

In-Home Food Safety Behaviors and Consumer Education: Web Survey

OMB No. 0583-NEW

Supporting Statement

A. Justification

A.1. Circumstances Making Collection of Information Necessary

The U.S. Department of Agriculture’s (USDA’s) Food Safety and Inspection Service (FSIS) has been delegated the authority to exercise the functions of the Secretary of Agriculture (7 CFR 2.18, 2.53) as specified in the Federal Meat Inspection Act and the Poultry Products Inspection Act (21 U.S.C. 453 et. seq., 601 et seq.). FSIS protects the public by verifying that meat, poultry, and processed egg products are wholesome; not adulterated; and properly marked, labeled, and packaged.

FSIS’s Office of Public Affairs and Consumer Education (OPACE) ensures that all segments of the farm-to-table chain receive valuable food safety information. The consumer education programs developed by OPACE inform the public on how to safely handle, prepare, and store meat, poultry, and processed egg products to minimize incidence of foodborne illness. The FSIS 2017–2021 Strategic Plan addresses the need to conduct research to inform OPACE’s efforts to effectively communicate food safety information to consumers: “[t]he agency will continue to extend and expand [these] food safety messages ... [and] ... will conduct research on consumer adoption of safe food handling practices to inform the agency about meaningful ways to explain food safety risks to consumers.”

OPACE strives to continuously increase consumer knowledge of recommended food safety practices with the intent to improve food-handling behaviors at home. OPACE shares its messages through the *Food Safe Families* campaign (a cooperative

effort of USDA, Food and Drug Administration [FDA], and Centers for Disease Control and Prevention [CDC]); social media; AskKaren (an online database of frequently asked food safety questions); the FSIS web site; FoodSafety.gov (the cross-federal web site operated by FSIS, FDA, and CDC that the agency uses to promote safe food handling practices to consumers); the Meat and Poultry Hotline; publications; and events. These messages are focused on the four core food safety behaviors: clean, separate, cook, and chill.

By testing planned and tailoring existing communication programs and materials, FSIS can help ensure that it is effectively communicating with the public and working to improve consumer food safety practices. As part of OPACE's ongoing activities to develop and evaluate its public health education and communication activities, FSIS is requesting approval for a new information collection to conduct web-based surveys of consumers. Findings from the web surveys will provide information on how FSIS communication programs and materials affect consumer understanding of recommended safe food handling practices and insight into how to effectively inform consumers of recommended practices. The results of this exploratory research will be used to enhance communication programs and materials to improve consumers' food safety behaviors and help prevent foodborne illness. Additionally, this research will provide useful information for tracking progress toward the goals outlined in the FSIS 2017–2021 Strategic Plan.

FSIS has contracted with RTI International to conduct two iterations of a web-based survey. The first survey will be conducted in fiscal year (FY) 2019, and the second survey will be conducted in FY 2021. The supporting statement describes the topics and methods for the first survey and the survey materials, which are provided as appendices.

We will submit a memorandum that provides the research design and materials for the FY 2021 web survey before conducting the survey.

A.2. How, by Whom, and Purpose Information Is to Be Used

FSIS will use the findings from this exploratory study to address Objective 1.2.3 of the FSIS Fiscal Years 2017–2021 Strategic Plan (USDA, FSIS, 2016), which is to “increase public awareness of recalls, foodborne illness, and safe food handling practices.” This objective includes two measures: (1) “% increase in public awareness of safe food handling guidance and recalls through communication channels” and (2) “% increase of consumers identified who follow safe food handling behaviors.” The research findings will help inform the development of strategic communication and outreach efforts and evaluate the effect of these activities. By testing new consumer messaging and tailoring existing messaging, FSIS can help ensure that it is effectively communicating with the American public and promoting behavior change with the goals of increasing public awareness of foodborne illness and safe food handling practices and ultimately increasing consumer adherence to the recommended safe food handling behaviors of clean, separate, cook, and chill.

Table A-1 lists the topics that will be addressed in the first iteration of the survey and how OPACE plans to use the survey results (Appendix A provides the survey instrument). The topics for the second iteration have not been determined.

Table A-1. Topics and Planned Use of Results for First Iteration of the Survey

Topic	How OPACE Will Use the Survey Results
Preferences for receiving information on food safety	<ul style="list-style-type: none"> • Inform selection of delivery mechanisms for consumer outreach efforts
Awareness, use, and satisfaction with USDA’s Meat and Poultry (M&P) Hotline	<ul style="list-style-type: none"> • Evaluate response to USDA M&P Hotline • Assess response to likelihood of using USDA M&P hotline if operating hours extended • Identify preferences for connecting with USDA M&P hotline
Awareness, understanding, and use of USDA press releases on food recalls	<ul style="list-style-type: none"> • Assess recall fatigue (i.e., overexposure to messaging) • Evaluate understanding and usability of information provided in recall press releases to motivate action • Identify preferences for receiving information on recalls (e.g., delivery mode, frequency, topics)
Awareness, understanding, and use of government-provided information on foodborne illness outbreaks	<ul style="list-style-type: none"> • Assess fatigue to public health alerts of foodborne illness outbreaks • Determine preference for when information on outbreaks should be shared with consumers (limited vs. more information available on cause of outbreak)
Adherence to recommended food safety practices when grilling meat, poultry, or seafood at home	<ul style="list-style-type: none"> • Inform OPACE messaging on how to safely grill meat, poultry, and seafood
Adherence to recommended food safety practices when serving food at gatherings and parties	<ul style="list-style-type: none"> • Inform OPACE messaging on how to safely serve hot and cold foods at gatherings and parties
Personal or household experience with foodborne illness	<ul style="list-style-type: none"> • Characterize response to foodborne illness • Investigate whether there is a relationship between experiencing foodborne illness and food safety behaviors

Each iteration of the survey will collect information from 2,400 randomly selected English-speaking adult members of a web-enabled research panel referred to as the KnowledgePanel maintained by Ipsos (<https://www.ipsos.com/en-us/solution/knowledgepanel>).¹ A random sample of individuals will be selected from the panel for participation in the survey. A pilot will be conducted before the survey to test the survey instrument and procedures.

Unlike opt-in web-based panels that use convenience sampling, the KnowledgePanel is a probability-based panel that is designed to be representative of the U.S. adult population. This representation is achieved through address-based sampling (ABS), where every U.S. adult with an address (including those who do not have a landline phone number) has an equal probability of being selected for participation on the panel. Selected panelists without Internet access are provided with Internet access and a tablet computer, if needed. The KnowledgePanel has some limitations that should be considered when interpreting the survey results. The low recruitment rate for panel participation, panel attrition, and nonresponse among panelists selected to complete a particular survey lead to a very low overall response rate (7%), which may result in nonresponse bias if nonrespondents are systematically different from respondents (Tourangeau, Conrad, & Couper, 2013). Other potential limitations include sampling and coverage issues, nonresponse from breakoffs (i.e., not completing the survey), and measurement error (Tourangeau, Conrad, & Couper, 2013). Because of these limitations, it is not appropriate to make inferences to the U.S. population using results from a probability-based panel survey. Conducting a probability-based survey such as using addressed-based sampling would be cost prohibitive. FSIS has determined that

¹ The KnowledgePanel was formerly owned and maintained by GfK.

conducting a web-based survey will provide sufficient information to inform its consumer outreach efforts.

A.3. Use of Improved Information Technology

The exploratory study will use a web-based questionnaire. Web-based questionnaires not only reduce the burden on participants but also minimize possible administration errors and expedite the timeliness of data processing. Compared with face-to-face interviews, telephone surveys, and mailed surveys, web-based surveys are less intrusive and less costly to administer.

A.4. Efforts to Identify and Avoid Duplication

FSIS has reviewed existing research, including the FDA Food Safety Survey, and has concluded that the questions in the proposed survey do not duplicate any similar study and that the existing knowledge base and literature do not meet the Agency's informational needs with regard to information needed to inform OPACE's consumer outreach efforts.

FDA, in collaboration with USDA, FSIS, conducts the Food Safety Survey, a periodic national telephone survey of adults, intended to help FDA and USDA make informed regulatory, education, and other decisions by providing a better understanding of consumer knowledge, attitudes, and practices related to food safety. The 2016 survey was the seventh iteration of the survey (FDA, 2016, OMB No. 0910-0345: Food Safety Survey). FSIS reviewed the instrument for the eighth iteration of the Food Safety Survey, which is scheduled to be conducted in fall of 2019, and it does not include any of the questions in FSIS's proposed survey. The eighth iteration of the survey will combine the Food Safety Survey with the Health and Diet Survey; thus, it was not possible for FSIS to

add the questions in the proposed survey to FDA's combined survey to avoid overburdening respondents.

A.5. Methods to Minimize Burden on Small Business Entities

No small businesses will be involved in this information collection.

A.6. Consequences of Less Frequent Data Collection

FSIS is conducting two iterations of an exploratory web survey; each iteration will collect information on different topics, and a different set of individuals will participate in the survey each year.

Results of the most recent iteration of the Food Safety Survey indicate that some behaviors, such as handwashing and use of separate cutting boards for meat or poultry and produce, have remained constant or decreased in recent years after increasing for several years (FDA, 2016). Thus, there is the continued need to educate consumers about recommended food safety practices to increase knowledge and adoption of recommended behaviors. By conducting this exploratory research, FSIS will have a better understanding of how FSIS communication programs and materials affect consumer understanding of recommended safe food handling practices and will have insight into how to effectively inform consumers of recommended practices.

A.7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5 that Would Cause the Information Collection to be Conducted in a Manner:

- requiring respondents to report information to the agency more often than quarterly;
- requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;

- requiring respondents to submit more than an original and two copies of any document;
- requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than 3 years;
- in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
- requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
- that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or that unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- requiring respondents to submit proprietary trade secret or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

This information collection fully complies with 5 CFR 1320.5(d) (2). No special circumstances are associated with this information collection that would be inconsistent with the regulation.

A.8. Consultations with Persons Outside the Agency

In accordance with the Paperwork Reduction Act, FSIS published a 60-day notice requesting comments regarding this information collection request (FRN Notice, Volume

84, No. 52, pages 9745-46; 3/18/2019). The Agency received 12 comments. Four of the comments suggested that FSIS spend resources on inspections not consumer education, five of the comments offered suggestions on how to educate consumers on food safety (e.g., using social media, adding food safety instructions to recipes), and three comments were unrelated to the proposed survey and expressed opinions on the processing of meat and poultry and the need to support small processors. No changes were required in response to their comments

The supporting statement was reviewed by Sarah Goodale at the National Agricultural Statistics Service. Several revisions were required in response to their comments.

We contacted three individuals to complete the survey so we could estimate respondent burden. The names, phone numbers, and length of time to complete the survey is provided below:

Lauren White, 210-445-3900, 18 minutes

Geoff Bishop, 919-357-7416, 15 minutes

Allyson Kern, 864-707-6211, 19 minutes

This corroborates our estimated burden of 20 minutes. The cognitive interviews (described in Section B, Part 4) provided additional information on respondent burden.

A.9. Payments to Respondents

The sampling frame for the survey is KnowledgePanel, the Ipsos Public Affairs (Ipsos) online consumer panel that is probability based and designed to be representative of the U.S. adult population.

Households without existing computers and Internet access that are invited to participate on the panel are provided a free tablet computer and Internet access in return for their participation. Households with existing computers and Internet access use their own equipment and Internet connection to complete surveys and receive points for completing a survey (1,000 points = \$1). Members can exchange their points for vouchers and gifts from a partner network. Internet panel participants are enrolled into a points program that is analogous to a “frequent flyer” card; respondents are credited with sweepstakes entries or bonus points in proportion to their regular participation in surveys. (For the households provided an Internet device and connection, their incentive includes the hardware and Internet service in addition to the sweepstakes entries and bonus points.) Traditionally, panelists earn sweepstakes entries on some surveys (including surveys more than 15 minutes in length) and bonus points for surveys that are longer or require special tasks by panel members. Panelists may elect to redeem their points for checks or raffle entries as they accrue them. For the proposed web survey, respondents with existing computers and Internet access receive the equivalent of a \$1 incentive.

A.10. Assurance of Confidentiality

Confidentiality will be assured by using independent contractors, RTI and Ipsos, to collect the information, by enacting procedures to prevent unauthorized access to participant data, and by preventing the public disclosure of the responses of individual participants.

Ipsos has a system of standard operating procedures in place for documenting all processes relating to maintaining confidentiality and privacy of panelists. Although Ipsos collects panel members’ contact information for sample selection and panel maintenance,

individually identifiable information is not shared with anyone, including RTI and FSIS. Contact information is stored separately from the survey data file and is not linked in any way to participant responses. More specifically, the following data are in three separate databases:

- panel member information
- survey link file (linkage between survey-specific respondent identifier and respondent ID)
- survey data

Ipsos stores all personally identifiable panelist records at its secure data center located near the parent company's corporate headquarters. All data transfers from personal computers (used for survey administration) to the main servers pass through a firewall. Ipsos never provides personally identifiable information to any client or agency without the explicit and informed consent of panelists. Ipsos will not share personal information regarding panel members with any third party without the participant's permission unless it is required by law to protect their rights or to comply with judicial proceedings, court orders, or other legal processes.

All survey data records are stored separately from panelist information. Ipsos keeps survey data in a secured database that does not contain personally identifiable information. The staff members in Ipsos's Panel Relations and Statistics departments who have access to the personally identifiable information do not have access to the survey response data. The secured database also contains field-specific permissions that restrict access by type of user to prevent unauthorized access.

Ipsos retains the survey response data in its secure database after the completion of each study. These data are retained for operational research, such as analyzing response rates, and for future analysis, statistical adjustments, or statistical surveys that would require resurveying research subjects as part of validation or longitudinal surveys.

Information regarding informed consent, including assurances of data privacy and security, will be provided on the first screen of the survey (see Appendix A). RTI's Institutional Review Board (IRB) reviewed and determined the study is exempt from IRB review (see Appendix C).

RTI and FSIS will not have access to panel members' personal information. No personally identifying information will be included in the data files delivered to the agency. In accordance with the Privacy Threshold Analysis, a Privacy Impact Analysis was prepared, and a System of Records Notice is underway. Further, FSIS has included the FSCRIP in the Department's Plan of Action and Milestones (POAM).

A.11. Justification for Questions of Sensitive Nature

The survey does not include any questions that are of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. The survey includes a question on whether any household members have been diagnosed with cancer, diabetes, or other conditions that weaken the immune system. Individuals will not be asked for a specific diagnosis. Immunocompromised individuals are considered at risk for foodborne illness; thus, it is important to collect information from these individuals or their caregivers.

A.12. Estimates of Respondent Burden

The total estimated burden for each iteration of the exploratory web-based survey is 978.18 hours (see Table A-2), for a total burden of 1,956.36 hours for two iterations. The number of respondents for each iteration is 4,546 (146 + 4,400), for a total number of respondents of 9,092 for two iterations.

Table A-2. Estimated Annual Reporting Burden for Each Iteration of the Web

Survey

Portion of Study	Appendix(s) for Data Collection Instrument or Form	No. of Respondents	Annual Frequency per Response	Total Annual Responses	Hours per Response	Total Hours
Pretest Invitation	B	146	1	146	0.03333 (2 min.)	4.87
Pretest	A	80 ^a	1	80	0.33333 (20 min.)	26.67
Survey Invitation	B	4,400	1	4,400	0.03333 (2 min.)	146.65
Survey	A	2,400 ^a	1	2,400	0.33333 (20 min.)	799.99
Total						978.18

^aA subset of the people who received the invitation.

The annualized cost to all respondents for the collection of information is \$23,627, including fringe benefits (978.18 x \$ 18.58 per hour x 1.30) (the 2018 U.S. median hourly wage rate; http://www.bls.gov/oes/current/oes_nat.htm) for each iteration of the web survey.

A.13. Capital and Start-Up Costs and Subsequent Maintenance

No capital, start-up, operating, or maintenance costs are associated with this information collection.

A.14. Annual Cost to Federal Government

The estimated total cost to the Federal Government for this information collection is \$161,000 for each iteration of the web survey. The costs arise from the time spent by

the contractor to develop and conduct the exploratory study, analyze the data, and prepare and deliver a final report and includes fringe benefits.

A.15. Reasons for Changes in Burden

This is a new information collection.

A.16. Tabulation, Analysis, and Publication

The planned schedule for the web survey is shown in Table A-3. Once OMB approval is received, we will begin data collection activities. The contractor will provide FSIS a report that summarizes the study methods and results within 90 days of completing the data collection. Appropriate statistical analyses will be used to analyze the survey data. We will produce descriptive statistics for all survey questions. For nominal variables, we will calculate weighted percentage distributions and 95% confidence intervals. We will conduct bivariate analyses to examine the relationship between survey responses and respondent demographics (by subgroup such as age category, education level, previous experience with foodborne illness). The survey results will not be used to make inferences to the population of all U.S. consumers. OPACE will use the survey results to inform their consumer outreach efforts related to educating consumers on recommended food safety practices and properly responding to food recalls and foodborne illness outbreaks.

There are no plans to publish the survey data for statistical use. Dissemination of the study results may include internal briefings, presentations at national conferences, peer-reviewed manuscripts, and reports and posting on FSIS’s web site.

Table A-3. Project Schedule

Date	Activity
Within 15 days following OMB approval	Begin data collection activities

Within 45 days following OMB approval
Within 135 days following OMB approval

Complete data collection activities
Complete summary report

A.17. OMB Approval Number Display

The OMB approval and expiration date will be displayed on all materials associated with the study. No exemption is requested.

A.18. Exceptions to the Certification

There are no exceptions to the certification.

References:

- Food and Drug Administration. (2016). *2016 Food Safety Survey*. Retrieved from <http://www.fda.gov/downloads/Food/FoodScienceResearch/ConsumerBehaviorResearch/UCM529481.pdf>
- Tourangeau, F., Conrad, F. G., & Couper, M. P. (2013). *The science of web surveys*. New York, NY: Oxford University Press.
- U.S. Department of Agriculture, Food Safety and Inspection Service. (2016). *Food Safety and Inspection Service (FSIS) 2017–2021 strategic plan*. Retrieved from <https://www.fsis.usda.gov/wps/wcm/connect/317d14d6-1759-448e-941a-de3cbff289e5/Strategic-Plan-2017-2021.pdf?MOD=AJPERES>