

# **Food Safety Behaviors and Consumer Education: Focus Group Research**

**OMB No. 0583-NEW**

## **Supporting Statement**

### **A. Justification**

#### **A.1. Circumstances Making Collection of Information Necessary**

The U.S. Department of Agriculture, Food Safety and Inspection Service, Office of Public Affairs and Consumer Education (USDA, FSIS, OPACE) ensures that all segments of the farm-to-table chain receive valuable food safety information. The consumer education programs developed by OPACE's Food Safety Education Staff inform the public on how to safely handle, prepare, and store meat, poultry, and processed egg products to minimize incidence of foodborne illness.

OPACE strives to continuously increase consumer awareness 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; social media; AskKaren (an online database of frequently asked food safety questions); the FSIS web site; FoodSafety.gov; Meat and Poultry Hotline; publications; and events. These messages are focused on the four core food safety behaviors: clean, separate, cook, and chill. 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.” The proposed focus groups will provide OPACE with the information needed to

develop and disseminate effective messaging to help reduce foodborne illness attributed to the consumption of raw or undercooked meat and poultry products.

By testing new consumer messaging and tailoring existing messaging, FSIS can help ensure that it is effectively communicating with the public and working to improve consumer food safety practices. OPACE plans to conduct focus groups with consumers to collect qualitative information on consumer food safety knowledge, attitudes, and practices and to elicit consumer responses to FSIS food safety messages and their effect on consumer food safety knowledge and behavior. Findings from the proposed focus group research will provide insight into how to effectively inform consumers of recommended safe food handling practices. The results of this research will be used to enhance messaging to improve consumers' food safety behaviors and help prevent foodborne illness.

Focus groups are typically used to develop and test health communication messages. Qualitative research is particularly useful in studies such as the one proposed in which the research is exploratory in nature. These findings help provide insight and direction into the topics of interest and provide an understanding of the "why" behind the target audience's attitudes and behaviors.

FSIS has contracted with RTI International to conduct two series of focus groups with adults. Each series will include 16 focus groups. The first series will be conducted in fiscal year (FY) 2018, and the second series will be conducted in FY 2020. The supporting statement describes the topics and methods for the first series of focus groups to be conducted in FY 2018, and the recruiting materials and moderator guide are provided as appendices. The FY 2020 focus group topics have yet to be determined but will ultimately inform the development of communication campaigns on foodborne illness prevention. We will submit a memorandum that

provides the research design and materials for the FY 2020 groups before conducting these groups.

In FY 2018, two sets of focus groups will be conducted, with eight groups per set, for a total of 16 focus groups. Each set of groups is described below.

**Set 1 Focus Groups: Food Safe Families Logo and Message Framing**

The first set of focus groups (Set 1) in FY 2018 will be conducted with parents of children (<18 years) to (1) obtain consumer feedback on the current design for the *Food Safe Families* logo and (2) assess consumer response to different approaches for framing food safety messages (negative versus positive and rational versus emotional appeal). The need for focus group research to address these topics is described below.

As part of its educational outreach, FSIS conducted a joint, national, multimedia public service campaign called *Food Safe Families* to help Americans prevent food-related illnesses in their homes. Using the slogan “Check Your Steps,” *Food Safe Families* encourages consumers to adopt these four simple steps: clean, separate, cook, and chill. The four steps are illustrated in the *Food Safe Families* logo, which is displayed in Exhibit A-1.



Findings from previous focus group research conducted by FSIS (Office of Management and Budget [OMB] No. 0583-0166, *Professional Services to Support Requirement Gathering Sessions for Safe Food Handling Instructions [SHI]*)) suggest that the four icons may not convey the four steps as originally intended. Hence, FSIS would like to conduct consumer research to

better understand how consumers perceive the four icons that comprise the *Food Safe Families* logo and whether the icons need to be revised to more effectively communicate the key messages of clean, separate, cook, and chill.

Many public health campaigns seek to change behavior by using persuasive messaging designed to motivate the target audience to adopt the desired behavior. These campaigns are based on appeals that can be rational or emotional. To date, limited research has been conducted to assess the effectiveness of alternative messaging approaches for food safety recommendations. FSIS will use the focus groups to explore consumer response to four types of messages for the recommendation to use a food thermometer to determine doneness of meat and poultry (negative versus positive and emotional versus rational appeal). The findings from these focus groups will provide useful information as to which type of messaging is most effective for motivating consumers to change their behavior.

### **Set 2 Focus Groups: Raw or Undercooked Meat or Poultry Products**

The second set of eight focus groups (Set 2) in FY 2018 will be conducted with English-speaking adults who prefer to consume certain meat and poultry dishes raw or undercooked. These dishes include hamburgers cooked rare or medium rare, chicken livers or chicken liver pâté, dishes made with raw beef such as raw meat sandwiches or beef tartare, and kibbeh or similar dishes made with raw meat. These groups will be segmented by type of food and conducted in locations where consumption of these foods is common based on ethnic, cultural, or other traditions. The purpose of the focus groups is to understand consumer preferences for these foods and to collect information to inform dissemination efforts to effectively communicate to consumers the potential risks from consuming these foods. The need for focus group research to address these topics is described below.

According to FSIS's list of food safety research priorities (<https://www.fsis.usda.gov/wps/portal/fsis/topics/science/food-safety-research-priorities>), *"FSIS investigations have revealed several foodborne outbreaks attributable to consumption of raw or undercooked FSIS-regulated products (for example, raw beef, chicken livers). Consumption of these products is often associated with ethnic traditions and certain niche communities."* To reduce foodborne illness from consumption of raw or undercooked meat and poultry products, consumer outreach efforts are needed to educate consumers about the risks associated with consumption of raw or undercooked meat and poultry products when eating at or away from home and how to safely prepare these foods at home. As stated in FSIS's research priorities, *"Improving identification and awareness of cultural or traditional situations, and subsequent development of effective risk communication methods will help FSIS tailor specific messaging on safe food handling and preparation practices for various at risk, vulnerable, and under-served populations, particularly those who knowingly consume raw or undercooked FSIS-regulated products. Research into different communication techniques, presentation of information, and expression of risk will help FSIS shape and deliver appropriately sensitive, effective, food safety messages."* The proposed focus groups will provide OPACE with the information needed to develop and disseminate effective messaging to help reduce foodborne illness attributed to the consumption of raw or undercooked meat and poultry products.

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

In FY 2018, two sets of focus groups will be conducted, with eight groups per set, for a total of 16 focus groups.

### **Set 1 Focus Groups: *Food Safe Families* Logo and Message Framing**

The first set of eight focus groups (Set 1) in FY 2018 will be conducted with parents of children (<18 years) to (1) obtain consumer feedback on the current design for the *Food Safe Families* logo and (2) assess consumer response to different approaches for framing food safety messages. To provide geographic diversity, we will conduct two focus groups in each of the following locations: Hartford, CT; Austin, TX; San Diego, CA; and Chicago, IL. In each location, we will conduct one group with English-speaking adults and one group with Spanish-speaking adults. The focus groups will be segmented by education level to provide homogeneity within groups so that four of the groups will be conducted with adults who have a high school education or less and four of the groups will be conducted with adults who have some college or higher education. A screening questionnaire will be used to screen participants for eligibility (see Appendix A).

A moderator's guide (see Appendix B) will provide structure for the focus group discussions and ensure that topics of interest are addressed. The moderator guide will address the following topics:

- Respondents' food safety concerns
  - control over food safety when cooking at home
  - experience with foodborne illness
  - perception of how common foodborne illness is
  - knowledge of at-risk populations for foodborne illness
- Evaluation of current *Food Safe Families* logo and icons
  - address each icon: clean, separate, cook, chill
  - discuss initial impressions

- discuss whether icons convey intended message
- suggest revisions
- Discuss food safety messaging alternatives
  - awareness of USDA recommendation to use a food thermometer to determine doneness
  - current use of food thermometer
  - motivators to using a food thermometer
  - opinion on how well the messaging conveys recommendation
  - choose message that would most and least likely encourage food thermometer use
  - preferred sources for food safety information

### **Set 2 Focus Groups: Raw or Undercooked Meat or Poultry Products**

The second set of eight focus groups (Set 2) in FY 2018 will be conducted with English-speaking adults who have prepared raw or undercooked meat or poultry products at home. As previously mentioned, the dishes of interest include (1) hamburgers cooked rare or medium rare; (2) chicken livers or chicken liver pâté; (3) dishes made with raw beef such as raw meat sandwiches or beef tartare; and (4) kibbeh or similar dishes made with raw meat. These groups will be segmented by the four types of food and conducted in locations where consumption of these foods is common based on ethnic, cultural, or other traditions. Additional segmentation (e.g., by education level) is not required because these groups focus on consumers of specific products. We will conduct two focus groups in each of the following locations: Portland, OR (hamburgers cooked rare or medium rare), Newark, NJ (chicken livers or chicken liver pâté), Milwaukee, WI (dishes made with raw beef), and Detroit, MI (kibbeh made with raw meat).

Separate screening questionnaires will be used to screen participants for eligibility (see Appendix C).

The moderator guide will address the topics listed below, with a separate moderator guide for each of the four types of food (see Appendix D).

- Preferences for eating the food when purchased outside the home
  - likelihood of eating food prepared at home versus prepared outside the home
  - purchasing/ordering preferences and practices
  - consumption practices
  - concerns regarding the safety of the food
  - perceptions and preferences regarding the preparation of the food
- Preferences for eating the food when prepared at home
  - purchasing preferences and practices
  - preparation and cooking practices
  - knowledge and adherence to food safety recommendation
- Response to FSIS educational materials specific to the food
  - provide current FSIS educational material
  - initial impressions
  - likelihood of following recommendations, including motivators and barriers
  - suggested improvements to the educational material



- suggested sources and mechanisms for delivering food safety information to consumers
- suggested approaches for reaching target audience
- current sources of food safety information

### **A.3. Use of Improved Information Technology**

To provide information to interpret the study findings, the focus groups will be digitally recorded, and the audio-recordings will be transcribed. No electronic copies of the questions will be provided to the participants before the focus group discussions.

### **A.4. Efforts to Identify and Avoid Duplication**

The Agency concluded that the proposed data collection will not duplicate any similar study and the existing knowledge base and literature do not meet the Agency's informational need.

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

Data is not being collected from small businesses.

### **A.6. Consequences of Less Frequent Data Collection**

This is a one-time data collection. Without this study, FSIS will not have the needed information to effectively communicate with the public and improve consumers' food safety behaviors. This lack of information would impede the Agency's ability to provide more useful information to consumers to help reduce foodborne illness in the United States.

### **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). There are no special circumstances 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 (82 FR 55079; [November

20, 2017])). The Agency received four comments in response to Docket No. FSIS-2017-0042. Three of the four comments were irrelevant to the study, and one comment, which was received from Dr. Shauna Henley, a food safety educator at the University of Maryland Extension, commented on the study design. In her comments, Dr. Henley suggested recruiting non-English speaking adults to possibly capture the unique handling practices linked to food and culture. In our response to Dr. Henley, we noted that we will conduct four of the eight focus groups in Set 1 with Spanish-speaking adults and explained that we will be unable to conduct the other focus groups in languages other than English due to lack of resources. Dr. Henley also suggested covering the following topics in the focus group study: emerging food trends, the safety of organic meats and eggs, animal husbandry, and public perception of how butchers handle meats. In our response, we acknowledged that each of these topics are important to explore, but they are not outcome measures of interests for the current focus group study. Dr. Henley also suggested exploring whether religion and related dietary practices affect consumer poultry washing. In our response, we acknowledged that poultry washing at home is a concern, and FSIS plans to explore this topic in future consumer research. Two of the comments related to how to effectively reach consumers with messaging on food safety. In our response, we noted that the purpose of the current focus group study is to provide OPACE with the information needed to develop effective messaging and dissemination strategies to help reduce foodborne illness.

In addition, Bayazid Sarkar, a Mathematical Statistician at the National Agricultural Statistics Service's Summary, Estimation, and Disclosure Methodology Branch, reviewed the collection and made supportive comments on December 8, 2017.

### **A.9. Payments to Respondents**

We understand that the OMB guidance about incentives for participation in research is based on the principles of the 2006 memo: Guidance on Agency Survey and Statistical Information Collections. We propose providing each focus group participant a \$75 Visa gift card and a small gift (food thermometer valued at \$5.38 and a magnet valued at \$0.23) so that we can effectively recruit hard-to-find populations, to ensure a high-show rate for the focus groups, and to improve data quality. Additionally, participation in focus groups requires substantial commitment and investment of time on the part of the participant in that they must make a commitment to attend the discussion at a certain time on a specific date. Participation also requires participants to travel to a designated location, with the average commute in U.S. metropolitan areas estimated at about 25.1 minutes (McKenzie and Rapino, 2011) and may also require that the participant obtain child care for a fee (especially for the focus groups with parents of children and other participants who may have children). Thus, incentives have long been considered a standard practice in conducting qualitative research such as focus groups.

Table A-1 provides information on the cost to participate in the focus group discussion. Although the cost to participate varies by group depending on whether the participant needs child care for their child while attending the focus group (from \$26.86 to \$71.86), we propose to offer all participants the same incentive amount (\$75) to avoid introducing selection bias that might occur by offering different incentive amounts to different subpopulations.

The proposed \$75 incentive amount is in line with the industry standard. These industry-standard stipends help ensure that respondents can be recruited efficiently and ensure their arrival and participation in the groups. These standards also exist to provide fair compensation for costs incurred by participants while attending groups (i.e., travel and child care expenses). In

addition to covering reasonable costs of participation, payment to participants is necessary to ensure that a sufficient number of respondents from the target populations participate in the study. Payment to

**Table A-1. Estimated Cost to Participants of Taking Part in the Focus Group Discussion by Whether the Participant Needs to Retain Child Care**

<b>Participants who need to retain child care</b>			
Cost Component	Estimated Number of Units	Unit Cost	Total Cost
Cost to travel to/from facility	50.2 miles <sup>a</sup>	\$0.535/mile <sup>b</sup>	\$26.86
Cost of child care during travel time (1-hour round trip) and attending focus group (15 minutes before group to park and check in, 90-minute discussion, 15 minutes after group to check out and receive incentive)	3 hours	\$15/hour <sup>c</sup>	\$45.00
Total			\$71.86
<b>Participants who do not need to retain child care</b>			
Cost Component	Estimated Number of Units	Unit Cost	Total Cost
Cost to travel to/from facility	50.2 miles <sup>a</sup>	\$0.575/mile <sup>b</sup>	\$26.87
Total			\$26.87

<sup>a</sup> The average commute in a U.S. metropolitan areas is an estimated 25.1 minutes to the designated location (McKenzie and Rapino, 2011) for a total of 50.2 minutes. Assuming participants travel 60 miles an hour, the total number of miles is 50.2 miles.

<sup>b</sup> Source: <http://www.gsa.gov/portal/content/100715>

<sup>c</sup> Source: <http://www.care.com>

participants must encourage potential participants to agree to allocate their time to the focus group discussion and maintain that commitment on the day of the research.

Offering no incentive or a smaller incentive could potentially exclude sections of the population who cannot attend the groups, either due to cost of child care and/or travel or the cost of missing work. Excluding sections of the population would limit the qualitative information that would be gained through the focus group discussion and potentially bias the information needed to address the research questions of interest, thus negatively affecting data quality.

Moreover, the \$75 incentive payment proposed is consistent with what OMB has approved for other 90-minute focus group studies, for example, OMB No. 0583-0166: *Professional Services to Support Requirement Gathering Sessions for SHI*; OMB No. 0583-0141: *Consumer Research, Assessing the Effectiveness and Application of Public Health Messages Affecting Consumer Behavior Regarding Food Safety*; and OMB No. 0584-0561: *Healthy Incentives Pilot Evaluation*.

To encourage recruited individuals to not only attend but to arrive on time for the focus group discussions, we will include all those who sign in 15 minutes before each group is scheduled to start in a drawing for a chance to win an extra \$50 (in form of Visa gift card). We anticipate that without the incentive and drawing, we would need to screen more people to achieve the desired cooperation rate. The current estimated annualized burden for the participant screening is about 170.24 hours. Without the incentive, we expect the burden to be approximately 425 hours, an increase of approximately 40%. The cost to respondents and the federal government would increase accordingly.

#### **A.10. Assurance of Confidentiality**

The privacy of the focus group participants will be assured by using an independent contractor to collect the information, by enacting procedures to prevent unauthorized access to

respondent data, and by preventing the public disclosure of the responses of individual participants.

The only Information in Identifiable Form (IIF) that will be obtained are the participants' names, phone numbers, and email or mailing addresses for setting up interview appointments, mailing confirmation letters, and making reminder phone calls. This IIF will be maintained at each of the local market research firms in their own proprietary files. These personal identifiers will not be linked to data and will not be shared with FSIS or RTI.

Participation in the focus groups is voluntary, and participants will be advised that their responses will be treated in a secure manner and will not be linked to their names. During the focus groups, only first names will be used. Focus groups will be transcribed for use by the RTI research team in developing a report, but participants' first names will be replaced with the word "participant." The digital audio tapes will be stored on a password-protected share drive, accessible only to RTI project staff.

Assurances of data privacy and security are documented in the informed consent form (see Appendix E for Set 1 focus groups and Appendix F for Set 2 focus groups). The study protocol and instruments were reviewed and approved by RTI's Institutional Review Board (see Appendix G). The FSIS Privacy Office conducted a Privacy Threshold Analysis and determined that a Privacy Impact Analysis was not necessary.

#### **A.11. Justification for Questions of Sensitive Nature**

During the focus group discussions, participants will not be asked any questions that are personal or sensitive in nature.

#### **A.12. Estimates of Respondent Burden**

For each series of 16 focus groups, it is expected that 1,280 individuals will complete the

screening questionnaire, and it is assumed that 160 will be eligible and subsequently agree to participate in the focus group study (10 people per group). Each screening questionnaire is expected to take 8 minutes (0.133 hour). Taking part in the focus group discussion will take a total of 90 minutes (1.5 hours). Table A-2 details the estimated annual reporting burden. For each series of 16 focus groups, the estimated annual reporting burden is 410.24 hours, which is the sum of the burden estimates for the screening and focus group discussion. For the two series of focus groups (32 groups total), the estimated total number of individuals to be screened is 2,560 (1,280 each year), and the estimated total number of individuals to take part in the focus group discussions is no more than 320 (160 each year). The estimated total burden for the two series of focus groups is 820.48 hours (410.24 x 2).

**Table A-2. Estimated Annual Reporting Burden for Each Series of the Focus Group Study (16 groups in each series)**

<b>Portion of Study</b>	<b>No. of Respondents</b>	<b>Annual Frequency per Response</b>	<b>Total Annual Responses</b>	<b>Hours per Response</b>	<b>Total Hours</b>
Screening questionnaire	1,280	1	1,280	0.133 (8 min.)	170.24
Focus group discussion	160	1	160	1.5	240
Total					410.24

The annualized cost to all respondents for the collection of information is \$14,628.07 (820.48 x \$17.81) at \$17.81 per hour (the May 2016 U. S. median hourly wage rate). See [http://www.bls.gov/oes/current/oes\\_nat.htm](http://www.bls.gov/oes/current/oes_nat.htm).

### **A.13. Capital and Start-Up Cost and Subsequent Maintenance**

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



#### **A.14. Annual Cost to Federal Government**

The estimated annual cost to the federal government for one series of focus groups is \$132,341. The costs arise from the time spent by the contractor to develop and conduct the study, analyze the data, and prepare and deliver a final report.

#### **A.15. Reasons for Changes in Burden**

This is a new information collection.

#### **A.16. Tabulation, Analysis, and Publication**

The planned schedule for this information collection is shown in Table A-3 for the first series of focus groups. Once OMB approval is received, it will take up to 60 days to recruit individuals and conduct the 16 focus groups. The contractor will provide FSIS a summary report of the focus group discussions within 60 days of the last focus group. No statistical analyses will be conducted, and there are no plans to publish the data for statistical use. Dissemination of the study results may include internal briefings, presentations, and reports and posting on FSIS's Web site.

**Table A-3. Project Schedule for First Series of Focus Groups**

<b>Date</b>	<b>Activity</b>
Within 60 days following OMB approval	Conduct 16 focus groups
Within 60 days following last focus group	Completion of focus group 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**

McKenzie, B., & Rapino, M. (2011). *Commuting in the United States: 2009*. Supplemental Table C. Mean travel time to work by means of transportation and selected characteristics: 2009. Washington, DC: U.S. Census Bureau.