

Online Appendix for  
Price Consciousness at the Peak of "Impatience"

by

Mary Zaki  
*University of Maryland*

and

Jessica E. Todd  
*United States Department of Agriculture*

Paper uses restricted-use data from FoodAPS and IRI that cannot be made available. The restricted-use data may be obtained by following instructions listed on the ERS website (<https://www.ers.usda.gov/data-products/foodaps-national-household-food-acquisition-and-purchase-survey/data-access/>). Access to IRI also requires a third-party agreement. Additional supplementary materials including code to produce the results are available from Jessica Todd via email at [jessica.todd@usda.gov](mailto:jessica.todd@usda.gov).

## APPENDIX A: Table and Figures

Appendix Table 1: Assigning Time in Benefit Month

Day of month of SNAP benefit receipt	Day of month of first day of survey that would assign household to...	
	first half of benefit month	second half of benefit month
1	25 - 30, 1 - 7	8 - 24
2	26 - 30, 1 - 8	9 - 25
3	27 - 30, 1 - 9	10 - 26
4	28 - 30, 1 - 10	11 - 27
5	29 - 30, 1 - 11	12 - 28
6	30, 1 - 12	13 - 29
7	1 - 13	14 - 30
8	2 - 14	1, 15 - 30
9	3 - 15	1 - 2, 16 - 30
10	4 - 16	1 - 3, 17 - 30
11	5 - 17	1 - 4, 18 - 30
12	6 - 18	1 - 5, 19 - 30
13	7 - 19	1 - 6, 20 - 30
14	8 - 20	1 - 7, 21 - 30
15	9 - 21	1 - 8, 22 - 30
16	10 - 22	1 - 9, 23 - 30
17	11 - 23	1 - 10, 24 - 30
18	12 - 24	1 - 11, 25 - 30
19	13 - 25	1 - 12, 26 - 30
20	14 - 26	1 - 13, 27 - 30
21	15 - 27	1 - 14, 28 - 30
22	16 - 28	1 - 15, 29 - 30
23	17 - 29	1 - 16, 30
24	18 - 30	1 - 17
25	1, 19 - 30	2 - 18
26	1 - 2, 20 - 30	3 - 19
27	1 - 3, 21 - 30	4 - 20
28	1 - 4, 22 - 30	5 - 21
29	1 - 5, 23 - 30	6 - 22
30	1 - 6, 24 - 30	7 - 23

Note: This guide is for 30-day months. Actual assignment based on actual length of months.

**Appendix Table 2: Demographics and Food Acquisition by Household (HH) Type**

	(1)	(2)	(3)		
	SNAP HH	Non-SNAP HH: < 185% Poverty Guideline	Non-SNAP HH: > 185% Poverty Guideline	N	
Age (years) of reference person	45.91	52.93	49.75	4818	a b
HH reference person is married	0.22	0.30	0.52	4823	a b
HH reference person has some college education	0.10	0.10	0.15	4823	b
HH reference person has 4-year degree or more education	0.17	0.21	0.41	4823	b
Number of people at residence excluding guests	2.90	2.17	2.39	4826	a b
Number of children in HH	1.06	0.58	0.55	4823	a b
Number of adults in HH	1.66	1.17	1.54	4823	a b
Number of seniors in HH	0.21	0.43	0.31	4823	a b
Number of workers in HH	0.75	0.68	1.32	4825	b
Number of adult workers in HH	0.72	0.64	1.22	4823	b
Number of adult non-workers in HH	0.95	0.53	0.31	4823	a b
Someone in HH is Black	0.32	0.18	0.10	4821	a b
Someone in HH is nonwhite (other than Black)	0.17	0.13	0.13	4821	a b
Rural tract	0.28	0.33	0.35	4826	b
Household does not reside in a CBSA	0.14	0.15	0.13	4826	
HH has a car or access to a car when needed	0.69	0.82	0.96	4826	a b
Monthly SNAP amount last received in past 12 months (\$)	252.58	210.26†	221.73†	1807	
Anyone in HH receiving benefits from WIC	0.15	0.04	0.02	4825	a b
# of supermarkets/superstores within 0.5 mi of HH	0.54	0.54	0.41	4826	b
Miles to nearest SNAP-authorized supermarket/superstore	1.90	2.26	2.22	4826	
Shop at primary store b/c has low prices/good value	0.60	0.57	0.50	4824	b
Shop at primary store b/c has good quality food	0.18	0.16	0.23	4824	
Shop at primary store b/c has good variety of general foods	0.20	0.23	0.27	4824	b
Total spending at all events (\$)	127.91	106.91	186.34	4799	a b
Total spending on food (\$)	107.68	87.91	155.13	4799	a b
Total spending at FAH events (\$)	95.32	72.91	117.49	4799	a b
Total spending on FAH food items (\$)‡	75.53	53.93	86.35	4792	a b
Total FAFH spending (\$)	32.59	34.00	68.85	4799	b
Share of spending at FAH events	0.71	0.68	0.61	4662	b
Share of food spending on FAH items	0.66	0.62	0.55	4617	b
Total trips for FAH events	3.50	3.06	3.23	4799	a b
Total FAH and FAFH events	10.43	8.94	11.81	4799	a b
Number of days with at least one FAH event	2.55	2.35	2.48	4799	a
Number of FoodAPS households	1581	1197	2048	4826	

Notes: Source: Author's calculations from FoodAPS.

*a* indicates a statistically significant difference at the 5% level in means of characteristics between SNAP households and Non-SNAP households below 185% of the poverty guideline.

*b* indicates a statistically significant difference at the 5% level in means of characteristics between SNAP households and Non-SNAP households above 185% of the poverty guideline.

† The SNAP households column (i.e., column 1) includes only those households receiving SNAP benefits within 30 days of the survey. This row, however, reports the amount of SNAP last received by any household who received SNAP within the past 12 months.

‡ Households report both the total event-level spending, inclusive of nonfood items and taxes, and spending on each item. This total is the sum of spending on each item and excludes nonfood items and taxes.

**Appendix Table 3: Income by Household Type**

	(1)	(2)	(3)		
	SNAP HH	Non-SNAP HH: < 185% Poverty Guideline	Non-SNAP HH: > 185% Poverty Guideline	N	
<i>Unconditional Averages</i>					
Monthly Household average income (\$)	2051.57	1622.79	6785.36	4826	a b
Percent of poverty guideline	128.16	122.73	498.03	4826	b
HH has earned income	0.52	0.49	0.83	4826	b
HH has unearned income	0.65	0.58	0.41	4826	b
HH has unemployment income	0.06	0.06	0.04	4826	
HH has retirement/disability income	0.50	0.51	0.35	4826	b
HH has transfer income	0.18	0.04	0.04	4826	a b
Monthly HH earned income (\$)	1253.43	894.41	5355.23	4826	a b
Monthly HH unearned income (\$)	747.43	657.07	1198.03	4826	b
Monthly HH unemployment income (\$)	66.68	63.34	53.32	4826	
Monthly HH retirement/disability income (\$)	589.3	573.1	1118.81	4826	b
Monthly HH transfer income (\$)	91.45	20.63	25.91	4826	a b
Share of total HH income from earnings	0.45	0.44	0.74	4728	b
Share of total HH income from unearned sources	0.52	0.50	0.22	4728	b
Share of total HH income from unemployment	0.04	0.04	0.01	4728	b
Share of total HH income from retirement/disability	0.40	0.44	0.21	4728	b
Share of total HH income from transfers	0.07	0.01	0.01	4728	a b
<i>Levels and Shares of Income Conditional of Receipt of a Specified Type of Income</i>					
HH earned income (\$)	2415.39	1826.8	6418.94	3412	a b
HH unearned income (\$)	1153.96	1124.19	2931.4	2378	b
HH unemployment income (\$)	1032.69	1111.22	1281.74	254	
HH retirement/disability income (\$)	1172.06	1116.11	3216.33	1893	b
HH transfer income (\$)	506.11	506.33	705.45	492	
Share of total HH income from earnings	0.81	0.88	0.89	3412	a b
Share of total HH income from unearned sources	0.75	0.83	0.54	2378	a b
Share of total HH income from unemployment	0.58	0.75	0.29	254	a b
Share of total HH income from retirement/disability	0.76	0.84	0.59	1893	a b
Share of total HH income from transfers	0.37	0.30	0.14	492	b

Notes: Source: Authors' estimates using FoodAPS data.

*a* indicates a statistically significant difference at the 5% level in means of characteristics between SNAP households and Non-SNAP households below 185% of the poverty guideline.

*b* indicates a statistically significant difference at the 5% level in means of characteristics between SNAP households and Non-SNAP households above 185% of the poverty guideline.

**Appendix Table 4: Average Characteristics and Behaviors Across the Benefit Month**

	Beginning of SNAP Month	End of SNAP Month	Difference	N
Age (years) of reference person	44.42	47.12	-2.70* ( 1.54)	1304
HH ref person is married	0.21	0.26	-0.04 ( 0.03)	1303
HH ref person has some college education	0.11	0.10	0.00 ( 0.03)	1303
HH ref person has 4-year degree or more education	0.19	0.17	0.02 ( 0.02)	1303
Number of adults in HH	1.77	1.67	0.10 ( 0.08)	1304
Number of workers in HH	0.83	0.73	0.10 ( 0.08)	1304
Number of adult workers in HH	0.79	0.69	0.11 ( 0.07)	1304
Number of adult non-workers in HH	0.97	0.98	-0.00 ( 0.06)	1304
Someone in HH is Black	0.29	0.27	0.02 ( 0.03)	1303
Someone in HH is nonwhite (other than Black)	0.19	0.17	0.01 ( 0.03)	1303

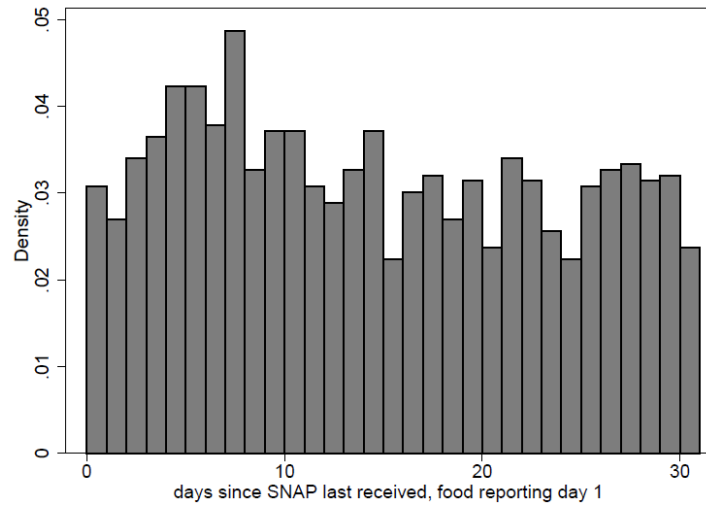
Source: Authors' estimates using FoodAPS data.

Notes: 1,548 SNAP households had a nonmissing date of last SNAP receipt and reported on shopping including confirming no shopping occurrences. Of those households, 1,304 shopped at least once during the survey week.

Appendix Table 5. List of commonly bought, first half common, and not common USDA 2-digit food categories.

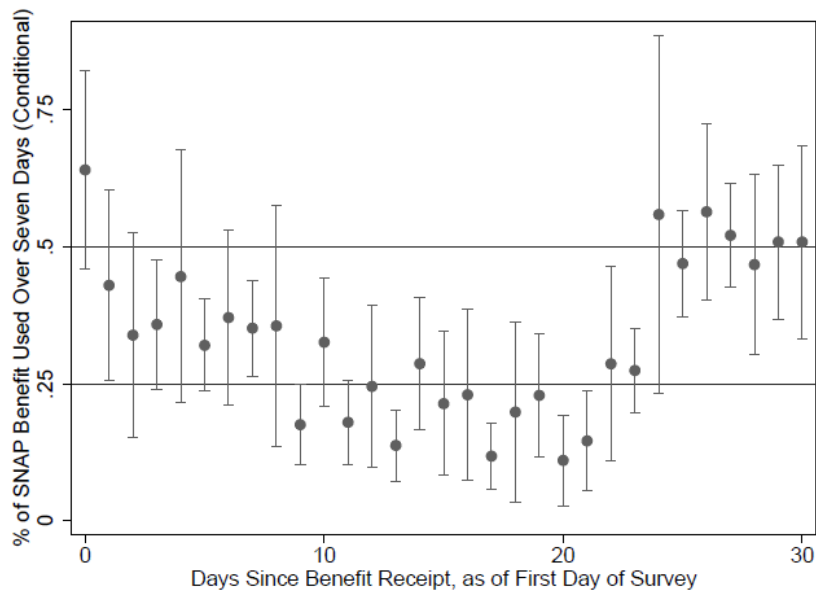
Commonly bought throughout benefit month		More commonly bought at the beginning of the benefit month		Not Commonly Bought	
10	Milk	22	Poultry	12	Flavored milk
16	Cheese	24	Seafood	14	Dairy drinks and substitutes
20	Meats	28	Plant-based protein foods	18	Yogurt
26	Cold cuts and cured meats	30	Mixed dishes--meat, poultry, seafood	25	Eggs
42	Breads, rolls, tortillas	32	Mixed dishes--grain-based	34	Mixed dishes--Asian
50	Savory snacks	36	Mixed dishes--pizza	35	Mixed dishes--Mexican
55	Sweet bakery products	40	Rice, pasta, cooked grains	37	Mixed dishes--sandwiches (single code)
60	Fruits	46	Ready-to-eat cereals	38	Mixed dishes--soups
64	Vegetables, excluding potatoes	52	Crackers	44	Quick breads and bread products
72	Sweetened beverages	57	Candy and chocolates	48	Cooked cereals
80	Fats and oils	58	Ice cream, pudding, other desserts	54	Snack/meal bars
84	Condiments and sauces	68	White potatoes	70	100% juice
		88	Sugar, jams, syrups	71	Diet beverages
				73	Coffee and tea
				75	Alcoholic beverages
				77	Plain water
				78	Flavored or enhanced water
				90	Baby foods
				92	Baby juice and water
				94	Infant formulas
				98	Protein and nutritional powders
				99	Not included in a category

Appendix Figure 1:  
 Distribution of Days Between Last Benefit Receipt and First Day of FoodAPS Survey



Note: Authors' calculations using data from the National Food Acquisition and Purchase Survey.

Appendix Figure 2: % of SNAP Benefits Used over Seven Survey Days  
 (Conditional on having positive spending)



Note: Authors' calculations using data from the National Food Acquisition and Purchase Survey.

## APPENDIX B: USDA Food Categories

Each food item that a FoodAPS household reports is matched to a USDA 8-digit foodcode and its associated nutrition information.<sup>i</sup> Foodcodes are categorized into food categories by USDA's Agricultural Research Service (USDA/ARS, 2015). Numeric codes associated with food categories are 4 digits long, where the first digit indicates the broadest category (such as 1 for dairy products), the first two digits indicate a subcategory (such as 10 = white milks) and the full four-digit code provides the most detailed information of the products in that category (such as 1002 = whole milk). There are a total of 9 one-digit categories, 48 two-digit categories, and 152 four-digit categories (including one code that indicates all items not otherwise sorted). In addition, the Economic Research Service classifies items into 79 groups (ERS food groups) related to main food group, form (e.g., fresh, frozen, canned), and level of preparation (e.g., shelf-stable and frozen ready-to-cook prepared foods).

### References

U.S. Department of Agriculture, Agricultural Research Service. (2015). *What We Eat in America Food Categories 2011-2012*. Available: [www.ars.usda.gov/nea/bhnrc/fsrg](http://www.ars.usda.gov/nea/bhnrc/fsrg)

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<sup>i</sup> The first digit in a foodcode identifies the major commodity associated with the food, such as 1 for milk and additional digits describe the food (e.g., 11511100 = 'Milk, chocolate, whole-milk-based', 21500000 = 'Ground beef, raw', and 57123000 = 'Cereal (General Mills cheerios)').