Today, we’ll cover:

• Successes of the Consumer Food Safety Education Conference 2014

• Results of the 2014 environmental scan of consumer food safety education efforts

• Preview of a comprehensive Food Safety Education Assessment now underway

• Next steps around measurement and evaluation
Today’s Speakers:

**Shelley Feist**  
*Executive Director*  
The Partnership for Food Safety Education

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*Director*  
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WORLD HEALTH DAY 2015
FOOD SAFETY

Let’s show the world what BAC Fighters and PFSE Partners do for food safety!
Watch for an email from PFSE!

FROM FARM TO PLATE
MAKE FOOD SAFE
Consumer Food Safety Education Conference Highlights
97% said the conference provided the tools and knowledge needed to advance Healthy People 2020 food safety behavior change goals

98% said they learned strategies for increasing adherence to safe food handling behaviors among consumers

99% said they would make changes in their practice as a result of the information presented at this conference

98% said they would disseminate information learned to create positive behavior change in consumer food handling practices

100% said the conference provided opportunities to develop a network of professional contacts
Conference Resources Available

Videos

Presentations

www.teamfoodsafety.org > Conference
Have you taken actions since the conference to plan future work or to evaluate your work?

A) Yes
B) No
Food Safety Leadership: An Environmental Scan

• What are the leaders in consumer food safety education in the public and private sectors doing to reach millions of American consumers?

• PFSE commissioned survey - NCSU
Background

• There has not to date been systematic collection of whom is providing what information to what audiences
• This data collection is a necessary step to a needs assessment to better describe the current population of food safety educators, their programs, and sources of information and materials
• Gaps within food safety messages need to be addressed
Methods

• Survey intended to develop short “stories” or case studies from all sectors regarding their food safety education to consumers
• SurveyMonkey was central location for data collection
• Participants were able to fill out information for up to five different food safety education programs
• Open for responses from June 2- Aug. 1, 2014
• Reopened Oct. 16-Oct. 31, 2014 to accommodate other groups that expressed interest in being represented (397 participated in total)
FOOD SAFETY EDUCATORS

Who is educating consumers about reducing risk of foodborne illness?

- Academia and Cooperative Extension: 35%
- School System (K-12): 13%
- Federal Government: 12%
- Public Health: 21%
- Non-Profits: 12%
- Industry and Food Retail: 6%
- Others: 2%
Channels Educators Use to Reach Consumers

In-person

- Academia–Coop Ext - 96%
- School System (K-12) - 96%
- Public Health - 89%
Channels Educators Use to Reach Consumers

Online

- Federal Government - 52%
- Academia - 38%
- Non-Profits - 34%
Channels Educators Use to Reach Consumers

Television

- Federal Government - 12%
- Academia - 7%
- School System (K-12) - 4%
Channels Educators Use to Reach Consumers

Other Channels

Public Health - 31%
Federal Government - 27%
Non-Profits - 26%

Newsletters, mail, phone, posters, displays, newspaper
Does Your Organization Measure Impacts of the Outreach Program?

- I Don't Know: 10%
- No: 38%
- Yes: 52%
Other learnings:

Federal government is reaching the most people on annual basis (use of television)

Children and households with children are primary targets for education efforts

Must increase engagement of food retail and food industry and better capture this activity
For more info on environmental scan or national consumer food safety education work:

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An Examination of Food Safety Research: Implications for Future Strategies

Preliminary Findings

Patricia Borrusso and Sharmi Das
CFSAN/FDA

Partnership for Food Safety Education Fight BAC!
Forward Webinar, February 12, 2015
Outline

• Purpose and Background
• Methods – Literature Review
• Findings from Literature Review
• Preliminary Recommendations
• Conclusions
• Plans for Dissemination
Project Goals

• Review consumer food safety campaigns and research

• Evaluate the role of education and other behavioral influences on consumer food-handling practices

• Provide recommendations for the future direction of food safety education and programs
Why is Food Safety Education So Important… And Sometimes Difficult?

• “Final defense” against foodborne illness

• For the information to have the intended effect (improve behavior), the consumer must:
  ✓ Be exposed to the message,
  ✓ Believe the message applies to them,
  ✓ Feel compelled to listen to the entire message,
  ✓ Understand the message,
  ✓ Agree with the message, and finally,
  ✓ Act as the message suggests.

Many steps between message creation & consumer action
Methods

Literature Review Inclusion Criteria:

- Published food safety research (N=109+)
- Recent (last 15 years), from similar countries
- Related to one of the following topics:
  - Consumer knowledge, attitudes, and behavior
  - Communication and behavior theory
  - Design, implementation, and outcomes of education campaigns

+ Interviews with food safety educators and key stakeholders for insight about history, goals, and future of food safety education
Knowledge

Consumers are knowledgeable about some food safety topics…

- How and when to wash hands correctly
- How and when to clean/use separate cutting boards and utensils

But not others...

- Recommended temperatures (for cooking, refrigerators)
- How to use a food thermometer
- Foods considered “high risk”

References: 1-9
Behavior

High Compliance
• Avoid cross-contamination via cutting boards – 60-100% correct

Low Compliance
• Refrigerator temp. – 30-60% between 41-50°F, 5-14% > 50°F
• Food thermometer use – 0-25%

Compliance Unclear
• Correct Handwashing; Before meal preparation
  – 5-38% (Observed), 78-97% (Self-Report)
• Correct Handwashing; After contact with raw meat
  – 20-50% (Observed), 81-92% (Self-Report)

References: 2-8, 10-22
Summary of Findings from Literature

• Significant progress and improvements to consumer food-handling over the last 20 years!

But…

• Need to improve and vary approach for designing food safety campaigns and interventions
  – Consumers fail to follow recommended food-handling behaviors for many reasons
  – Strategies that worked 20 years ago, or 10 years ago, or even last week may not work today
Preliminary Recommendations for Educators

Do What Works; Stop Doing What Doesn’t Work

• Work at teachable moments, when the target audience is most likely to pay attention
  – Example: During outbreaks/recalls

• Design campaigns based on needs emphasized by (recent) food safety research

• Conduct rigorous evaluation (all kinds)
  – Formative: Market research about target audience
  – Process: Program is up to date and running smoothly
  – Outcomes: Measurable impact
Designing Need-Based Campaigns – Example

1. Specify target behavior and audience

  **Target Behavior:** Correct (soap & water) handwashing;
  **Target Audience:** Consumers who wash hands **incorrectly**

- All steps based on results from literature review, theory adapted from Atkin et al. 2013
Designing Need-Based Campaigns – Example

2. Trace backward: What factors influence the consumer’s decision to perform the behavior? Which have the greatest influence on this decision?

Lack knowledge? **Unlikely**; 75-100% know correct behavior

Low risk perception? **Likely**; Perceived importance varies by situation; perceived severity is often low

Lack resources? **Likely for some (low-income)**; No soap in 8-35% homes

Lack awareness? **Likely**; Unless hands are visibly soiled

References: 1-9, 24
3. Communication perspective: Identify best approach to influence behavior of target audience

**Barrier:** Underestimate consequences/severity (Low risk perception)
**Suggestion:** Appeal to emotion (fear): Stories about victims of foodborne illness

**Barrier:** Cannot afford soap (Lack resources)
**Suggestion:** Offer coupons for necessary items, Develop donation–based programs

**Barrier:** Forgets to wash hands (Lack awareness)
**Suggestion:** Appeal to emotion (disgust): Graphic picture of hand contamination
Preliminary Recommendations for Everyone

Form Meaningful Collaborations and Partnerships

• Reach out to organizations who are in the field educating consumers, such as Extension and Health Departments

• Encourage businesses to incentivize safe behaviors:
  – Food Industry (coupons and promotions on food safety related items)
  – Kitchen Designers (more products to make food safety easy)

Automatic soap dispenser for the home, Bed Bath & Beyond
Conclusion

Here’s the thing about consumer behavior…

It’s not simple,

Or random…

*But it can be improved.*
Future Plans: Dissemination

• Invite feedback and suggestions from key stakeholders
  – Presentations within FDA, other agencies (USDA, CDC), and to local educators (PFSE, UMD Extension)

• National Conferences
  – Presenting with Shelley Feist at the Food Safety Summit in April – “Who's Talking to the Consumer? What We Know About Consumer Food Safety Education”
  – Abstracts submitted to NACCHO, IAFP, and APHA

• Peer-reviewed publications?
Acknowledgements

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• Interviewees – Howard Seltzer (CFSAN), Louise Dickerson (CFSAN), Marjorie Davidson (CFSAN), Maria Malagon (FSIS), Christine Prue (CDC), and Shelley Feist (PFSE)
We’re very interested in your feedback!
Please feel free to contact us at:

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www.teamfoodsafty.org/forward

- RTI International's List of Reliable and Valid Food Safety Measures/Instruments
- Presentations on Evaluation from the Consumer Food Safety Education Conference 2014
Questions and Comments
Stay in touch - follow us on social media to easily share consumer messages!

Visit www.fightbac.org to sign up.

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