

About the Survey

FoodDS tracks consumer preferences and sentiments on the safety, quality, and price of food at home and away from home with particular focus on meat demand. FoodDS is a monthly on-line survey with a sample size of at least 1,000 individuals, weighted to match the US population in terms of age, gender, education and region of residence. See the [online technical document](#) for more details.

OVERALL COMMENTS

The Food Demand Survey (FoodDS) started in May 2013 and has been delivered every month for three years. The following information is a summary from the past year (May 2015 to April 2016). The previous year's summary can be found on-line in the [Volume 1: First Year Summary](#) or [Volume 2: Second Year Summary](#).

MEAT DEMAND

Table 1: Willingness-to-Pay

Willingness-to-Pay	Steak	Chicken Breast	Hamburger	Pork Chop	Deli Ham	Chicken Wing	Beans and Rice	Pasta
May 2014	\$6.35	\$4.63	\$4.06	\$3.51	\$2.29	\$2.01	\$2.08	\$3.13
June 2014	\$7.52	\$5.35	\$4.50	\$4.14	\$2.89	\$2.73	\$2.62	\$3.82
July 2014	\$7.00	\$5.00	\$4.30	\$3.71	\$2.48	\$2.18	\$1.80	\$2.98
August 2014	\$7.01	\$5.05	\$4.32	\$4.16	\$2.68	\$2.10	\$2.08	\$3.36
September 2014	\$7.18	\$5.06	\$4.48	\$4.01	\$2.44	\$2.10	\$1.90	\$3.45
October 2014	\$7.05	\$4.88	\$4.25	\$3.69	\$2.37	\$2.21	\$2.11	\$2.85
November 2014	\$7.00	\$5.16	\$4.62	\$4.02	\$2.56	\$2.42	\$2.20	\$3.48
December 2014	\$7.80	\$5.02	\$4.49	\$4.08	\$2.67	\$2.52	\$2.35	\$3.79
January 2015	\$7.28	\$5.09	\$4.14	\$4.04	\$2.41	\$2.55	\$2.33	\$3.25
February 2015	\$7.92	\$5.05	\$4.54	\$3.81	\$2.78	\$2.23	\$2.31	\$2.97
March 2015	\$7.89	\$5.47	\$4.61	\$4.25	\$2.79	\$2.29	\$2.82	\$3.55
April 2015	\$8.02	\$5.59	\$4.46	\$3.97	\$2.51	\$2.42	\$2.33	\$3.61
May 2015	\$7.52	\$5.36	\$4.70	\$4.19	\$2.47	\$2.23	\$2.04	\$3.49
June 2015	\$7.73	\$5.66	\$4.22	\$3.79	\$2.50	\$2.45	\$2.30	\$2.87
July 2015	\$7.12	\$5.03	\$4.23	\$3.59	\$2.20	\$2.15	\$1.72	\$2.59
August 2015	\$8.03	\$5.81	\$4.93	\$4.42	\$3.18	\$2.92	\$3.07	\$3.97
September 2015	\$7.83	\$5.70	\$4.35	\$3.74	\$2.51	\$2.32	\$1.90	\$3.30
October 2015	\$6.60	\$4.96	\$4.10	\$3.44	\$1.70	\$1.76	\$1.06	\$2.63
November 2015	\$7.06	\$5.44	\$4.15	\$3.82	\$1.98	\$2.45	\$2.04	\$2.77
December 2015	\$7.63	\$5.52	\$4.51	\$3.85	\$2.83	\$2.45	\$2.66	\$3.80
January 2016	\$7.43	\$5.34	\$4.36	\$3.94	\$2.67	\$2.43	\$2.50	\$3.59
February 2016	\$7.39	\$5.36	\$4.68	\$4.20	\$2.65	\$2.27	\$2.54	\$3.54
March 2016	\$7.76	\$5.53	\$4.52	\$4.02	\$2.45	\$2.79	\$3.10	\$3.51
April 2016	\$7.47	\$5.29	\$4.09	\$3.94	\$2.33	\$2.76	\$3.07	\$3.31

Willingness-to-pay (WTP) for two beef, chicken and pork products, in addition to two non-meat items, was calculated each month since the beginning of FoodS. WTP for each food item over the course of the past year is shown in the first table. WTP for each product in each month is reported as an index value set relative to May 2013. For example, the WTP index for chicken wings in April 2016 was 123.7, meaning WTP in April 2016 was $(123.7 - 100 = 23.7)$ 23.7% higher than in May 2015. Figures 2-4 reveal that WTP for beef, pork, and chicken have generally been lower this year compared to last and were highest during year two of the FoodS survey.

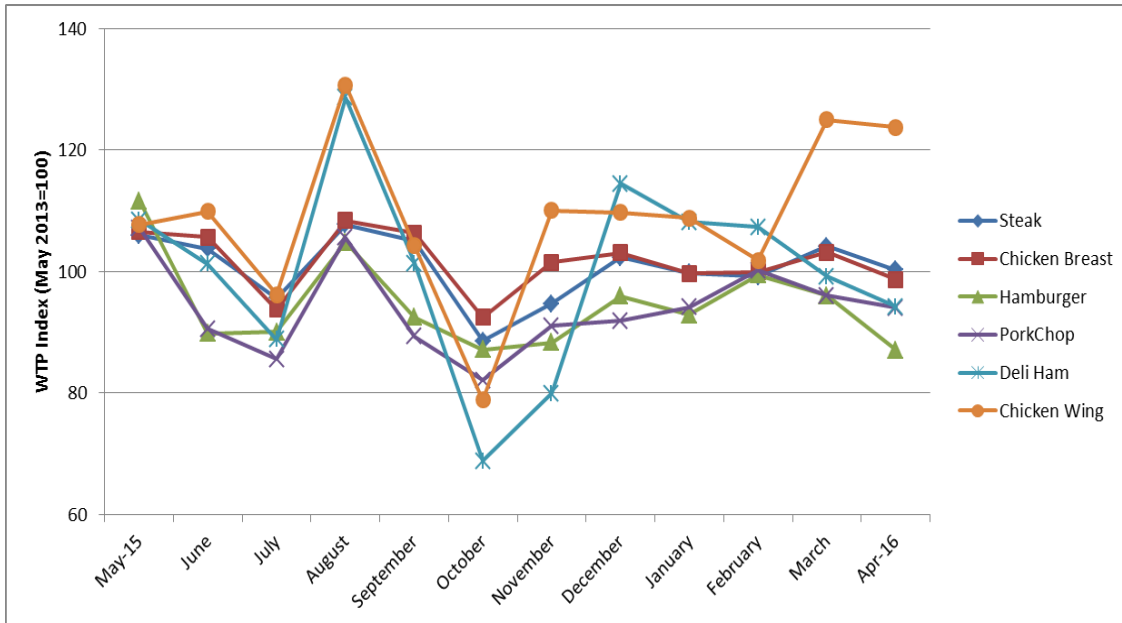


Figure 1: Demand indices for six meat products (May 2013 = 100)

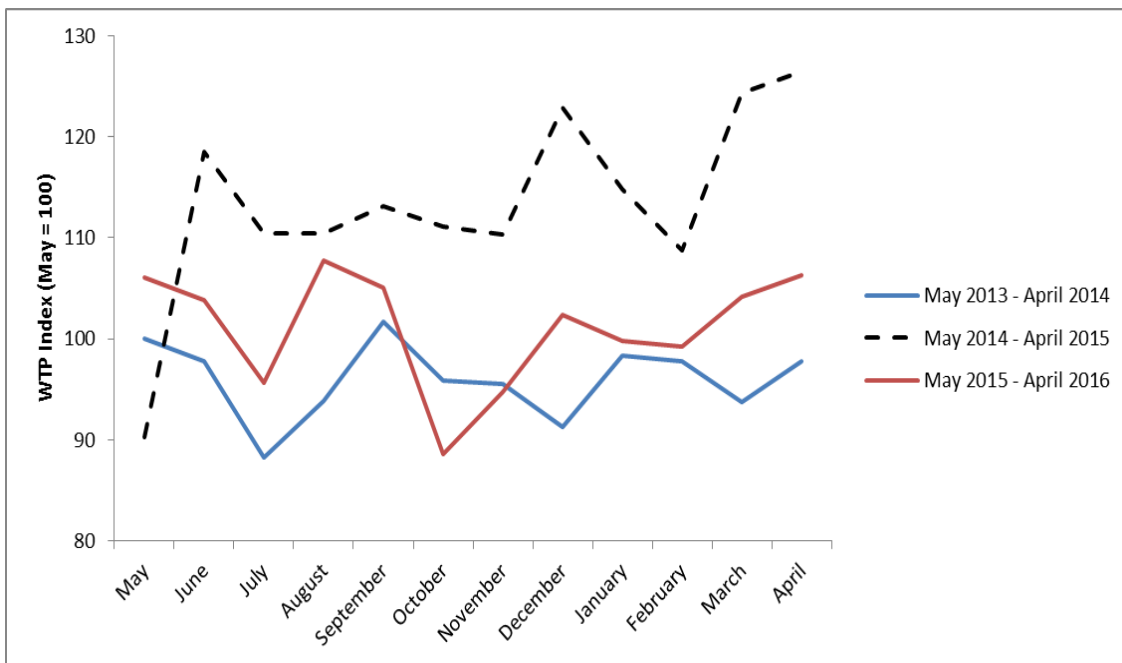


Figure 2: Demand indices for steak over the past two years (May 2013 = 100)

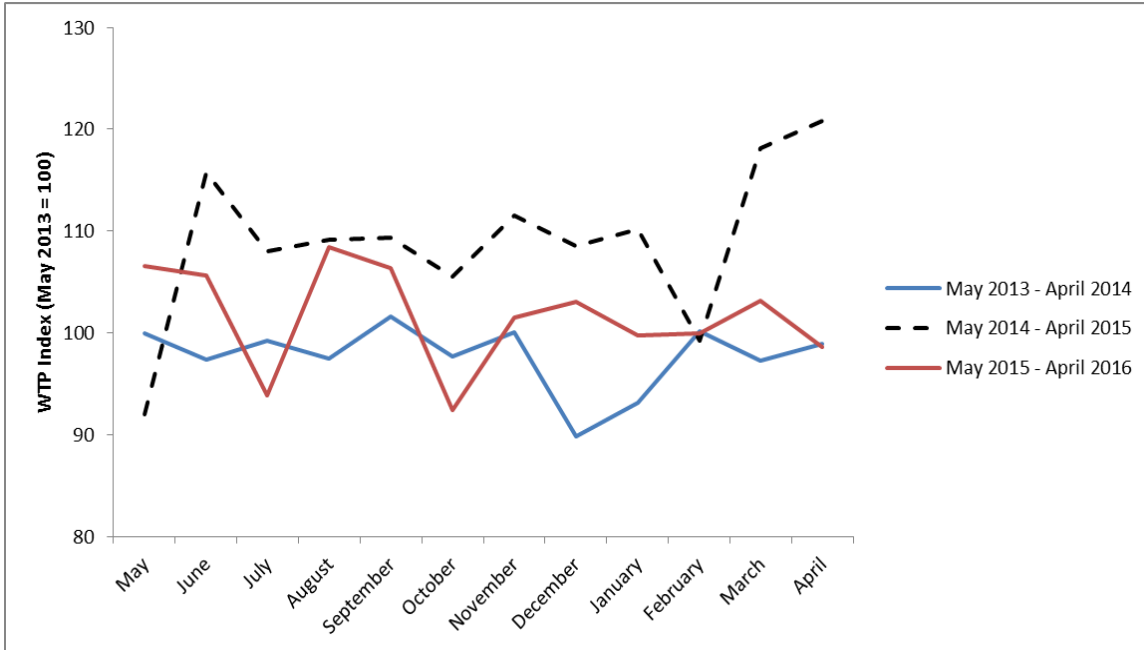


Figure 3: Demand indices for chicken breast over the past two years (May 2013 = 100)

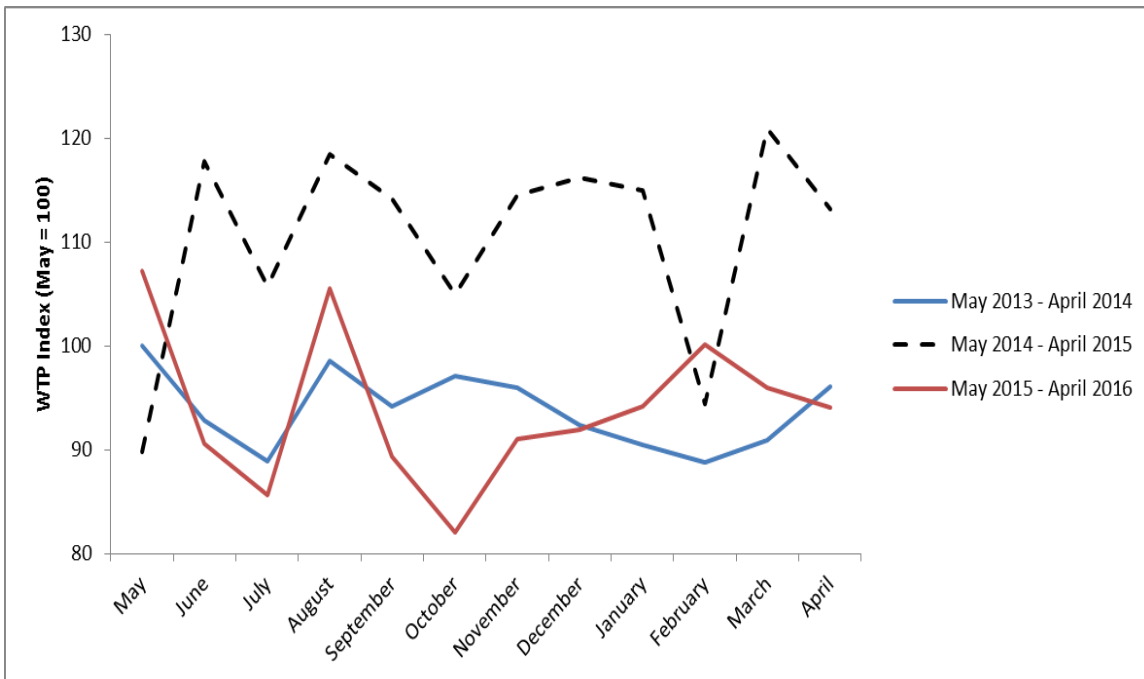


Figure 4: Demand indices for pork chops over the past two years (May 2013 = 100)

FOOD EXPENDITURES

At home food-grocery expenditures reached a low of \$93.18/week in June 2015, and a high of \$98.96/week in August 2015. Consumers reported spending the least on food away from home in January 2016 at \$49.91/week and the highest in October 2015 at \$56.11/week. Consumers continually reported planning to spend less money away from home throughout the course of the survey, although, as table 2 shows, they frequently do not follow through with those plans.

Table 2: Current and predicted food expenditures for at home and away from home food consumption.

	Current weekly at home	Current weekly away from home	Anticipated change in at home in next 2 weeks	Anticipated change away from home in next 2 weeks
May 2015	\$96.32	\$53.23	-0.43%	-1.49%
June 2015	\$93.18	\$51.93	-0.51%	-1.47%
July 2015	\$94.74	\$52.03	-0.64%	-1.40%
August 2015	\$98.96	\$54.52	-0.64%	-1.32%
September 2015	\$97.56	\$53.65	-0.56%	-1.27%
October 2015	\$98.71	\$56.11	-0.42%	-1.37%
November 2015	\$95.54	\$53.39	0.72%	-1.59%
December 2015	\$94.72	\$49.95	0.93%	-1.05%
January 2016	\$97.48	\$49.91	-0.63%	-1.56%
February 2016	\$98.57	\$51.00	-0.30%	-1.44%
March 2016	\$98.51	\$52.58	-0.28%	-1.22%
April 2016	\$97.17	\$55.43	-0.50%	-1.22%



Consumers expected to see higher meat prices each month, especially for beef, although the extent of these expectations varied across months, reaching a high for beef, chicken, and pork in June 2015. Generally expectations of price increases have been lower this year than last. Consumers reported that they planned to buy more chicken and less pork in most months.

Table 3: Future Consumer Expenditures. Values reported are the differences in percent of consumers agreeing and disagreeing (%) with each statement.

	I plan to buy more chicken	I plan to buy more beef	I plan to buy more pork	I plan to eat out more	I expect higher beef prices	I expect higher chicken prices	I expect higher pork prices
May 2015	33.5	1.45	-1.33	-36.47	33	21.52	19.56
June 2015	33.87	-2.78	-4.48	-32.22	34.12	26.79	20.54
July 2015	27.97	-3.75	-7.27	-33.73	33.33	23.55	20.07
August 2015	27.6	-4.08	-9.46	-32.44	28.17	18.96	16.55
September 2015	26.96	-0.76	-7.15	-33.99	27.43	18.46	15.52
October 2015	31.70	-4.51	-5.58	-31.72	22.60	11.33	11.24
November 2015	26.59	-5.01	-8.38	-32.31	26.31	14.85	12.77
December 2015	31.21	-0.07	-2.44	-23.12	29.95	14.20	17.70
January 2016	26.73	-3.44	-7.25	-41.44	24.20	11.80	14.75
February 2016	29.24	-3.58	-6.65	-38.21	19.47	1.56	3.98
March 2016	29.32	1.95	-2.53	-30.38	16.82	3.67	3.52
April 2016	24.28	-4.71	-9.01	-29.97	23.54	12.53	12.77

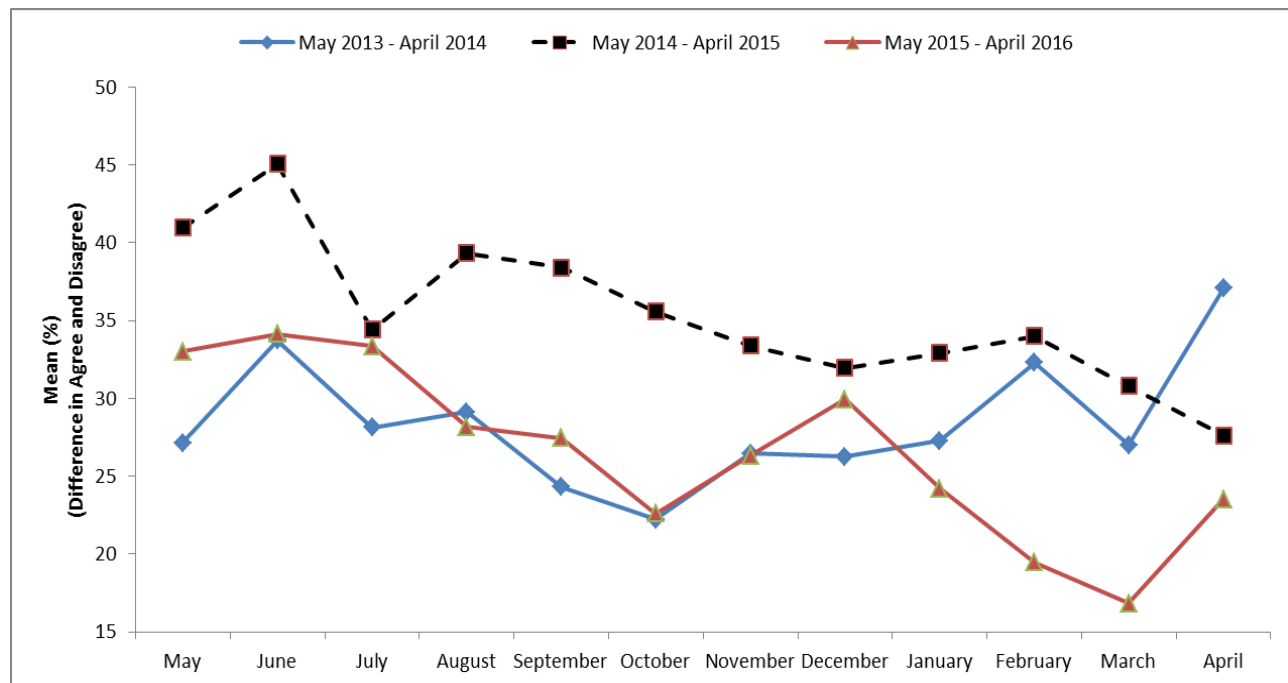


Figure 5: Future Price Expectations for Beef. Difference in percent agree and disagree that beef prices will rise.

AWARENESS & CONCERN TRACKING

Awareness and concern for 18 food issues have been tracked over the course of the survey. Cancer and meat concern was added in April 2016. GMOs, Salmonella, *E. coli*, and hormones have remained the top four issues consumers report hearing most about in the news. As shown in Figure 6, a significant increase in awareness was seen for *E. coli* from November 2015 through December 2015 and a decrease in hormones from December 2015 to January 2016. GMOs, Salmonella, *E. coli*, and hormones also remained as the issues of most concern among consumers in the past year. Concern for all food issues rose in December 2015 and fell in January 2016, as shown in Table 5.

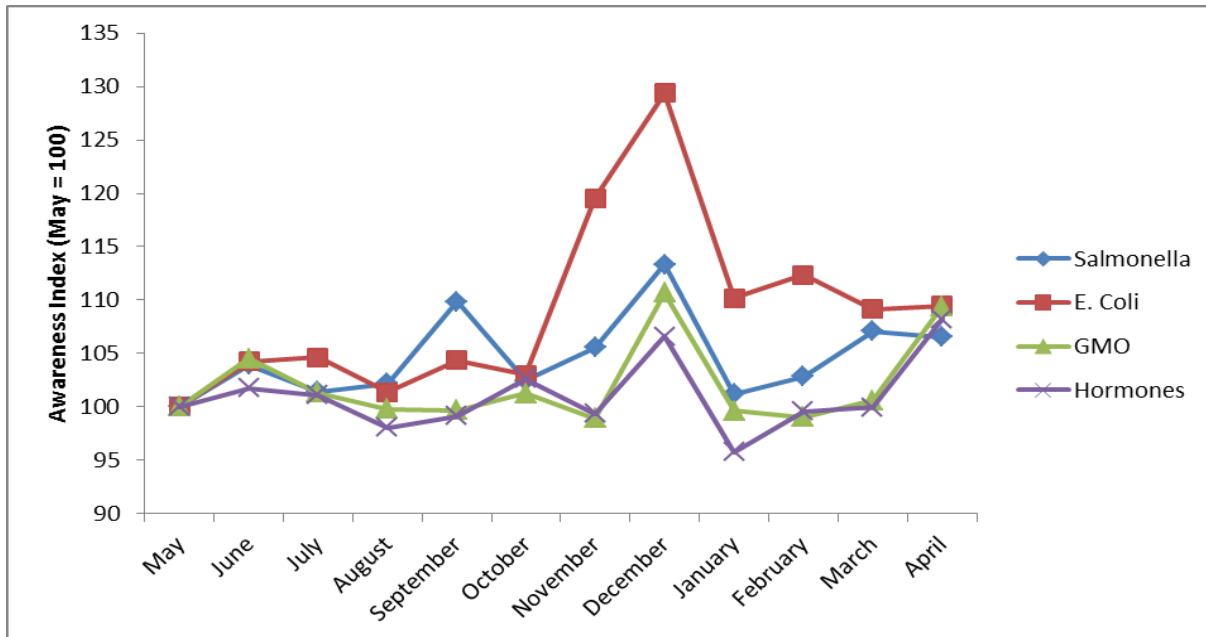


Figure 6: Awareness of four issues in the news (May 2014 = 100)

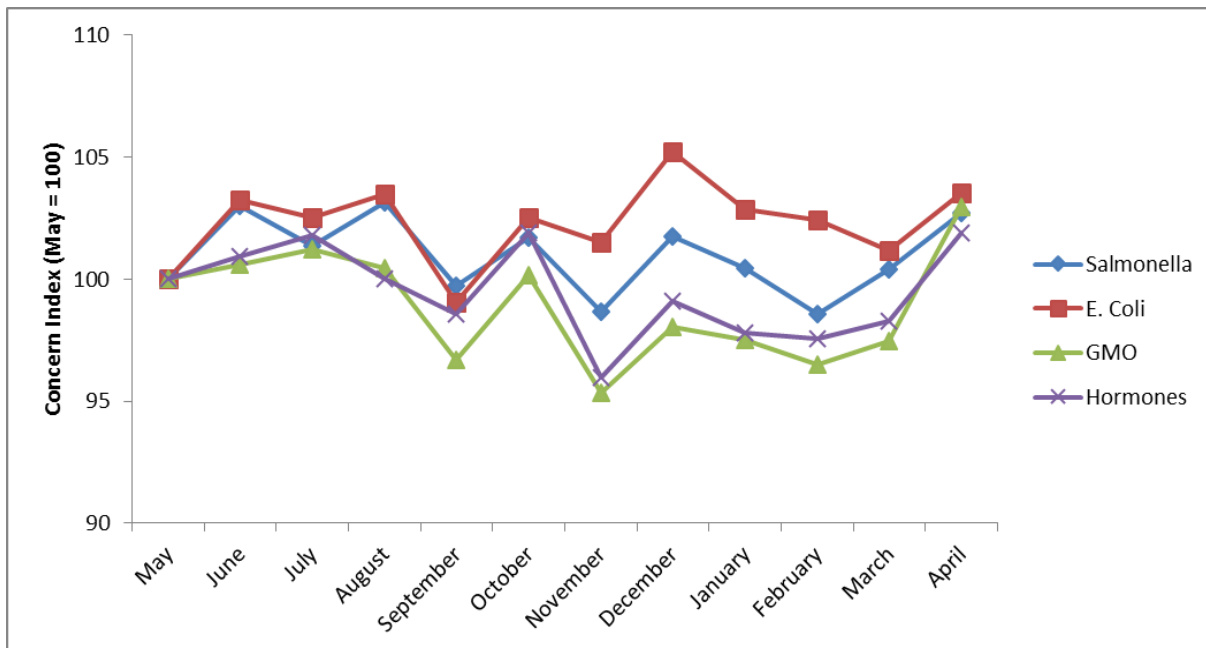


Figure 7: Concern for four issues in the news (May 2014 = 100)

Table 4: Awareness of food issues. Reported values are the mean response to the question “Overall, how much have you heard or read about each of the following topics in the past two weeks”, where 1 = nothing, 3= a moderate amount, and 5 = a great deal.

	May 2015	June 2015	July 2015	August 2015	September 2015	October 2015	November 2015	December 2015	January 2016	February 2016	March 2016	April 2016
Salmonella	2.27	2.36	2.30	2.32	2.49	2.32	2.39	2.57	2.29	2.33	2.43	2.41
E. Coli	2.23	2.32	2.33	2.26	2.33	2.30	2.66	2.88	2.46	2.51	2.43	2.44
GMO	2.31	2.42	2.35	2.31	2.31	2.34	2.29	2.56	2.31	2.29	2.33	2.53
Hormones	2.19	2.23	2.22	2.15	2.17	2.25	2.18	2.34	2.10	2.18	2.19	2.37
Farm Animal Welfare	2.11	2.20	2.19	2.10	2.16	2.13	2.08	2.22	2.05	2.00	2.12	2.29
Antibiotics	2.16	2.25	2.23	2.18	2.10	2.20	2.14	2.31	2.11	2.17	2.20	2.32
Bird Flu	2.19	2.42	2.29	2.22	2.13	2.08	2.04	2.13	1.90	2.02	2.00	2.11
Swine Flu	2.02	2.13	2.04	2.03	2.07	2.01	1.93	2.08	1.91	1.92	1.98	2.10
Mad cow	1.96	2.04	2.02	1.94	2.00	1.99	1.88	2.02	1.85	1.92	2.97	2.06
Pink Slime	1.87	1.94	1.93	1.81	1.85	1.85	1.85	1.88	1.75	1.78	1.80	1.96
Cloning	1.73	1.80	1.85	1.76	1.79	1.82	1.73	1.85	1.71	1.69	1.73	1.93
LFTB	1.83	1.88	1.87	1.80	1.83	1.85	1.80	1.89	1.72	1.71	1.81	1.91
Gestation Crates	1.66	1.73	1.77	1.62	1.74	1.74	1.63	1.74	1.62	1.58	1.60	1.73
Battery Cages	1.62	1.73	1.77	1.66	1.75	1.74	1.65	1.76	1.60	1.57	1.67	1.76
BSE	1.57	1.65	1.68	1.54	1.62	1.62	1.52	1.65	1.53	1.49	1.54	1.65
Greenhouse Gas	1.95	2.03	1.96	1.90	1.91	1.97	1.93	2.08	1.91	1.87	1.90	2.05
Beta-Agonist	1.55	1.64	1.69	1.57	1.64	1.63	1.55	1.65	1.54	1.49	1.56	1.66
Cancer and Meat Consumption	-	-	-	-	-	-	-	-	-	-	-	2.16

Table 5: Concern for food issues. Reported values are the mean response to the question “How concerned are you that the following pose a health hazard in the food that you eat in the next two weeks”, where 1 = very unconcerned, 3= neither concerned nor unconcerned, and 5 = very concerned.

	May 2015	June 2015	July 2015	August 2015	September 2015	October 2015	November 2015	December 2015	January 2016	February 2016	March 2016	April 2016
Salmonella	3.37	3.47	3.41	3.47	3.36	3.42	3.32	3.43	3.38	3.32	3.38	3.46
E. Coli	3.33	3.44	3.42	3.45	3.30	3.42	3.38	3.51	3.43	3.42	3.37	3.45
GMO	3.24	3.25	3.27	3.25	3.13	3.24	3.08	3.17	3.15	3.12	3.15	3.33
Hormones	3.29	3.32	3.35	3.29	3.24	3.35	3.16	3.26	3.22	3.21	3.23	3.35
Farm Animal Welfare	3.24	3.31	3.33	3.26	3.22	3.27	3.14	3.19	3.24	3.16	3.17	3.34
Antibiotics	3.25	3.32	3.33	3.29	3.21	3.33	3.20	3.28	3.24	3.20	3.23	3.34
Bird Flu	3.10	3.24	3.20	3.18	3.11	3.12	2.96	3.00	2.95	2.92	2.93	3.09
Swine Flu	3.02	3.17	3.12	3.13	3.05	3.06	2.92	2.94	2.97	2.93	2.95	3.07
Mad cow	3.00	3.14	3.09	3.11	2.98	3.06	2.90	2.95	2.96	2.92	2.97	3.07
Pink Slime	3.02	3.11	3.07	3.12	3.00	3.06	2.93	2.99	2.97	2.86	2.94	3.13
Cloning	3.00	3.04	3.02	3.07	2.93	3.07	2.89	2.96	2.96	2.91	2.92	3.04
LFTB	2.86	2.87	2.92	2.86	2.88	2.88	2.75	2.80	2.84	2.72	2.83	2.94
Gestation Crates	2.87	2.93	2.93	2.94	2.90	2.93	2.79	2.83	2.84	2.77	2.86	2.95
Battery Cages	2.87	2.96	2.96	2.97	2.92	2.97	2.77	2.86	2.86	2.78	2.88	2.96
BSE	2.80	2.88	2.88	2.84	2.82	2.88	2.76	2.79	2.81	2.76	2.82	2.88
Greenhouse Gas	2.88	2.97	2.98	2.92	2.94	2.93	2.78	2.85	2.82	2.85	2.85	2.96
Beta-agonist	2.78	2.82	2.86	2.86	2.85	2.84	2.69	2.78	2.77	2.74	2.76	2.90
Cancer and Meat Consumption	-	-	-	-	-	-	-	-	-	-	-	3.25

GENERAL FOOD VALUES

Taste, safety, price, and nutrition have remained consumer’s top four values throughout the course of the FoodS survey, while fairness and novelty have remained the values of least concern. Consumers reported that finding affordable foods to fit with-in their budget was their main challenge each month. Consumers reported that finding foods their children will eat was their least difficult challenge each month. The challenge of losing weight saw the largest increase in March.

Table 6: Consumer Values. Respondents were asked to choose their four “most important” and four “least important” food-related values. A scale of importance was created by calculating the proportion of times a food value appeared most important minus the times it appeared least important. A higher number implies a greater importance to the consumer.

	Taste	Safety	Price	Nutrition	Appearance	Animal Welfare	Natural-ness	Origin	Environment	Convenience	Fairness	Novelty
May 2015	0.65	0.55	0.46	0.37	0.08	-0.11	-0.2	-0.27	-0.32	-0.25	-0.33	-0.63
June 2015	0.6	0.52	0.43	0.4	0.02	-0.11	-0.10	-0.23	-0.3	-0.28	-0.3	-0.65
July 2015	0.6	0.55	0.42	0.41	0.06	-0.1	-0.18	-0.23	-0.28	-0.28	-0.31	-0.68
August 2015	0.60	0.54	0.47	0.49	0.01	-0.10	-0.10	-0.32	-0.24	-0.31	-0.33	-0.71
September 2015	0.65	0.58	0.46	0.45	-0.01	-0.10	-0.11	-0.28	-0.30	-0.32	-0.35	-0.68
October 2015	0.63	0.53	0.43	0.41	0.07	-0.11	-0.15	-0.23	-0.30	-0.26	-0.35	-0.66
November 2015	0.66	0.53	0.45	0.41	0.04	-0.08	-0.20	-0.32	-0.26	-0.26	-0.29	-0.67
December 2015	0.69	0.59	0.49	0.40	0.08	-0.18	-0.17	-0.31	-0.32	-0.23	-0.37	-0.68
January 2016	0.68	0.58	0.52	0.39	-0.04	-0.13	-0.19	-0.25	-0.29	-0.25	-0.33	-0.69
February 2016	0.67	0.56	0.50	0.37	0.03	-0.12	-0.21	-0.27	-0.28	-0.28	-0.31	-0.67
March 2016	0.62	0.55	0.47	0.44	0.04	-0.12	-0.10	-0.26	-0.32	-0.34	-0.33	-0.67
April 2016	0.61	0.54	0.41	0.37	-0.03	-0.07	-0.11	-0.30	-0.25	-0.27	-0.26	-0.64

Table 7: Consumer Challenges. Food-related challenges were ranked on a scaled from 1 – 7, where 7 = most challenging and 1 = least challenging; reported values are the mean ranks.

	Finding affordable foods	Avoiding certain nutrients or ingredients	Avoiding pesticides, added hormones, antibiotics	Losing weight	Finding convenient alternatives	Finding time to cook at home	Finding foods my children will eat
May 2015	4.9	4.22	4.11	4.12	4.08	3.87	2.7
June 2015	4.92	4.29	4.11	4.09	4.08	3.76	2.76
July 2015	4.93	4.26	4.05	4.05	4.13	3.89	2.68
August 2015	4.74	4.34	4.18	4.05	3.97	3.94	2.78
September 2015	4.88	4.23	4.12	4.11	4.02	3.83	2.81
October 2015	4.86	4.17	4.11	4.02	4.07	3.89	2.87
November 2015	4.86	4.25	4.11	4.01	3.95	4.03	2.80
December 2015	4.88	4.32	3.92	4.10	3.96	4.14	2.69
January 2016	4.90	4.19	4.05	4.05	3.97	3.91	2.92
February 2016	4.87	4.17	4.09	4.03	4.14	3.99	2.71
March 2016	4.76	4.25	4.09	4.21	4.10	3.93	2.66
April 2016	4.84	4.28	4.10	4.03	4.04	3.76	2.95

OTHER CONSUMER CHARACTERISTICS

Each month, the percent of respondents who reported being on food stamps, being vegetarian or vegans, or have had food poisoning in the last month was calculated, and is reported in Figure 8. July 2016 had the highest frequency of food-stamp participants. April 2016 saw the largest percent of people who reported being vegetarian or vegan at 7.90%. Reported food poisoning was also highest in December 2015 at 7.24%.

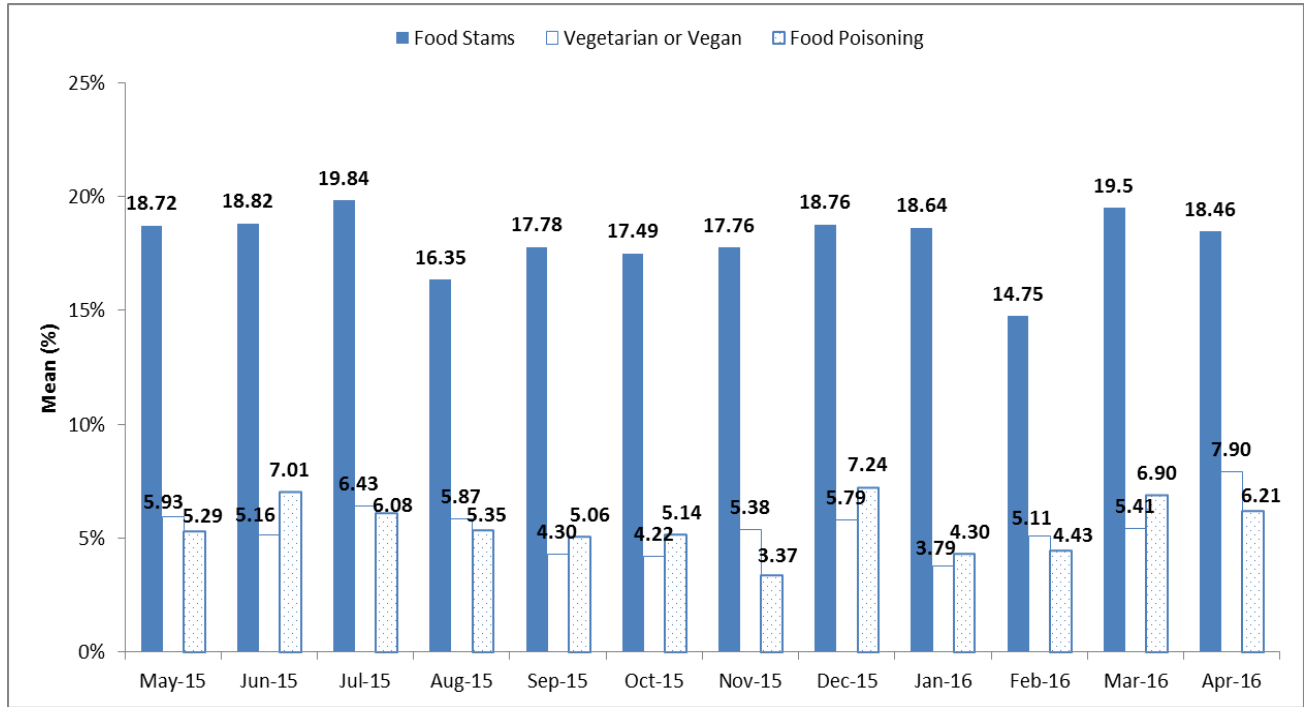


Figure 8: General consumer information covering food stamps, vegetarian or vegan preferences, or food poisoning. Calculated as a mean of the population (%)

AD HOC QUESTIONS

Each month three to five ad hoc questions were added to the survey. The following is a list of questions and topics that were covered.

- Consumer concern for avian influenza
- Labeling of genetically engineered food
- Life satisfaction of consumers
- Consumer’s beliefs on the state of food and agriculture
- Consumer knowledge on the number of genes affected by plant breeding techniques
- Consumer knowledge of meat cuts from various animals
- Antibiotic policies in animal products
- Support or opposition of genetically engineered food, crops, and livestock
- Consumer’s satisfaction with farmers, producers, and agriculture
- Standards for confining farm animals
- Consumer preferences for living conditions
- Consumer knowledge of carcinogenic agents
- Indicators of farm animal welfare
- Consumer perception of taste, health and safety
- Support for presidential candidates
- Consumer’s time spent doing food related activities
- Consumer perception of fresh, frozen, and canned fruits and vegetables