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FOODS TYPICALLY PURCHASED BY SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) HOUSEHOLDS

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Foods Typically Purchased by Supplemental Nutrition Assistance Program (SNAP) Households

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Purpose and Overview

The Food and Nutrition Service (FNS) awarded a contract to IMPAQ International, LLC, to determine what foods are typically purchased by households receiving Supplemental Nutrition Assistance Program (SNAP) benefits. This study examined point-of-sale (POS) food purchase data to determine for what foods SNAP households have the largest expenditures, including both SNAP benefits and other resources, and how their expenditures compare to those made by non-SNAP households.

SNAP, administered by FNS, is the nation's largest nutrition assistance program. In 2011, SNAP participants redeemed over $71 billion in SNAP benefits in more than 230,000 SNAP-authorized stores.[1] Given the magnitude of SNAP, FNS has a sustained interest in understanding the effects of the program. To date, FNS has studied SNAP household food consumption and expenditures using national surveys that generally rely on consumers to recall what they ate or to report or scan every purchase. This previous research has shown that the similarities in food purchases, consumption patterns, and dietary outcomes among low-income families and higher-income households are more striking than the differences.[2]

By using POS data to compare the purchases of SNAP households to those of non-SNAP households, the current study provides more detail on food expenditure patterns than previous studies. This study examines two major questions:

- What food items are purchased by SNAP households?
- How do foods purchased by SNAP households compare to food purchased by non-SNAP households?

Methodology

Data Overview

POS transaction data from January 1, 2011 through December 31, 2011 from a leading grocery retailer were examined for this study.[3] The majority of stores from which the data came would

[1] USDA FNS. (2011). *Supplemental Nutrition Assistance Program 2011 Annual Report.* Benefit Redemption Division. Available at http://www.fns.usda.gov/snap/retailers/pdfs/2011-annual-report-revised.pdf.

[2] See, for example, Office of Research and Analysis (2012). *Building a Healthy America: A Profile of the Supplemental Nutrition Assistance Program.* Food and Nutrition Service, USDA (available on line at www.fns.usda.gov/ora/MENU/Published/snap/FILES/Other/BuildingHealthyAmerica.pdf).

[3] Per the data sharing agreement between the data provider and IMPAQ, a description of the source of these data must be limited to the following: "From a leading US grocery retailer data examining POS transactions from January 1, 2011 through December 31, 2011 across approximately 11 million SNAP households. The majority of

be classified as grocery stores, supermarkets, and combination food and drug stores per FNS Retailer Policy and Management Division food retailer definitions.[4] On average, each of the 12 monthly data files contained over 1 billion records of food items purchased by 26.5 million households, reflecting 127 million unique transactions. Each monthly data file included an average of 3.2 million SNAP households, identified using the methodology described below. Total expenditures on all SNAP-eligible food items in the dataset by SNAP and non-SNAP households over the 12 months were $39.0 billion, or approximately $3.3 billion per month. SNAP households spent approximately $555 million on SNAP-eligible items each month in this dataset, using both SNAP benefits and other resources such as cash or credit cards.[5]

Identifying SNAP Households and Creating Analysis Categories

SNAP households were identified in the data for each month. This identification was performed monthly because, in any given month, some households enter or leave the program. The analysis identified SNAP households each month by first identifying any transaction in which SNAP electronic benefit transfer (EBT) was used to pay for at least half of the value of the purchase and designating the household that made that transaction as a SNAP household.[6] It then linked all other transactions made by that household during that month to estimate total monthly spending by SNAP households. All other transactions in these stores were designated as non-SNAP household purchases.[7]

IMPAQ analyzed SNAP-eligible food items given the focus of the study. Per the Food and Nutrition Act of 2008 (the Act), eligible food includes any food or food product for home consumption, as well as seeds and plants which produce food for consumption. The Act precludes alcoholic beverages, tobacco products, hot food and any food sold for on-premises consumption from being purchased with SNAP benefits.[8] The unit of analysis for the study was a food-related subcommodity, with subcommodities and commodities defined by the data provider. Each subcommodity typically consisted of multiple food items, often distinguished by brand or package size, identified by a Universal Product Code (UPC) or a Price Look Up (PLU) code. Each commodity was an aggregation of similar subcommodities. The "apples" commodity group, for example, combined different varieties (Gala, Fuji, Honeycrisp) and forms (bagged, bulk) that were presented separately as subcommodities.

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stores would be classified as grocery stores, supermarkets, and combination food and drug stores per USDA/FNS food retailer definitions."

[4] Stores that opened or closed during 2011 were not included in these analyses.

[5] By way of comparison, in FY 2011, 21.1 million households participated in SNAP in an average month (http://www.fns.usda.gov/ora/MENU/Published/snap/FILES/Participation/2011Characteristics.pdf) and redeemed $6.0 billion in benefits in an average month (http://www.fns.usda.gov/snap/retailers/pdfs/2011-annual-report-revised.pdf).

[6] SNAP transactions in which SNAP EBT was not the majority tender were not identifiable in the data.

[7] Some of these transactions may, in fact, have included SNAP purchases. Some SNAP households may never have presented EBT as the majority tender in any transaction, for example.

[8] See http://www.fns.usda.gov/snap/retailers/eligible.htm for more details.

Although subcommodities and commodities provide adequate comparison reference points, these groupings were designed to help retailers classify purchases for their own needs (e.g., marketing purposes). Therefore, this study analyzed purchases at two higher levels of aggregation. Thirty summary categories were created – for example, meat/poultry/seafood, fruits, vegetables, and frozen prepared foods – to be roughly analogous to the major sections or departments in a typical grocery store. These categories were constructed to enhance discussion of similarities and differences between purchasing patterns of SNAP and non-SNAP households. Appendix B provides a crosswalk of subcommodities to summary categories.

IMPAQ also mapped food subcommodities to USDA Food Pattern categories (dairy, fruits, grains, oils, protein foods, solid fats and added sugars (SoFAS), and vegetables). Not all subcommodities could be classified into a single Food Pattern category. Subcommodities incorporating multiple food categories, such as foods packaged as complete meals, were classified as *composite* foods. In addition, some subcommodities did not contain any Food Pattern categories, or the labels were not descriptive enough to permit categorization even with the addition of the composite category. A ninth category, *other,* was created to capture such subcommodities. "Other" captured all items that could not be classified using USDA Food Patterns, such as water, isotonic drinks, and baby food.

Data Caveats and Limitations

Although POS data provide a wealth of information on the food purchase patterns of SNAP households, some limitations existed in the data analyzed for this study. The data used for this study captured only transactions completed at a specific set of retail outlets. As stated before, the majority of stores from which the data came would be classified as grocery stores, supermarkets, and combination food and drug stores per FNS Retailer Policy and Management Division food retailer definitions.[9] Purchases made at other SNAP-authorized retailers or other venues (e.g., farmers markets) were not included in these data. On average, SNAP households in the data spent approximately $229 per month on SNAP-eligible foods using a combination of SNAP benefits, cash and other forms of payment.[10] In contrast, the national average monthly SNAP benefit per household was $284 in FY 2011.[11] Therefore, although these data account for a significant proportion of SNAP-eligible food expenditures by SNAP households, they do not include all SNAP benefit expenditures.

SNAP transactions were identified as those for which a SNAP EBT card was the majority tender. Because some transactions included both SNAP and cash or credit tenders, these data could not differentiate between items purchased with SNAP benefits and those purchased with other

[9] Stores that opened or closed during 2011 were not included in these analyses.

[10] On average, SNAP households in the data made 8.5 transactions per month. The average total expenditure on SNAP-eligible foods per transaction was $26.99.

[11] http://www.fns.usda.gov/pd/19SNAPavg$HH.htm

funds. These data, therefore, represent food purchases made by SNAP households, rather than the foods purchased with SNAP EBT specifically.

Rankings of expenditure categories depend in part on the level of food item aggregation (whether at the Food Pattern, summary, commodity or subcommodity levels). As discussed above, the data provider aggregated food items into subcommodities and commodities, considering other factors outside of the needs of this particular analysis. These classifications at times presented analytic challenges that may have affected the rank ordering of purchases. For example, subcommodity groups categorized as "composite" or "other" for these analyses likely included food items that would more appropriately be included in one of the Food Pattern categories had more information been available. Similarly, some distinctions of potential nutritional importance were not available in these data. For example, it was not possible to distinguish between fat-free or low-fat varieties of some dairy products, such as fluid milk or yogurt, from whole milk varieties.

Key Findings

Food Items Purchased by SNAP Households

Overall, the findings from this study indicate that SNAP households and non-SNAP households purchased similar foods in the retail outlets in these data. Exhibits 1 and 2 summarize the findings.

- There were no major differences in the expenditure patterns of SNAP and non-SNAP households, no matter how the data were categorized. Similar to most American households:
  - About 40 cents of every dollar of food expenditures by SNAP households was spent on basic items such as meat, fruits, vegetables, milk, eggs, and bread.
  - Another 20 cents out of every dollar was spent on sweetened beverages, desserts, salty snacks, candy and sugar.
  - The remaining 40 cents were spent on a variety of items such as cereal, prepared foods, dairy products, rice, and beans.
- The top 10 summary categories and the top 7 commodities by expenditure were the same for SNAP and non-SNAP households, although ranked in slightly different orders.
- Expenditure shares for each of the USDA Food Pattern categories (dairy, fruits, grains, oils, protein foods, solid fats and added sugars (SoFAS), and vegetables) varied by no more than 3 cents per dollar when comparing SNAP and non-SNAP households. Protein foods represented the largest expenditure share for both household types, while proportionally more was spent on fruits and vegetables than on SoFAS, grains, or dairy.
- Less healthy food items were common purchases for both SNAP and non-SNAP households. Sweetened beverages, prepared desserts and salty snacks were among the

top 10 summary categories for both groups. Expenditures were greater for sweetened beverages compared to all milk for both groups, as well.

- Expenditures were concentrated in a relatively small number of similar food-item categories. The top 5 summary groups totaled half (50%) of the expenditures for SNAP households and nearly half (47%) for non-SNAP households. Twenty-five commodities accounted for over forty percent of the food expenditures in these data with SNAP and non-SNAP households having 20 of them in common. The top 25 subcommodities for SNAP households and non-SNAP households, respectively, accounted for between one-fifth to one-quarter of total food expenditures for each group with 16 subcommodities in common for the two groups.

Exhibit 1: SNAP and Non-SNAP Household Food Expenditure Patterns

Finding	SNAP Households	Non-SNAP Households
Total annual expenditures on SNAP-eligible foods in dataset	$6.7 billion	$32.3 billion
Percentage of all transactions by all households	12%	88%
Percentage of total annual expenditures by all households	17%	83%
Top 1,000 subcommodity (of 1,792) expenditures as a percentage of all expenditures	99%	98%
Top 100 subcommodity expenditures as a percentage of all expenditures	51%	46%
Top 25 subcommodity expenditures as a percentage of all expenditures	25%	21%
Top 25 commodity (of 238) expenditures as a percentage of all expenditures	45%	41%
Top 10 summary categories (of 30) by expenditure	Meat/Poultry/Seafood	Meat/Poultry/Seafood
	Sweetened Beverages	Vegetables
	Vegetables	High-fat Dairy/Cheese
	Frozen Prepared Foods	Fruits
	Prepared Desserts	Sweetened Beverages
	High-fat Dairy/Cheese	Prepared Desserts
	Bread and Crackers	Bread and Crackers
	Fruits	Frozen Prepared Foods
	Milk	Milk
	Salty Snacks	Salty Snacks
Top 10 commodities (of 238) by expenditure	Soft Drinks	Fluid Milk Products
	Fluid Milk Products	Soft Drinks
	Beef Grinds	Cheese
	Bag Snacks	Baked Breads

Finding	SNAP Households	Non-SNAP Households
	Cheese	Bag Snacks
	Baked Breads	Beef Grinds
	Cold Cereal	Cold Cereal
	Chicken Fresh	Candy – Packaged
	Frozen Handhelds and Snacks	Coffee and Creamers
	Lunchmeat	Ice Cream, Ice Milk, and Sherbets
Top 10 subcommodities (of 1,792) by expenditure	Fluid Milk/White Only	Fluid Milk/White Only
	Soft Drinks 12–18 pack	Soft Drinks 12–18 pack
	Lean Beef	Shredded Cheese
	Kids' Cereal	Chicken Breast – Boneless
	Shredded Cheese	Frozen Premium Nutritional Meals
	2-Liter Soft Drink	Pure Orange Juice – Dairy Case
	Potato Chips	Lean Beef
	Primal Beef	Potato Chips
	Lunchmeat – Deli fresh	Large Eggs
	Infant Formula/Starter Solution	Bananas
USDA Food Pattern categories, by expenditure		
▪ Dairy	9%	10%
▪ Fruits	6%	9%
▪ Grains	12%	13%
▪ Oils	2%	2%
▪ Protein Foods	23%	20%
▪ Solid Fats and Added Sugars	13%	12%
▪ Vegetables	8%	10%
▪ Composite	19%	16%
▪ Other	8%	8%

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.

CHAPTER 1. INTRODUCTION AND BACKGROUND

1.1 Introduction

The Food and Nutrition Service (FNS) awarded a contract to IMPAQ International, LLC, to determine what foods are typically purchased by households receiving Supplemental Nutrition Assistance Program (SNAP) benefits. More specifically, this study examined POS food purchase data to determine for what foods SNAP households have the largest expenditures, including both SNAP benefits and other resources, and how these expenditures compare to those made by non-SNAP households.

1.2 Background

The mission of FNS is to provide children and needy families with improved access to food and a more healthful diet through a range of nutrition assistance programs and comprehensive nutrition education efforts. SNAP, administered by FNS, is the nation's largest nutrition assistance program, providing benefits to more than 15% of the U.S. population. In 2011, SNAP participants redeemed over $71 billion in SNAP benefits in more than 230,000 SNAP-authorized stores.[12] Total program costs in FY 2011 were nearly $76 billion.[13] Given the magnitude of SNAP, FNS has a sustained interest in understanding the effects of the program.

SNAP aims to alleviate hunger and improve the nutritional status of participants by increasing the resources available to households to purchase food. Paradoxically, one-in-six people in the U.S. experiences food insecurity,[14] while two-thirds of adults and one-third of children are overweight or obese.[15] These public health problems disproportionately affect low-income populations.[16] While no evidence exists that SNAP participation causes obesity, the high rates of obesity and food insecurity among low-income Americans underscore the importance of

[12] USDA FNS. (2011). *Supplemental Nutrition Assistance Program 2011 Annual Report.* Benefit Redemption Division. Available at http://www.fns.usda.gov/snap/retailers/pdfs/2011-annual-report-revised.pdf.

[13] http://www.fns.usda.gov/pd/SNAPsummary.htm

[14] Coleman-Jensen, A., Nord, M., Andrews, M., & Carlson, S. (2011). *Household food security in the United States in 2010.* Economic Research Report, No. ERR-125. Available at http://www.ers.usda.gov/media/884525/err141.pdf.

[15] Flegal, K. M., Carroll, M. D., Ogden, C. L., & Curtin, L. R. (2010). "Prevalence and trends in obesity among U.S. adults, 1999–2008*," Journal of the American Medical Association,* 303, 235–241; Burgstahler, R., Gundersen, C., & Garasky, S. (forthcoming). "The Supplemental Nutrition Assistance Program, financial stress, and childhood obesity." *Agricultural and Resource Economics Review*; Eisenmann, J. C., Gundersen, C., Lohman, B. J., Garasky, S., & Stewart, S. D. (2011). "Is food insecurity related to overweight and obesity in children and adolescents? A summary of studies, 1995–2009." *Obesity Reviews*, 12, e73–e83; Lohman, B. J., Stewart, S., Gundersen, C., Garasky, S., & Eisenmann, J. C. (2009). "Adolescent overweight and obesity: Links to food insecurity and individual, maternal, and family stressors." *Journal of Adolescent Health*, 45, 230–237; Gundersen, C., Garasky, S., & Lohman, B. J. (2009) "Food insecurity is not associated with childhood obesity as assessed using multiple measures of obesity." *Journal of Nutrition,* 139, 1173–1178.

[16] Trust for America's Health. (2011). *F as in fat: How obesity threatens America's future.* Available at http://healthyamericans.org/reports/obesity2010/Obesity2010Report.pdf.

exploring ways to continue to employ SNAP strategically as a tool to promote healthier nutrition, as well as to reduce obesity rates among program participants of whom nearly 50% are children.

1.3 Research Questions

The project addressed two key research questions.

Research Question 1: What food items are purchased by SNAP households? Specifically, the study examined SNAP household food expenditure data by four categorizations: U.S. Department of Agriculture (USDA) Food Pattern categories, "summary categories," commodities, and subcommodities.

Research Question 2: How do foods purchased by SNAP households compare to purchases made by non-SNAP households? Analyses paralleled those for Research Question 1, but for non-SNAP households. Comparisons were then drawn between the food expenditures of SNAP and non-SNAP households.

1.4 Challenges of Collecting Point-of-Sale Data

Understanding the food choices and purchasing patterns of SNAP participants is an important part of promoting healthy choices. FNS analyzes various extant data that describe the diets and food purchasing patterns of SNAP households. For example, *The National Health and Nutrition Examination Survey* is an annual nationally representative survey of approximately 5,000 respondents that collects, among other data, dietary behavior and 24-hour dietary recall data.[17] *The Nielsen Homescan* data include a panel of households that records grocery purchases using a scanning device.[18] Panelists scan the barcodes of the products they purchase, recording information such as price and quantity. The *Consumer Expenditure Survey* gathers expenditure information from participants every three months over a 15-month period through interviews and a diary survey.[19] The interview is designed to gather expenditure data on items that are easy to recall, while the diary survey records purchases made each day during a two-week period.

An outstanding question is whether food purchase data collected at the point-of-sale offers a different or more detailed perspective on the food choices of SNAP and other households. Ideally, retail data on SNAP electronic benefit transfer (EBT) purchases would be collected in a timely manner—preferably at the point of sale—and with sufficient sample size to be nationally representative. To date, there have been numerous challenges to collecting such retail data:

[17] http://www.cdc.gov/nchs/tutorials/Dietary/SurveyOrientation/intro.htm.
[18] http://www.ncppanel.com
[19] http://www.bls.gov/cex

- The immense volume of SNAP retail data – in FY 2011, over $71 billion in SNAP benefits were redeemed at over 230,000 participating stores, farmers markets and other venues authorized to accept SNAP benefits.[20] These transactions represent billions of food items purchased each month via an estimated 250 million or more unique transactions.
- The wide variety of food products and package sizes sold by the over 230,000 SNAP-authorized retailers – roughly 40,000 items in larger stores[21] – and the diverse ways retailers identify and track these items.
- Industry reluctance to share detailed sales data, a key competitive tool for food marketers.
- Equipment and system changes needed to capture item-level data at SNAP-approved stores. The numerous cash register technologies currently in use vary in their sophistication and their ability to collect item-level data. Data transmission and storage are also important issues.
- Distinguishing between SNAP and non-SNAP transactions and purchases, given that SNAP households at times combine SNAP benefits and their own funds when making purchases.

The current study provides a snapshot of food purchasing patterns using POS data from a set of retailers to compare expenditures on SNAP-eligible food items made by SNAP and non-SNAP households.

[20] Supplemental Nutrition Assistance Program, USDA FNS Benefit Redemption Division 2011 Annual Report. Available from http://www.fns.usda.gov/snap/retailers/pdfs/2011-annual-report-revised.pdf
[21] http://www.fmi.org/facts_figs/?fuseaction=superfact

CHAPTER 2. METHODOLOGY

2.1 Data Overview

POS transaction data from January 1, 2011 through December 31, 2011 from a leading grocery retailer were examined in this study.[22] The majority of stores from which the data came would be classified as grocery stores, supermarkets, and combination food and drug stores per FNS Retailer Policy and Management Division food retailer definitions.[23] On average, each of the 12 monthly data files contained over 1 billion records of food items purchased by 26.5 million households, reflecting 127 million unique transactions. Each monthly data file included an average of 3.2 million SNAP households, identified using the methodology described below. Total expenditures on all SNAP-eligible food items in the dataset by SNAP and non-SNAP households over the 12 months were $39.0 billion, or approximately $3.3 billion per month. SNAP households expended approximately $555 million on SNAP-eligible food items each month in this dataset, using both SNAP benefits and other resources such as cash or credit cards.[24]

2.2 Identification of SNAP Households and Creation of Analysis Categories

SNAP households were identified in the data for each month. This identification was performed monthly because, in any given month, some households enter or leave the program. The analysis identified SNAP households each month by first identifying any transaction in which SNAP EBT was used to pay for at least half of the value of the purchase and designating the household that made that transaction as a SNAP household.[25] It then linked all other transactions made by that household during that month to estimate total monthly spending by SNAP households. All other transactions in these stores were designated as non-SNAP household purchases.[26] Exhibit 2 illustrates the identification of SNAP households.

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[22] Per the data sharing agreement between the data provider and IMPAQ, a description of the source of these data must be limited to the following: "From a leading US grocery retailer data examining POS transactions from January 1, 2011 through December 31, 2011 across approximately 11 million SNAP households. The majority of stores would be classified as grocery stores, supermarkets, and combination food and drug stores per USDA/FNS food retailer definitions."

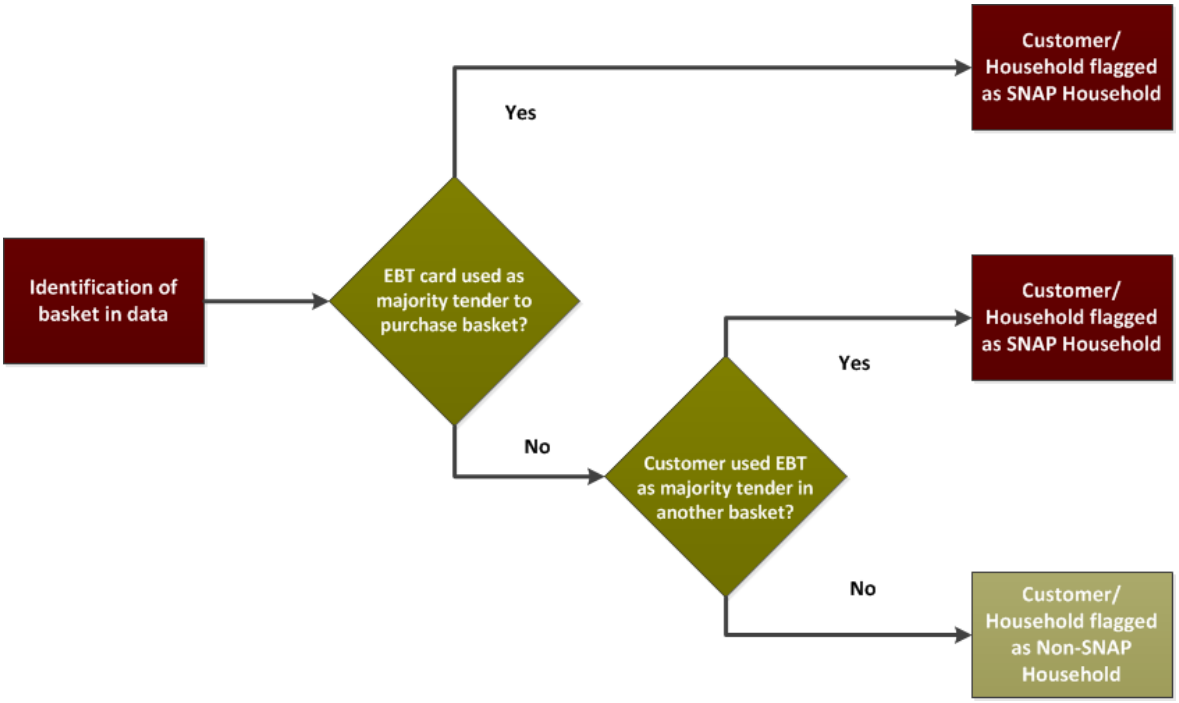
[23] Stores that opened or closed during 2011 were not included in these analyses.

[24] By way of comparison, in FY 2011, 21.1 million households participated in SNAP in an average month (http://www.fns.usda.gov/ora/MENU/Published/snap/FILES/Participation/2011Characteristics.pdf) and redeemed $6.0 billion in benefits in an average month (http://www.fns.usda.gov/snap/retailers/pdfs/2011-annual-report-revised.pdf).

[25] SNAP transactions in which SNAP EBT was not the majority tender were not identifiable in the data.

[26] Some of these transactions may, in fact, have included SNAP purchases. Some SNAP households may never have presented EBT as the majority tender in any transaction, for example.

Exhibit 2: Conceptual Map for Identification of SNAP Households in the POS Data



IMPAQ analyzed SNAP-eligible food items given the focus of the study. Per the Food and Nutrition Act of 2008 (the Act), eligible food include any food or food product for home consumption, as well as seeds and plants which produce food for consumption. The Act precludes alcoholic beverages, tobacco products, hot food and any food sold for on-premises consumption from being purchased with SNAP benefits.[27] The unit of analysis for the study was a food-related subcommodity, with subcommodities and commodities defined by the data provider. Each subcommodity typically consisted of multiple food items, often distinguished by brand or package size, identified by a Universal Product Code (UPC) or a Price Look Up (PLU) code. Each commodity was an aggregation of similar subcommodities. The "apples" commodity group, for example, combined different varieties (Gala, Fuji, Honeycrisp) and forms (bagged, bulk) that were presented separately as subcommodities. The decision to rely on subcommodity groupings follows procedures established in published studies.[28] These studies prefer subcommodity-level analyses over item-level analyses because UPCs and PLUs assigned by manufacturers and retailers can change over time. Additionally, the same food item may be sold in multiple forms with different brands and labels, each with its own unique UPC.[29]

[27] See http://www.fns.usda.gov/snap/retailers/eligible.htm for more details.

[28] For examples, see Hamilton, S., et al. (2007). "Food and nutrient availability in New Zealand: An analysis of supermarket sales data." *Public Health Nutrition*, 10(12): 1448–1455; Van Wave, T. W., & Decker, M. (2003). "Secondary analysis of a marketing research database reveals patterns in dairy product purchases over time." *Journal of American Dietetic Association*, 103(4), 445–453.

[29] Baxter, J., et al. (1996). Experiences in using computerized sales data to evaluate a nutrition intervention program. *Journal of Nutrition Education*, 28, 443–445.

Exhibit 3 details expenditures on SNAP-eligible food items in the dataset. As can be seen, expenditures on all 1,792 subcommodities in the dataset sum up to $6.7 billion and $32.3 billion for SNAP and non-SNAP households, respectively. Notably, expenditures on the top 1,000 subcommodities account for 99% of expenditures for SNAP households and 98% for non-SNAP households. For this reason, all subsequent analyses and tables in the report are generated using the top 1,000 subcommodities.

Exhibit 3: Summary of SNAP and Non-SNAP Household Food Expenditures in the Dataset by Subcommodity

Finding	SNAP Households	Non-SNAP Households
Total annual expenditures on SNAP-eligible foods in dataset	$6.7 billion	$32.3 billion
Percentage of all transactions by all households	12%	88%
Percentage of total annual expenditures by all households	17%	83%
Top 1,000 (of 1,792) subcommodity expenditures as a percentage of all expenditures	99%	98%
Top 100 (of 1,792) subcommodity expenditures as a percentage of all expenditures	51%	46%
Top 25 (of 1,792) subcommodity expenditures as a percentage of all expenditures	25%	21%
Top 25 commodity (of 238) expenditures as a percentage of all expenditures	45%	41%
Total annual expenditures on top 1,000 subcommodities	**$6.5805 billion**	**$31.5138 billion**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.

The data provider aggregated the subcommodities to commodities. The top 1,000 subcommodities represented 238 commodities. Although subcommodities and commodities provide adequate comparison reference points, these groupings were designed to help retailers classify purchases for their own needs (e.g., marketing purposes). Therefore, this study analyzed purchases at two higher levels of aggregation. Thirty summary categories were created – for example, meat/poultry/seafood, fruits, vegetables, cereal, candy, and frozen prepared foods – to be roughly analogous to the major sections or departments in a typical grocery store. These categories were constructed to enhance discussion of similarities and differences between the purchasing patterns of SNAP and non-SNAP households. Appendix B provides a crosswalk of subcommodities to summary categories.

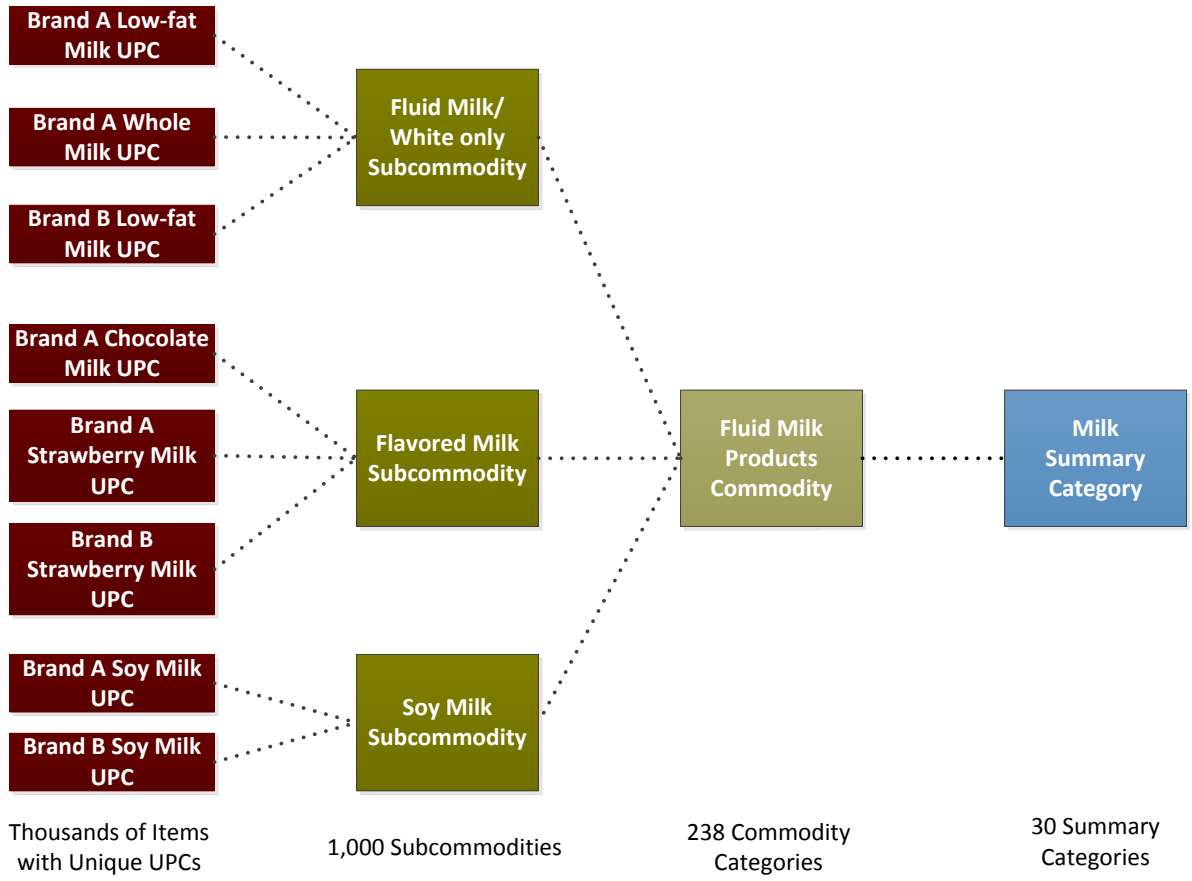
IMPAQ also mapped food subcommodities to USDA Food Pattern categories (dairy, fruits, grains, oils, protein foods, solid fats and added sugars (SoFAS), and vegetables).[30] A crosswalk of subcommodities to USDA Food Pattern categories can be found in Appendix C. Relative to the

[30] USDA Center for Nutrition Policy and Promotion Food Patterns (http://www.cnpp.usda.gov/USDAFoodPatterns.htm).

30 summary categories, there are only 7 USDA Food Pattern categories. As a result, more subcommodities were included in each Food Pattern category, on average, relative to the summary categories which at times lead to differing results for categories with the same name. For example, for the USDA Food Patterns analysis, 100% pure orange juice was classified as a fruit. Juice, however, is a specific category among the summary categories. Therefore, expenditures on 100% orange juice were not included as fruit expenditures for the summary categories analysis as they were for the Food Patterns analysis. Readers should keep this in mind when comparing results for categories such as fruits or vegetables across analyses.

Not all subcommodities could be classified into single Food Pattern categories. Subcommodities incorporating multiple food categories, such as foods packaged as complete meals, were classified as *composite* foods. In addition, some subcommodities did not fit any Food Pattern categories, or the labels were not descriptive enough to permit categorization even with the addition of the composite category. A ninth category, *other,* was created to capture such subcommodities. "Other" captured all items that could not be classified using USDA Food Patterns, such as water, isotonic drinks, and baby food. Exhibit 4 describes the aggregations of food items used for these analyses, using fluid milk products as an example.

Exhibit 4: Aggregating Food Items



Note: The vast majority of commodities included subcommodities that could be mapped to a single summary category as shown above. However, a small number of commodities included subcommodities that did not map to the same summary category. For example, the commodity group *Authentic Hispanic Foods and Products* included a*uthentic vegetables and foods, Hispanic carbonated beverages, and authentic pasta/rice/beans* subcommodities which mapped to the vegetables, sweetened beverages, and rice summary categories, respectively. The top 1,000 subcommodities accounted for 99% of all expenditures on SNAP-eligible food items in the dataset for SNAP households and 98% of all expenditures on SNAP-eligible food items by non-SNAP households.

2.3 Data Caveats and Limitations

Although POS data provide a wealth of information on the food purchase patterns of SNAP households, some limitations existed in the data analyzed for this study. The data used for this study captured only transactions completed at a specific set of retail outlets. As stated before, the majority of stores from which the data came would be classified as grocery stores, supermarkets, and combination food and drug stores per FNS Retailer Policy and Management Division food retailer definitions.[31] Purchases made at other SNAP-authorized retailers or other venues (e.g., farmers markets) were not included in these data. On average, SNAP households in the data spent approximately $229 per month on SNAP-eligible foods using a combination of SNAP benefits, cash and other forms of payment.[32] In contrast, the national average monthly SNAP benefit per household was $284 in FY 2011.[33] Therefore, although these data account for a significant proportion of SNAP-eligible food expenditures by SNAP households, they do not include all SNAP benefit expenditures.

SNAP transactions were identified as those for which a SNAP EBT card was the majority tender. Because some transactions included both SNAP and cash or credit tenders, these data could not differentiate between items purchased with SNAP benefits and those purchased with other funds. These data, therefore, represent food purchases made by SNAP households rather than the foods purchased with SNAP EBT.

Rankings of expenditure categories depend in part on the level of food item aggregation (whether at the Food Pattern category, summary category, commodity or subcommodity levels). As discussed above, the data provider aggregated food items into subcommodities and commodities considering other factors outside of the needs of this particular analysis. These classifications at times presented analytic challenges that may have affected the rank ordering of expenditures. For example, subcommodity groups categorized as “composite” or “other” for these analyses likely included food items that would more appropriately be included in one of the Food Pattern categories had more information been available. Similarly, some distinctions of potential nutritional importance were not available in these data. For example, it was not

[31] Stores that opened or closed during 2011 were not included in these analyses.

[32] On average, SNAP households in the data made 8.5 transactions per month. The average total expenditure on SNAP-eligible foods per transaction was $26.99.

[33] http://www.fns.usda.gov/pd/19SNAPavg$HH.htm

possible to distinguish between fat-free or low-fat varieties of some dairy products, such as fluid milk or yogurt, from whole milk varieties.

CHAPTER 3. FINDINGS: TOP EXPENDITURES BY SNAP AND NON-SNAP HOUSEHOLDS

Key Findings

- There were no major differences in the expenditure patterns of SNAP and non-SNAP households, no matter how the data were categorized. Similar to most American households:
  - About 40 cents of every dollar of food expenditures by SNAP households was spent on basic items such as meat, fruits, vegetables, milk, eggs, and bread.
  - Another 20 cents out of every dollar was spent on sweetened beverages, desserts, salty snacks, candy and sugar.
  - The remaining 40 cents were spent on a variety of items such as cereal, prepared foods, dairy products, rice, and beans.
- The top 10 summary categories and the top 7 commodities by expenditure were the same for SNAP and non-SNAP households, although ranked in slightly different orders.
- Less healthy food items were common purchases for both SNAP and non-SNAP households. Sweetened beverages, prepared desserts and salty snacks were among the top 10 summary categories for both groups. Expenditures were greater for sweetened beverages compared to all milk for both groups, as well.
- Expenditures were concentrated in a relatively small number of similar food-item categories. The top 5 summary groups totaled half (50%) of the expenditures for SNAP households and nearly half (47%) for non-SNAP households. Twenty-five commodities accounted for nearly half of the food expenditures in these data with SNAP and non-SNAP households having 20 of them in common. The top 25 subcommodities for SNAP households and non-SNAP households, respectively, accounted for over one-fifth of food expenditures for each group with 16 subcommodities in common for the two groups.

3.1 Distribution of Expenditures by Summary Categories

Exhibit 5 provides an overview of expenditures by the summary categories described in Chapter 2. In general, SNAP and non-SNAP household expenditure rankings and proportions were similar. Expenditures on basic or staple foods (meat/poultry/seafood, fruits, vegetables, milk, eggs and bread/crackers) comprised over 40 cents of every food purchase dollar for both SNAP and non-SNAP households (41 and 44 cents/dollar, respectively). Another 20 cents per dollar was spent on less healthy foods such as sweetened beverages, prepared desserts, salty snacks, candy and sugars by both household groups (SNAP households – 23 cents; non-SNAP households – 20 cents).

Expenditures were generally concentrated in a small number of summary groups for both SNAP and non-SNAP households. The top 5 groups total half (50%) of the expenditures for SNAP households and nearly half (47%) for non-SNAP households. The top three categories by expenditures for SNAP households were meat/poultry/seafood, sweetened beverages, and vegetables. The top three categories for non-SNAP households were meat/poultry/seafood, vegetables, and high fat dairy/cheese; sweetened beverages ranked fifth. Both SNAP and non-SNAP households spent a greater proportion of total expenditures on meat, poultry and seafood than any other category. Both household groups spent more on fruits and vegetables than on prepared foods, and more on sweetened beverages than on milk.

Exhibit 5: Summary Categories by Expenditure

Summary Category	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Meat, Poultry and Seafood	1	$1,262.9	19.19%	1	$5,016.3	15.92%
Sweetened Beverages	2	$608.7	9.25%	5	$2,238.8	7.10%
Vegetables	3	$473.4	7.19%	2	$2,873.9	9.12%
Frozen Prepared Foods	4	$455.2	6.92%	8	$1,592.3	5.05%
Prepared Desserts	5	$453.8	6.90%	6	$2,021.2	6.41%
High Fat Dairy/Cheese	6	$427.8	6.50%	3	$2,483.2	7.88%
Bread and Crackers	7	$354.9	5.39%	7	$1,978.2	6.28%
Fruits	8	$308.2	4.68%	4	$2,271.2	7.21%
Milk	9	$232.7	3.54%	9	$1,211.0	3.84%
Salty Snacks	10	$225.6	3.43%	10	$969.7	3.08%
Prepared Foods	11	$202.2	3.07%	14	$707.0	2.24%
Cereal	12	$186.9	2.84%	11	$933.9	2.96%
Condiments and Seasoning	13	$174.6	2.65%	12	$878.9	2.79%
Fats and Oils	14	$155.1	2.36%	13	$766.9	2.43%
Candy	15	$138.2	2.10%	15	$701.4	2.23%
Baby Food	16	$126.8	1.93%	27	$198.2	0.63%
Juices	17	$110.4	1.68%	16	$605.4	1.92%
Coffee and Tea	18	$83.4	1.27%	17	$568.8	1.80%
Bottled Water	19	$78.1	1.19%	22	$377.4	1.20%
Eggs	20	$73.8	1.12%	21	$388.2	1.23%
Other Dairy Products	21	$69.8	1.06%	18	$549.5	1.74%
Pasta, Cornmeal, Other Cereal Products	22	$66.4	1.01%	23	$281.5	0.89%
Soups	23	$62.7	0.95%	20	$414.1	1.31%
Sugars	24	$60.9	0.93%	24	$260.3	0.83%
Nuts and Seeds	25	$53.2	0.81%	19	$445.9	1.41%
Beans	26	$38.3	0.58%	25	$234.5	0.74%
Rice	27	$30.1	0.46%	28	$131.0	0.42%

Summary Category	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Jams, Jellies, Preserves and Other Sweets	28	$29.1	0.44%	29	$117.5	0.37%
Flour and Prepared Flour Mixes	29	$18.7	0.28%	30	$94.9	0.30%
Miscellaneous	30	$18.6	0.28%	26	$202.6	0.64%
Total Summary Category Expenditures (Top 1,000 subcommodities)		**$6,580.5**	**100%**		**$31,513.8**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: Columns may not sum to total shown due to rounding.

3.2 Distribution of Expenditures by Commodities

Exhibit 6 examines expenditures at the commodity level, listing the top 100 commodities by expenditure for SNAP households while providing corresponding rankings of these commodities for non-SNAP households. The top 100 commodities accounted for nearly all expenditures for both SNAP (87%) and non-SNAP (82%) households. The top 25 SNAP household commodities accounted for nearly half (46%) of the food expenditures for SNAP households; the top 25 commodities for non-SNAP households accounted for 42%. Among the top 25 commodities, the two households groups had 20 in common.

The top two commodities were the same for SNAP and non-SNAP households, namely soft drinks and fluid milk products, although the order was reversed with soft drinks ranked first for SNAP households compared to fluid milk products for non-SNAP households. However, while expenditure proportions were similar for fluid milk products across the two household types (4 cents per dollar), expenditure proportions on soft drinks were slightly higher for SNAP households compared to non-SNAP households (5 cents versus 4 cents per dollar). Overall, the expenditure rankings and patterns should be assessed with caution as a small difference in the expenditure share of a commodity can lead to a major difference in the ranking of the commodity. For example, among SNAP households, the difference in expenditure shares between lunchmeat, ranked tenth, and aseptic juice, ranked sixty-ninth, is approximately one cent per dollar.

Exhibit 6: Top 100 Commodities for SNAP Households by Expenditure

Commodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Soft drinks	1	$357.7	5.44%	2	$1,263.3	4.01%
Fluid milk products	2	$253.7	3.85%	1	$1,270.3	4.03%
Beef grinds	3	$201.0	3.05%	6	$621.1	1.97%

Commodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Bag snacks	4	$199.3	3.03%	5	$793.9	2.52%
Cheese	5	$186.4	2.83%	3	$948.9	3.01%
Baked breads	6	$163.7	2.49%	4	$874.8	2.78%
Cold cereal	7	$139.2	2.12%	7	$583.9	1.85%
Chicken fresh	8	$121.4	1.85%	11	$477.8	1.52%
Frozen handhelds and snacks	9	$101.5	1.54%	47	$214.6	0.68%
Lunchmeat	10	$99.4	1.51%	17	$386.1	1.23%
Candy - packaged	11	$96.2	1.46%	8	$527.7	1.67%
Infant formula	12	$95.7	1.45%	80	$124.8	0.40%
Frozen pizza	13	$90.2	1.37%	23	$305.7	0.97%
Refrigerated juices/drinks	14	$88.5	1.35%	14	$412.8	1.31%
Ice cream, ice milk, sherbets	15	$86.0	1.31%	10	$481.8	1.53%
Coffee and creamers	16	$82.3	1.25%	9	$519.4	1.65%
Cookies	17	$78.2	1.19%	16	$408.3	1.30%
Water - (sparkling and still)	18	$77.0	1.17%	18	$379.2	1.20%
Shelf stable juice	19	$73.1	1.11%	28	$282.2	0.90%
Eggs/muffins/potatoes	20	$72.0	1.09%	20	$358.7	1.14%
Frozen single serving premium meals	21	$68.6	1.04%	12	$447.1	1.42%
Cakes	22	$68.2	1.04%	38	$240.9	0.76%
Bacon	23	$66.1	1.00%	27	$283.2	0.90%
Traditional Mexican foods	24	$62.6	0.95%	25	$286.9	0.91%
Yogurt	25	$59.9	0.91%	13	$442.3	1.40%
Salad dressing and sandwich spreads	26	$59.7	0.91%	30	$280.9	0.89%
Dinner sausage	27	$59.3	0.90%	46	$222.6	0.71%
Frozen prepared chicken	28	$58.6	0.89%	74	$136.4	0.43%
Baked sweet goods	29	$57.5	0.87%	62	$159.6	0.51%
Beef loins	30	$56.3	0.86%	31	$280.3	0.89%
Chicken frozen	31	$54.8	0.83%	85	$123.0	0.39%
Deli meat: bulk	32	$54.6	0.83%	15	$411.0	1.30%
Frozen multi-serve meals	33	$53.0	0.81%	54	$183.5	0.58%
Dinner mixes-dry	34	$51.8	0.79%	72	$140.3	0.45%
Frozen breakfast foods	35	$51.3	0.78%	55	$180.9	0.57%
Crackers and misc baked food	36	$50.9	0.77%	21	$323.7	1.03%
Frozen novelties-water ice	37	$50.7	0.77%	43	$229.7	0.73%
Margarines	38	$50.3	0.76%	24	$303.0	0.96%
Condiments and sauces	39	$49.8	0.76%	52	$187.2	0.59%
Potatoes	40	$48.8	0.74%	34	$265.2	0.84%

Commodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Frozen vegetable and veg dish	41	$48.2	0.73%	33	$266.9	0.85%
Hot dogs	42	$45.5	0.69%	63	$158.4	0.50%
Can vegetables - shelf stable	43	$45.3	0.69%	50	$191.7	0.61%
Shortening and oil	44	$44.6	0.68%	57	$174.2	0.55%
Sugars and sweeteners	45	$43.3	0.66%	60	$162.4	0.52%
Isotonic drinks	46	$42.8	0.65%	53	$185.3	0.59%
Salad mix	47	$42.8	0.65%	22	$319.4	1.01%
Milk by-products	48	$42.5	0.65%	32	$268.9	0.85%
Pork boneless loin/rib	49	$41.5	0.63%	58	$168.0	0.53%
Convenience breakfasts and wholesome snacks	50	$41.1	0.62%	45	$226.1	0.72%
Frozen single serve economy meals	51	$40.9	0.62%	109	$80.7	0.26%
Refrigerated dough products	52	$40.5	0.62%	56	$176.6	0.56%
Beef round	53	$40.4	0.61%	75	$134.2	0.43%
Dry bean vegetables and rice	54	$39.9	0.61%	59	$166.1	0.53%
Convenient meals	55	$38.7	0.59%	108	$81.0	0.26%
Tomatoes	56	$38.3	0.58%	35	$261.7	0.83%
Candy - checklane	57	$37.9	0.58%	64	$154.0	0.49%
Berries	58	$37.4	0.57%	19	$373.5	1.19%
Grapes	59	$36.1	0.55%	39	$235.7	0.75%
Bananas	60	$36.1	0.55%	36	$261.4	0.83%
Peanut	61	$36.0	0.55%	42	$231.0	0.73%
Pork thin meats	62	$35.0	0.53%	93	$106.8	0.34%
Citrus	63	$34.3	0.52%	37	$251.7	0.80%
Breakfast sausage	64	$34.2	0.52%	79	$126.7	0.40%
Dry sauce, gravy, potatoes, stuffing	65	$34.0	0.52%	87	$119.2	0.38%
Salad and dips	66	$33.9	0.52%	40	$235.3	0.75%
Apples	67	$33.7	0.51%	29	$281.7	0.89%
Meat - shelf stable	68	$33.3	0.51%	91	$109.2	0.35%
Aseptic juice	69	$33.1	0.50%	112	$78.9	0.25%
Sweet goods	70	$32.5	0.49%	66	$152.9	0.49%
Frozen potatoes	71	$32.2	0.49%	95	$104.5	0.33%
Meat frozen	72	$31.9	0.48%	120	$69.9	0.22%
Baby foods	73	$30.6	0.46%	121	$67.8	0.22%
Vegetables salad	74	$30.0	0.46%	44	$228.6	0.73%
Beef: thin meats	75	$30.0	0.46%	78	$127.7	0.41%
Seafood - shrimp	76	$29.8	0.45%	84	$123.1	0.39%

Commodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Canned soups	77	$29.7	0.45%	65	$153.6	0.49%
Baking mixes	78	$28.3	0.43%	69	$148.1	0.47%
Pasta and pizza sauce	79	$27.6	0.42%	99	$96.7	0.31%
Dry noodles and pasta	80	$27.5	0.42%	71	$141.5	0.45%
Can seafood - shelf stable	81	$26.5	0.40%	77	$132.3	0.42%
Rts/micro soup/broth	82	$26.0	0.40%	48	$200.8	0.64%
Canned pasta and microwave food	83	$25.9	0.39%	135	$56.7	0.18%
Smoked hams	84	$25.7	0.39%	92	$108.8	0.35%
Nuts	85	$25.6	0.39%	41	$234.2	0.74%
Value added fruit	86	$25.3	0.38%	70	$146.6	0.47%
Can beans	87	$24.0	0.36%	82	$123.3	0.39%
Dry/ramen bouillon	88	$21.7	0.33%	133	$61.0	0.19%
Powder and crystal drink mix	89	$21.6	0.33%	119	$75.2	0.24%
Rtd tea/new age juice	90	$21.5	0.33%	103	$93.8	0.30%
Baking needs	91	$21.3	0.32%	51	$188.9	0.60%
Can fruit/jar applesauce	92	$20.9	0.32%	96	$104.0	0.33%
Spices and extracts	93	$20.4	0.31%	86	$121.9	0.39%
Energy drinks	94	$20.1	0.30%	102	$94.1	0.30%
Onions	95	$20.0	0.30%	81	$123.5	0.39%
Tropical fruit	96	$19.8	0.30%	61	$160.1	0.51%
Bagels and cream cheese	97	$19.8	0.30%	83	$123.2	0.39%
Frozen bread/dough	98	$19.7	0.30%	114	$77.7	0.25%
Rolls	99	$18.9	0.29%	88	$113.9	0.36%
Hot cereal	100	$18.9	0.29%	100	$96.1	0.30%
Expenditures on Listed Commodities		**$5,700.3**	**86.62%**		**$25,800.4**	**81.93%**
Expenditures on Top 1,000 Subcommodities		**$6,580.5**	**100%**		**$31,513.8**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 100 commodities for SNAP households and the corresponding rankings of these commodities for non-SNAP households. Columns may not sum to total shown due to rounding.

3.3 Distribution of Expenditures by Subcommodities

Exhibit 7 presents the top 100 subcommodities purchased by SNAP households, along with corresponding expenditures and ranks of these subcommodities for non-SNAP households.[34] These 100 subcommodities accounted for over half (51%) of the food expenditures in these data for SNAP households. Comparatively, the food purchases of non-SNAP households on these 100 subcommodities represented only 43% of their total expenditures. As expected, the level of detail provided by the subcommodity classifications resulted in relatively small proportions of total expenditures being spent on any single subcommodity. Individually, only six subcommodities represented more than 1% of the expenditures of SNAP households. As with the commodity rankings, a small difference in the expenditure share of a subcommodity translated into a substantial difference in its ranking. For example, among SNAP households, the difference in shares of expenditures between potato chips, ranked seventh, and bananas, ranked thirty-fifth, is less than one-half of one percentage point.

The top two subcommodities purchased by SNAP households, fluid milk/white only and carbonated soft drinks in 12-18 can packages, were the top subcommodities for non-SNAP households as well. An interesting difference in rankings of subcommodities between SNAP households and non-SNAP households was for infant formula/starter solution. This subcommodity ranked tenth among SNAP households. The majority of these formula purchases were made when SNAP EBT was not the majority tender (results not presented here), perhaps because WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) benefits were used. Infant formula/starter solution purchases ranked well out of the top 100 for non-SNAP households, at 190.

Exhibit 7: Top 100 Subcommodities for SNAP Households by Expenditure

Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Fluid Milk/White Only	1	$191.1	2.90%	1	$853.8	2.71%
Soft Drinks 12/18 &15pk Can Car	2	$164.6	2.50%	2	$601.2	1.91%
Lean [Beef]	3	$112.4	1.71%	7	$257.9	0.82%
Kids' Cereal	4	$78.1	1.19%	20	$186.4	0.59%
Shredded Cheese	5	$74.7	1.14%	3	$342.0	1.09%
Soft Drink 2 Liter Btl Carb Incl	6	$70.9	1.08%	12	$230.1	0.73%
Potato Chips	7	$64.4	0.98%	8	$253.2	0.80%
Primal [Beef]	8	$62.4	0.95%	14	$219.8	0.70%
Lunchmeat - Deli Fresh	9	$55.8	0.85%	11	$242.6	0.77%

[34] See Appendix A for the commodity that corresponds to each subcommodity for the top 1000 subcommodities.

Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Infant Formula Starter/Solution	10	$54.2	0.82%	190	$45.3	0.14%
Eggs – Large	11	$52.1	0.79%	9	$251.6	0.80%
Chicken Breast Boneless	12	$49.6	0.75%	4	$292.9	0.93%
Still Water Drinking/Mineral Water	13	$48.8	0.74%	19	$187.7	0.60%
Mainstream White Bread	14	$48.0	0.73%	39	$136.8	0.43%
Tortilla/Nacho Chips	15	$47.4	0.72%	17	$209.0	0.66%
Snacks/Appetizers	16	$44.6	0.68%	65	$100.5	0.32%
American Single Cheese	17	$44.1	0.67%	41	$136.6	0.43%
Frozen Single Serve Premium Traditional Meals	18	$43.8	0.67%	24	$175.4	0.56%
Dairy Case 100% Pure Juice – Orange	19	$43.5	0.66%	6	$269.0	0.85%
Snack Cake – Multi-Pack	20	$41.6	0.63%	63	$101.7	0.32%
Enhanced [Pork Boneless Loin/Rib]	21	$41.5	0.63%	27	$168.0	0.53%
Unflavored Can Coffee	22	$41.3	0.63%	18	$198.0	0.63%
Frozen Single Serve Economy Meals All	23	$40.9	0.62%	81	$80.7	0.26%
Bacon - Trad 16oz Or Less	24	$40.7	0.62%	29	$157.6	0.50%
Soft Drinks 20pk&24pk Can Carb	25	$39.7	0.60%	60	$106.4	0.34%
Pizza/Premium	26	$39.7	0.60%	32	$153.3	0.49%
Mainstream Variety Breads	27	$38.4	0.58%	26	$173.2	0.55%
Sugar	28	$36.9	0.56%	55	$112.7	0.36%
All Family Cereal	29	$36.2	0.55%	16	$214.9	0.68%
Sandwiches and Handhelds	30	$35.9	0.54%	91	$73.6	0.23%
Potatoes Russet (Bulk&Bag)	31	$35.8	0.54%	30	$154.5	0.49%
Natural Cheese Chunks	32	$35.3	0.54%	15	$216.1	0.69%
Ribs [Pork]	33	$35.0	0.53%	59	$106.8	0.34%
Convenient Meals - Kids Meal	34	$34.2	0.52%	96	$69.7	0.22%
Bananas	35	$34.2	0.52%	10	$242.7	0.77%
Soft Drink Mlt-Pk Btl Carb	36	$34.0	0.52%	25	$173.6	0.55%
Premium [Ice Cream & Sherbert]	37	$31.2	0.47%	13	$226.0	0.72%
Isotonic Drinks Single Serve	38	$30.5	0.46%	47	$119.5	0.38%
Frozen Chicken - White Meat	39	$30.0	0.46%	66	$99.8	0.32%
Condensed Soup	40	$29.7	0.45%	31	$153.6	0.49%
Pourable Salad Dressings	41	$29.0	0.44%	37	$139.4	0.44%
Choice Beef	42	$28.4	0.43%	40	$136.6	0.43%
Select Beef	43	$27.9	0.42%	36	$143.7	0.46%

Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Soft Drink Single Srv Btl Carb	44	$27.8	0.42%	94	$71.4	0.23%
Frozen Family Style Entrees	45	$27.6	0.42%	77	$83.5	0.26%
Mayonnaise&Whipped Dressing	46	$27.3	0.41%	48	$119.1	0.38%
Frozen Bag Vegetables – Plain	47	$25.7	0.39%	42	$131.9	0.42%
Traditional [Ice Cream and Sherbert]	48	$25.6	0.39%	49	$118.7	0.38%
Hot Dogs - Base Meat	49	$25.1	0.38%	138	$56.8	0.18%
Adult Cereal	50	$24.9	0.38%	21	$182.6	0.58%
Frozen Single Serve Premium Nutritional Meals	51	$24.7	0.38%	5	$271.6	0.86%
Macaroni and Cheese Dinners	52	$24.3	0.37%	125	$59.7	0.19%
Aseptic Pack Juice and Drinks	53	$24.2	0.37%	134	$57.1	0.18%
Refrigerated Coffee Creamers	54	$24.1	0.37%	34	$147.2	0.47%
Choice Beef	55	$24.0	0.37%	92	$72.5	0.23%
Mexican Soft Tortillas And Wra	56	$23.7	0.36%	54	$113.1	0.36%
Strawberries	57	$23.5	0.36%	22	$178.4	0.57%
Margarine: Tubs And Bowls	58	$23.4	0.36%	64	$100.9	0.32%
Mainstream [Pasta & Pizza	59	$23.0	0.35%	80	$81.0	0.26%
Chicken Wings	60	$22.2	0.34%	300	$28.6	0.09%
Can Pasta	61	$22.2	0.34%	179	$47.7	0.15%
Frozen Chicken - Wings	62	$22.2	0.34%	452	$17.4	0.06%
Lunchmeat - Bologna/Sausage	63	$21.8	0.33%	121	$60.9	0.19%
Multi-Pack Bag Snacks	64	$21.6	0.33%	199	$43.4	0.14%
Candy Bags-Chocolate	65	$21.5	0.33%	33	$147.5	0.47%
Sweet Goods:Donuts	66	$21.3	0.32%	78	$82.3	0.26%
Tuna	67	$21.1	0.32%	57	$109.9	0.35%
Vegetable Oil	68	$20.5	0.31%	246	$35.4	0.11%
Frozen French Fries	69	$20.5	0.31%	163	$50.3	0.16%
Peanut Butter	70	$20.4	0.31%	43	$127.8	0.41%
Pizza/Economy	71	$19.8	0.30%	192	$45.1	0.14%
Butter	72	$19.6	0.30%	23	$175.6	0.56%
Meat: Turkey Bulk	73	$19.3	0.29%	28	$159.6	0.51%
Frozen Breakfast Sandwiches	74	$19.1	0.29%	142	$55.7	0.18%
Frozen Meat - Beef	75	$19.0	0.29%	185	$46.3	0.15%
Frozen Skillet Meals	76	$18.8	0.29%	83	$79.3	0.25%
Value Forms/ 18oz And Larger [Chicken]	77	$18.6	0.28%	209	$42.6	0.14%
Cakes: Birthday/Celebration	78	$18.6	0.28%	164	$50.3	0.16%
Sandwich Cookies	79	$18.0	0.27%	93	$71.8	0.23%

Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Pizza/Traditional	80	$17.9	0.27%	111	$64.1	0.20%
Fruit Snacks	81	$17.6	0.27%	202	$43.2	0.14%
Rts Soup: Chunky/Homestyle	82	$17.6	0.27%	46	$119.9	0.38%
Sour Creams	83	$17.5	0.27%	70	$95.2	0.30%
Waffles/Pancakes/French Toast	84	$17.3	0.26%	90	$77.4	0.25%
Chicken Drums	85	$17.3	0.26%	270	$31.5	0.10%
Cream Cheese	86	$17.2	0.26%	51	$115.5	0.37%
Angus [Beef]	87	$17.1	0.26%	61	$103.8	0.33%
Bagged Cheese Snacks	88	$17.1	0.26%	157	$52.0	0.16%
Salsa and Dips	89	$17.1	0.26%	135	$57.0	0.18%
Sandwiches - (Cold)	90	$16.9	0.26%	106	$67.7	0.21%
Ramen Noodles/Ramen Cups	91	$16.7	0.25%	304	$28.1	0.09%
Cheese Crackers	92	$16.5	0.25%	72	$90.2	0.29%
Dinner Sausage - Links Pork	93	$16.4	0.25%	233	$37.6	0.12%
Candy Bars (Singles)	94	$16.3	0.25%	146	$54.9	0.17%
Hamburger Buns	95	$16.2	0.25%	95	$70.2	0.22%
Hot Dog Buns	96	$16.2	0.25%	117	$62.2	0.20%
Spring Water	97	$16.2	0.25%	69	$95.6	0.30%
Dairy Case Juice Drink Under 10oz	98	$16.0	0.24%	177	$48.0	0.15%
Flavored Milk	99	$16.0	0.24%	128	$59.4	0.19%
Sweet Goods - Full Size	100	$15.8	0.24%	133	$57.9	0.18%
Expenditures on Listed Subcommodities		**$3,372.2**	**51.01%**		**$13,390.0**	**42.14%**
Expenditures on Top 1,000 subcommodities		**$6,580.5**	**100%**		**$31,513.8**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 100 subcommodities for SNAP households and the corresponding rankings of these subcommodities for non-SNAP households. Columns may not sum to total shown due to rounding.

3.4 Distribution of Expenditures by Household Demographics, Store Characteristics, Type of Resource Used, and Month of Purchase

In addition to analyzing purchase patterns as a whole, IMPAQ also analyzed the POS purchase data by household demographic and store characteristic subgroups based on information from the data provider. Appendix E provides these analyses. More transactions in these data were made by households without children than by households with children. In addition, a larger proportion of transactions were made at retail outlets in metropolitan areas than in rural or

suburban areas;[35] at larger stores rather than smaller ones;[36] and in counties with 10–20% poverty rates, the median of the three poverty rate categories into which the counties in which the stores were located were classified.[37] Compared to non-SNAP household transactions, SNAP household transactions were more likely to be made by households headed by adults 19–44 years of age, in stores located in the Midwest, and in medium-sized grocery stores. A larger proportion of SNAP household transactions than of non-SNAP household transactions took place in the most impoverished counties (counties with poverty rates greater than 20%). Notably, the distribution of transactions by household demographic and store characteristics was relatively consistent whether SNAP households used SNAP benefits or other resources.

In addition to analyzing the POS data for the full year, analyses were completed at the monthly level to investigate monthly or seasonal patterns in purchases. There was little month-to-month variation in expenditure patterns for either SNAP or non-SNAP households. A notable exception was that for both household types expenditure shares for vegetables were 2–3 percentage points lower during the summer months, while expenditure shares for fruits were 2–3 percentage points higher (data not shown).

[35] USDA Economic Research Service Urban Influence Codes (http://www.ers.usda.gov/data-products/urban-influence-codes.aspx).

[36] Following Food Marketing Institute conventions from http://www.fmi.org/about/ and http://www.fmi.org/facts_figs/?fuseaction=superfact and FNS Retailer Policy and Management Division food retailer definitions from http://www.fns.usda.gov/snap/retailers/pdfs/2012-annual-report.pdf.

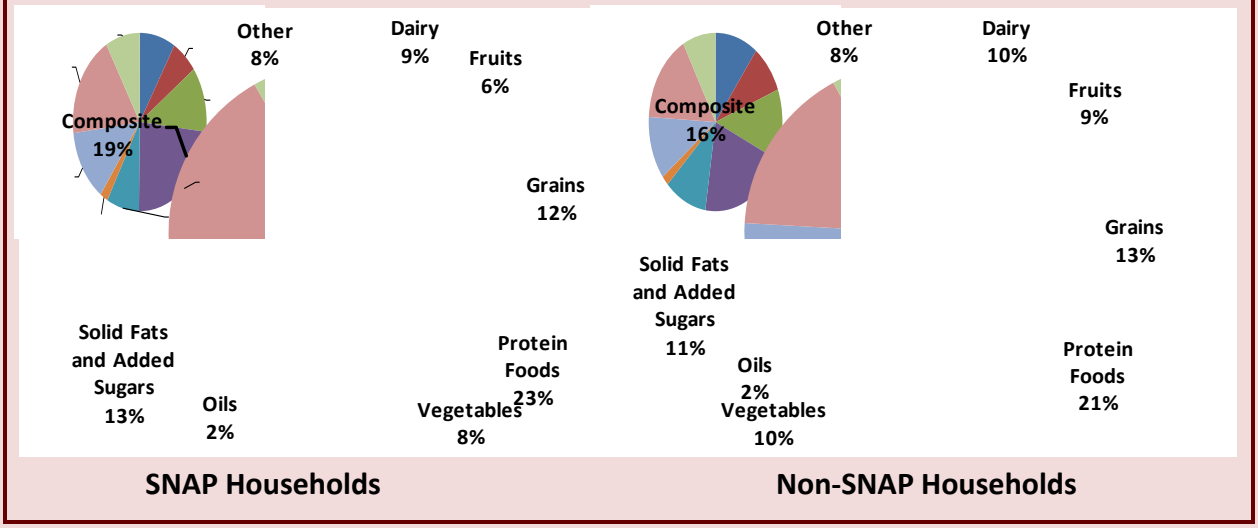
[37] Census Bureau data from http://www.census.gov/did/www/saipe/county.html.

CHAPTER 4. FINDINGS: TOP EXPENDITURES BY USDA FOOD PATTERN CATEGORIES

Key Findings

- Overall, there were few differences between SNAP and non-SNAP household expenditures by USDA Food Pattern categories. Expenditure shares for each of the USDA Food Pattern categories (dairy, fruits, grains, oils, protein foods, solid fats and added sugars (SoFAS), and vegetables) varied by no more than 3 cents per dollar when comparing SNAP and non-SNAP households.
- Protein foods represented the largest expenditure share for both household types, while proportionally more was spent on fruits and vegetables than on solid fats and added sugars, grains or dairy.

SNAP and Non-SNAP Household Expenditures by USDA Food Pattern Categories



Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.

4.1 Top Expenditures for Dairy

There are few differences in dairy expenditure patterns between SNAP households and non-SNAP households. Shown in Exhibit 8, the top 4 dairy subcommodities for both household groups were identical – fluid milk/white only, shredded cheese, American single cheese, and natural cheese chunks. These top 4 accounted for 60% of all dairy expenditures for SNAP households and 47% for non-SNAP households. The biggest driver of the proportional difference was the purchase of fluid milk/white only. Fluid white milk was the top subcommodity representing 33% of all dairy expenditures by SNAP households. In comparison, this subcommodity accounted for 26% of non-SNAP household dairy expenditures. Overall, 23

dairy subcommodities in the top 25 for SNAP households were also among the top 25 for non-SNAP households. The top 25 dairy subcommodities for SNAP households represented almost all dairy expenditures, 93%, while these 25 subcommodities represented 85% of dairy expenditures for non-SNAP households.

Exhibit 8: Top 25 SNAP Household Dairy Subcommodity Expenditures

Dairy Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Fluid Milk/White Only	1	$191.1	33.25%	1	$853.8	25.69%
Shredded Cheese	2	$74.7	13.00%	2	$342.0	10.29%
American Single Cheese	3	$44.1	7.67%	4	$136.6	4.11%
Natural Cheese Chunks	4	$35.3	6.14%	3	$216.1	6.50%
Bagged Cheese Snacks	5	$17.1	2.98%	16	$52.0	1.56%
Flavored Fluid Milk	6	$16.0	2.78%	14	$59.4	1.79%
String Cheese	7	$15.1	2.63%	9	$99.0	2.98%
Yogurt/Kids	8	$14.0	2.44%	20	$42.4	1.28%
Cottage Cheese	9	$13.9	2.42%	7	$108.8	3.27%
Natural Cheese Slices	10	$13.4	2.33%	6	$113.2	3.41%
Yogurt/Single Serving Regular	11	$11.0	1.91%	11	$69.0	2.07%
Loaf Cheese	12	$10.9	1.90%	23	$38.1	1.15%
Yogurt/Single Serve Light	13	$10.2	1.78%	8	$103.1	3.10%
Yogurt/Pro Active Health	14	$7.4	1.29%	13	$63.5	1.91%
Yogurt/Adult Multi-Packs	15	$7.2	1.25%	19	$42.5	1.28%
Specialty/Lactose Free Milk	16	$6.7	1.17%	17	$48.4	1.46%
Grated Cheese	17	$6.2	1.08%	25	$33.6	1.01%
Bulk Semi-Hard (Cheese)	18	$6.1	1.05%	18	$44.0	1.32%
Fluid Milk	19	$5.9	1.02%	5	$113.3	3.41%
Canned Milk	20	$5.5	0.96%	27	$27.9	0.84%
Yogurt/Specialty Greek	21	$5.0	0.86%	10	$77.4	2.33%
Half & Half	22	$4.4	0.77%	15	$54.6	1.64%
Yogurt/Large Size (16oz or More)	23	$4.4	0.76%	22	$40.4	1.22%
Miscellaneous Cheese	24	$3.8	0.67%	21	$42.1	1.27%
Bulk Processed (Cheese)	25	$3.4	0.59%	29	$19.8	0.60%
Sum of Listed Dairy Expenditures		**$532.9**	**92.70%**		**$2,841.0**	**85.49%**
Total Dairy Expenditures Among Top 1,000 Subcommodities		**$571.2**	**100%**		**$3,257.4**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 25 dairy subcommodities for SNAP households and the corresponding ranking of these subcommodities for non-SNAP households. Columns may not sum to total shown due to rounding.

4.2 Top Expenditures for Fruits

The top 25 fruit subcommodities by expenditure for SNAP households included whole fruits as well as 100% fruit juices, as shown in Exhibit 9 below. The top fruit subcommodity for both SNAP and non-SNAP households was 100% orange juice. This top fruit subcommodity represented 10% of all SNAP household fruit expenditures, 9% for non-SNAP households. Bananas and strawberries rank second and third, respectively, for both household groups. Together, the top 3 fruit subcommodities account for about one-fourth (24%) of the fruit expenditures for both SNAP and non-SNAP households. The top 25 SNAP household fruit subcommodities accounted for 71% of all SNAP household fruit expenditures. These 25 subcommodities accounted for 66% of fruit expenditures for non-SNAP households. Twenty-one of the top 25 fruit subcommodities for SNAP households were also in the top 25 for non-SNAP households.

Exhibit 9: Top 25 SNAP Household Fruit Subcommodity Expenditures

Fruit Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
100% Pure Juice – Orange; Dairy Case	1	$43.5	10.18%	1	$269.0	9.35%
Bananas	2	$34.2	8.00%	2	$242.7	8.43%
Strawberries	3	$23.5	5.48%	3	$178.4	6.20%
Fruit Snacks	4	$17.6	4.13%	17	$43.2	1.50%
Grapes Red	5	$15.8	3.70%	4	$121.7	4.23%
Grapes White	6	$15.5	3.61%	6	$84.9	2.95%
Apple Juice & Cider (Over 50% Pure Juice)	7	$13.3	3.11%	14	$45.8	1.59%
Instore Cut Fruit	8	$13.2	3.09%	5	$85.8	2.98%
Oranges Navels	9	$12.6	2.94%	8	$79.3	2.75%
Fruit Cup	10	$10.6	2.47%	19	$42.7	1.49%
Blended Juice & Combinations	11	$9.3	2.17%	29	$29.6	1.03%
Clementines	12	$8.8	2.06%	9	$78.6	2.73%
Melons Instore Cut	13	$8.2	1.93%	18	$42.8	1.49%
Watermelon Seedless Whole	14	$7.9	1.84%	16	$43.9	1.53%
Cherries Red	15	$6.9	1.61%	11	$56.7	1.97%
Apples Gala (Bulk & Bag)	16	$6.6	1.54%	10	$69.3	2.41%
Cranapple/Cran Grape Juice	17	$6.1	1.43%	31	$27.3	0.95%
Apples Red Delicious (Bulk & Bag)	18	$5.8	1.35%	23	$35.2	1.22%
100% Pure Juice – Other; Dairy Case	19	$5.4	1.26%	25	$32.3	1.12%
Cantaloupe Whole	20	$5.3	1.24%	15	$44.4	1.54%
Blueberries	21	$5.1	1.19%	7	$79.4	2.76%
Pineapple	22	$4.9	1.15%	33	$24.0	0.83%
Peaches Yellow Flesh	23	$4.8	1.13%	22	$35.6	1.24%
Grape Juice (Over 50% Juice)	24	$4.8	1.12%	44	$17.1	0.60%

Fruit Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Lemons	25	$4.6	1.08%	24	$33.6	1.17%
Sum of Listed Fruit Expenditures		**$294.3**	**68.81%**		**$1,843.4**	**64.06%**
Total Fruit Expenditures Among Top 1,000 Subcommodities		**$416.8**	**100%**		**$2,772.4**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 25 fruit subcommodities for SNAP households and the corresponding rankings of these subcommodities for non-SNAP households. Columns may not sum to total shown due to rounding.

4.3 Top Expenditures for Grains

Exhibit 10 details the top 25 grain subcommodities purchased by SNAP households. Cereals are a popular purchase among grain subcommodities for both SNAP and non-SNAP households. The top grain subcommodity for SNAP households was kids cereal, representing almost 10% of all grain expenditures. Kids cereal, ranked third for non-SNAP households. All family cereal was ranked first for non-SNAP households and fifth for SNAP households. Adult cereals were also common purchases ranking sixth for SNAP households and fourth for non-SNAP households. The top 25 grain subcommodities purchased by SNAP households made up 67% of their grain expenditures. Comparatively, these 25 subcommodities comprised 57% of expenditures on grains subcommodities for non-SNAP households. Ninteen subcommodities in the top 25 for SNAP households were also among the top 25 for non-SNAP households.

Exhibit 10: Top 25 SNAP Household Grains Subcommodity Expenditures

Grains Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Kids Cereal	1	$78.1	9.88%	3	$186.4	4.51%
Mainstream White Bread	2	$48.0	6.07%	7	$136.8	3.31%
Tortilla/Nacho Chips	3	$47.4	5.99%	2	$209.0	5.05%
Mainstream Variety Breads	4	$38.4	4.86%	5	$173.2	4.19%
All Family Cereal	5	$36.2	4.58%	1	$214.9	5.20%
Adult Cereal	6	$24.9	3.15%	4	$182.6	4.42%
Mexican Soft Tortillas and Wraps	7	$23.7	3.00%	8	$113.1	2.74%
Waffles/Pancakes/French Toast	8	$17.3	2.19%	13	$77.4	1.87%
Ramen Noodles/Ramen Cups	9	$16.7	2.12%	43	$28.1	0.68%
Cheese Crackers	10	$16.5	2.08%	10	$90.2	2.18%
Hamburger Buns	11	$16.2	2.05%	14	$70.2	1.70%
Hot Dog Buns	12	$16.2	2.05%	18	$62.2	1.50%
Refrigerated Biscuits	13	$14.7	1.86%	30	$45.2	1.09%
Butter Spray Crackers	14	$14.6	1.85%	15	$68.7	1.66%
Toaster Pastries	15	$14.0	1.77%	27	$47.6	1.15%

Grains Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Rice Side Dish Mixes Dry	16	$14.0	1.76%	28	$46.7	1.13%
Popcorn – Microwave	17	$13.1	1.65%	17	$63.4	1.53%
Long Cut Pasta	18	$13.0	1.64%	19	$60.4	1.46%
Granola Bars	19	$12.8	1.61%	11	$88.9	2.15%
Premium Bread	20	$12.3	1.55%	6	$144.7	3.50%
Cereal Bars	21	$10.9	1.38%	12	$78.4	1.90%
Short Cut Pasta	22	$9.9	1.25%	21	$56.2	1.36%
Rolls: Dinner	23	$9.5	1.21%	23	$50.5	1.22%
Frozen Garlic Toast	24	$9.1	1.16%	44	$27.8	0.67%
Corn Chips	25	$9.1	1.15%	29	$45.6	1.10%
Sum of Listed Grain Expenditures		**$536.6**	**67.86%**		**$2,368.4**	**57.27%**
Total Grain Expenditures Among Top 1,000 Subcommodities		**$783.8**	**100%**		**$4,049.9**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 25 grain subcommodities for SNAP households and the corresponding ranking of these subcommodities for non-SNAP households. Columns may not sum to total shown due to rounding.

4.4 Top Expenditures for Oils

The top oils subcommodity expenditures are shown in Exhibit 11. Pourable salad dressings was the top oils subcommodity by expenditure for both SNAP and non-SNAP households, accounting for nearly one-fourth of their total expenditures on oils. The second and third ranked oils subcommodities, mayonnaise/whipped dressing and margarine in tubs and bowls, were the same for both household groups, as well.

Exhibit 11: Oils Subcommodity Expenditures

Oils Subcommodity	SNAP Household Expenditures			Non-SNAP Household Purchases		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Pourable Salad Dressings	1	$29.0	22.71%	1	$139.4	24.28%
Mayonnaise and Whipped Dressing	2	$27.3	21.34%	2	$119.1	20.73%
Margarine: Tubs and Bowls	3	$23.4	18.37%	3	$100.9	17.56%
Vegetable Oils	4	$20.5	16.07%	5	$35.4	6.16%
Canola Oils	5	$8.3	6.49%	6	$29.3	5.10%
Olive Oils	6	$7.3	5.69%	4	$63.8	11.11%
Cooking Sprays	7	$3.2	2.49%	7	$21.0	3.65%
Dressing Creamy	8	$1.6	1.23%	8	$14.5	2.53%
Sandwich/Horseradish and Tartar Sauce	9	$1.4	1.14%	10	$7.2	1.26%
Corn Oils	10	$1.3	1.01%	14	$4.1	0.71%
Cooking Oils: Peanut/Safflower	11	$1.1	0.89%	11	$6.7	1.17%

Oils Subcommodity	SNAP Household Expenditures			Non-SNAP Household Purchases		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Dressing Blue Cheese	12	$0.9	0.71%	9	$9.5	1.65%
Margarine: Squeeze	13	$0.6	0.44%	13	$4.2	0.74%
Sum of Listed Oils Expenditures		**$125.9**	**98.58%**		**$555.0**	**96.65%**
Total Oils Expenditures Among the Top 1,000 Subcommodities		**$125.9**	**100%**		**$555.0**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The data included only 13 oils subcommodities in the top 1,000 subcommodities. Columns may not sum to total shown due to rounding.

4.5 Top Expenditures for Protein Foods

The top 25 protein foods subcommodities based on expenditures of SNAP households are shown in Exhibit 12. For SNAP households, the top 25 represented over half (54%) of all protein foods expenditures. These same 25 subcommodities comprised 48% of the protein foods expenditures for non-SNAP households. The top 5 subcommodities were the same for both household groups, although in slightly different order and accounted for one fifth of all protein expenditures for both households. The protein foods included in the top 5 were beef, lunchmeat, eggs and chicken. Lean ground beef was the top protein foods subcommodity by expenditure for SNAP households, totaling just over 7% of all protein foods expenditures. The top protein foods subcommodity for non-SNAP households was boneless chicken breasts at 5% of their expenditures. Eighteen of the SNAP household top 25 subcommodities were also ranked in the top 25 for non-SNAP households.

Exhibit 12: Top 25 SNAP Household Protein Foods Subcommodity Expenditures

Protein Foods Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Lean Ground Beef	1	$112.4	7.38%	2	$257.9	4.03%
Primal Ground Beef	2	$62.4	4.10%	5	$219.8	3.43%
Lunchmeat - Deli Fresh	3	$55.8	3.67%	4	$242.6	3.79%
Eggs – Large	4	$52.1	3.43%	3	$251.6	3.93%
Chicken Breast Boneless	5	$49.6	3.26%	1	$292.9	4.57%
Enhanced Pork Boneless Loin/Rib	6	$41.5	2.73%	6	$168.0	2.62%
Bacon - Trad 16oz Or Less	7	$40.7	2.68%	8	$157.6	2.46%
Ribs (Pork)	8	$35.0	2.30%	15	$106.8	1.67%
Frozen Chicken - White Meat	9	$30.0	1.97%	17	$99.8	1.56%
Choice Beef (Loins)	10	$28.4	1.87%	11	$136.6	2.13%
Select Beef	11	$27.9	1.83%	9	$143.7	2.24%
Hot Dogs - Base Meat	12	$25.1	1.65%	27	$56.8	0.89%
Choice Beef (Rounds)	13	$24.0	1.58%	20	$72.5	1.13%
Chicken Wings	14	$22.2	1.46%	58	$28.6	0.45%
Frozen Chicken – Wings	15	$22.2	1.46%	97	$17.4	0.27%

Protein Foods Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Lunchmeat - Bologna/Sausage	16	$21.8	1.43%	24	$60.9	0.95%
Tuna	17	$21.1	1.39%	14	$109.9	1.72%
Peanut Butter	18	$20.4	1.34%	12	$127.8	1.99%
Meat: Turkey Bulk	19	$19.3	1.27%	7	$159.6	2.49%
Frozen Meat – Beef	20	$19.0	1.25%	34	$46.3	0.72%
Value Forms / 18oz & Larger	21	$18.6	1.22%	41	$42.6	0.67%
Chicken Drumsticks	22	$17.3	1.14%	49	$31.5	0.49%
Angus Beef	23	$17.1	1.13%	16	$103.8	1.62%
Dinner Sausage - Links Pork Ckd	24	$16.4	1.08%	45	$37.6	0.59%
Meat: Ham Bulk	25	$15.3	1.00%	13	$115.9	1.81%
Sum of Listed Protein Foods Expenditures		**$815.7**	**53.62%**		**$3,088.3**	**48.22%**
Total Protein Foods Expenditures Among Top 1,000 Subcommodities		**$1,512.2**	**100%**		**$6,288.8**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 25 protein foods subcommodities for SNAP households and the corresponding ranking of these subcommodities for non-SNAP households. Columns may not sum to total shown due to rounding.

4.6 Top Expenditures for Solid Fats and Added Sugars (SoFAS)

The top 25 SoFAS subcommodities by expenditure for SNAP households are shown in Exhibit 13. Twenty two subcommodities in the top 25 for SNAP households were also among the top 25 for non-SNAP households. In addition, the top two subcommodities were the same. They were carbonated soft drinks packaged as 12-18 pack cans and 2-liter bottles. These two subcommodities represented approximately one-fourth of the SoFAS expenditures for both types of households. Sugar, ranked fourth, was the highest ranked non-beverage SoFAS subcommodity for SNAP households. It was eighth ranked for non-SNAP households. Butter ranked higher (third) for non-SNAP households compared to tenth for SNAP households. Overall, the top 25 SNAP household SoFAS subcommodities in Exhibit 13 totaled 75% of SNAP household SoFAS expenditures. These 25 subcommodities totaled 71% of the SoFAS expenditures for non-SNAP households.

Exhibit 13: Top 25 SNAP Household Solid Fats and Added Sugars (SoFAS) Subcommodity Expenditures

Solid Fats and Added Sugars (SoFAS) Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Soft Drinks 12/18&15pk Can Car	1	$164.6	18.86%	1	$601.2	16.11%
Soft Drinks 2 Liter Btl Carb Incl	2	$70.9	8.12%	2	$230.1	6.17%
Soft Drinks 20pk&24pk Can Carb	3	$39.7	4.55%	9	$106.4	2.85%
Sugar	4	$36.9	4.23%	8	$112.7	3.02%
Soft Drink Mlt-Pk Btl Carb	5	$34.0	3.90%	4	$173.6	4.65%
Soft Drink Single Serve Btl Carb	6	$27.8	3.18%	11	$71.4	1.91%
Aseptic Pack Juice And Drinks	7	$24.2	2.78%	16	$57.1	1.53%
Refrigerated Coffee Creamers	8	$24.1	2.76%	6	$147.2	3.95%
Candy Bags-Chocolate	9	$21.5	2.46%	5	$147.5	3.95%
Butter	10	$19.6	2.24%	3	$175.6	4.71%
Sour Creams	11	$17.5	2.00%	10	$95.2	2.55%
Cream Cheese	12	$17.2	1.97%	7	$115.5	3.10%
Candy Bars (Singles)	13	$16.3	1.87%	18	$54.9	1.47%
Dairy Case Juice Drink Under 10 Oz	14	$16.0	1.83%	22	$48.0	1.29%
Candy Bars (Multi Pack)	15	$15.6	1.79%	12	$69.6	1.86%
Tea Sweetened	16	$13.9	1.59%	13	$68.7	1.84%
Chewing Gum	17	$13.2	1.51%	14	$68.3	1.83%
Candy Bags-Non Chocolate	18	$12.6	1.44%	19	$54.9	1.47%
Molasses And Syrups	19	$11.7	1.34%	15	$58.7	1.57%
Dairy Case Citrus Punch/Oj Subs	20	$11.0	1.26%	27	$34.4	0.92%
Fruit Drinks: Canned & Glass	21	$10.6	1.21%	60	$10.9	0.29%
Non Dairy Creamer	22	$10.5	1.20%	25	$35.4	0.95%
Seasonal Miscellaneous	23	$9.2	1.05%	23	$46.9	1.26%
Dairy Case Tea With Sugar	24	$8.4	0.96%	36	$23.1	0.62%
Seasonal Candy Bags-Chocolate	25	$7.9	0.90%	20	$54.8	1.47%
Sum of Listed SoFAS Expenditures		**$655.0**	**75.00%**		**$2,662.3**	**71.34%**
Total SoFAS Expenditures Among Top 1,000 Subcommodities		**$864.1**	**100%**		**$3,673.1**	**100%**

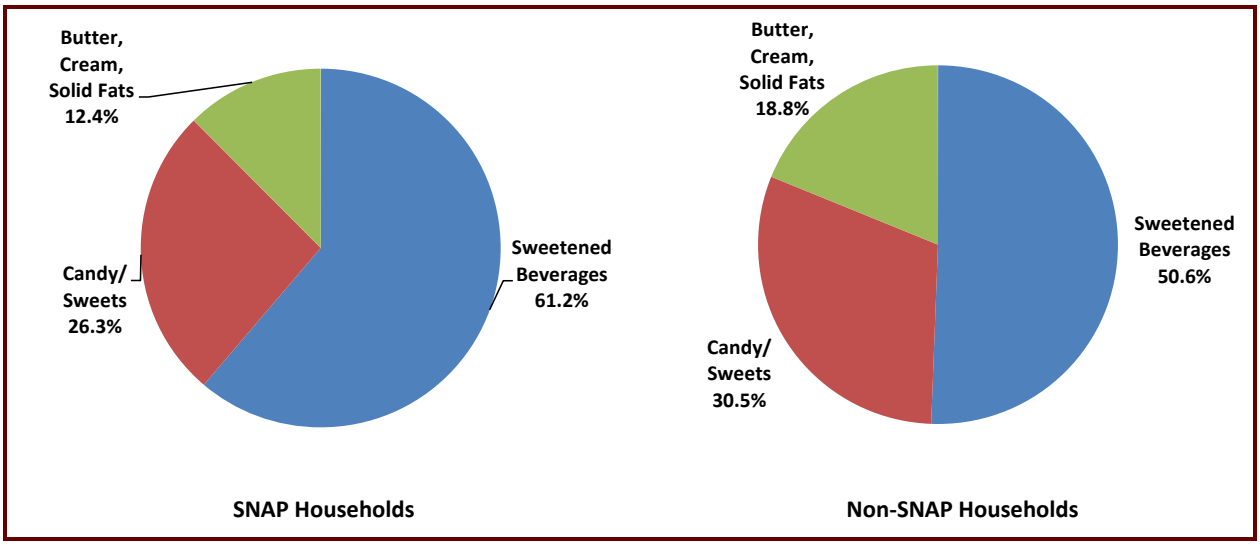
Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 25 SoFAS subcommodities for SNAP households and the corresponding ranking of these subcommodities for non-SNAP households. Columns may not sum to total shown due to rounding.

SoFAS were divided into three broad subcategories to inform the analyses: butter/cream/solid fats, candy/sweets, and sweetened beverages.[38] The distribution of these subcategories for both household types is shown in Exhibit 14. As a share of total SoFAS expenditures, sweetened beverage expenditures were more than 10 percentage points higher in SNAP households than

[38] Fruit drinks that are over 50% juice are categorized as fruits. All other fruit drinks are categorized as SoFAS. In our discussion, fruit drinks that are less than 50% juice are grouped into "sweetened beverages."

non-SNAP households. In contrast, non-SNAP households spent a larger share of their SoFAS expenditures on the butter/cream/solid fats and candy/sweets subcategories.

Exhibit 14: Solid Fats and Added Sugars (SoFAS) Expenditures by Subcategory



Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.

4.7 Top Expenditures for Vegetables

As shown in Exhibit 15, russet potatoes and plain frozen bag vegetables were the top two vegetable subcommodities by expenditure purchased by SNAP and non-SNAP households. Overall, 18 of the top 25 vegetable subcommodities for SNAP households were among the top 25 for non-SNAP households. The top 25 SNAP household subcommodities comprised 56% of total vegetable expenditures for SNAP households. These same 25 subcommodities comprised 47% of total vegetable expenditures for non-SNAP households. The top 25 subcommodities for both SNAP and non-SNAP households for this Food Pattern category included a range of vegetables such as potatoes, avocados, green beans, corn, lettuce and cucumbers to name a few.

Exhibit 15: Top 25 SNAP Household Vegetables Subcommodity Expenditures

Vegetables Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Potatoes Russet (Bulk & Bag)	1	$35.8	6.74%	1	$154.5	4.60%
Frozen Bag Vegetables – Plain	2	$25.7	4.85%	2	$131.9	3.93%
Mainstream Pasta & Pizza Sauce	3	$23.0	4.33%	6	$81.0	2.41%
Frozen French Fries	4	$20.5	3.86%	19	$50.3	1.50%
Avocado	5	$13.4	2.52%	4	$112.6	3.35%
Blends Salad Mix	6	$13.1	2.47%	3	$124.0	3.69%
Green Beans: Fs/Whl/Cut	7	$12.8	2.41%	15	$53.1	1.58%

Vegetables Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Potatoes: Dry	8	$12.3	2.31%	33	$32.3	0.96%
Corn	9	$12.1	2.28%	22	$44.0	1.31%
Head Lettuce	10	$11.6	2.18%	13	$55.5	1.65%
Frozen Steamable Vegetables	11	$10.5	1.98%	5	$81.4	2.42%
Mexican Sauces And Picante Sauce	12	$10.2	1.93%	9	$62.3	1.85%
Tomatoes Diced	13	$9.5	1.79%	11	$59.9	1.78%
Tomatoes Hothouse On The Vine	14	$9.2	1.74%	7	$77.7	2.31%
Onions Yellow (Bulk & Bag)	15	$8.7	1.65%	27	$39.3	1.17%
Cucumbers	16	$8.2	1.55%	12	$58.9	1.75%
Vegetable Salads – Prepack	17	$7.8	1.48%	29	$36.6	1.09%
Peppers Green Bell	18	$7.8	1.47%	25	$41.5	1.24%
Regular Garden	19	$7.8	1.46%	35	$31.9	0.95%
Roma Tomatoes (Bulk/Pkg)	20	$7.5	1.41%	26	$39.6	1.18%
Carrots Mini Peeled	21	$7.0	1.32%	10	$61.4	1.83%
Onions Sweet (Bulk & Bag)	22	$6.2	1.16%	20	$47.4	1.41%
Celery	23	$5.9	1.11%	17	$51.2	1.52%
Tomatoes Vine Ripe Bulk	24	$5.7	1.07%	51	$22.5	0.67%
Garden Plus Salad Mix	25	$5.5	1.03%	36	$31.8	0.95%
Sum of Listed Vegetable Expenditures		**$297.7**	**56.10%**		**$1,582.6**	**47.10%**
Total Vegetable Expenditures Among Top 1,000 Subcommodities		**$520.5**	**100%**		**$3,251.8**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 25 vegetable subcommodities for SNAP households and the corresponding ranking of these subcommodities for non-SNAP households. Columns may not sum to total shown due to rounding.

4.8 Top Expenditures for Composite Foods

Composite foods include those subcommodities that contain more than one USDA Food Pattern category. As a result, they could not be assigned specifically to a single category. For example, composite foods include both dairy and grains (macaroni and cheese), dairy and SoFAS (ice cream), vegetables and oils (potato chips), or protein foods, vegetables and grains (frozen meals). The top 25 composite foods subcommodities based on the expenditures of SNAP households are presented in Exhibit 16. Potato chips were the top composite subcommodity by expenditure for SNAP households, representing 5% of their overall expenditures on composite items. Potato chips were ranked second for non-SNAP households. Overall, expenditures on composite subcommodities were similar for SNAP and non-SNAP households with 19 subcommodities in the top 25 for both groups. The top 25 SNAP household subcommodities shown in Exhibit 16 represented 58% of all SNAP household composite foods expenditures, while expenditures on these 25 subcommodities by non-SNAP households accounted for 51% of their total composite foods expenditures.

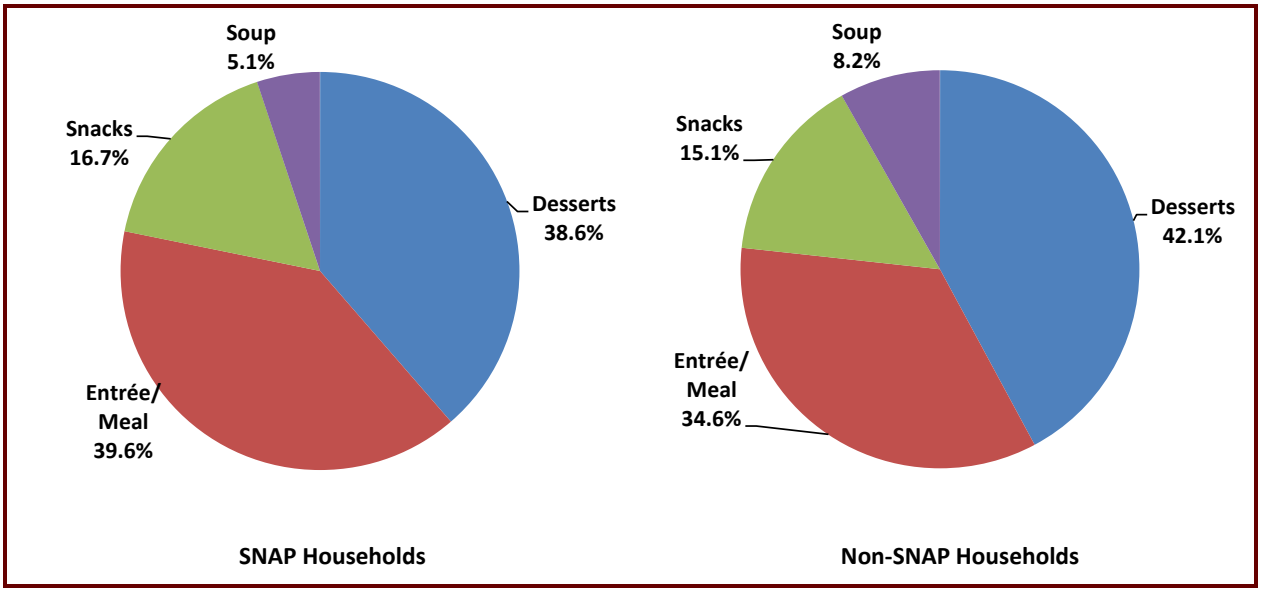
Exhibit 16: Top 25 SNAP Household Composite Subcommodity Expenditures

Composite Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Potato Chips	1	$64.4	5.19%	2	$253.2	4.88%
Snacks/Appetizers	2	$44.6	3.59%	10	$100.5	1.94%
Frozen Single Serve Premium Traditional Meals	3	$43.8	3.53%	4	$175.4	3.38%
Snack Cake - Multi Pack	4	$41.6	3.36%	9	$101.7	1.96%
Frozen Single Serve Economy Meals	5	$40.9	3.30%	15	$80.7	1.56%
Pizza/Premium	6	$39.7	3.20%	6	$153.3	2.95%
Sandwiches And Handhelds	7	$35.9	2.89%	17	$73.6	1.42%
Convenient Meals - Kids Meal	8	$34.2	2.76%	19	$69.7	1.34%
Premium (Ice Cream & Sherbert)	9	$31.2	2.52%	3	$226.0	4.35%
Condensed Soup	10	$29.7	2.39%	5	$153.6	2.96%
Frozen Family Style Entrees	11	$27.6	2.23%	13	$83.5	1.61%
Traditional	12	$25.6	2.07%	8	$118.7	2.29%
Frozen Single Serve Premium Nutritional Meals	13	$24.7	1.99%	1	$271.6	5.23%
Macaroni And Cheese Dinners	14	$24.3	1.96%	24	$59.7	1.15%
Can Pasta	15	$22.2	1.79%	36	$47.7	0.92%
Multi-Pack Bag Snacks	16	$21.6	1.74%	38	$43.4	0.84%
Sweet Goods:Donuts	17	$21.3	1.72%	14	$82.3	1.58%
Pizza/Economy	18	$19.8	1.60%	37	$45.1	0.87%
Frozen Breakfast Sandwiches	19	$19.1	1.54%	29	$55.7	1.07%
Frozen Skillet Meals	20	$18.8	1.51%	16	$79.3	1.53%
Cakes: Birthday/Celebration	21	$18.6	1.50%	33	$50.3	0.97%
Sandwich Cookies	22	$18.0	1.45%	18	$71.8	1.38%
Pizza/Traditional	23	$17.9	1.44%	22	$64.1	1.24%
Rts Soup: Chunky/Homestyle	24	$17.6	1.42%	7	$119.9	2.31%
Salsa And Dips	25	$17.1	1.38%	28	$57.0	1.10%
Sum of Listed Composite Expenditures		**$720.5**	**58.07%**		**$2,637.7**	**50.83%**
Total Composite Expenditures Among Top 1,000 Subcommodities		**$1,235.4**	**100%**		**$5,132.0**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 25 composite subcommodities for SNAP households and the corresponding ranking of these subcommodities for non-SNAP households. Columns may not sum to total shown due to rounding.

The composite subcommodities were further categorized as snacks, soups, desserts, and entrée/meal items to inform the analyses. Exhibit 17 suggests some differences in SNAP and non-SNAP household expenditure distributions on these subgroups. SNAP households spent a larger share of their composite expenditures on entrée/meal subcommodities, while non-SNAP households spent larger shares on desserts and soup. Expenditures on snacks were not very different across the two groups.

Exhibit 17: Composite Expenditures by Subcategory



Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.

4.9 Top Expenditures for Other Subcommodities

Some subcommodities did not contain any USDA Food Pattern categories, or the subcommodity labels were not descriptive enough to permit categorization even with the addition of the composite category. As a result, a ninth category, *other,* was created to capture such subcommodities. "Other" included subcommodities such as water, isotonic drinks, and baby food. The top 25 other subcommodities based on the expenditures of SNAP households are shown in Exhibit 18 and accounted for 66% of their overall other subcommodity expenditures. These subcommodities accounted for 54% of all other expenditures for non-SNAP households. Overall, expenditures on other subcommodities were similar for SNAP and non-SNAP households with 19 subcommodities in common in the top 25 for both groups. The top other subcommodity purchased by SNAP households was infant formula/starter solution, accounting for almost 10% of the total SNAP household expenditures on these items. Subcommodities reflecting drinking water and coffee were ranked second and third, respectively. Coffee subcommodities were ranked first and third for non-SNAP households with the same water subcommodity that was ranked second for SNAP households ranked second for non-SNAP households, as well. Interestingly, infant formula/starter solution that was ranked first for SNAP households was ranked 14th for non-SNAP households.

Exhibit 18: Top 25 SNAP Household Other Subcommodity Expenditures

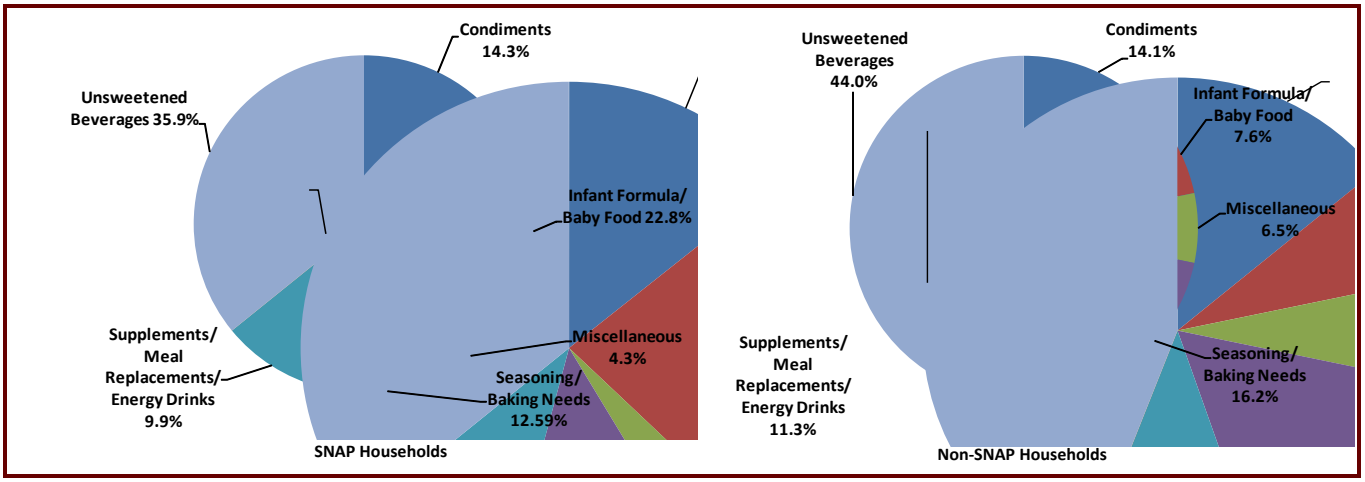
Other Subcommodity	SNAP Household Expenditures			Non-SNAP Household Expenditures		
	Rank	$ in Millions	% of Expenditures	Rank	$ in Millions	% of Expenditures
Infant Formula / Starter Solution	1	$54.2	9.60%	14	$45.3	1.70%
Still Water Drinking/ Mineral Water	2	$48.8	8.64%	2	$187.7	7.03%
Unflavored Can Coffee	3	$41.3	7.32%	1	$198.0	7.41%
Isotonic Drinks Single Serve	4	$30.5	5.40%	4	$119.5	4.47%
Spring Water	5	$16.2	2.87%	5	$95.6	3.58%
Traditional Spices	6	$14.1	2.49%	8	$61.2	2.29%
Bbq Sauce	7	$12.3	2.17%	16	$38.6	1.45%
Baby Food - Beginner	8	$11.7	2.07%	21	$28.1	1.05%
Non-Carb Water Flavor - Drink/Mnr	9	$11.6	2.05%	7	$63.4	2.37%
Catsup	10	$11.5	2.03%	15	$41.5	1.55%
Sauce Mixes/Gravy Mixes Dry	11	$11.5	2.03%	13	$46.7	1.75%
Baby Food Junior/All Brands	12	$11.2	1.98%	22	$27.5	1.03%
Isotonic Drinks Multi-Pack	13	$10.8	1.92%	9	$58.1	2.17%
Ice - Crushed/Cubed	14	$9.3	1.65%	11	$49.9	1.87%
Unflavored Bag Coffee	15	$8.5	1.50%	3	$137.3	5.14%
Infant Formula Specialty	16	$8.4	1.49%	71	$9.1	0.34%
Infant Formula Starter Large	17	$8.3	1.46%	30	$22.8	0.85%
Steak & Worchester Sauce	18	$8.2	1.44%	25	$26.7	1.00%
Unflavored Instant Coffee	19	$7.6	1.34%	23	$27.3	1.02%
Non-Dairy Milk	20	$7.1	1.25%	6	$67.7	2.53%
Unsweetened Envelope (Powder Drink Mix)	21	$7.0	1.25%	88	$6.2	0.23%
Malted Milk/Syrup/Powders/ Eggnog	22	$6.9	1.23%	28	$25.3	0.95%
Still Water Flavored Drink/Mineral Water	23	$6.3	1.11%	17	$38.1	1.43%
Infant Formula Toddler	24	$6.0	1.06%	55	$12.4	0.46%
Mexican Seasoning Mixes	25	$5.9	1.05%	33	$20.6	0.77%
Sum of Listed Other Expenditures		**$374.8**	**66.40%**		**$1,454.7**	**54.44%**
Total Other Expenditures Among Top 1,000 Subcommodities		**$550.7**	**100%**		**$2,533.2**	**100%**

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
Note: The table lists the top 25 "other" subcommodities for SNAP households and the corresponding ranking of these subcommodities for non-SNAP households. Columns may not sum to total shown due to rounding.

All other subcommodities were divided into the following six subcategories for additional analysis: condiments; infant formula/baby food; seasoning/baking needs; supplements/meal replacements/energy drinks; unsweetened beverages; and miscellaneous. Exhibit 19 shows that

SNAP households spent a notably larger share—about 15 percentage points more than non-SNAP households—on infant formulas and baby foods in these data. Non-SNAP households spent a larger share on unsweetened beverages.

Exhibit 19: Other Expenditures by Subcategory



Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.

CHAPTER 5. CONCLUSION

IMPAQ analyzed point-of-sale transaction data from January 1, 2011 through December 31, 2011 from a leading grocery retailer to understand what food items are typically purchased by SNAP households and how these purchases compare to those made by non-SNAP households. The majority of stores from which the data came would be classified as grocery stores, supermarkets, and combination food and drug stores per FNS Retailer Policy and Management Division food retailer definitions.[39] Expenditures on SNAP-eligible food items were examined at four levels: by USDA Food Pattern categories, summary categories, commodities, and subcommodities, as shown in Exhibit 20.

Overall, the findings from this study indicate that SNAP households and non-SNAP households purchased similar foods in the retail outlets in these data. The findings hold true after assessing food expenditure patterns of SNAP and non-SNAP households using multiple categorization methods. Both groups of households spent about 40 cents of every dollar of food expenditures on basic items such as meat, fruits, vegetables, milk, eggs, and bread. Another 20 cents out of every dollar was spent on sweetened beverages, desserts, salty snacks, candy and sugar. The remaining 40 cents were spent on a variety of items such as cereal, prepared foods, dairy products, rice, and beans.

Exhibit 20: SNAP and Non-SNAP Household Food Expenditure Patterns

Finding	SNAP Households	Non-SNAP Households
Total annual expenditures on SNAP-eligible foods in dataset	$6.7 billion	$32.3 billion
Percentage of all transactions by all households	12%	88%
Percentage of total annual expenditures by all households	17%	83%
Top 1,000 (of 1,792) subcommodity expenditures as a percentage of all expenditures	99%	98%
Top 100 subcommodity expenditures as a percentage of all expenditures	51%	46%
Top 25 subcommodity expenditures as a percentage of all expenditures	25%	21%
Top 25 commodity (of 238) expenditures as a percentage of all expenditures	45%	41%
Top 10 summary categories (of 30) by expenditure	Meat, Poultry and Seafood	Meat, Poultry and Seafood
	Sweetened Beverages	Vegetables
	Vegetables	High-fat Dairy/Cheese

[39] Stores that opened or closed during 2011 were not included in these analyses.

Finding	SNAP Households	Non-SNAP Households
	Frozen Prepared Foods	Fruits
	Prepared Desserts	Sweetened Beverages
	High-fat Dairy/Cheese	Prepared Desserts
	Bread and Crackers	Bread and Crackers
	Fruits	Frozen Prepared Foods
	Milk	Milk
	Salty Snacks	Salty Snacks
Top 10 commodities (of 238) by expenditure	Soft Drinks	Fluid Milk Products
	Fluid Milk Products	Soft Drinks
	Beef Grinds	Cheese
	Bag Snacks	Baked Breads
	Cheese	Bag Snacks
	Baked Breads	Beef Grinds
	Cold Cereal	Cold Cereal
	Chicken Fresh	Candy – Packaged
	Frozen Handhelds and Snacks	Coffee and Creamers
	Lunchmeat	Ice Cream, Ice Milk, and Sherbets
Top 10 subcommodities (of 1,792) by expenditure	Fluid Milk/White Only	Fluid Milk/White Only
	Soft Drinks 12–18 pack	Soft Drinks 12–18 pack
	Lean Beef	Shredded Cheese
	Kids' Cereal	Chicken Breast – Boneless
	Shredded Cheese	Frozen Premium Nutritional Meals
	2-Liter Soft Drink	Pure Orange Juice – Dairy Case
	Potato Chips	Lean Beef
	Primal Beef	Potato Chips
	Lunchmeat – Deli fresh	Large Eggs
	Infant Formula/Starter Solution	Bananas

Source: Foods Typically Purchased by SNAP Households, IMPAQ International, LLC, 2016.
*All SNAP totals represent purchases by SNAP households in the dataset, not SNAP dollars.

In summary, after assessing food expenditure patterns of SNAP households and non-SNAP households using multiple categorization methods, both household types made similar food expenditures in 2011 from the retail outlets included in these data.