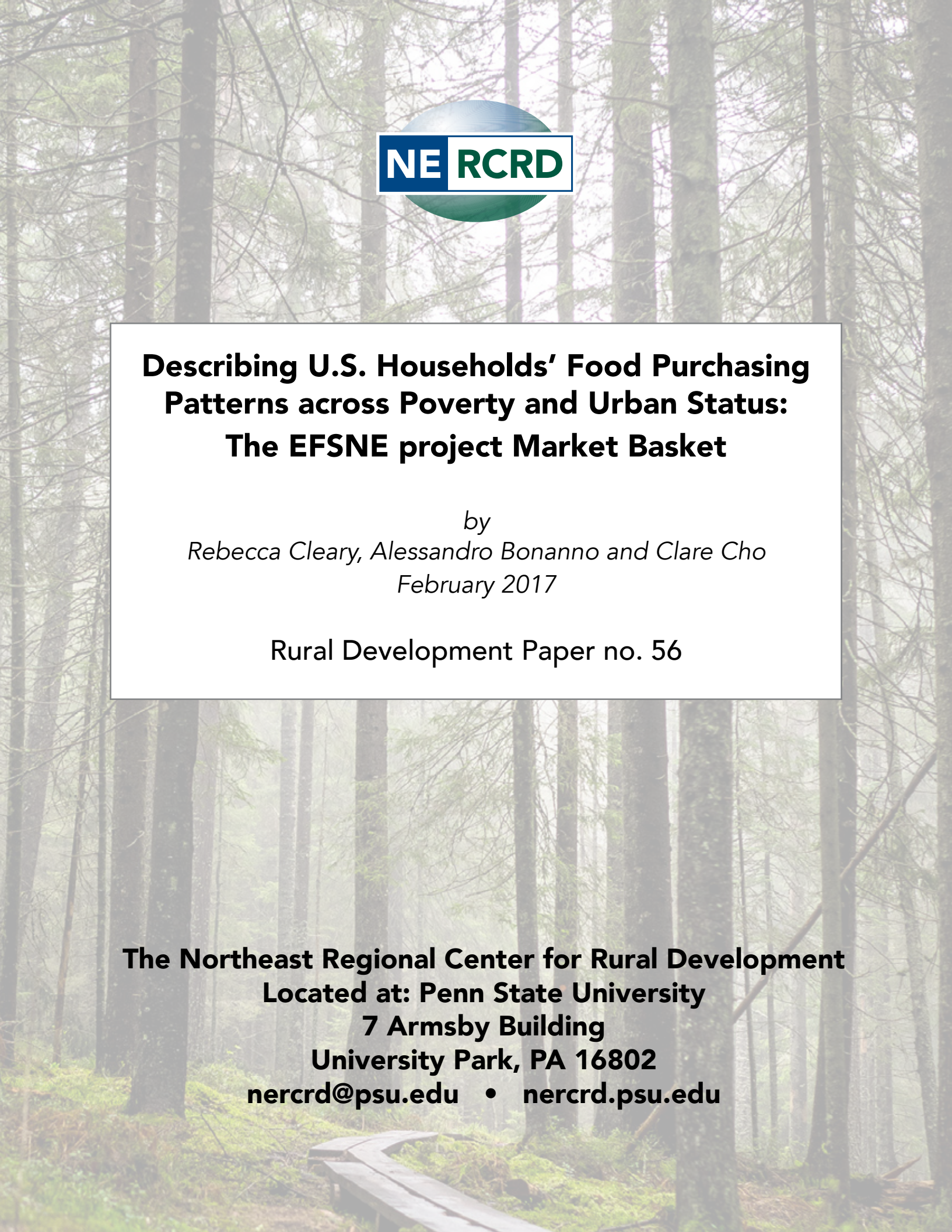

Describing U.S. Households' Food Purchasing Patterns across Poverty and Urban Status: The EFSNE project Market Basket

by
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Rationale

The Enhancing Food Security in the Northeast (EFSNE) project aims to assess different aspects of food production, distribution, and consumption in a number of states in the northeastern U.S. (i.e., Connecticut, Delaware, D.C., Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and West Virginia). Tackling the complex interactions of production, distribution, and consumption issues for a large variety of food products is not feasible. Thus, the EFSNE's project analyses focused on different forms (i.e., refrigerated, shelf stable, perishable, and frozen) of the following market basket of food products, or Market Basket Items (MBIs): milk, sliced bread, ground beef, fresh potatoes, frozen broccoli, canned peaches, fresh apples, and cabbage.

One goal of the EFSNE project is to determine how the current food environment serves low-income consumers to help identify opportunities to improve access to healthy foods in the Northeast. To that end, we examine actual household-level food purchases with the objective of characterizing differences in purchasing patterns of the MBIs across households segmented by income status (low-income v. non-low-income), urban status (urban v. non-urban), and an intersection of the two (i.e., low-income urban v. non-low-income urban). Previous studies finding that lower income consumers pay higher prices infer food prices faced by low-income groups by examining the immediate food environment and not actual prices paid (e.g., Kaufman et al., 2007; MacDonald and Nelson, 1991; Chung and Myers, 1999; *inter alia*). However, studies focusing on prices paid find that low-income individuals do not pay more (*e.g.* Broda, Leibtag, and Weinstein, 2009; Rahkovsky and Snyder 2015). Investigating actual prices paid and quantities purchased depict the relevant food environment and the actual purchasing context, in lieu of an inferred one.

To gain a more detailed understanding of their purchasing patterns, this analysis will highlight differences and similarities of MBIs among household groups (low-income v. non-low-income; urban v. non-urban) in terms of amounts purchased, expenditures, prices paid, purchase occasions, frequency of purchases in different types of stores, and coupon usage. The analysis of MBIs' purchasing patterns is performed across the U.S. and for the EFSNE Northeast, conducting another level of insight by assessing whether geographical differences emerge among the different groups of households' MBI purchases.

This report proceeds with a discussion of the applicable literature and policy relevance of purchasing patterns across income and location, data sources, empirical methods, samples used, and product definitions. Detailed illustrations of the results by MBI and sub samples will follow. An overall discussion of the main findings across MBIs and samples will conclude.

Background

Empirical analyses investigating whether low-income households pay more for food have been conducted since the 1960s; early studies, as reviewed in Sexton (1971), show several limitations and presented mixed findings. A common notion in this line of literature is that as poorer households purchase food more frequently and from smaller stores, they may pay higher prices per-unit for the same goods. Kunreuther (1973) finds that, after controlling for package and store sizaverage per-unit price paid declined or remained the same as package size increased, and that smaller groceries stocked fewer bulk-sized items. In particular, low-income individuals may live in areas characterized by fewer, smaller stores,

with lower selections and higher prices (see, inter alia, Alwitt and Donley 1997; Morland, Diez Roux, and Wing, 2002; Moore and Diez Roux 2006; Powell et al. 2007; Ball, Timperio and Crawford 2008). Surveys of food-store prices often conclude that lower income households shop in stores with higher prices. MacDonald and Nelson (1991) find that prices in stores located in poor areas were about 2% higher than in other stores. Chung and Myers (1999) focus on one metropolitan area and find that the poor paid slightly more, which they attribute to poor households having less access to chain stores; they may be forced to shop in non-chain stores that charge a significant premium.

One of the issues in this branch of literature is that the relevant food environment may be incorrectly characterized; using prices faced by low-income households assumes away the possibility that low-income consumers may shop more frequently, switch to cheaper / lower quality profile products, or have a primary store outside their neighborhood. Although previous research that inferred quantity discounts disadvantaged the poor because the poor buy less, by using household-level data and analyzing prices paid instead of prices faced, Beatty (2010) finds that quantity discounts were most important at a transaction level and that poorer households took advantage of this by buying greater amounts per transaction. Aguiar and Hurst (2007) find that households with higher shopping frequency paid prices 7-10% lower. Using actual food prices paid by households, Broda, Leibtag, and Weinstein (2009) find that poorer households paid systematically less for the same goods. They find that this is partially due to poorer households shopping in cheaper stores and partially from paying less for the same goods in the same stores. While they confirm previous findings that the poor shop more in convenience stores (where prices are higher), the poor also show greater expenditures at supercenters (where prices are lower), offsetting the higher prices paid in convenience stores. Rahkovsky and Snyder (2015) find that food prices paid by households in low-income / low-access (LILA) areas were not different from those paid by other households. They also find that LILA households purchased more food and were able to spend less, even when they faced similar prices.

There is, however, some concern that these households are able to realize lower prices because they buy lower quality products (Kaufman et al., 1997; Kennedy et al., 1995). For example, whereas some researchers find that healthy diets cost more (Darmon and Drewnowski, 2008; *inter alia*), others have suggested that a healthy diet can be more affordable than an unhealthy one and its costliness depends on the way that food cost is determined (Carlson and Frazao, 2012). Moreover, Rahkovsky and Snyder (2015) find no evidence that low-income / low-access (LILA) households paid more for healthful foods. Eating lower quality or less healthy products can lead to diet-related diseases, such as obesity and type II diabetes, which are disproportionately distributed among lower income households (U.S. Dept. of Health and Human Services, 2010). The Dietary Guidelines Advisory Committee (DGAC) examine disease outcomes across several different dietary assessment methods and find several consistent results, leading them to conclude that a "healthy dietary pattern is higher in vegetables, fruits, whole grains, low- or nonfat dairy, seafood, legumes, and nuts; moderate in alcohol (among adults); lower in red and processed meat; and low in sugar-sweetened foods and drinks and refined grains" (DGAC 2015). Rahkovsky and Snyder (2015) find the basket of food households in LILA areas purchased contains more red meats and sodas, and fewer fruits, vegetables, and low-fat milk than non-LILA households. Other researchers also find that lower income households purchased lower dietary quality items (Kennedy et al., 1995).[1]

The literature on disparities in food purchases and prices across urban and rural consumers has evolved parallel to the aforementioned literature focusing on household income levels. In particular, the literature has focused on how consumers' access in urban areas differ from rural ones. Disparity in supermarket (and other food stores) access between urban and rural populations has been documented for a least three decades, highlighting large supermarkets abandoning the inner-cities – particularly low-income ones – to relocate to peri-urban, more affluent areas, leaving urban households with smaller stores with higher

[1] Kennedy et al. (1995) measure dietary quality using the Healthy Eating Index.

prices (e.g., Cotterill and Franklin, 1995; Kaufman 1997; Chung and Myers, 1999; Nayga and Weinberg 1999). Conversely, consumers in rural areas have, over time, been able to shop at large superstores, which may supply food at comparatively lower prices. These changes seem to revert older findings that rural consumers have lower access and pay higher prices for their foods (e.g. Morris, Bellinger and Haas 1990; Morris, Neuhauser, and Campbell 1992). However, disparity in access still persists. Powell et al. (2007) analyze a national sample of 28,050 ZIP codes and find that rural areas had 14% fewer chain supermarkets than urban areas.

Disparity in access – which likely results in different prices and available products – and the persistent prevalence of higher poverty rates in rural areas (Farrigan, 2016) can drive differences in food purchasing patterns among urban and non-urban areas. For example, one would expect food prices to be lower in rural areas compared to urban ones. Nord and Leibtag (2005) compare "cost-of-enough-food" indexes (based on the amounts households need to spend to meet their food needs, adjusted for household size and, in one case, income differences) using the Current Population Survey Food Security Supplements data and find that, on average, the cost-of-enough-food is 11-14% lower for non-metropolitan households than for similar metro ones. However, such cost differences may not be equally distributed across products with different nutritional content. Hardin-Fanning and Rayens (2015) observe the cost of 92 food products over a ten-month period across two rural and two urban counties in Kentucky, finding that the cost of more nutritious food was lower in urban areas. Rahkovsky and Snyder (2015) find that urban consumers seem to have a more healthful diet than rural ones, as they purchase more fruits, vegetables, and low-fat milk products and lower amounts of red meats and non-diet drinks. However, being in an LILA area affects urban consumers' healthfulness of food purchases more than non-urban ones, which may be due to larger differences in the food environment (and therefore assortment and prices) for urban LILA v. non-LILA households than for LILA v. non-LILA rural ones.

Empirical Methods, Data, and Product Descriptions

Empirical Methods

In order to understand the difference of purchases between low-income (urban) and non-low-income (non-urban) consumers, we compare the means of the following characteristics by MBI item and by household group (low-income and non-low-income; urban and non-urban; and urban low-income and urban non-low-income households): average expenditure and average quantity purchased (annual and monthly), average per-unit price paid, average household size, average expenditure per household member, average quantity purchased per household member, and average number of annual purchase occasions given that the MBI was purchased. We also examine the frequency of purchases at grocery stores, drug stores, mass merchandisers, superstores, convenience stores, dollar stores, and club stores, and the frequency of coupon or promotion use.

As we discuss in more detail below, we use sampling weights attached to a nationally representative sample of households to determine the (weighted) average food purchase characteristics by low-income, non-low-income, urban, non-urban, urban low-income, and urban non-low-income household. We perform adjusted Wald tests, which controls for the use of sampling weights, of difference in means to determine if the average food purchase features for two groups of households (e.g., low-income v. non-low-income) are statistically different from each other.[2] Each MBI is analyzed independently.

Data Sources

[2] We used the *svy: means* command in Stata 14.2 followed by the *test* command.

We use the IRI Consumer Network Panel™ database, courtesy of the USDA Economic Research Service (ERS), as the core data of our analysis. This database contains records of all food-at-home (FAH) purchases for a sample of more than 100,000 households.[3] To compare purchasing patterns of different groups of consumers by poverty and urban status (of residence), our analysis requires the use of demographic information, particularly household income and size, which are used to determine whether a household is above or below the poverty line. Even though the purchase data are available from 2008 to 2012, we only utilize the 2012 data because precise demographic information is only available for this year, as described in Muth *et al*. (2016).[4]

Household Samples

Of the households included in the database, we selected the 62,503 households with sampling weights that can be used to create nationally representative purchases, or IRI's "Static Panel." For additional information regarding how sampling weights are constructed and the complete documentation of the database, please see Muth et al (2016).

We segment the household in our samples based on poverty and urban status. With respect to poverty status, we divide households in the static panel into two groups: low-income and non-low-income. The IRI database reports 12 income brackets. If the midpoint of a household's income bracket is at or below 200% of the U.S. Census Bureau Poverty Thresholds (U.S. Census Bureau, 2015) for their reported household size, it is classified as "low-income"; otherwise, it is defined as "non-low-income." There are 13,647 households, or 21.8% of the static panel, that meet the classification of low-income. For our urbanity measure, we divide the static panel into two groups: urban and non-urban. The IRI database provides the FIPS code for each household's county of residence. We match these FIPS codes to the USDA 2013 Rural-Urban Continuum Codes (RUCC; USDA, 2013). We define a household as urban if it resides in a county characterized by a RUCC of 3 or lower: counties in metro areas with a population of at least 1 million; 250,000 to 1 million; and less than 250,000. Using this classification, we identify 53,073 urban households, representing 85.9% of the static panel. We also look at the intersection of these two classifications by dividing urban households into low-income and non-low-income to investigate whether urban low-income households show differences not reflected by all low-income purchasers. There are 10,700 households that meet the criteria for both low-income and urban classification, or low-income urban households.

The IRI database provides household-level information – including total ounces purchased, dollars paid, channel where the purchase took place (i.e., grocery store, drug store, mass merchandiser, superstore, convenience store, dollar store, club store, or all other stores), and if a coupon or promotion was used – for each purchase occasion (i.e., shopping trip). We aggregate the purchases to an annual level for each household. A household is considered a purchasing household if the aggregate annual quantity purchased (total ounces) is greater than zero. We converted ounces to pounds for non-liquid MBIs (e.g., ground beef, sliced sandwich bread, frozen broccoli, canned peaches) by dividing total ounces by 16. We converted ounces to gallons for milk by dividing total ounces by 128. Total expenditures were calculated by aggregating dollars paid to an annual level. Average price paid was calculated by dividing total expenditures by total quantity (in pounds or gallons). Household size was provided in the core IRI database. We divided average expenditures and average quantity by household size to determine the average expenditure and quantity per household-member. We divided annual average expenditure (per

[3] Food bought to prepare or consume at home is included; however the database does not record purchases of food-away-from-home (FAFH), for example, fast food chain, restaurant, or school lunch purchases.

[4] The 2012 demographic file is available reweighted for the composition of regions for the remaining years, however, this reweighting process does not take into consideration households that have moved (which would mitigate our ability to measure urban status) or have changed income status (which would mitigate our ability to measure low-income). Therefore, we use only the 2012 data.

household and per household-member) and quantity purchased (per household and per household-member) by 12 to obtain monthly values to ensure they would be easily comparable to other data generated for the EFSNE project.

EFSNE Northeast and Sampling Weights

Our analyses are performed at the national and the EFSNE Northeast level. We construct our measures of the Northeast by subsetting the IRI database to reflect only those states included in the EFSNE definition of the Northeast: Connecticut, Delaware, D.C., Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and West Virginia. The "Static Panel" contains 12,770 households in the EFSNE Northeast States.

We used sample weights in our analysis for both the U.S. and the EFSNE Northeast sample. The reader should be aware that the sample weights are designed to represent national and regional averages. However, the EFSNE Northeast differs from the Census Northeast region, for which the weights were constructed.[5] Thus, because we attach the national sample weights to the EFSNE Northeast sample, the EFSNE Northeast statistics discussed below are not necessarily representative of purchases in that area.

Product Definitions

As mentioned previously, the EFSNE market basket contains: milk, ground beef, bread, canned peaches, frozen broccoli, potatoes, cabbage, and apples (EFSNE 2013). The IRI database includes information on fat content and flavor, allowing us to subset these items further to examine some MBIs on a more detailed level. The IRI database contains purchase information on all of the MBIs; however, it does not contain quantity information for random weight versions of items like apples, potatoes, or cabbage (Muth *et al*. 2016), but contains quantity information on the uniform weight versions (e.g., a 5-pound bag of potatoes). However, much of the information on uniform weight apples and cabbage was not consistent with the versions of these products used elsewhere in the project, and therefore were excluded from the analysis.[6] Thus, the MBI versions included in this analysis are: All Milk, Skim/Lowfat Milk, Whole Milk, All Ground Beef, Lean Ground Beef, Regular Ground Beef, All Sandwich Bread, White Sandwich Bread, Wheat Sandwich Bread, Uniform Weight Fresh (UWF) Potatoes, Frozen Broccoli, and Canned/Bottled Peaches.[7] Below we describe the definition of each item as used in this analysis.

Milk Items: All Milk contains fluid, white, dairy milk of any fat content and excludes flavored milks, buttermilk, and non-dairy milks. Skim/Lowfat Milk and Whole Milk, described below, are exhaustive subsets of All Milk. In the static sample there are 49,328 households that purchased milk in 2012; 10,616 of these households are in the EFSNE Northeast. For this category we distinguish:

- **Skim/Lowfat Milk** encompasses All Milk products containing 2% milkfat or less. In the static sample, there are 43,727 households that purchased Skim/Lowfat Milk in 2012; 9,343 of these households are in the EFSNE Northeast.
- **Whole Milk** contains All Milk that does not belong to the Skim/Lowfat Milk subset. In the static sample, there are 20,490 households that purchased Whole Milk in 2012; 4,764 of these households are in the EFSNE Northeast.

[5] The Census definition of the Northeast includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, and Pennsylvania.

[6] Most of the uniform weight cabbage was bagged shredded cabbage and most of the uniform weight apples were in the form of apple fruit trays with dips.

[7] We use capitalization to distinguish those products named and defined in our analysis versus general products. For example, "milk" may be ambiguous and may contain many different types of milk. In contrast, "All Milk" is specifically defined herein.

Ground Beef Items: All Ground Beef is a subset of the 'refrigerated, uncooked meats – no poultry' category, where the product type is beef. We only include beef in the form of ground, ground chuck, ground round, ground sirloin, ground chub, ground roll, and ground patty. All Ground Beef includes ground beef that did not state the fat content on the package, whereas all of the ground beef in Lean Ground Beef and Regular Ground Beef state the fat content on the package. As a results, Lean Ground Beef and Regular Ground Beef, described below, are not exhaustive subsets of All Ground Beef. In the static panel, there are 16,818 households that purchased All Ground Beef in 2012; 1,862 of these households are in the EFSNE Northeast.

- **Lean Ground Beef** includes all ground beef with a label indicating "lean" or with a stated fat content of 15% or less. This includes fat content descriptors of "lean" or "extra lean", "low fat," 85% lean, 90% lean, 92% lean, 93% lean, 96% lean, 98% lean, 85% fat free, 90% fat free, 91% fat free, 92% fat free, 93% fat free, 96% fat free, 15% fat, 7% fat, or 9% fat. Lean Ground Beef does not contain ground beef that does not state the fat content on the package. In the static panel, there are 8,378 households that purchased Lean Ground Beef in 2012; 890 of these households are in the EFSNE Northeast
- **Regular Ground Beef** includes all ground beef with a label indicating "regular fat" or with a stated fat content of more than 15%. This includes fat content descriptors of regular fat, 20% fat, 27% fat, 70% lean, 73% lean, 75% fat free, 75% lean, 78% lean, 80% fat free, 80% lean, 81% lean, or 83% lean. Regular Ground Beef does not contain ground beef that does not state the fat content on the package. In the static panel, there are 11,884 households that purchased Regular Ground Beef in 2012; 1,155 of these households are in the EFSNE Northeast.

Sandwich Bread Items: The "fresh bread and rolls" category was subsetted to identify the product "fresh bread," from which we isolated only those that included the word "sandwich bread." These products include sliced and unsliced varieties. As there were over 685 unique flavors of sandwich bread, we restricted our analysis. We initially select a total of 23 flavors, covering approximately 90% of the total purchase occasions, to be included in the analysis. We expand the analysis to include a total of 30 flavors, which encompass an overall of 91.85% of all sandwich bread purchase occasions in 2012. These additional seven "fringe" products were in the top 30 consumed products in the period 2008-2012, four of which also appear in the top 30 products purchased in 2012. The IRI data do not organize sandwich bread into comprehensive categories of wheat and white bread; we describe the designation process for Wheat and White Sandwich Bread below and present the complete list of flavors and its designation in Appendix B. Wheat Sandwich Bread and White Sandwich Bread are not exhaustive categories of All Sandwich Bread; All Sandwich Bread also includes flavors such as "cinnamon" and "multi grain." In the static sample, there are 45,000 households that purchased sandwich bread in 2012; 9,943 of these households are in the EFSNE Northeast.

- **Wheat Sandwich Bread** contains all flavors of All Sandwich Bread containing the word "wheat." Therefore, it does not necessarily contain other whole grain bread or multi-grain. For a complete list of flavors, please refer to Appendix B. In the static sample, there are 28,292 households that purchased Wheat Sandwich Bread in 2012; 5,789 of these households are in the EFSNE Northeast.
- **White Sandwich Bread** includes any flavor of All Sandwich Bread containing the word "white." We also include Italian Sandwich Bread and French Sandwich Bread. For a complete list of flavors, please refer to Appendix B. In the static sample, there are 27,414 households that purchased White Sandwich Bread in 2012; 6,598 of these households are in the EFSNE Northeast.

Canned/Bottled Peaches are a subset of the "canned/bottled fruit" category, and include peaches in syrup, water, light syrup, and fruit juice. In the static sample, there are 17,377 households that purchased Canned or Bottled Peaches in 2012; 3,440 of these households are in the EFSNE Northeast.

Frozen Broccoli is a subset of the "frozen plain vegetables" category, and it does not contain frozen broccoli mixed with other vegetables or frozen broccoli with sauce. In the static sample, there are 17,980

households that purchased Frozen Broccoli in 2012; 4,405 of these households are in the EFSNE Northeast.

UWF Potatoes represent an entire category in the IRI database and it contains all uniform weight fresh potatoes, regardless of packaging. In the static sample, there are 35,144 households that purchased UWF Potatoes in 2012; 7,443 of these households are in the EFSNE Northeast.

Results

The results of our descriptive analysis are presented below. The focus will be primarily on those features of the purchase process (amounts purchased, prices paid, expenditures, etc.) that have statistical differences among household groups; our other findings provide inconclusive evidence.[8] Here we present an overview of key findings. After, we present findings for each MBI.

Overview of Key Findings:

- Low-income households paid a lower per-unit price for all MBIs; the difference in price paid ranges from $0.09/pound for UWF Potatoes to $0.45/gallon for Whole Milk.
- A greater percentage of low-income households purchase MBIs, except for All Milk, Skim/Lowfat Milk, Lean Ground Beef, and Frozen Broccoli.
- Low-income households purchase a greater quantity and spend more on MBIs.
- Low-income households have fewer purchase occasions at grocery stores for MBIs (with inconclusive findings for Lean Ground Beef and UWF Potatoes) and more purchase occasions at superstores (with inconclusive findings for Lean Ground Beef). This is exacerbated for items with greater perishability (e.g., All Milk, All Ground Beef, All Sandwich Bread).
- Low-income households use coupons on fewer purchase occasions than higher income shoppers. Our findings range from inconclusive (Lean Ground Beef) to 5.83% fewer (Wheat Sandwich Bread).
- Low-income households have more purchase occasions for MBIs; exceptions are Skim/Lowfat Milk and Lean Ground Beef.

- Urban households paid a higher price per-unit for nearly all MBIs; the difference in price paid ranges from inconclusive (Regular Ground Beef) to $0.23/gallon (Skim/Lowfat Milk).
- Urban households purchase and spend less on MBIs.
- Urban households have more purchase occasions at grocery stores and mass merchandisers for MBIs and fewer purchase occasions at superstores.
- Urban households use coupons on more purchase occasions than non-urban shoppers. Our findings range from 1.81% (Whole Milk) to 7.47% (White Sandwich Bread) more.
- Urban households have fewer purchase occasions for MBIs; the only exceptions are those products with inconclusive results.

- On average, low-income consumers' purchasing patterns in urban areas are more similar to low-income consumers nationwide than urban consumers. In particular, they paid lower prices per-unit for all MBIs relative to their non-low-income urban counterparts; this difference ranges from $0.09/pound (UWF Potatoes) to $0.49/gallon (Whole Milk). They also use coupons less frequently.

[8] Note that a finding of "no statistically-significant difference" is interpreted as an inconclusive finding and not a finding of "no difference." In some cases, the difference may be too small to detect given the level of significance we require and the number of observations in the sample. In order to provide evidence supporting a "no difference" finding, a power test would be necessitated. We have not conducted power tests in this analysis and therefore our results cannot be interpreted as evidence supporting any claims for no difference between groups.

Milk Items

Results for milk items are presented in the following tables: Table 1 for All Milk, Table 2 for Whole Milk, and Table 3 for Skim/Lowfat Milk.

Key Findings: In 2012, All Milk was purchased by more than 90% of households in our sample. About 80% of households purchased Skim/Lowfat Milk and only about 42% Whole Milk, indicating that some households may purchase both types of milk whereas others choose only one.

Low-income (non-urban) households paid a lower average price for milk than non-low-income (urban) households for all milk types. For All Milk and Whole Milk, low-income (non-urban) households bought a greater amount of milk than non-low-income (urban) ones. We found no statistical difference in per-household amounts of purchased Skim/Lowfat Milk between low-income and non-low income households. Non-low-income (urban) consumers used coupons more frequently than low-income (non-urban) consumers. However, for the entire U.S., there is no statistical difference in the frequency of coupon use for Whole Milk by low-income and non-low-income households.

Low-income v Non-low-income households

Most U.S. households in our sample purchased All Milk in 2012: 91.8% of low-income and 93.4% of non-low-income households. Similarly, 77.1% of low-income and 83.5% of non-low-income households purchased Skim/Lowfat Milk; the difference of 6.4% is more than four times the one for All Milk. This pattern is reversed for Whole Milk: 39.6% of low-income and 31.5% of non-low-income households purchased Whole Milk; that is, about 8.6% more low-income households purchased Whole Milk in 2012. Thus, these patterns show a different average distribution of purchases among household groups by income.

While low-income and non-low-income households' annual (or monthly) expenditures for All Milk and Skim/Low Fat Milk are not statistically different, we do find a statistical difference in the amount spent on Whole Milk. Low-income households that purchased Whole Milk spent about $5.92/year ($0.49/month) more than non-low income households.

Low-income households purchased about a gallon more of All Milk in 2012 than non-low-income households (respectively, 24.44 vs 23.26 gallon/year), and paid a lower price - about 20¢/gallon less. While there is no statistically significant difference in the amount of Skim/Low Fat Milk purchased by the two household groups (about 21.5 gallons/year), low-income households purchased more Whole Milk than non-low-income households (12.21 and 9.91 gallons / year, respectively) and paid about 45¢/gallon less, which is more than twice the difference in price paid for Skim/Low Fat Milk (19¢/gallon). Comparing prices paid across milk types, low-income households spent about 37¢/gallon more for Whole Milk than for Skim/Low Fat Milk, while non-low-income households spent about 61¢/gallon more for Whole Milk.

The majority of purchase occasions occurred in grocery stores and supercenters (cumulatively accounting for more than 80% of purchase occasions for both household types). However, while low-income households purchased All Milk at supercenters more frequently than non-low-income households (18.39% v. 14.87% of purchase occasions, respectively), the relationship reverses for grocery stores. Also, low-income households purchased All Milk in convenience stores relatively more often than non-low-income households. Similarly, low-income households bought Skim/Lowfat Milk less at grocery stores and club stores, but more at superstores and dollar stores, than non-low-income households. Low-income households also purchased Whole Milk more frequently at superstores, convenience stores, and dollar stores, and less frequently at grocery stores and club stores.

Low-income households did not use coupons as frequently as non-low-income ones for their All Milk purchases: non-low-income households used coupons for about 1 out of every 5 purchases, whereas low-income households used coupons for about 1 out of every 5.5 purchases. A similar pattern emerged for Whole Milk; however, no statistical difference emerged in coupon-use for Skim/Lowfat Milk.

For the most part, 2012 All Milk purchase patterns of households in the EFSNE Northeast is consistent with purchases by low-income and non-low-income households in the aggregate U.S. For All Milk purchases, three notable exceptions for the EFSNE households include: average gallons purchased, household size, and convenience store purchases, where the differences are no longer statistically significant. Similar patterns are also found for those who purchased Skim/Lowfat Milk, with low-income and non-low-income household sizes no longer being statistically different. In the EFSNE Northeast, the average expenditure and gallons purchased per household member are statistically larger for low-income households than non-low-income ones. Also, EFSNE Northeast low-income households paid about 21¢/gallon less for Skim/Lowfat Milk than non-low-income households and do not use coupons as frequently. They shopped for Skim/Lowfat Milk more frequently at superstores and dollar stores, and less at club stores. For Whole Milk, there are not as many statistically significant differences for EFSNE Northeast low-income and non-low-income households. On average, EFSNE Northeast low-income consumers paid about 40¢/gallon less and purchased more gallons per household member than non-low-income ones. Low-income consumers in EFSNE Northeast shopped less frequently at grocery stores and more frequently at superstores and dollar stores. They did not use coupons as frequently as non-low-income EFSNE Northeast consumers.

Urban v Non-urban

Our data indicates that 92.6% of urban households and 94.5% of non-urban households purchased milk in 2012. Urban households bought about 3 gallons/year less milk, perhaps because they paid higher prices (circa 20¢/gallon) than non-urban ones. About the same amount of urban and non-urban households purchased Skim/Lowfat Milk (81.8% and 81%, respectively). However, urban consumers bought about 3.2 fewer gallons of Skim/Lowfat Milk than non-urban consumers, possibly because they paid about 23¢/gallon more. About 2.8% fewer urban households purchased Whole Milk than non-urban households (40.6% and 43.4%). Among those who purchased Whole Milk, urban households purchased and spent less than non-urban households, and paid about 19¢/gallon more.

In general, for all types of milk analyzed, urban households are slightly larger than non-urban ones; thus, urban households bought less per household member than non-urban households. Also, for all types of milk analyzed, urban households bought more from grocery stores, drug stores, mass merchandisers, and club stores than non-urban households, and bought less from superstores, convenience stores, and dollar stores, which is consistent with the different general locations of these store types. Also, urban households used coupons more frequently across all milk types analyzed.

This pattern largely bears out with purchases by urban and non-urban households in the EFSNE Northeast. Again, the exceptions occur where the difference is not statistically significant in the EFSNE Northeast: drug store and convenience store purchases, and household size. This could be because the Northeast is characterized by more urban counties or because the difference is not large enough to be detected by the relatively smaller number of observations available for that region.

Urban low-income v Urban non-low-income

For the most part, urban low-income consumers' purchases are similar to all low-income consumers in the U.S. across the types of milk analyzed, with most differences consistent with the patterns highlighted above for urban and non-urban milk consumers. Notable differences in prices paid in 2012 should be highlighted: for All Milk, urban low-income consumers paid 22¢/gallon less than urban non-low-income

ones, with a similar difference for urban Skim/Lowfat Milk purchasers (21¢/gallon), but much more marked for urban Whole Milk purchasers (49¢/gallon).

Ground Beef Items

Results for ground beef items are presented in the following tables: Table 4 for All Ground Beef, Table 5 for Regular Ground Beef, and Table 6 for Lean Ground Beef.

Key Findings: In 2012, low-income (non-urban) households paid a lower average price for All Ground Beef than non-low-income (urban) households. This pattern applies to Lean Ground Beef, and in part, to Regular Ground Beef: low-income households paid a lower average price for Regular Ground Beef than non-low-income households, although urban households do not pay statistically higher prices than non-urban households. Low-income households bought a greater amount of All Ground Beef and Regular Ground Beef than non-low-income ones. Non-urban households bought a greater amount of All Ground Beef and Regular Ground Beef than urban ones. Non-low-income (urban) consumers also used coupons more frequently than low-income (non-urban) consumers for All Ground Beef and Regular Ground Beef.

Detailed Findings:

Low-income v Non- low-income

In general, about 5.4% more low-income households bought All Ground Beef than non-low-income households; however, while we see the same pattern for Regular Ground Beef, with 8.5% more purchased among low-income households, the opposite emerges for Lean Ground Beef. In 2012, approximately 2.9% fewer low-income households bought Lean Ground Beef than non-low-income households.

While low-income households bought more All Ground Beef than non-low-income ones, they paid about 38¢/pound less for it. Low-income households also paid a statistically lower price per pound—about 14¢ less—than non-low-income ones for Lean Ground Beef, and about 13¢/pound less for Regular Ground Beef. Also, low-income households bought more and spent more than non-low-income households for both All Ground Beef and Regular Ground Beef, with inconclusive evidence for Lean Ground Beef.

It should also be noted that while very few statistically significant differences emerge across low-income and non-low-income purchasers of Lean Ground Beef, indicating there is inconclusive evidence that these groups have different purchasing patterns for this product, several differences emerge for All Ground Beef and Regular Ground Beef. Among households purchasing All Ground Beef, low-income households are larger than non-low income ones, similar to households that purchase Regular Ground Beef. Also, they bought more All Ground Beef per household member than non-low-income households (1.25 pounds/year) and more Regular Ground Beef per household member (1.35 pounds/year).

Low-income households shopped less frequently for All Ground Beef at grocery stores and mass merchandisers, and more frequently at superstores. The same pattern held for households purchasing Regular Ground Beef. In both cases, more than 90% of purchases occurred in either a grocery store or a superstore (circa 88% in the case of Lean Ground Beef purchased). Low-income households used coupons less frequently to purchase All Ground Beef and Regular Ground Beef than non-low-income households.

For the EFSNE Northeast, there is no significant difference in the percentage of low-income and non-low-income households that purchased All Ground Beef in 2012; however, the EFSNE Northeast exhibits the same overall patterns as the U.S. sample, with few statistical differences between household types purchasing Lean Ground Beef (one exception is that the EFSNE Northeast low-income households bought Lean Ground Beef at supercenters more frequently than non-low-income households). A notable exception is that, in the EFSNE Northeast, there is no statistical difference in the frequency of shopping at

grocery stores among income groups for All Ground Beef. Low-income households purchased Regular Ground Beef less frequently at mass merchandisers, but there is no statistical difference in the other outlets. As in the overall U.S., low-income consumers used coupons less frequently than non-low-income ones for the purchases of All Ground Beef and Regular Ground Beef.

Urban v Non-urban

In 2012, about 8.9% fewer urban households bought All Ground Beef than non-urban ones. The same pattern appears for Regular Ground Beef: 9.6% fewer urban purchased Regular Ground Beef. There is no statistical difference between the number of urban and non-urban households that bought Lean Ground Beef.

Urban households also bought less All Ground Beef and paid about 20¢/pound more than non-urban households. Urban households bought 0.8 fewer pounds/year of Lean Ground Beef and paid a statistically higher price per pound (15¢/pound). Furthermore, among Lean Ground Beef purchasers, urban households are larger, on average, than non-urban ones and bought less Lean Ground Beef per household member (0.55 pound/year). Urban households bought and spent less on Regular Ground Beef than non-urban ones, even when estimated per household member, despite having paid similar prices per pound and having similar household sizes.

Urban households shopped for All Ground Beef more frequently at grocery stores, mass merchandisers, and club stores, and less frequently at superstores than non-urban ones; they also used coupons more frequently. These patterns are consistent for Lean Ground Beef and Regular Ground Beef as well. The most striking difference in purchase frequencies emerges for grocery stores and superstores, perhaps influenced by the presence of different types of outlets.

In the EFSNE Northeast, there are fewer differences between urban and non-urban consumers. While urban consumers bought approximately 2.47 fewer pounds of All Ground Beef than non-urban ones, they did not pay a statistically significant higher price per pound, and their overall expenditures are not statistically different. Fewer urban households bought Lean Ground Beef and paid a higher price per pound, whereas for Regular Ground Beef, household size of purchasers and expenditures per household members are not statistically different between urban and non-urban households.

The shopping patterns of EFSNE Northeast consumers reflect patterns of the overall U.S., with some differences: urban households bought All Ground Beef more frequently at mass merchandisers and club stores and less frequently at superstores, and urban households purchased Regular Ground Beef at club stores more than non-urban households.

Urban low-income v Urban non-low-income

The subset of low-income households that live in urban locations exhibit the same general patterns as the overall low-income group, with a few qualitative exceptions.

Sandwich Bread Items

Results for sandwich bread items are presented in the following tables: Table 7 for All Sandwich Bread, Table 8 for White Sandwich Bread, and Table 9 for Wheat Sandwich Bread.

Key Findings: In 2012 low-income (non-urban) households paid a lower average price for All Sandwich Bread and All White Bread than non-low-income (urban) households. Low-income (non-urban) households paid a lower average price for All Sandwich Bread than non-low-income (urban) households. Low-income (non-urban) households bought greater quantities of all types of bread analyzed than non-

low-income (urban) households. Non-low-income (urban) consumers also used coupons more frequently than low-income (non-urban) consumers for all types of bread considered.

Detailed Findings:

Low-income v Non- low-income

About 2.8% more low-income households bought All Sandwich Bread than non-low-income households. Also, about 8% more low-income households bought White Sandwich Bread than non-low-income ones, whereas no statistically significant difference emerges for Wheat Sandwich Bread.

Low-income households bought more, on a per-household and per-capita basis, of all types of bread considered than non-low-income households and were able to pay a lower price for them; the price differences were about 22¢/pound for All Sandwich Bread, 12¢/pound for Wheat Sandwich Bread, and about 19¢/pound for White Sandwich Bread.

Low-income households purchased all types of bread analyzed less frequently at grocery stores and club stores, and more frequently at superstores and dollar stores. Also, Wheat (White) Sandwich Bread was purchased more frequently at drug stores (convenience stores) by low-income than non-low income households. Low-income households used coupons less frequently than non-low-income households nationwide for all types of bread considered.

In the EFSNE Northeast, there is no statistical difference in the number of low-income v. non-low-income households that purchased All Sandwich Bread or Wheat Sandwich Bread. However, low-income households bought and spent more than non-low-income ones on a household-member basis for White Sandwich Bread. Low-income households purchased a greater quantity than non-low-income households in the EFSNE Northeast and paid about 25¢/pound less for All Sandwich Bread, 19¢/pound for Wheat Sandwich Bread, and 18¢/pound for White Sandwich Bread. Low-income households in the EFSNE Northeast purchased all types of bread considered less frequently at grocery stores and club stores and more frequently at superstores and dollar stores. For White Sandwich Bread, there is no difference in frequency of purchases at grocery stores, although purchase patterns at other outlets are similar to the overall U.S.; for White Sandwich Bread, the purchasing frequency at convenience stores is not statistically different between low-income and non-low income households. Coupon use resembles the total U.S.

Urban v Non-urban

In 2012, fewer households in urban areas bought all types of bread analyzed than non-urban households. These differences amount to about 4.3% for All Sandwich Bread, 3.1% for Wheat Sandwich Bread, and 10.3% for White Sandwich Bread. Urban households bought less and spent less on All Sandwich Bread, as well as Wheat and White Sandwich Bread, than non-urban households, both at the household and on a per-household member basis; however, urban households paid a higher price for White Sandwich Bread than non-urban ones.

Compared to non-urban households, urban households purchased all types of sandwich bread considered more frequently at grocery stores, drug stores, mass merchandisers, and club stores and less frequently at superstores. A difference in purchase frequency is also detected among urban / non-urban households at convenience stores for All Sandwich Bread but not for the different types. Urban households also use coupons more frequently than non-urban households for all types of bread considered.

Households in the EFSNE Northeast mostly exhibit the same patterns as those in the overall U.S.; however, there are fewer statistical differences between urban and non-urban households' Wheat Sandwich Bread purchases. For example, there is no difference in the amount purchased or spent on

Wheat Sandwich Bread per-household or per-household member and in the price paid. Purchasing patterns are slightly different between the EFSNE Northeast and the U.S.: for All Sandwich Bread, urban households purchase more frequently at grocery stores, mass merchandisers, and clubs and less frequently at superstores with no statistical differences in frequency of purchase at drug stores, convenience stores, and dollar stores; urban consumers purchase Wheat Sandwich Bread more frequently at grocery stores, mass merchandisers, and club stores and less frequently at superstores; for White Sandwich Bread, the purchase frequencies at drug and dollar stores are not statistically different for urban v. non-urban households. Similar to the U.S., EFSNE Northeast urban households also use coupons more frequently than non-urban households for all the types of breads considered.

Urban low-income v Urban non-low-income

The subset of low-income households that live in urban locations exhibit the same general patterns as the overall low-income group across product type, with a few qualitative exceptions.

Canned or Bottled Peaches

Results for Canned Peaches are presented in Table 10.

Key Findings: In 2012 1ow-income (non-urban) households paid a lower average price for Canned Peaches than non-low-income (urban) households. Non-low-income (urban) consumers used coupons more frequently than low-income (non-urban) consumers.

Detailed Findings:

Low-income v Non- low-income

In 2012, about 2.9% more low-income households bought Canned Peaches than non-low-income ones. Even though there is no statistical difference in their expenditures or the amount purchased, low-income households paid about 12¢/pound less than non-low-income ones, and purchased more Canned Peaches per household member than non-low-income households. Similar to the other products discussed so far, low-income households purchased Canned Peaches less frequently at grocery stores, mass merchandisers, and club stores in 2012 and more frequently at superstores and dollar stores than non-low-income ones, and also used coupons less frequently.

In the EFSNE Northeast, there are fewer statistical differences between these types of households. Low-income households paid about 10¢/pound less than non-low-income households. Purchasing patterns mirror the overall U.S., except for the lack of statistical difference for the frequency of purchase from mass merchandisers.

Urban v Non-urban

In 2012, about 7.5% fewer urban households bought Canned Peaches than non-urban households. Even though there is no statistical difference between the amount purchased and expenditures on Canned Peaches by urban and non-urban households, urban households spent about 12¢/pound more and purchased fewer pounds per household member. Urban households purchased Canned Peaches more frequently at grocery stores, mass merchandisers, and club stores and less frequently at superstores and dollar stores. Urban households used coupons more frequently than non-urban households.

In the EFSNE Northeast, fewer urban households bought Canned Peaches than non-urban households, but there are no statistical differences in the amount, expenditure, or price paid for them. Purchasing patterns for the EFSNE Northeast are similar to the entire U.S.

Urban low-income v Urban non-low-income

The subset of low-income households that live in urban locations exhibit the same general patterns as the overall low-income group, aside from fewer statistical differences.

Frozen Broccoli

Results for Frozen Broccoli are presented in Table 11.

Key Findings: In 2012, low-income (non-urban) households paid a lower average price for Frozen Broccoli than non-low-income (urban) households. Non-low-income (urban) consumers also used coupons more frequently than low-income (non-urban) consumers.

Detailed Findings:

Low-income v Non- low-income

About 3% fewer low-income households bought Frozen Broccoli in 2012 than non-low-income ones. Although there is no statistical difference between amount purchased or expenditure on Frozen Broccoli between low-income and non-low-income households, low-income households paid a statistically lower price per pound than non-low-income households (approximately $0.14/ pound). As most of the other products analyzed, low-income households purchased Frozen Broccoli less frequently at grocery stores and more frequently at superstores and dollar stores, and used coupons less frequently than non-low-income ones.

In the EFSNE Northeast, about 3.8% fewer low-income households purchased Frozen Broccoli and paid about 13¢/pound less. Fewer statistical differences emerge across income levels in the EFSNE Northeast compared to the U.S. Low-income households in the EFSNE Northeast purchased Frozen Broccoli more frequently from superstores and less frequently with a coupon.

Urban v Non-urban

There is no statistical difference in the percentage of urban and non-urban households purchasing Frozen Broccoli. Of those households that did purchase Frozen Broccoli, urban households spent more than non-urban ones on this product (approximately $0.82/ pound more per household); this difference is likely due to the higher prices paid (urban households paying 10¢/pound more) as the quantity purchased were not statistically different for the two household groups (overall and by households member). Confirming the patterns highlighted for the other products, urban households purchased Frozen Broccoli more frequently than non-urban ones from grocery stores (71.49% v. 62.01%), mass merchandisers, and club stores and less frequently from supercenters (15.86% v. 31.89%). Urban consumers also used coupons for Frozen Broccoli more frequently.

The EFSNE Northeast exhibits the same pattern as the overall U.S.; however there is no statistical difference in shopping frequency at mass merchandisers and Northeast urban households purchased Frozen Broccoli more frequently at dollar stores than non-urban ones.

Urban low-income v Urban non-low-income

The subset of low-income households that live in urban locations exhibit the same general patterns as the overall low-income group, aside from fewer statistical differences.

Uniform Weight Fresh Potatoes

Results for UWF Potatoes are presented in Table 12.

Key Findings: In 2012, low-income (non-urban) households paid a lower average price for UWF Potatoes than non-low-income (urban) households. Low-income (non-urban) households bought a greater amount of UWF Potatoes than non-low-income (urban) households. Non-low-income (urban) consumers also used coupons more frequently than low-income (non-urban) consumers.

Detailed Findings:

Low-income v Non- low-income

There is no difference in the share of low-income and non-low-income households that purchased UWF Potatoes in 2012. However, whereas low-income households that purchased UWF Potatoes spent more and bought more of this product – overall (5.8 pounds) and per household member (0.86 pounds) – than non-low-income households, they paid about 9¢/pound less. Low-income households purchased UWF Potatoes more frequently at superstores and less frequently at drug and club stores and used coupons less frequently than non-low-income households.

In the EFSNE Northeast, low-income households bought more UWF Potatoes overall and per household member; they also spent more per household member than non-low-income consumers. Low-income households also paid a lower price per pound and purchased UWF Potatoes more frequently from superstores than non-low-income households.

Urban v Non-urban

About 8.9% fewer urban households bought UWF Potatoes in 2012 than non-urban households. Urban households spent less on and bought fewer pounds of UWF Potatoes overall and per household member than non-urban households. Urban households also paid a higher price per unit than non-urban households. Urban households purchased UWF Potatoes more frequently at grocery stores, mass merchandisers, dollar, and club stores and less frequently at superstores than non-urban households. Also, urban consumers used coupons for UWF Potatoes more frequently than non-urban ones.
In the EFSNE Northeast, the same overall pattern persists. However, the difference in frequency of shopping at mass merchandisers and dollar stores ceases to be statistically significant. The statistical difference in frequency of coupon use persists.

Urban low-income v Urban non-low-income

The subset of low-income households that live in urban locations exhibit the same general patterns as the overall low-income group.

Discussion and Conclusions

The goal of this analysis was to characterize purchasing patterns across low-income and urban status for all U.S. households and in the EFSNE Northeast for different food product categories using the 2012 Static Panel of the IRI Consumer Network Panel™ database. Analysis of this FAH database allows us to highlight some interesting purchase patterns.

Overall, we find that a higher share of low-income than non-low-income households bought nearly all MBIs. This is most likely due to the data capturing FAH purchases and does not account for FAFH, such as take-out or sit-down restaurant meals, or lunches purchased at school. Non-low-income households may consume less FAH and dine out instead. Urban households may also dine out more, which would explain why a higher percentage of non-urban households bought more MBIs than non-urban households.

Some interesting overall patterns in our analysis emerge for low-income v. non-low-income households. First, in 2012, low-income households paid a lower average price than non-low income households for all of the MBIs analyzed on a nationwide basis. The same general pattern emerges for the EFSNE Northeast: low-income households paid a lower average price for all MBIs analyzed, excluding Lean Ground Beef, which had inconclusive evidence for the difference in price paid. This finding is consistent with Broda, Leibtag, and Weinstein (2009), who find that lower income households consistently paid lower prices for products. Second, in general, low-income households purchased greater quantities of MBIs (except for products that had inconclusive evidence of a difference: Skim/Lowfat Milk, Lean Ground Beef, Canned Peaches, and Frozen Broccoli), which is consistent with the findings of Rahkovsky and Snyder (2015). This pattern persists in the EFSNE Northeast for All Ground Beef, Regular Ground Beef, All Sandwich Bread, White Sandwich Bread, and UWF Potatoes, with inconclusive evidence of a difference in quantities purchased for the remaining MBIs. Third, we notice no consistent pattern across all MBIs for the number of purchase occasions. For some MBIs, low-income households had more purchase occasions (e.g., Whole Milk, All Ground Beef, Regular Ground Beef, All Sandwich Bread, Wheat Sandwich Bread, White Sandwich Bread, and UWF Potatoes) while for other MBIs, they had fewer (e.g., Skim/Lowfat Milk and Lean Ground Beef). It is interesting to note that the latter group is comprised of healthier versions of the MBIs. This is exacerbated for the EFSNE Northeast: low-income households had more purchase occasions than non-low-income households only for Regular Ground Beef, All Sandwich Bread, and White Sandwich Bread. We do not find a pattern associating differences in purchase occasion frequency and price paid, which is not consistent with the findings of Aguiar and Hurst (2007). They find that households that doubled their purchasing frequencies paid about 7-10% less, but these contrasting results may be due to the limited products we analyzed.[9]

Also consistent with previous research (e.g., Broda, Leibtag, and Weinstein, 2009), we find that low-income consumers frequent superstores more and grocery stores less than non-low-income consumers. This finding appears to be consistent across both refrigerated and shelf-stable items: grocery stores make up 62.65% (Canned Peaches) to 67.45% (UWF Potatoes) and supercenters make up 17.5% (Whole Milk) to 21.79% (Canned Peaches) of low-income households' purchase occasions. An exception to this is the ground beef products considered: grocery stores make up 38.3% (Lean Ground Beef) to 42.63% (All Ground Beef) and supercenters make up 48.14% (All Ground Beef) to 50.81% (Lean Ground Beef) of low-income households' purchase occasions. We also found that low-income consumers used coupons less frequently than non-low-income consumers, which may be consistent with the Aguiar and Hurst (2007) finding that lower income households often spend less time on food-related activities.

Similar patterns emerge for urban v. non-urban households. First, in 2012, non-urban households paid a lower average price than urban households for all of the MBIs analyzed on a nationwide basis. The same general pattern emerges for the EFSNE Northeast: non-urban households paid a lower average price for all MBIs analyzed, excluding All Ground Beef, Regular Ground Beef, Wheat Sandwich Bread, White Sandwich Bread, Canned Peaches, and UWF Potatoes, for which there was inconclusive evidence of a difference in price paid. Second, in general, non-urban households purchased greater quantities of MBIs (exceptions are products that had inconclusive evidence of a difference: Canned Peaches and Frozen Broccoli). This pattern persists in the EFSNE Northeast, with inconclusive evidence of a difference in quantities purchased for Lean Ground Beef, Wheat Sandwich Bread, Canned Peaches, and Frozen Broccoli. Third, urban consumers consistently make fewer purchase occasions than non-urban ones; the only exceptions to this are products that had inconclusive evidence of a difference (i.e., Lean Ground Beef, Canned Peaches, and Frozen Broccoli). Urban households frequented grocery stores more and

[9] We only looked at associations between the differences in annual average price paid across MBIs and differences in annual number of purchase occasions across MBIs, which may also mask the association. In contrast, Aguiar and Hurst (2007) conduct their analysis across households.

superstores less than non-urban households. Urban consumers were also more likely to frequent mass merchandisers and use a coupon than non-urban ones.

The results of this study resonate with recent literature on food access and purchases that highlight differences in purchasing patterns between low-income and non-low-income households, and urban and non-urban households.

References

Aguiar, M. and E. Hurst. (2007). "Life-Cycle Prices and Production." *American Economic Review*, 97(5): 1533-1559.

Alwitt, L.F., and T.D. Donley. 1997. "Retail Stores in Poor Urban Neighbourhoods." *The Journal of Consumer Affairs* 31: 139–163.

Ball, K., A. Timperio, and D. Crawford. 2008. "Neighborhood Socioeconomic Inequalities in Food Access and Affordability." *Health and Place* 15(2): 578–585.

Beatty, T.K.M. (2010). "Do the Poor Pay More for Food?" *American Journal of Agricultural Economics*, 92(3): 608-621.

Broda, C., E. Leibtag, and D.E. Weinstein. (2009). "The Role of Prices in Measuring the Poor's Living Standards." *Journal of Economic Perspectives*, 23(2): 77-97.

Carlson, A., & Frazão, E. (2012). Are healthy foods really more expensive? It depends on how you measure the price. *It Depends on How You Measure the Price (May 1, 2012). USDA-ERS Economic Information Bulletin*, (96).

Chung, C. and S.L. Myers. (1999). "Do the Poor Pay More for Food? An Analysis of Grocery Store Availability and Food Price Disparities." *The Journal of Consumer Affairs*, 33(2): 276-296.

Cotterill, R.W., and A. W. Franklin. 1995. The urban grocery store gap. Food Marketing Policy Issue Paper No. 8. Food Marketing Policy Center, University of Connecticut, Storrs, CT. April.
DC: US Government Printing Office, 2000.

DGAC. (2015) "Scientific report of the 2015 Dietary Guidelines Advisory Committee." February 2015. Downloaded on December 13, 2016 from http://www.health.gov/dietaryguidelines/2015-scientific-report/PDFs/Scientific-Report-of-the-2015--Dietary-Guidelines-Advisory- Committee.pdf.

Farrigan, T. 2016. Poverty Overview. Available at https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/poverty-overview.aspx

Hardin-Fanning F. and M. K. Rayens (2015) "Food Cost Disparities in Rural Communities" *Health Promotion Practice* 16(3): 383-391.

Kaufman, P.R., J.M MacDonald, S.M. Lutz, and D.M. Smallwood. (1997). "Do the Poor Pay More for Food? Item Selection and Price Differences Affect Low-Income Household Food Costs." Agricultural Economics Report, No. 759, U.S. Department of Agriculture, Economic Research Service.

Kunreuther, H. (1973). "Why the Poor May Pay More for Food: Theoretical and Empirical Evidence." *Journal of Business*, 46: 368-383.

Liese A, K. Weis, D. Pluto, E. Smith, and A. Lawson. (2007) "Food store types, availability, and cost of foods in a rural environment." Journal of the American Dietary Association.107:1916 –23

MacDonald, J.M. and P.E. Nelson. (1991). "Do the Poor Still Pay More? Food Price Variations in Large Metropolitan Areas." *Journal of Urban Economics*, 30: 344-359.

Moore, L.V., and A. Diez Roux. (2006). "Associations of Neighborhood Characteristics with the Location and Type of Food Stores." *American Journal of Public Health* 96(2): 325–331.

Morland, K., A. Diez Roux, and S. Wing. 2006. "Supermarkets, Other Food Stores, and Obesity. The Atherosclerosis Risk in Communities Study." *American Journal of Preventive Medicine* 30: 333-339.

Morris, M. P. Bellinger, and E. Haas. (1990). "Higher Prices, Fewer Choices: Shopping for Food in Rural America. Public Voice for Food and Health Policy, Washington, DC.

Morris, P.M., L. Neuhauser, and C. Campbell (1992). "Food security in rural America: a study of the availability and costs of food." *Journal of Nutrition Education*, 24 (1): 52S–58S.

Muth, M., Sweitzer, M., Brown, D., Capogrossi, K., Karns, S., Levin, D., Okrent, M. K., Siegel, P. & Zhen, C. (2016). *Understanding IRI Household-Based and Store-Based Scanner Data* (No. 234905). United States Department of Agriculture, Economic Research Service.

Nayga R.M.Jr., and Z. Weinberg (1999). Supermarket access in the inner cities. Journal of Retailing and Consumer Services 6: 141—145

Nord, N., and E. Leibtag (2005). "Is the "Cost of Enough Food" Lower in Rural Areas?" *The Review of Regional Studies* 35(3): 291-310.

Powell, L.M., S. Slater, D. Mirtcheva, Y. Bao, and F. J. Chaloupka (2007). "Food Store Availability and Neighborhood Characteristics in the United States." *Preventive Medicine* 44: 189-195.

Poverty Thresholds. U.S. Census Bureau. 2012. Downloaded from https://www.census.gov/hhes/www/poverty/data/threshld/ on August 11, 2015.

Rahkovsky, I. and S. Snyder (2015) Food Choices and Store Proximity, ERR-195, U.S. Department of Agriculture, Economic Research Service, September 2015.

Rural-Urban Continuum Codes. (2013). United States Department of Agriculture. Economic Research Service. Downloaded from http://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx on August 11, 2015.

Sexton, D.E., Jr. (1971). "Comparing the Cost of Food to Blacks and Whites—A Survey. *Journal of Marketing*, 35(July): 40-46.

U.S. Dept. of Health and Human Services. 2010. *Healthy People 2010.* 2nd ed. Washington.

Table 1. Summary Description of All Milk Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	91.8%	93.4%	-1.5% *	92.6%	94.5%	-1.9% *	91.5%	93.1%	-1.6% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$81.47	$80.10	$1.37	$79.09	$88.55	-$9.46 *	$78.94	$79.15	-$0.21
Average Expenditure Per HH, monthly	$6.79	$6.68	$0.11	$6.59	$7.38	-$0.79 *	$6.58	$6.60	-$0.02
Average Gallons Purchased Per HH, annually	24.44	23.26	1.17 *	23.16	26.12	-2.96 *	23.73	22.96	0.77
Average Gallons Purchased Per HH, monthly	2.04	1.94	0.10 *	1.93	2.18	-0.25 *	1.98	1.91	0.06
Average Price Paid Per Gallon	$3.83	$4.02	-$0.20 *	$4.00	$3.80	$0.20 *	$3.83	$4.05	-$0.22 *
Average HH Size	2.71	2.58	0.14 *	2.63	2.54	0.09 *	2.74	2.59	0.14 *
Average Expenditure Per HH Member, annually	$36.95	$34.38	$2.56 *	$34.23	$40.23	-$6.00 *	$35.57	$33.75	$1.83 *
Average Expenditure Per HH Member, monthly	$3.08	$2.87	$0.21 *	$2.85	$3.35	-$0.50 *	$2.96	$2.81	$0.15 *
Average Gallons Purchased Per HH Member, annually	$10.72	$9.74	$0.98 *	$9.74	$11.62	-$1.88 *	$10.34	$9.53	$0.82 *
Average Gallons Purchased Per HH Member, monthly	0.89	0.81	0.08 *	0.81	0.97	-0.16 *	0.86	0.79	0.07 *
Average Number of Purchase Occasions, annually	22.28	22.62	-0.35	22.28	23.94	-1.66 *	21.87	22.43	-0.56
Percentage of Purchase Occasions at									
Grocery Stores	64.93%	67.55%	-2.62% *	67.90%	60.49%	7.41% *	66.17%	68.52%	-2.35% *
Drug Stores	3.30%	2.92%	0.38%	3.10%	2.61%	0.49% *	3.51%	2.96%	0.55% *
Mass Merchandisers	2.60%	2.84%	-0.24%	3.00%	1.43%	1.57% *	2.95%	3.02%	-0.07%
Superstores	18.39%	14.87%	3.53% *	14.02%	26.51%	-12.48% *	16.23%	13.24%	2.99% *
Convenience Stores	1.68%	1.23%	0.45% *	1.20%	2.25%	-1.05% *	1.55%	1.08%	0.47% *
Dollar Stores	2.03%	0.75%	1.28% *	0.91%	2.33%	-1.43% *	1.71%	0.62%	1.09% *
Club Stores	3.94%	7.22%	-3.28% *	7.04%	1.92%	5.12% *	4.62%	7.91%	-3.29% *
A Discount via Coupon or Promotion	18.15%	19.90%	-1.75% *	19.91%	16.46%	3.45% *	19.05%	20.21%	-1.16% *
Of All Northeastern Households									
Percentage of HH Purchasing	90.9%	92.9%	-2.0%	92.1%	95.0%	-2.8% *	90.3%	92.7%	-2.4%
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$82.89	$82.00	$0.89	$81.20	$92.48	-$11.28 *	$80.66	$81.37	-$0.71
Average Expenditure Per HH, monthly	$6.91	$6.83	$0.07	$6.77	$7.71	-$0.94 *	$6.72	$6.78	-$0.06
Average Gallons Purchased Per HH, annually	22.39	21.35	1.03	21.14	26.37	-5.23 *	21.41	21.06	0.36
Average Gallons Purchased Per HH, monthly	1.87	1.78	0.09	1.76	2.20	-0.44 *	1.78	1.75	0.03
Average Price Paid Per Gallon	$4.19	$4.42	-$0.23 *	$4.41	$3.84	$0.57 *	$4.27	$4.46	-$0.19 *
Average HH Size	2.57	2.58	-0.01	2.58	2.51	0.07	2.57	2.58	-0.01
Average Expenditure Per HH Member, annually	$40.54	$35.48	$5.06 *	$36.19	$42.46	-$6.26 *	$39.61	$35.12	$4.49 *
Average Expenditure Per HH Member, monthly	$3.38	$2.96	$0.42 *	$3.02	$3.54	-$0.52 *	$3.30	$2.93	$0.37 *
Average Gallons Purchased Per HH Member, annually	$10.63	$9.02	$1.61 *	$9.18	$11.90	-$2.72 *	$10.21	$8.86	$1.35 *
Average Gallons Purchased Per HH Member, monthly	0.89	0.75	0.13 *	0.77	0.99	-0.23 *	0.85	0.74	0.11 *
Average Number of Purchase Occasions, annually	23.57	23.62	-0.06	23.33	26.36	-3.03 *	23.17	23.38	-0.21
Percentage of Purchase Occasions at									
Grocery Stores	70.06%	73.08%	-3.03% *	72.79%	67.56%	5.24% *	71.20%	73.29%	-2.09%
Drug Stores	3.49%	2.90%	0.59%	3.07%	2.81%	0.26%	3.58%	2.91%	0.67%
Mass Merchandisers	3.15%	3.27%	-0.12%	3.39%	1.80%	1.59% *	3.43%	3.37%	0.06%
Superstores	10.24%	6.47%	3.77% *	6.22%	19.52%	-13.30% *	8.13%	5.62%	2.51% *
Convenience Stores	3.13%	2.21%	0.92%	2.50%	1.94%	0.55%	3.28%	2.25%	1.02%
Dollar Stores	1.72%	0.44%	1.27% *	0.63%	2.15%	-1.52% *	1.52%	0.35%	1.17% *
Club Stores	4.47%	8.52%	-4.06% *	8.07%	1.78%	6.29% *	5.02%	9.02%	-4.00% *
A Discount via Coupon or Promotion	9.66%	12.43%	-2.76% *	11.95%	9.53%	2.42% *	10.04%	12.55%	-2.51% *

† Notes and Sources are available in Appendix A.

Table 2. Summary Description of Whole Milk Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	47.1%	38.5%	8.6% *	40.6%	43.4%	-2.8% *	46.7%	38.4%	8.4% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$42.44	$36.52	$5.92 *	$37.77	$42.40	-$4.63 *	$41.71	$36.02	$5.69 *
Average Expenditure Per HH, monthly	$3.54	$3.04	$0.49 *	$3.15	$3.53	-$0.39 *	$3.48	$3.00	$0.47 *
Average Gallons Purchased Per HH, annually	12.21	9.91	2.29 *	10.49	11.69	-1.20 *	12.05	9.80	2.26 *
Average Gallons Purchased Per HH, monthly	1.02	0.83	0.19 *	0.87	0.97	-0.10 *	1.00	0.82	0.19 *
Average Price Paid Per Gallon	$4.16	$4.60	-$0.45 *	$4.48	$4.30	$0.19 *	$4.15	$4.63	-$0.49 *
Average HH Size	2.83	2.66	0.17 *	2.73	2.64	0.09	2.85	2.68	0.17 *
Average Expenditure Per HH Member, annually	$19.06	$15.17	$3.90 *	$15.90	$19.52	-$3.61 *	$18.48	$14.76	$3.71 *
Average Expenditure Per HH Member, monthly	$1.59	$1.26	$0.32 *	$1.33	$1.63	-$0.30 *	$1.54	$1.23	$0.31 *
Average Gallons Purchased Per HH Member, annually	$5.29	$4.01	$1.28 *	$4.29	$5.23	-$0.94 *	$5.15	$3.90	$1.25 *
Average Gallons Purchased Per HH Member, monthly	0.44	0.33	0.11 *	0.36	0.44	-0.08 *	0.43	0.33	0.10 *
Average Number of Purchase Occasions, annually	11.70	10.24	1.46 *	10.59	11.44	-0.85 *	11.60	10.15	1.45 *
Percentage of Purchase Occasions at									
Grocery Stores	63.98%	68.16%	-4.18% *	67.86%	60.80%	7.06% *	64.62%	69.30%	-4.68% *
Drug Stores	4.03%	3.45%	0.58%	3.75%	3.04%	0.72%	4.38%	3.47%	0.91% *
Mass Merchandisers	2.69%	3.10%	-0.40%	3.20%	1.65%	1.55% *	3.03%	3.27%	-0.24%
Superstores	17.50%	14.67%	2.84% *	14.00%	24.41%	-10.40% *	15.94%	13.14%	2.80% *
Convenience Stores	2.09%	1.26%	0.83% *	1.46%	1.95%	-0.49%	2.05%	1.20%	0.86% *
Dollar Stores	3.55%	1.51%	2.04% *	1.86%	3.97%	-2.10% *	3.15%	1.29%	1.87% *
Club Stores	3.06%	5.04%	-1.98% *	4.93%	1.41%	3.52% *	3.59%	5.52%	-1.93% *
A Discount via Coupon or Promotion	15.34%	16.47%	-1.13%	16.37%	14.56%	1.81% *	15.79%	16.63%	-0.85%
Of All Northeastern Households									
Percentage of HH Purchasing	49.3%	42.2%	7.1% *	44.0%	43.8%	0.2%	49.2%	42.4%	6.8% *
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$39.25	$38.26	$0.98	$38.04	$43.76	-$5.72	$36.88	$38.48	-$1.61
Average Expenditure Per HH, monthly	$3.27	$3.19	$0.08	$3.17	$3.65	-$0.48	$3.07	$3.21	-$0.13
Average Gallons Purchased Per HH, annually	10.16	9.35	0.81	9.37	11.85	-2.49	9.36	9.37	-0.01
Average Gallons Purchased Per HH, monthly	0.85	0.78	0.07	0.78	0.99	-0.21	0.78	0.78	0.00
Average Price Paid Per Gallon	$4.45	$4.84	-$0.40 *	$4.77	$4.29	$0.48 *	$4.52	$4.87	-$0.35 *
Average HH Size	2.70	2.64	0.06	2.66	2.64	0.02	2.68	2.65	0.03
Average Expenditure Per HH Member, annually	$18.39	$15.80	$2.59	$16.19	$20.24	-$4.04	$17.29	$15.78	$1.51
Average Expenditure Per HH Member, monthly	$1.53	$1.32	$0.22	$1.35	$1.69	-$0.34	$1.44	$1.32	$0.13
Average Gallons Purchased Per HH Member, annually	$4.67	$3.80	$0.87 *	$3.92	$5.35	-$1.43 *	$4.32	$3.77	$0.55
Average Gallons Purchased Per HH Member, monthly	0.39	0.32	0.07 *	0.33	0.45	-0.12 *	0.36	0.31	0.05
Average Number of Purchase Occasions, annually	11.47	10.82	0.65	10.84	12.70	-1.86	10.98	10.79	0.19
Percentage of Purchase Occasions at									
Grocery Stores	68.49%	74.45%	-5.96% *	73.25%	67.35%	5.91% *	68.95%	74.86%	-5.91% *
Drug Stores	4.49%	3.57%	0.92%	3.95%	2.65%	1.30%	4.86%	3.61%	1.25%
Mass Merchandisers	3.16%	3.85%	-0.70%	3.80%	2.04%	1.76% *	3.39%	3.96%	-0.57%
Superstores	9.75%	5.57%	4.18% *	5.65%	18.49%	-12.83% *	8.18%	4.70%	3.48% *
Convenience Stores	3.93%	2.30%	1.63%	2.90%	1.35%	1.56% *	4.29%	2.38%	1.90%
Dollar Stores	2.68%	0.85%	1.83% *	1.15%	3.72%	-2.56% *	2.37%	0.69%	1.68% *
Club Stores	3.99%	6.02%	-2.03%	5.80%	1.62%	4.19% *	4.31%	6.36%	-2.05%
A Discount via Coupon or Promotion	7.97%	10.43%	-2.46% *	9.99%	6.93%	3.07% *	8.33%	10.62%	-2.29%

† Notes and Sources are available in Appendix A.

Table 3. Summary Description of Skim/Lowfat Milk Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	77.1%	83.5%	-6.4% *	81.8%	81.0%	0.8%	77.3%	83.4%	-6.1% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$71.11	$72.70	-$1.59	$70.85	$80.64	-$9.79 *	$68.18	$71.75	-$3.57 *
Average Expenditure Per HH, monthly	$5.93	$6.06	-$0.13	$5.90	$6.72	-$0.82 *	$5.68	$5.98	-$0.30 *
Average Gallons Purchased Per HH, annually	21.65	21.43	0.21	21.03	24.22	-3.19 *	20.79	21.11	-0.32
Average Gallons Purchased Per HH, monthly	1.80	1.79	0.02	1.75	2.02	-0.27 *	1.73	1.76	-0.03
Average Price Paid Per Gallon	$3.79	$3.99	-$0.19 *	$3.97	$3.74	$0.23 *	$3.81	$4.02	-$0.21 *
Average HH Size	2.77	2.59	0.18 *	2.66	2.57	0.08 *	2.79	2.61	0.19 *
Average Expenditure Per HH Member, annually	$32.36	$31.44	$0.92	$30.88	$36.49	-$5.61 *	$30.92	$30.87	$0.05
Average Expenditure Per HH Member, monthly	$2.70	$2.62	$0.08	$2.57	$3.04	-$0.47 *	$2.58	$2.57	$0.00
Average Gallons Purchased Per HH Member, annually	$9.54	$9.04	$0.50 *	$8.91	$10.76	-$1.85 *	$9.12	$8.84	$0.29
Average Gallons Purchased Per HH Member, monthly	0.80	0.75	0.04 *	0.74	0.90	-0.15 *	0.76	0.74	0.02
Average Number of Purchase Occasions, annually	19.38	20.57	-1.19 *	19.98	21.81	-1.83 *	18.86	20.36	-1.50 *
Percentage of Purchase Occasions at									
Grocery Stores	65.26%	67.65%	-2.39% *	68.06%	60.71%	7.34% *	66.57%	68.56%	-1.99% *
Drug Stores	3.26%	2.85%	0.41%	3.01%	2.66%	0.34%	3.44%	2.86%	0.57% *
Mass Merchandisers	2.67%	2.84%	-0.17%	3.03%	1.40%	1.62% *	3.05%	3.02%	0.04%
Superstores	18.36%	14.73%	3.64% *	13.94%	26.24%	-12.30% *	16.20%	13.18%	3.02% *
Convenience Stores	1.58%	1.24%	0.34%	1.16%	2.39%	-1.24% *	1.39%	1.08%	0.31%
Dollar Stores	1.67%	0.59%	1.09% *	0.70%	1.99%	-1.30% *	1.36%	0.47%	0.89% *
Club Stores	4.07%	7.54%	-3.47% *	7.34%	2.19%	5.15% *	4.72%	8.22%	-3.50% *
A Discount via Coupon or Promotion	19.33%	20.81%	-1.48% *	20.88%	17.58%	3.30% *	20.27%	21.09%	-0.82%
Of All Northeastern Households									
Percentage of HH Purchasing	75.6%	82.2%	-6.6% *	80.4%	82.0%	-1.6%	75.6%	81.9%	-6.4% *
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$74.11	$73.00	$1.11	$72.24	$83.73	-$11.49 *	$72.44	$72.18	$0.25
Average Expenditure Per HH, monthly	$6.18	$6.08	$0.09	$6.02	$6.98	-$0.96 *	$6.04	$6.02	$0.02
Average Gallons Purchased Per HH, annually	20.30	19.32	0.98	19.10	24.21	-5.10 *	19.51	18.98	0.53
Average Gallons Purchased Per HH, monthly	1.69	1.61	0.08	1.59	2.02	-0.43 *	1.63	1.58	0.04
Average Price Paid Per Gallon	$4.18	$4.40	-$0.21 *	$4.40	$3.80	$0.60 *	$4.26	$4.44	-$0.18 *
Average HH Size	2.61	2.59	0.02	2.60	2.52	0.09	2.62	2.60	0.02
Average Expenditure Per HH Member, annually	$36.77	$31.97	$4.80 *	$32.62	$38.36	-$5.75 *	$36.11	$31.58	$4.53 *
Average Expenditure Per HH Member, monthly	$3.06	$2.66	$0.40 *	$2.72	$3.20	-$0.48 *	$3.01	$2.63	$0.38 *
Average Gallons Purchased Per HH Member, annually	$9.74	$8.24	$1.50 *	$8.37	$10.93	-$2.55 *	$9.39	$8.07	$1.32 *
Average Gallons Purchased Per HH Member, monthly	0.81	0.69	0.12 *	0.70	0.91	-0.21 *	0.78	0.67	0.11 *
Average Number of Purchase Occasions, annually	20.87	21.14	-0.27	20.81	23.75	-2.94 *	20.56	20.88	-0.33
Percentage of Purchase Occasions at									
Grocery Stores	69.98%	72.96%	-2.98%	72.67%	67.84%	4.83% *	71.15%	73.12%	-1.98%
Drug Stores	3.40%	2.71%	0.69%	2.87%	3.01%	-0.14%	3.38%	2.71%	0.67%
Mass Merchandisers	3.59%	3.16%	0.43%	3.43%	1.58%	1.86% *	3.92%	3.28%	0.64%
Superstores	10.06%	6.72%	3.34% *	6.32%	19.75%	-13.43% *	8.01%	5.82%	2.19% *
Convenience Stores	2.83%	2.25%	0.58%	2.43%	2.02%	0.41%	2.90%	2.29%	0.61%
Dollar Stores	1.49%	0.29%	1.21% *	0.46%	1.78%	-1.33% *	1.30%	0.21%	1.09% *
Club Stores	4.83%	8.80%	-3.97% *	8.44%	1.79%	6.65% *	5.43%	9.33%	-3.90% *
A Discount via Coupon or Promotion	10.38%	13.32%	-2.94% *	12.84%	10.31%	2.53% *	10.72%	13.47%	-2.74% *

† Notes and Sources are available in Appendix A.

Table 4. Summary Description of All Ground Beef Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	36.9%	31.5%	5.4% *	31.7%	40.6%	-8.9% *	35.1%	30.5%	4.6% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$35.76	$29.33	$6.43 *	$30.28	$36.56	-$6.27 *	$34.85	$28.37	$6.48 *
Average Expenditure Per HH, monthly	$2.98	$2.44	$0.54 *	$2.52	$3.05	-$0.52 *	$2.90	$2.36	$0.54 *
Average Pounds Purchased Per HH, annually	12.39	9.05	3.34 *	9.68	12.18	-2.50 *	12.06	8.69	3.37 *
Average Pounds Purchased Per HH, monthly	1.03	0.75	0.28 *	0.81	1.02	-0.21 *	1.01	0.72	0.28 *
Average Price Paid Per Pound	$3.22	$3.60	-$0.38 *	$3.51	$3.31	$0.20 *	$3.23	$3.63	-$0.39 *
Average HH Size	2.98	2.73	0.25 *	2.82	2.73	0.09	3.00	2.75	0.25 *
Average Expenditure Per HH Member, annually	$14.94	$12.46	$2.48 *	$12.68	$15.94	-$3.27 *	$14.40	$11.95	$2.45 *
Average Expenditure Per HH Member, monthly	$1.25	$1.04	$0.21 *	$1.06	$1.33	-$0.27 *	$1.20	$1.00	$0.20 *
Average Pounds Purchased Per HH Member, annually	$5.06	$3.81	$1.25 *	$3.99	$5.22	-$1.23 *	$4.88	$3.62	$1.25 *
Average Pounds Purchased Per HH Member, monthly	0.42	0.32	0.10 *	0.33	0.43	-0.10 *	0.41	0.30	0.10 *
Average Number of Purchase Occasions, annually	4.20	3.84	0.36 *	3.87	4.34	-0.47 *	4.16	3.75	0.41 *
Percentage of Purchase Occasions at									
Grocery Stores	42.63%	45.55%	-2.92% *	47.03%	33.48%	13.55% *	45.88%	47.52%	-1.64%
Drug Stores	0.22%	0.04%	0.19%	0.10%	0.08%	0.02%	0.26%	0.03%	0.22%
Mass Merchandisers	5.14%	7.10%	-1.96% *	7.29%	2.71%	4.58% *	5.98%	7.84%	-1.85% *
Superstores	48.14%	44.65%	3.49% *	42.46%	60.98%	-18.52% *	43.69%	41.94%	1.75%
Convenience Stores	0.29%	0.04%	0.25%	0.11%	0.16%	-0.05%	0.30%	0.03%	0.27%
Dollar Stores	0.85%	0.30%	0.56% *	0.43%	0.68%	-0.25%	0.83%	0.26%	0.57% *
Club Stores	0.34%	0.52%	-0.19%	0.53%	0.17%	0.35% *	0.37%	0.59%	-0.22%
A Discount via Coupon or Promotion	16.49%	18.49%	-2.00% *	18.72%	13.84%	4.87% *	17.83%	19.09%	-1.26%
Of All Northeastern Households									
Percentage of HH Purchasing	17.8%	16.0%	1.8%	15.2%	29.1%	-13.8% *	15.4%	15.2%	0.3%
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$29.55	$20.92	$8.62 *	$22.48	$27.87	-$5.39	$29.18	$20.28	$8.89 *
Average Expenditure Per HH, monthly	$2.46	$1.74	$0.72 *	$1.87	$2.32	-$0.45	$2.43	$1.69	$0.74 *
Average Pounds Purchased Per HH, annually	9.69	5.84	3.86 *	6.52	8.99	-2.47 *	9.44	5.57	3.88 *
Average Pounds Purchased Per HH, monthly	0.81	0.49	0.32 *	0.54	0.75	-0.21 *	0.79	0.46	0.32 *
Average Price Paid Per Pound	$3.49	$4.13	-$0.64 *	$4.00	$3.69	$0.31	$3.48	$4.17	-$0.69 *
Average HH Size	2.87	2.68	0.19	2.72	2.78	-0.05	2.82	2.69	0.13
Average Expenditure Per HH Member, annually	$13.00	$9.13	$3.87 *	$10.01	$11.29	-$1.28	$13.40	$8.90	$4.50 *
Average Expenditure Per HH Member, monthly	$1.08	$0.76	$0.32 *	$0.83	$0.94	-$0.11	$1.12	$0.74	$0.37 *
Average Pounds Purchased Per HH Member, annually	$4.18	$2.50	$1.68 *	$2.86	$3.53	-$0.67	$4.27	$2.40	$1.87 *
Average Pounds Purchased Per HH Member, monthly	0.35	0.21	0.14 *	0.24	0.29	-0.06	0.36	0.20	0.16 *
Average Number of Purchase Occasions, annually	3.15	2.74	0.41	2.81	3.11	-0.29	3.19	2.69	0.50
Percentage of Purchase Occasions at									
Grocery Stores	32.38%	37.41%	-5.03%	37.67%	27.01%	10.67% *	34.69%	38.66%	-3.97%
Drug Stores	0.00%	0.01%	-0.01%	0.01%	0.00%	0.01%	0.00%	0.01%	-0.01%
Mass Merchandisers	11.03%	17.31%	-6.28% *	17.62%	4.42%	13.20% *	13.29%	19.04%	-5.75%
Superstores	48.95%	40.10%	8.86% *	38.34%	65.43%	-27.10% *	43.00%	36.81%	6.19%
Convenience Stores	0.00%	0.05%	-0.05%	0.04%	0.00%	0.04%	0.00%	0.05%	-0.05%
Dollar Stores	0.95%	0.12%	0.84%	0.28%	0.70%	-0.42%	0.78%	0.12%	0.66%
Club Stores	1.79%	2.59%	-0.80%	2.78%	0.12%	2.66% *	2.39%	2.91%	-0.53%
A Discount via Coupon or Promotion	13.10%	16.05%	-2.96%	16.45%	8.66%	7.79% *	14.02%	17.24%	-3.22%

† Notes and Sources are available in Appendix A.

Table 5. Summary Description of Regular Ground Beef Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	30.0%	21.5%	8.5% *	22.6%	32.1%	-9.6% *	28.2%	20.5%	7.6% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$33.79	$24.77	$9.02 *	$26.82	$33.05	-$6.23 *	$32.97	$23.74	$9.23 *
Average Expenditure Per HH, monthly	$2.82	$2.06	$0.75 *	$2.23	$2.75	-$0.52 *	$2.75	$1.98	$0.77 *
Average Pounds Purchased Per HH, annually	12.70	8.93	3.77 *	9.85	12.14	-2.29 *	12.41	8.56	3.85 *
Average Pounds Purchased Per HH, monthly	1.06	0.74	0.31 *	0.82	1.01	-0.19 *	1.03	0.71	0.32 *
Average Price Paid Per Pound	$2.84	$2.97	-$0.13 *	$2.93	$2.90	$0.03	$2.84	$2.97	-$0.13 *
Average HH Size	3.05	2.77	0.28 *	2.90	2.78	0.11	3.09	2.80	0.29 *
Average Expenditure Per HH Member, annually	$13.66	$10.33	$3.33 *	$10.96	$13.89	-$2.93 *	$13.21	$9.83	$3.38 *
Average Expenditure Per HH Member, monthly	$1.14	$0.86	$0.28 *	$0.91	$1.16	-$0.24 *	$1.10	$0.82	$0.28 *
Average Pounds Purchased Per HH Member, annually	$5.06	$3.70	$1.35 *	$3.99	$5.04	-$1.06 *	$4.91	$3.53	$1.38 *
Average Pounds Purchased Per HH Member, monthly	0.42	0.31	0.11 *	0.33	0.42	-0.09 *	0.41	0.29	0.12 *
Average Number of Purchase Occasions, annually	3.93	3.26	0.67 *	3.41	3.88	-0.47 *	3.88	3.17	0.71 *
Percentage of Purchase Occasions at									
Grocery Stores	42.54%	47.23%	-4.69% *	48.79%	32.11%	16.68% *	46.51%	49.93%	-3.43%
Drug Stores	0.42%	0.05%	0.37%	0.20%	0.11%	0.09%	0.51%	0.04%	0.47%
Mass Merchandisers	4.27%	5.97%	-1.70% *	6.02%	2.60%	3.42% *	4.95%	6.56%	-1.61% *
Superstores	48.96%	44.46%	4.50% *	42.18%	62.18%	-20.00% *	43.95%	41.29%	2.66%
Convenience Stores	0.33%	0.07%	0.25%	0.16%	0.19%	-0.03%	0.33%	0.07%	0.26%
Dollar Stores	1.10%	0.45%	0.66% *	0.62%	0.95%	-0.33%	1.10%	0.38%	0.72% *
Club Stores	0.17%	0.28%	-0.11%	0.27%	0.12%	0.16%	0.16%	0.33%	-0.17%
A Discount via Coupon or Promotion	16.08%	19.86%	-3.78% *	19.51%	14.29%	5.22% *	17.37%	20.58%	-3.21% *
Of All Northeastern Households									
Percentage of HH Purchasing	13.5%	9.2%	4.3% *	9.3%	20.4%	-11.1% *	11.7%	8.6%	3.1% *
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$30.19	$17.80	$12.39 *	$20.45	$29.20	-$8.75 *	$29.12	$16.63	$12.48 *
Average Expenditure Per HH, monthly	$2.52	$1.48	$1.03 *	$1.70	$2.43	-$0.73 *	$2.43	$1.39	$1.04 *
Average Pounds Purchased Per HH, annually	10.96	6.40	4.56 *	7.40	10.51	-3.11 *	10.53	6.02	4.51 *
Average Pounds Purchased Per HH, monthly	0.91	0.53	0.38 *	0.62	0.88	-0.26 *	0.88	0.50	0.38 *
Average Price Paid Per Pound	$2.85	$3.02	-$0.17 *	$2.95	$3.00	-$0.04	$2.85	$3.00	-$0.15
Average HH Size	2.92	2.75	0.17	2.79	2.89	-0.11	2.85	2.76	0.10
Average Expenditure Per HH Member, annually	$12.90	$7.47	$5.43 *	$8.89	$11.22	-$2.32	$13.08	$7.05	$6.03 *
Average Expenditure Per HH Member, monthly	$1.08	$0.62	$0.45 *	$0.74	$0.93	-$0.19	$1.09	$0.59	$0.50 *
Average Pounds Purchased Per HH Member, annually	$4.62	$2.65	$1.97 *	$3.18	$3.96	-$0.78	$4.67	$2.52	$2.16 *
Average Pounds Purchased Per HH Member, monthly	0.38	0.22	0.16 *	0.26	0.33	-0.07	0.39	0.21	0.18 *
Average Number of Purchase Occasions, annually	3.09	2.31	0.78 *	2.46	3.09	-0.63	3.02	2.21	0.81
Percentage of Purchase Occasions at									
Grocery Stores	29.54%	33.37%	-3.83%	34.54%	20.43%	14.11% *	33.93%	34.81%	-0.87%
Drug Stores	0.00%	0.02%	-0.02%	0.02%	0.00%	0.02%	0.00%	0.03%	-0.03%
Mass Merchandisers	10.45%	16.93%	-6.48% *	16.89%	4.62%	12.26% *	12.55%	18.80%	-6.25%
Superstores	52.30%	45.63%	6.66%	42.89%	71.49%	-28.60% *	44.74%	42.08%	2.66%
Convenience Stores	0.00%	0.08%	-0.08%	0.06%	0.00%	0.06%	0.00%	0.09%	-0.09%
Dollar Stores	1.33%	0.20%	1.13%	0.49%	1.00%	-0.51%	1.12%	0.21%	0.91%
Club Stores	0.97%	1.39%	-0.42%	1.49%	0.12%	1.37% *	1.30%	1.57%	-0.27%
A Discount via Coupon or Promotion	12.50%	18.73%	-6.23% *	18.58%	7.39%	11.19% *	14.78%	20.26%	-5.48%

† Notes and Sources are available in Appendix A.

Table 6. Summary Description of Lean Ground Beef Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	13.5%	16.5%	-2.9% *	15.5%	16.3%	-0.8%	13.4%	16.3%	-2.9% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$20.51	$22.46	-$1.95	$21.60	$24.08	-$2.48	$20.18	$22.02	-$1.84
Average Expenditure Per HH, monthly	$1.71	$1.87	-$0.16	$1.80	$2.01	-$0.21	$1.68	$1.84	-$0.15
Average Pounds Purchased Per HH, annually	5.00	5.34	-0.34	5.13	5.93	-0.80 *	4.89	5.20	-0.31
Average Pounds Purchased Per HH, monthly	0.42	0.44	-0.03	0.43	0.49	-0.07 *	0.41	0.43	-0.03
Average Price Paid Per Pound	$4.23	$4.37	-$0.14 *	$4.35	$4.20	$0.15 *	$4.25	$4.39	-$0.14 *
Average HH Size	2.83	2.68	0.15	2.75	2.55	0.21 *	2.89	2.71	0.17 *
Average Expenditure Per HH Member, annually	$9.31	$9.76	-$0.45	$9.37	$11.22	-$1.85 *	$9.09	$9.45	-$0.36
Average Expenditure Per HH Member, monthly	$0.78	$0.81	-$0.04	$0.78	$0.93	-$0.15 *	$0.76	$0.79	-$0.03
Average Pounds Purchased Per HH Member, annually	$2.26	$2.32	-$0.06	$2.22	$2.77	-$0.55 *	$2.19	$2.23	-$0.04
Average Pounds Purchased Per HH Member, monthly	0.19	0.19	-0.01	0.18	0.23	-0.05 *	0.18	0.19	0.00
Average Number of Purchase Occasions, annually	2.56	2.96	-0.40 *	2.83	3.00	-0.17	2.56	2.91	-0.35 *
Percentage of Purchase Occasions at									
Grocery Stores	38.30%	40.53%	-2.22%	41.36%	32.22%	9.14% *	40.31%	41.67%	-1.36%
Drug Stores	0.01%	0.06%	-0.05%	0.05%	0.04%	0.01%	0.01%	0.06%	-0.05%
Mass Merchandisers	7.81%	8.89%	-1.08%	9.64%	2.97%	6.67% *	8.83%	9.88%	-1.05%
Superstores	50.81%	47.79%	3.01%	45.96%	63.00%	-17.04% *	47.34%	45.55%	1.79%
Convenience Stores	0.15%	0.02%	0.12%	0.04%	0.11%	-0.07%	0.14%	0.01%	0.13%
Dollar Stores	0.02%	0.02%	0.00%	0.02%	0.03%	0.00%	0.01%	0.03%	-0.01%
Club Stores	0.55%	0.71%	-0.16%	0.75%	0.25%	0.50% *	0.66%	0.78%	-0.12%
A Discount via Coupon or Promotion	18.90%	18.16%	0.75%	18.90%	15.22%	3.68% *	19.53%	18.72%	0.81%
Of All Northeastern Households									
Percentage of HH Purchasing	6.2%	8.2%	-2.0% *	7.4%	10.7%	-3.3% *	5.9%	7.9%	-1.9% *
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$17.01	$18.57	-$1.57	$18.20	$18.64	-$0.44	$16.71	$18.56	-$1.85
Average Expenditure Per HH, monthly	$1.42	$1.55	-$0.13	$1.52	$1.55	-$0.04	$1.39	$1.55	-$0.15
Average Pounds Purchased Per HH, annually	3.54	3.91	-0.37	3.79	4.17	-0.38	3.44	3.87	-0.43
Average Pounds Purchased Per HH, monthly	0.29	0.33	-0.03	0.32	0.35	-0.03	0.29	0.32	-0.04
Average Price Paid Per Pound	$4.69	$4.93	-$0.24	$4.92	$4.59	$0.33 *	$4.74	$4.96	-$0.22
Average HH Size	2.66	2.61	0.06	2.64	2.44	0.20	2.71	2.63	0.09
Average Expenditure Per HH Member, annually	$8.25	$8.34	-$0.08	$8.28	$8.63	-$0.35	$8.17	$8.30	-$0.14
Average Expenditure Per HH Member, monthly	$0.69	$0.69	-$0.01	$0.69	$0.72	-$0.03	$0.68	$0.69	-$0.01
Average Pounds Purchased Per HH Member, annually	$1.77	$1.76	$0.01	$1.74	$1.94	-$0.20	$1.74	$1.74	$0.01
Average Pounds Purchased Per HH Member, monthly	0.15	0.15	0.00	0.14	0.16	-0.02	0.15	0.14	0.00
Average Number of Purchase Occasions, annually	2.13	2.54	-0.41	2.46	2.40	0.06	2.17	2.53	-0.37
Percentage of Purchase Occasions at									
Grocery Stores	25.16%	31.95%	-6.79%	31.54%	23.45%	8.09%	25.52%	33.01%	-7.49%
Drug Stores	0.00%	0.00%	0.00% *	0.00%	0.00%	0.00% *	0.00%	0.00%	0.00% *
Mass Merchandisers	13.50%	20.86%	-7.35%	21.40%	4.51%	16.89% *	14.96%	22.98%	-8.01%
Superstores	55.56%	41.12%	14.44% *	40.62%	69.13%	-28.51% *	52.59%	37.69%	14.90%
Convenience Stores	0.00%	0.03%	-0.03%	0.03%	0.00%	0.03%	0.00%	0.03%	-0.03%
Dollar Stores	0.00%	0.00%	0.00% *	0.00%	0.00%	0.00% *	0.00%	0.00%	0.00% *
Club Stores	3.04%	3.75%	-0.71%	4.01%	0.68%	3.33% *	3.64%	4.10%	-0.46%
A Discount via Coupon or Promotion	11.85%	14.92%	-3.06%	14.91%	9.79%	5.12%	10.57%	15.97%	-5.41%

† Notes and Sources are available in Appendix A.

Table 7. Summary Description of All Sandwich Bread Purchases1,A,†
2012 Averages

	Low-Income2,B	Non Low-Income2	Difference	Urban3,D	Non Urban3	Difference	Urban Low-income	Urban Non Low-income	Difference
Of All U.S. Households									
Percentage of HH Purchasing	87.1%	84.3%	2.8% *	84.5%	88.7%	-4.3% *	86.5%	83.7%	2.7% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$28.60	$26.33	$2.26 *	$26.27	$31.10	-$4.83 *	$27.51	$25.80	$1.70 *
Average Expenditure Per HH, monthly	$2.38	$2.19	$0.19 *	$2.19	$2.59	-$0.40 *	$2.29	$2.15	$0.14 *
Average Pounds Purchased Per HH, annually	22.42	17.69	4.73 *	18.26	23.71	-5.44 *	21.28	17.13	4.15 *
Average Pounds Purchased Per HH, monthly	1.87	1.47	0.39 *	1.52	1.98	-0.45 *	1.77	1.43	0.35 *
Average Price Paid Per Pound	$1.47	$1.68	-$0.22 *	$1.65	$1.47	$0.18 *	$1.49	$1.70	-$0.21 *
Average HH Size	2.74	2.62	0.11 *	2.67	2.56	0.11 *	2.76	2.64	0.12 *
Average Expenditure Per HH Member, annually	$13.51	$11.65	$1.86 *	$11.78	$14.57	-$2.79 *	$12.91	$11.35	$1.56 *
Average Expenditure Per HH Member, monthly	$1.13	$0.97	$0.15 *	$0.98	$1.21	-$0.23 *	$1.08	$0.95	$0.13 *
Average Pounds Purchased Per HH Member, annually	$10.34	$7.68	$2.65 *	$8.02	$10.97	-$2.95 *	$9.72	$7.38	$2.34 *
Average Pounds Purchased Per HH Member, monthly	0.86	0.64	0.22 *	0.67	0.91	-0.25 *	0.81	0.62	0.20 *
Average Number of Purchase Occasions, annually	12.53	10.82	1.71 *	10.91	13.62	-2.70 *	12.00	10.50	1.50 *
Percentage of Purchase Occasions at									
Grocery Stores	65.69%	68.94%	-3.25% *	69.32%	60.49%	8.83% *	67.23%	70.11%	-2.88% *
Drug Stores	0.74%	0.52%	0.21% *	0.64%	0.32%	0.32% *	0.86%	0.55%	0.31% *
Mass Merchandisers	3.17%	3.57%	-0.39%	3.72%	1.91%	1.81% *	3.59%	3.78%	-0.19%
Superstores	19.59%	15.59%	4.00% *	14.67%	28.51%	-13.85% *	16.98%	13.80%	3.18% *
Convenience Stores	0.63%	0.34%	0.29% *	0.39%	0.65%	-0.26% *	0.62%	0.30%	0.32% *
Dollar Stores	2.55%	1.07%	1.48% *	1.38%	2.21%	-0.83% *	2.47%	0.97%	1.49% *
Club Stores	2.64%	5.84%	-3.20% *	5.46%	1.71%	3.75% *	3.13%	6.34%	-3.21% *
A Discount via Coupon or Promotion	24.47%	28.82%	-4.36% *	28.54%	21.91%	6.64% *	25.64%	29.63%	-3.99% *
Of All Northeastern Households									
Percentage of HH Purchasing	86.9%	86.0%	0.8%	85.9%	89.9%	-4.0% *	86.4%	85.7%	0.7%
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$31.91	$29.50	$2.42	$29.53	$36.00	-$6.48 *	$31.21	$28.98	$2.23
Average Expenditure Per HH, monthly	$2.66	$2.46	$0.20	$2.46	$3.00	-$0.54 *	$2.60	$2.41	$0.19
Average Pounds Purchased Per HH, annually	22.10	17.49	4.61 *	18.06	24.83	-6.77 *	21.26	17.02	4.24 *
Average Pounds Purchased Per HH, monthly	1.84	1.46	0.38 *	1.51	2.07	-0.56 *	1.77	1.42	0.35 *
Average Price Paid Per Pound	$1.67	$1.92	-$0.25 *	$1.87	$1.68	$0.19 *	$1.69	$1.93	-$0.24 *
Average HH Size	2.59	2.62	-0.02	2.62	2.53	0.09	2.60	2.63	-0.03
Average Expenditure Per HH Member, annually	$16.58	$13.17	$3.41 *	$13.71	$17.47	-$3.76 *	$16.05	$12.95	$3.10 *
Average Expenditure Per HH Member, monthly	$1.38	$1.10	$0.28 *	$1.14	$1.46	-$0.31 *	$1.34	$1.08	$0.26 *
Average Pounds Purchased Per HH Member, annually	$11.02	$7.61	$3.41 *	$8.17	$11.78	-$3.62 *	$10.48	$7.41	$3.07 *
Average Pounds Purchased Per HH Member, monthly	0.92	0.63	0.28 *	0.68	0.98	-0.30 *	0.87	0.62	0.26 *
Average Number of purchase occasions, annually	12.88	11.23	1.65 *	11.39	14.28	-2.89 *	12.62	10.99	1.63 *
Percentage of Purchase Occasions at									
Grocery Stores	73.32%	76.57%	-3.25% *	76.37%	69.35%	7.02% *	74.72%	76.91%	-2.19%
Drug Stores	0.75%	0.38%	0.37%	0.50%	0.29%	0.20%	0.84%	0.39%	0.45%
Mass Merchandisers	4.18%	4.44%	-0.25%	4.58%	2.27%	2.32% *	4.56%	4.59%	-0.03%
Superstores	10.03%	6.76%	3.27% *	6.39%	19.60%	-13.20% *	7.86%	5.92%	1.95% *
Convenience Stores	1.17%	0.59%	0.57%	0.77%	0.50%	0.27%	1.26%	0.61%	0.66%
Dollar Stores	3.34%	1.04%	2.30% *	1.59%	2.05%	-0.46%	3.42%	1.00%	2.42% *
Club Stores	2.72%	6.16%	-3.44% *	5.64%	1.61%	4.03% *	3.05%	6.48%	-3.43% *
A Discount via Coupon or Promotion	26.07%	31.31%	-5.25% *	30.62%	23.33%	7.29% *	27.16%	31.75%	-4.59% *

Notes and Sources are available in Appendix A.

Table 8. Summary Description of Sandwich Bread, White Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	58.2%	50.1%	8.0% *	50.9%	61.2%	-10.3% *	56.6%	48.9%	7.7% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$19.55	$15.64	$3.92 *	$16.11	$20.69	-$4.58 *	$18.61	$15.06	$3.56 *
Average Expenditure Per HH, monthly	$1.63	$1.30	$0.33 *	$1.34	$1.72	-$0.38 *	$1.55	$1.25	$0.30 *
Average Pounds Purchased Per HH, annually	17.81	12.44	5.37 *	13.37	18.03	-4.66 *	16.77	11.93	4.84 *
Average Pounds Purchased Per HH, monthly	1.48	1.04	0.45 *	1.11	1.50	-0.39 *	1.40	0.99	0.40 *
Average Price Paid Per Pound	$1.22	$1.41	-$0.19 *	$1.37	$1.26	$0.10 *	$1.23	$1.42	-$0.19 *
Average HH Size	2.90	2.75	0.16 *	2.82	2.69	0.13 *	2.93	2.77	0.16 *
Average Expenditure Per HH Member, annually	$8.78	$6.65	$2.13 *	$6.94	$9.26	-$2.32 *	$8.28	$6.38	$1.90 *
Average Expenditure Per HH Member, monthly	$0.73	$0.55	$0.18 *	$0.58	$0.77	-$0.19 *	$0.69	$0.53	$0.16 *
Average Pounds Purchased Per HH Member, annually	$7.81	$5.25	$2.56 *	$5.67	$8.00	-$2.33 *	$7.28	$5.00	$2.28 *
Average Pounds Purchased Per HH Member, monthly	0.65	0.44	0.21 *	0.47	0.67	-0.19 *	0.61	0.42	0.19 *
Average Number of Purchase Occasions, annually	9.81	7.71	2.10 *	8.01	10.18	-2.17 *	9.37	7.44	1.93 *
Percentage of Purchase Occasions at									
Grocery Stores	66.10%	71.18%	-5.08% *	71.16%	61.71%	9.45% *	67.84%	72.55%	-4.71% *
Drug Stores	0.96%	0.80%	0.16%	0.95%	0.38%	0.57% *	1.17%	0.85%	0.32%
Mass Merchandisers	3.18%	3.23%	-0.05%	3.46%	2.04%	1.42% *	3.56%	3.41%	0.15%
Superstores	19.54%	15.94%	3.60% *	14.99%	27.34%	-12.36% *	16.85%	14.21%	2.64% *
Convenience Stores	0.88%	0.41%	0.47% *	0.54%	0.68%	-0.14%	0.90%	0.39%	0.51% *
Dollar Stores	3.58%	1.58%	1.99% *	1.99%	3.33%	-1.33% *	3.44%	1.39%	2.06% *
Club Stores	1.57%	3.36%	-1.79% *	3.14%	1.03%	2.12% *	1.90%	3.67%	-1.76% *
A Discount via Coupon or Promotion	23.74%	28.01%	-4.28% *	27.91%	20.45%	7.47% *	25.24%	29.04%	-3.81% *
Of All Northeastern Households									
Percentage of HH Purchasing	62.4%	54.9%	7.5% *	55.4%	71.1%	-15.7% *	60.6%	53.7%	6.9% *
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$21.59	$16.86	$4.73 *	$17.48	$23.97	-$6.49 *	$21.07	$16.17	$4.91 *
Average Expenditure Per HH, monthly	$1.80	$1.40	$0.39 *	$1.46	$2.00	-$0.54 *	$1.76	$1.35	$0.41 *
Average Pounds Purchased Per HH, annually	18.00	12.79	5.21 *	13.58	19.74	-6.16 *	17.30	12.23	5.08 *
Average Pounds Purchased Per HH, monthly	1.50	1.07	0.43 *	1.13	1.64	-0.51 *	1.44	1.02	0.42 *
Average Price Paid Per Pound	$1.35	$1.53	-$0.18 *	$1.48	$1.43	$0.06	$1.36	$1.53	-$0.17 *
Average HH Size	2.74	2.75	-0.02	2.76	2.64	0.12	2.73	2.77	-0.04
Average Expenditure Per HH Member, annually	$10.55	$7.06	$3.49 *	$7.72	$10.69	-$2.97 *	$10.34	$6.77	$3.57 *
Average Expenditure Per HH Member, monthly	$0.88	$0.59	$0.29 *	$0.64	$0.89	-$0.25 *	$0.86	$0.56	$0.30 *
Average Pounds Purchased Per HH Member, annually	$8.48	$5.30	$3.19 *	$5.87	$8.80	-$2.93 *	$8.15	$5.04	$3.11 *
Average Pounds Purchased Per HH Member, monthly	0.71	0.44	0.27 *	0.49	0.73	-0.24 *	0.68	0.42	0.26 *
Average Number of Purchase Occasions, annually	10.22	8.18	2.05 *	8.49	10.91	-2.42 *	10.06	7.91	2.15 *
Percentage of Purchase Occasions at									
Grocery Stores	74.45%	80.50%	-6.05% *	79.83%	70.38%	9.45% *	75.93%	81.26%	-5.33% *
Drug Stores	1.03%	0.47%	0.55%	0.66%	0.39%	0.27%	1.17%	0.48%	0.69%
Mass Merchandisers	3.76%	3.67%	0.10%	3.90%	2.05%	1.85% *	4.22%	3.78%	0.44%
Superstores	9.80%	6.81%	2.99% *	6.17%	19.58%	-13.41% *	7.22%	5.79%	1.42%
Convenience Stores	1.67%	0.67%	1.00%	1.00%	0.62%	0.38%	1.90%	0.67%	1.23%
Dollar Stores	3.46%	1.03%	2.42% *	1.60%	2.69%	-1.10%	3.42%	0.93%	2.48% *
Club Stores	2.04%	3.58%	-1.53% *	3.37%	1.33%	2.04% *	2.38%	3.73%	-1.35%
A Discount via Coupon or Promotion	26.85%	34.24%	-7.39% *	33.18%	23.85%	9.32% *	28.14%	35.01%	-6.87% *

† Notes and Sources are available in Appendix A.

Table 9. Summary Description of Sandwich Bread, Wheat Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	55.0%	53.7%	1.3%	53.6%	56.7%	-3.1% *	54.6%	53.3%	1.4%
Of Households That Purchase									
Average Expenditure Per HH, annually	$17.06	$15.58	$1.48 *	$15.70	$17.80	-$2.10 *	$16.55	$15.38	$1.17 *
Average Expenditure Per HH, monthly	$1.42	$1.30	$0.12 *	$1.31	$1.48	-$0.18 *	$1.38	$1.28	$0.10 *
Average Pounds Purchased Per HH, annually	12.92	10.92	2.00 *	11.19	13.27	-2.08 *	12.50	10.70	1.79 *
Average Pounds Purchased Per HH, monthly	1.08	0.91	0.17 *	0.93	1.11	-0.17 *	1.04	0.89	0.15 *
Average Price Paid Per Pound	$1.48	$1.60	-$0.12 *	$1.58	$1.49	$0.09 *	$1.49	$1.61	-$0.12 *
Average HH Size	2.81	2.68	0.13 *	2.74	2.60	0.14 *	2.84	2.70	0.14 *
Average Expenditure Per HH Member, annually	$8.10	$6.93	$1.17 *	$7.06	$8.48	-$1.42 *	$7.81	$6.78	$1.03 *
Average Expenditure Per HH Member, monthly	$0.68	$0.58	$0.10 *	$0.59	$0.71	-$0.12 *	$0.65	$0.56	$0.09 *
Average Pounds Purchased Per HH Member, annually	$6.16	$4.78	$1.38 *	$4.98	$6.33	-$1.35 *	$5.90	$4.63	$1.27 *
Average Pounds Purchased Per HH Member, monthly	0.51	0.40	0.11 *	0.41	0.53	-0.11 *	0.49	0.39	0.11 *
Average Number of Purchase Occasions, annually	7.11	6.45	0.67 *	6.47	7.58	-1.10 *	6.90	6.31	0.59 *
Percentage of Purchase Occasions at									
Grocery Stores	66.32%	69.16%	-2.84% *	69.55%	61.56%	7.99% *	67.96%	70.14%	-2.18% *
Drug Stores	0.70%	0.50%	0.20%	0.59%	0.35%	0.24% *	0.78%	0.52%	0.26%
Mass Merchandisers	3.51%	3.91%	-0.40%	4.15%	1.80%	2.35% *	4.08%	4.18%	-0.10%
Superstores	20.09%	15.41%	4.68% *	14.68%	28.50%	-13.82% *	17.17%	13.75%	3.42% *
Convenience Stores	0.37%	0.28%	0.09%	0.28%	0.45%	-0.17%	0.38%	0.25%	0.14%
Dollar Stores	1.62%	0.97%	0.65% *	1.13%	1.34%	-0.21%	1.65%	0.93%	0.72% *
Club Stores	2.60%	5.69%	-3.09% *	5.34%	1.69%	3.65% *	3.11%	6.17%	-3.06% *
A Discount via Coupon or Promotion	24.92%	30.75%	-5.83% *	29.97%	23.84%	6.13% *	25.93%	31.49%	-5.56% *
Of All Northeastern Households									
Percentage of HH Purchasing	49.6%	51.3%	-1.7%	51.0%	49.8%	1.2%	49.8%	51.3%	-1.5%
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$17.73	$16.85	$0.89	$17.00	$17.82	-$0.82	$17.56	$16.82	$0.74
Average Expenditure Per HH, monthly	$1.48	$1.40	$0.07	$1.42	$1.48	-$0.07	$1.46	$1.40	$0.06
Average Pounds Purchased Per HH, annually	11.43	9.81	1.62	10.13	11.13	-1.00	11.28	9.77	1.51
Average Pounds Purchased Per HH, monthly	0.95	0.82	0.14	0.84	0.93	-0.08	0.94	0.81	0.13
Average Price Paid Per Pound	$1.75	$1.93	-$0.19 *	$1.89	$1.81	$0.08	$1.75	$1.94	-$0.18 *
Average HH Size	2.66	2.67	-0.01	2.69	2.46	0.22 *	2.69	2.68	0.01
Average Expenditure Per HH Member, annually	$9.13	$7.57	$1.56 *	$7.87	$8.95	-$1.09	$8.80	$7.57	$1.23
Average Expenditure Per HH Member, monthly	$0.76	$0.63	$0.13 *	$0.66	$0.75	-$0.09	$0.73	$0.63	$0.10
Average Pounds Purchased Per HH Member, annually	$5.85	$4.33	$1.52 *	$4.62	$5.64	-$1.02	$5.60	$4.32	$1.28 *
Average Pounds Purchased Per HH Member, monthly	0.49	0.36	0.13 *	0.39	0.47	-0.09	0.47	0.36	0.11 *
Average Number of Purchase Occasions, annually	6.47	5.98	0.50	6.05	6.64	-0.59	6.44	5.93	0.51
Percentage of Purchase Occasions at									
Grocery Stores	71.83%	73.44%	-1.61%	73.61%	66.98%	6.63% *	73.76%	73.57%	0.19%
Drug Stores	0.67%	0.45%	0.23%	0.53%	0.26%	0.26%	0.77%	0.45%	0.32%
Mass Merchandisers	5.28%	5.14%	0.15%	5.46%	2.12%	3.34% *	5.78%	5.36%	0.42%
Superstores	9.92%	7.09%	2.82% *	6.62%	20.34%	-13.73% *	7.22%	6.43%	0.80%
Convenience Stores	0.73%	0.60%	0.13%	0.65%	0.45%	0.21%	0.72%	0.63%	0.08%
Dollar Stores	2.79%	1.27%	1.52% *	1.66%	1.62%	0.04%	3.02%	1.23%	1.79% *
Club Stores	3.23%	8.07%	-4.84% *	7.31%	2.07%	5.24% *	3.52%	8.49%	-4.97% *
A Discount via Coupon or Promotion	24.43%	30.34%	-5.91% *	29.50%	21.99%	7.51% *	25.20%	30.85%	-5.65% *

† Notes and Sources are available in Appendix A.

Table 10. Summary Description of Canned or Bottled Peaches Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	34.3%	31.5%	2.9% *	31.2%	38.7%	-7.5% *	33.0%	30.5%	2.5% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$8.04	$8.54	-$0.50	$8.41	$8.31	$0.09	$8.13	$8.52	-$0.39
Average Expenditure Per HH, monthly	$0.67	$0.71	-$0.04	$0.70	$0.69	$0.01	$0.68	$0.71	-$0.03
Average Pounds Purchased Per HH, annually	5.92	5.91	0.02	5.84	6.25	-0.41	5.89	5.82	0.07
Average Pounds Purchased Per HH, monthly	0.49	0.49	0.00	0.49	0.52	-0.03	0.49	0.49	0.01
Average Price Paid Per Pound	$1.47	$1.59	-$0.12 *	$1.57	$1.45	$0.12 *	$1.49	$1.61	-$0.12 *
Average HH Size	2.81	2.69	0.12 *	2.75	2.60	0.15 *	2.84	2.71	0.13 *
Average Expenditure Per HH Member, annually	$4.26	$4.00	$0.26	$4.04	$4.26	-$0.22	$4.23	$3.97	$0.25
Average Expenditure Per HH Member, monthly	$0.36	$0.33	$0.02	$0.34	$0.36	-$0.02	$0.35	$0.33	$0.02
Average Pounds Purchased Per HH Member, annually	$3.23	$2.79	$0.44 *	$2.86	$3.23	-$0.38 *	$3.16	$2.74	$0.42
Average Pounds Purchased Per HH Member, monthly	0.27	0.23	0.04 *	0.24	0.27	-0.03 *	0.26	0.23	0.04
Average Number of Purchase Occasions, annually	2.91	2.92	-0.01	2.90	3.01	-0.11	2.88	2.91	-0.03
Percentage of Purchase Occasions at									
Grocery Stores	62.65%	67.21%	-4.56% *	67.43%	58.14%	9.29% *	63.97%	68.79%	-4.82% *
Drug Stores	1.12%	0.88%	0.24%	0.98%	0.78%	0.20%	1.18%	0.91%	0.28%
Mass Merchandisers	3.21%	4.28%	-1.06% *	4.16%	2.93%	1.23% *	3.44%	4.45%	-1.00%
Superstores	21.79%	17.59%	4.20% *	16.91%	28.21%	-11.30% *	19.73%	15.80%	3.93% *
Convenience Stores	0.08%	0.06%	0.02%	0.06%	0.10%	-0.03%	0.09%	0.05%	0.04%
Dollar Stores	4.63%	2.35%	2.28% *	2.80%	4.25%	-1.45% *	4.33%	2.20%	2.13% *
Club Stores	1.57%	3.00%	-1.43% *	2.87%	1.10%	1.77% *	1.85%	3.27%	-1.41% *
A Discount via Coupon or Promotion	26.17%	31.18%	-5.01% *	30.89%	23.73%	7.16% *	27.62%	32.18%	-4.56% *
Of All Northeastern Households									
Percentage of HH Purchasing	31.1%	28.8%	2.3%	28.5%	38.6%	-10.1% *	29.7%	28.1%	1.6%
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$8.83	$9.07	-$0.24	$8.96	$9.39	-$0.43	$8.95	$8.96	-$0.02
Average Expenditure Per HH, monthly	$0.74	$0.76	-$0.02	$0.75	$0.78	-$0.04	$0.75	$0.75	$0.00
Average Pounds Purchased Per HH, annually	5.77	5.79	-0.02	5.68	6.59	-0.91	5.78	5.65	0.13
Average Pounds Purchased Per HH, monthly	0.48	0.48	0.00	0.47	0.55	-0.08	0.48	0.47	0.01
Average Price Paid Per Pound	$1.63	$1.73	-$0.10 *	$1.71	$1.65	$0.06	$1.65	$1.73	-$0.08
Average HH Size	2.64	2.68	-0.04	2.68	2.57	0.11	2.64	2.69	-0.05
Average Expenditure Per HH Member, annually	$4.94	$4.22	$0.72	$4.41	$4.44	-$0.02	$5.09	$4.18	$0.90
Average Expenditure Per HH Member, monthly	$0.41	$0.35	$0.06	$0.37	$0.37	$0.00	$0.42	$0.35	$0.08
Average Pounds Purchased Per HH Member, annually	$3.26	$2.67	$0.58	$2.80	$3.08	-$0.27	$3.31	$2.63	$0.69
Average Pounds Purchased Per HH Member, monthly	0.27	0.22	0.05	0.23	0.26	-0.02	0.28	0.22	0.06
Average Number of Purchase Occasions, annually	2.96	2.83	0.13	2.85	3.02	-0.18	2.94	2.81	0.13
Percentage of Purchase Occasions at									
Grocery Stores	67.17%	74.81%	-7.64% *	74.15%	61.91%	12.25% *	70.07%	75.54%	-5.47%
Drug Stores	1.57%	1.18%	0.39%	1.28%	1.31%	-0.03%	1.49%	1.21%	0.28%
Mass Merchandisers	4.25%	5.41%	-1.16%	5.41%	2.66%	2.76% *	4.83%	5.61%	-0.78%
Superstores	15.13%	9.51%	5.62% *	9.19%	25.13%	-15.94% *	11.83%	8.29%	3.53%
Convenience Stores	0.18%	0.18%	0.00%	0.20%	0.02%	0.18%	0.22%	0.20%	0.02%
Dollar Stores	5.08%	1.69%	3.39% *	2.27%	5.20%	-2.93% *	4.42%	1.54%	2.87% *
Club Stores	1.80%	3.73%	-1.93% *	3.56%	0.51%	3.05% *	2.04%	4.08%	-2.04%
A Discount via Coupon or Promotion	27.70%	37.79%	-10.08% *	36.29%	25.48%	10.81% *	29.01%	38.78%	-9.77% *

† Notes and Sources are available in Appendix A.

Table 11. Summary Description of Frozen Broccoli Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	32.3%	35.2%	-3.0% *	34.5%	33.8%	0.7%	32.3%	35.3%	-2.9% *
Of Households That Purchase									
Average Expenditure Per HH, annually	$7.46	$7.87	-$0.41	$7.87	$7.05	$0.82 *	$7.66	$7.95	-$0.28
Average Expenditure Per HH, monthly	$0.62	$0.66	-$0.03	$0.66	$0.59	$0.07 *	$0.64	$0.66	-$0.02
Average Pounds Purchased Per HH, annually	4.74	4.63	0.11	4.70	4.40	0.29	4.82	4.66	0.17
Average Pounds Purchased Per HH, monthly	0.39	0.39	0.01	0.39	0.37	0.02	0.40	0.39	0.01
Average Price Paid Per Pound	$1.65	$1.78	-$0.14 *	$1.76	$1.67	$0.10 *	$1.66	$1.79	-$0.13 *
Average HH Size	2.97	2.71	0.25 *	2.79	2.76	0.02	2.96	2.73	0.23 *
Average Expenditure Per HH Member, annually	$3.47	$3.55	-$0.08	$3.59	$3.15	$0.45 *	$3.59	$3.60	-$0.01
Average Expenditure Per HH Member, monthly	$0.29	$0.30	-$0.01	$0.30	$0.26	$0.04 *	$0.30	$0.30	$0.00
Average Pounds Purchased Per HH Member, annually	$2.19	$2.09	$0.10	$2.15	$1.97	$0.17	$2.24	$2.11	$0.13
Average Pounds Purchased Per HH Member, monthly	0.18	0.17	0.01	0.18	0.16	0.01	0.19	0.18	0.01
Average Number of Purchase Occasions, annually	2.88	2.88	0.00	2.89	2.80	0.09	2.88	2.90	-0.02
Percentage of Purchase Occasions at									
Grocery Stores	67.46%	71.13%	-3.66% *	71.49%	62.01%	9.48% *	69.23%	72.24%	-3.01% *
Drug Stores	0.09%	0.08%	0.01%	0.08%	0.10%	-0.02%	0.10%	0.07%	0.03%
Mass Merchandisers	2.48%	3.04%	-0.57%	3.21%	0.98%	2.22% *	2.90%	3.31%	-0.42%
Superstores	21.51%	16.91%	4.60% *	15.86%	31.89%	-16.04% *	18.23%	15.06%	3.17% *
Convenience Stores	0.11%	0.06%	0.05%	0.07%	0.14%	-0.08%	0.11%	0.05%	0.06%
Dollar Stores	1.62%	0.85%	0.77% *	1.11%	0.74%	0.37%	1.82%	0.87%	0.94% *
Club Stores	3.86%	5.06%	-1.19%	5.16%	2.18%	2.98% *	4.36%	5.43%	-1.07%
A Discount via Coupon or Promotion	32.72%	38.47%	-5.74% *	37.94%	30.76%	7.18% *	33.91%	39.28%	-5.37% *
Of All Northeastern Households									
Percentage of HH Purchasing	36.1%	39.9%	-3.8% *	39.0%	38.1%	0.8%	36.7%	39.7%	-3.0%
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$8.32	$9.25	-$0.93	$9.17	$7.46	$1.72 *	$8.53	$9.37	-$0.84
Average Expenditure Per HH, monthly	$0.69	$0.77	-$0.08	$0.76	$0.62	$0.14 *	$0.71	$0.78	-$0.07
Average Pounds Purchased Per HH, annually	4.97	5.33	-0.36	5.30	4.59	0.71	5.05	5.38	-0.32
Average Pounds Purchased Per HH, monthly	0.41	0.44	-0.03	0.44	0.38	0.06	0.42	0.45	-0.03
Average Price Paid Per Pound	$1.69	$1.82	-$0.13 *	$1.79	$1.68	$0.11 *	$1.70	$1.82	-$0.13 *
Average HH Size	2.71	2.75	-0.04	2.74	2.73	0.02	2.69	2.76	-0.07
Average Expenditure Per HH Member, annually	$4.31	$4.05	$0.26	$4.20	$3.18	$1.03 *	$4.50	$4.11	$0.38
Average Expenditure Per HH Member, monthly	$0.36	$0.34	$0.02	$0.35	$0.26	$0.09 *	$0.37	$0.34	$0.03
Average Pounds Purchased Per HH Member, annually	$2.48	$2.32	$0.16	$2.40	$1.90	$0.50 *	$2.56	$2.35	$0.21
Average Pounds Purchased Per HH Member, monthly	0.21	0.19	0.01	0.20	0.16	0.04 *	0.21	0.20	0.02
Average Number of Purchase Occasions, annually	3.08	3.28	-0.20	3.27	2.83	0.44	3.14	3.31	-0.18
Percentage of Purchase Occasions at									
Grocery Stores	77.30%	80.40%	-3.09%	80.35%	72.36%	7.99% *	78.66%	80.85%	-2.19%
Drug Stores	0.03%	0.05%	-0.02%	0.02%	0.26%	-0.24%	0.04%	0.02%	0.02%
Mass Merchandisers	2.23%	3.10%	-0.87%	3.05%	1.31%	1.74%	2.48%	3.21%	-0.74%
Superstores	12.30%	7.06%	5.24% *	6.92%	23.01%	-16.09% *	9.82%	6.06%	3.77%
Convenience Stores	0.15%	0.06%	0.09%	0.09%	0.00%	0.09%	0.17%	0.06%	0.11%
Dollar Stores	2.20%	0.94%	1.26%	1.32%	0.35%	0.97% *	2.49%	0.98%	1.51%
Club Stores	3.91%	5.74%	-1.82%	5.67%	1.40%	4.27% *	4.34%	6.07%	-1.73%
A Discount via Coupon or Promotion	40.25%	46.23%	-5.98% *	45.75%	34.82%	10.93% *	41.62%	46.99%	-5.37%

† Notes and Sources are available in Appendix A.

Table 12. Summary Description of Uniform Weight Fresh Potatoes Purchases[1,A,†]
2012 Averages

	Low-Income[2,B]	Non Low-Income[2]	Difference[C]	Urban[3,D]	Non Urban[3]	Difference[E]	Urban Low-income[2,3,B,D]	Urban Non Low-income[2,3]	Difference[F]
Of All U.S. Households									
Percentage of HH Purchasing	64.8%	64.8%	0.0%	63.5%	72.4%	-8.9% *	63.2%	63.6%	-0.4%
Of Households That Purchase									
Average Expenditure Per HH, annually	$13.99	$12.83	$1.16 *	$12.76	$15.28	-$2.52 *	$13.48	$12.50	$0.98 *
Average Expenditure Per HH, monthly	$1.17	$1.07	$0.10 *	$1.06	$1.27	-$0.21 *	$1.12	$1.04	$0.08 *
Average Pounds Purchased Per HH, annually	32.67	26.90	5.78 *	27.34	34.89	-7.55 *	31.37	25.88	5.50 *
Average Pounds Purchased Per HH, monthly	2.72	2.24	0.48 *	2.28	2.91	-0.63 *	2.61	2.16	0.46 *
Average Price Paid Per Pound	$0.53	$0.62	-$0.09 *	$0.61	$0.54	$0.07 *	$0.54	$0.63	-$0.09 *
Average HH Size	2.87	2.68	0.19 *	2.76	2.63	0.13 *	2.90	2.70	0.20 *
Average Expenditure Per HH Member, annually	$6.52	$5.66	$0.86 *	$5.68	$7.08	-$1.40 *	$6.27	$5.47	$0.80 *
Average Expenditure Per HH Member, monthly	$0.54	$0.47	$0.07 *	$0.47	$0.59	-$0.12 *	$0.52	$0.46	$0.07 *
Average Pounds Purchased Per HH Member, annually	$14.97	$11.70	$3.28 *	$11.99	$16.02	-$4.04 *	$14.31	$11.14	$3.17 *
Average Pounds Purchased Per HH Member, monthly	1.25	0.97	0.27 *	1.00	1.34	-0.34 *	1.19	0.93	0.26 *
Average Number of Purchase Occasions, annually	4.26	4.03	0.22 *	4.00	4.57	-0.57 *	4.15	3.95	0.20 *
Percentage of Purchase Occasions at									
Grocery Stores	70.52%	71.61%	-1.09%	72.24%	66.41%	5.84% *	71.47%	72.52%	-1.05%
Drug Stores	0.25%	0.23%	0.03%	0.24%	0.19%	0.05%	0.27%	0.23%	0.04%
Mass Merchandisers	0.97%	1.51%	-0.55% *	1.51%	0.57%	0.94% *	1.08%	1.67%	-0.59% *
Superstores	19.02%	15.94%	3.08% *	14.89%	26.80%	-11.91% *	16.78%	14.21%	2.57% *
Convenience Stores	0.16%	0.15%	0.01%	0.14%	0.23%	-0.10%	0.16%	0.13%	0.03%
Dollar Stores	1.43%	1.09%	0.33%	1.32%	0.49%	0.84% *	1.68%	1.20%	0.48% *
Club Stores	4.00%	6.24%	-2.24% *	6.16%	2.70%	3.45% *	4.55%	6.74%	-2.19% *
A Discount via Coupon or Promotion	23.89%	26.06%	-2.17% *	25.79%	23.56%	2.23% *	24.46%	26.28%	-1.82% *
Of All Northeastern Households									
Percentage of HH Purchasing	61.0%	63.3%	-2.3%	61.9%	71.6%	-9.8% *	59.5%	62.6%	-3.1%
Of Northeastern Households That Purchase									
Average Expenditure Per HH, annually	$15.07	$14.57	$0.50	$14.44	$16.99	-$2.56 *	$14.73	$14.35	$0.38
Average Expenditure Per HH, monthly	$1.26	$1.21	$0.04	$1.20	$1.42	-$0.21 *	$1.23	$1.20	$0.03
Average Pounds Purchased Per HH, annually	28.78	25.04	3.74 *	25.25	32.53	-7.28 *	27.79	24.47	3.33 *
Average Pounds Purchased Per HH, monthly	2.40	2.09	0.31 *	2.10	2.71	-0.61 *	2.32	2.04	0.28 *
Average Price Paid Per Pound	$0.63	$0.72	-$0.09 *	$0.70	$0.65	$0.05	$0.63	$0.72	-$0.09 *
Average HH Size	2.71	2.71	0.00	2.72	2.59	0.13	2.72	2.72	0.00
Average Expenditure Per HH Member, annually	$7.57	$6.38	$1.20 *	$6.56	$7.71	-$1.15 *	$7.54	$6.26	$1.27 *
Average Expenditure Per HH Member, monthly	$0.63	$0.53	$0.10 *	$0.55	$0.64	-$0.10 *	$0.63	$0.52	$0.11 *
Average Pounds Purchased Per HH Member, annually	$14.40	$10.90	$3.50 *	$11.46	$14.60	-$3.14 *	$14.17	$10.63	$3.54 *
Average Pounds Purchased Per HH Member, monthly	1.20	0.91	0.29 *	0.95	1.22	-0.26 *	1.18	0.89	0.29 *
Average Number of Purchase Occasions, annually	4.18	4.11	0.08	4.07	4.64	-0.57 *	4.13	4.05	0.08
Percentage of Purchase Occasions at									
Grocery Stores	77.34%	80.35%	-3.01%	80.03%	75.74%	4.28% *	78.02%	80.64%	-2.62%
Drug Stores	0.11%	0.21%	-0.09%	0.20%	0.02%	0.18%	0.13%	0.22%	-0.09%
Mass Merchandisers	1.45%	1.48%	-0.03%	1.52%	1.06%	0.45%	1.39%	1.55%	-0.16%
Superstores	10.35%	6.75%	3.60% *	6.54%	17.62%	-11.08% *	8.78%	5.85%	2.94% *
Convenience Stores	0.37%	0.17%	0.20%	0.23%	0.07%	0.16%	0.43%	0.17%	0.26%
Dollar Stores	0.01%	0.03%	-0.03%	0.01%	0.16%	-0.15%	0.00%	0.02%	-0.02%
Club Stores	5.50%	7.24%	-1.74%	7.23%	3.00%	4.23% *	5.95%	7.63%	-1.68%
A Discount via Coupon or Promotion	25.96%	29.00%	-3.03%	28.90%	22.34%	6.56% *	26.95%	29.50%	-2.55%

† Notes and Sources are available in Appendix A.

Appendix A: Sources and Notes

Sources:

1 IRI Consumer Network™ Panel, 2012. Courtesy of the Economic Research Service of the USDA.

2 Poverty Thresholds. U.S. Census Bureau. 2012. Downloaded from https://www.census.gov/hhes/www/poverty/data/threshld/ on August 11, 2015.

3 Rural-Urban Continuum Codes, 2013. United States Department of Agriculture. Economic Research Service. Downloaded from http://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx on August 11, 2015.

Notes:

A Statistics have been weighted by their U.S. population weight (i.e., projection61k in IRI). Statistics for the Northeast have been weighted according to their U.S. population weights, but subsetted to reflect only those states included in the EFSNE definition of Northeast (i.e., CT, DE, DC, ME, MD, MA, NH, NJ, NY, PA, RI, VT, and WV). The static panel of all households contains 62,503 observations for the U.S. and 12,770 observations for the Northeast.

B Households are determined to be 'Low-income' if the midpoint of their IRI income bracket is at or below 200% of the U.S. Census Bureau Poverty Thresholds. The poverty thresholds vary by household size and year.

C The "Difference" column is calculated by subtracting the values in the "Non Low-income" column from the values in the "Low-income" column.

D Households are determined to be 'Urban' if their county (given in IRI) corresponds to a metropolitan area as defined by the USDA 2013 Rural-Urban Continuum Codes.

E The "Difference" column is calculated by subtracting the values in the "Non Urban" column from the values in the "Urban" column.

F The "Difference" column is calculated by subtracting the values in the "Urban Non Low-income" column from the values in the "Urban Low-income" column.

* Indicates that the difference between averages is statistically significant at the 1% level.

Appendix B: Sandwich Bread[A]
Definitions of Wheat, White, and Other Bread By Flavor

Flavors	Number of Purchases	Percentage of Purchases	Included in Analysis[B]	Wheat	White	Other
WHITE	1783205	37.482%	Yes		✔	
WHEAT	780011	16.396%	Yes	✔		
100% WHOLE WHEAT	447307	9.402%	Yes	✔		
WHOLE GRAIN WHITE	210696	4.429%	Yes			✔
HONEY WHEAT	198054	4.163%	Yes	✔		
ITALIAN	147901	3.109%	Yes		✔	
CLASSIC WHITE	107592	2.262%	Yes		✔	
CINNAMON	87388	1.837%	Yes			✔
MULTI GRAIN	72252	1.519%	Yes			✔
12 GRAIN	58577	1.231%	Yes			✔
RYE	42465	0.893%	Yes			✔
POTATO	42402	0.891%	Yes			✔
WHOLE GRAIN	35136	0.739%	Yes			✔
SOURDOUGH	33488	0.704%	Yes			✔
JEWISH RYE	32399	0.681%	Yes			✔
OATMEAL	28031	0.589%	Yes			✔
CINNAMON SWIRL	23831	0.501%	Yes			✔
100% WHOLE WHEAT WHOLE GRAIN	21626	0.455%	Yes	✔		
WHOLE WHEAT	20487	0.431%	Yes	✔		
100% MULTI GRAIN	18578	0.391%	Yes			✔
BUTTERMILK	18104	0.381%	Yes			✔
7 GRAIN	18049	0.379%	Yes			✔
FRENCH	17413	0.366%	Yes		✔	
OAT BRAN	17300	0.364%	Yes			✔
CRACKED WHEAT	15155	0.319%	Yes	✔		
SWEET HARVEST WHEAT	14352	0.302%	Yes	✔		
CINNAMON RAISIN	14044	0.295%	Yes			✔
HEARTY WHITE	11617	0.244%	Yes		✔	
100% STONE GROUND WHOLE WHEAT	11329	0.238%	Yes	✔		
SPROUTED GRAIN	11142	0.234%	Yes			✔

Source:

IRI Consumer Network™ Panel, 2008 - 2012.

Notes:

A The analysis only considers bread of the "Sandwich Bread" variety.

B The analysis only considers flavors of Sandwich Bread which had at least 11,000 purchase occasions. There were 685 sliced sandwich bread flavors included in the dataset; of these 30 had sufficient purchases to be included in the analysis. Additional information about the flavors not included in this analysis is available upon request.