Food Safety Leadership: An Environmental Scan

Partnership for Food Safety Education
North Carolina State University
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?
Background

- There has not to date been a 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 created with questions intended to develop short “stories” or case studies from all sectors regarding their food safety education to consumers.

- Survey questions were entered into SurveyMonkey as a central location for data collection.

- Participants were able to fill out information for up to five different food safety programs.

- Survey open for responses from June 2, 2014 - August 1, 2014.

- Survey reopened from October 16, 2014 - October 31, 2014 to accommodate other groups that expressed interest in being represented.
Participant Selection

- First targeted the Partnership for Food Safety Education Bac Fighter list

- Internet searches expanded through a snowball participant selection process – where participants were asked if they had colleagues who also provided consumer-based food safety programming

- Identified participants were reached through email and telephone calls
Consumer Education of Interest

- Survey participants required to educate consumers specifically (may be in combination with other audiences)

- Consumers defined as “individuals who purchase food for personal consumption and use”

- Survey participants were asked if their food safety programs included the education of consumers

- Many individuals selected “No” or “I don’t know,” but after further evaluation using the definition above, did indeed educate consumers
Total of 397 participants

Representing:
- Academia
- Federal government
- Food retail
- Industry trade groups
- Non-profits
- Public health
- School system (K-12)
- Other groups
Which Best Describes Your Organization?

n=397

- Academia: 35%
- Federal Government: 12%
- Food Retail: 3%
- Industry Trade Groups: 3%
- Non-Profits: 12%
- Other: 2%
- Public Health System (K-12): 21%
- School System (K-12): 13%
Who is Educating?

- Together, food retail and industry trade groups only made up about 6% of consumer food safety educators.

- “Other” sector included professional organizations, third party organizations, and internet sites.
Main Messages

- Four core (cook, clean, chill, separate)
- Hand washing/ hygiene/ sanitation
- High risk populations
- Home food preservation
- Foodborne illness/ prevention
- ServSafe
What Program Platform is Used?

- Be Food Safe: 137
- Cook It Safe: 108
- Fight BAC: 261
- Food Safe Families: 81
- None of these: 94
- Other: 159

Number of times chosen

Program platform
Program Platforms

- Germ City, Cooking for Crowds, and Eating Smart were frequently seen in the “other” category.

- Limitations: the Fight Bac program platform may have occurred most often due to first targeting the Bac Fighter listserv for potential survey participants.
Which Best Describes Your Organization within Academia?

n=139

- 4-H (Cooperative Extension): 4%
- Agricultural and Life Sciences: 9%
- Cooperative Extension (FCS/Food Science): 76%
- Hospitality: 2%
- Medical or Public Health: 1%
- Other: 6%
- Veterinary Medicine: 1%
Academia

- About half of survey participants in cooperative extension did not identify themselves as being linked to academia

- “Other” organizations involved in academia included nutrition programs and culinary schools

- Limitations: the cooperative extension (FCS/ Food Science) response could be most prominent due to individuals conducting this research being linked to that subsector
Which Best Describes Your Federal Government Organization?

n=49

- EFNEP: 20%
- FDA: 33%
- FSIS: 10%
- Other: 10%
- SNAP-ED: 12%
- USDA: 14%
Federal Government

- Many prevalent federal government agencies not represented in this survey

- “Other” federal government organizations included legislative agencies with safety and/or health committees and the Environmental Protection Agency (EPA)

- Limitations: some federal government organizations may not permit their members to participate in outside research
Food Retail and Industry Trade Groups

- The 12 food retail survey participants included chain and independent restaurants and growers/distributors.
- The 10 industry trade group survey participants included consumer product companies, advocacy groups, and marketing/trade services.
Food Retail and Industry Trade Groups

Many individuals from the food retail and industry trade group sectors acknowledged that they did not participate in the survey because they are not educating consumers.

Limitations: not enough representation among these sectors to consider their representatives’ survey responses significant (some data analyses were conducted without the input of these two sectors).
Which Best Describes Your Non-Profit Organization?
n=46

- Congregate Nutrition Program: 17%
- Food Bank: 28%
- Food Pantry: 2%
- Other: 52%
Non-Profits

- Food banks may indirectly educate consumers by supplementing food pantries with programming materials.

- “Other” groups included organizations focusing on the mentally ill or homeless, food safety task forces, and child care programs.
Which Best Describes Your Public Health Organization?

n=85

- Aging Facilities: 9%
- County Public Health Agency: 28%
- Healthcare: 7%
- Hospitals/Clinics: 9%
- Local Public Health Agency: 19%
- Other: 7%
- Preschool/Daycare: 8%
- State Department of Agriculture: 2%
- State Department of Health: 9%
Public Health

- Respectable variability within the types of public health organizations educating consumers

- “Other” public health organizations included poison control centers and national health agencies
Which Best Describes Your Organization within the School System (K-12)?

n=50

- Family and Consumer Science Teacher: 70%
- Science Teacher: 4%
- Other: 26%
School System (K-12)

- Few basic science teachers implementing food safety education programs
- No health teachers in K-12 schools represented
- “Other” organizations within the school system (K-12) included school counselors and cafeteria management and staff
- Limitations: some organizations within the school systems (K-12) may not permit their members to participate in outside research
Who is the Programming/ Outreach Activity Designed to Reach?

Number of times chosen

<table>
<thead>
<tr>
<th>Audience</th>
<th>Number of times chosen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults with children at home</td>
<td>190</td>
</tr>
<tr>
<td>Adults without children</td>
<td>109</td>
</tr>
<tr>
<td>Children/ Students (K-12)</td>
<td>213</td>
</tr>
<tr>
<td>Elderly (60+ years old)</td>
<td>154</td>
</tr>
<tr>
<td>Ethnicity based</td>
<td>48</td>
</tr>
<tr>
<td>Farmers’ market vendors</td>
<td>67</td>
</tr>
<tr>
<td>Low income populations</td>
<td>152</td>
</tr>
<tr>
<td>Mixed community of adults and kids</td>
<td>169</td>
</tr>
<tr>
<td>Other</td>
<td>134</td>
</tr>
<tr>
<td>Other food safety educators</td>
<td>87</td>
</tr>
<tr>
<td>People who are buying food</td>
<td>133</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>115</td>
</tr>
</tbody>
</table>
Target Audiences

- Primary focus on reaching children/students (K-12) and adults with children at home/primary meal preparers

- Need for programs reaching ethnicity based populations, farmers’ market vendors, and other food safety educators

- “Other” target audiences were food service employees, school staff, cottage food personnel, food pantries, and retail management
Why are Children the Primary Audience?

- Research grants often target children
- Children may have compromised immune systems
- Need to consider that children may not be the primary decision maker
Through what Type of Channel is the Program Delivered?

- In-person: 421 times
- Online: 167 times
- Other: 100 times
- Radio: 35 times
- Television: 24 times
Program Channels

- Opportunities to educate through online sources (email, website, social media, etc.), radio, and television
- Primary usage of in-person channels
- “Other” categories included newsletters, mail, phone, flyers/ handouts, posters, displays, and newspapers
Who is Using what Channels?

Top three sectors listed for each channel

In-person

- Academia - 96%
- School System (K-12) - 96%
- Public Health - 89%

*Only groups representing at least 10% of the survey population were compared*
Who is Using what Channels?

Top three sectors listed for each channel

Online

- Federal Government - 52%
- Academia - 38%
- Non-Profits - 34%

*Only groups representing at least 10% of the survey population were compared*
Who is Using what Channels?

Top three sectors listed for each channel

Television

Federal Government - 12%
Academia - 7%
School System (K-12) - 4%

*Only groups representing at least 10% of the survey population were compared*
Who is Using what Channels?
Top three sectors listed for each channel

Radio

Federal Government - 16%
Academia - 14%
Public Health - 4%

*Only groups representing at least 10% of the survey population were compared*
Who is Using what Channels?

Top three sectors listed for each channel

Other Channels

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

*Only groups representing at least 10% of the survey population were compared*
In-person vs. Online Audiences

**In-person**
- Children/ students K-12 (49%)
- Adults with children at home/ primary meal preparers (40%)
- Low income populations (35%)

**Online**
- Mixed community of audience of adults and kids (48%)
- Adults with children at home/ primary meal preparers (48%)
- Children/ students K-12 (48%)
Does Your Organization Measure Impacts of the Outreach Program?

- I Don't Know: 10%
- No: 38%
- Yes: 52%
Measuring Impacts

- About half of food safety educators are not or did not know if they are evaluating their programs.

- Those that do measure impacts use:
  - Pre and post surveys
  - Tests/quizzes
  - Surveillance
  - Audits/visits
  - WebNEERS
Who is Reaching the Most People?

- Survey participants were asked how many people they/their organization reached annually.

- Percentages represented the number of individuals per sector that chose 1,000+ people annually.

Federal Government = 65%
Academia = 28%
Public Health = 25%

*Only groups representing at least 10% of the survey population were compared.*
Consumer Food Safety Educator Profile 1
Academia

- Cooperative extension – Family and Consumer Science (76%)

- Main messages: canning/ home preservation, hand washing/ hygiene, four core, proper storage, and temperature

- Program platform: Fight Bac (57%) or other (35%)

- Audiences:
  - Adults with children at home/ primary meal preparers (50%)
  - Children/ students K-12 (48%)
  - Low income populations (45%)
Consumer Food Safety Educator Profile 1
Academia

- Channel: in-person (96%) or online (38%)
- Reaches 1,000+ people annually (28%)
- Will measure impacts (77%)
- Impacts measured by pre and post tests, reporting systems, questionnaires/ surveys, tests, or behavior evaluation
Consumer Food Safety Educator Profile 2
Federal Government

- Food and Drug Administration (33%)
- Main messages: high risk populations, safe food handling, temperature
- Program platform: Fight Bac (82%) or Be Food Safe (47%)
- Audiences:
  - Children/ students K-12 (69%)
  - Adults with children at home/ primary meal preparers (67%)
  - Pregnant women (63%)
Consumer Food Safety Educator Profile 2
Federal Government

- Channel: in-person (88%) or online (51%)
- Reaches 1,000+ people annually (65%)
- Will measure impacts (65%)
- Impacts measured by observation, publications, reports, surveys, and WebNEERS
Consumer Food Safety Educator Profile 3
Non-Profits

- “Other” non-profit organization (52%)
- Main messages: proper storage, high risk populations, source of food
- Program platform: Fight Bac (41%) or other (37%)
- Audiences:
  - Elderly (49%)
  - Other (37%)
  - Low income populations (35%)
Consumer Food Safety Educator Profile 3
Non-Profits

- Channel: in-person (85%) or online (35%)
- Reaches 101 - 500 people annually (30%)
- Will not measure impacts (65%)
Consumer Food Safety Educator Profile 4
Public Health

- County public health agency (28%)

- Main messages: hygiene/hand washing, foodborne illness, HACCP, high risk populations, and inspections

- Program platform: Fight Bac (49%) or other (33%)

- Audiences:
  - Other (41%)
  - Elderly (38%)
  - Adults with children at home/primary meal preparers (37%)
Consumer Food Safety Educator Profile 4
Public Health

- Channel: in-person (89%) or online (31%)
- Reaches 50 - 100 people annually (26%) or 101 - 500 people annually (26%)
- Will not measure impacts (62%)
Consumer Food Safety Educator Profile 5
School System (K-12)

- Family and Consumer Science teacher (70%)
- Main messages: sanitation, hygiene, cross contamination, and food handling
- Program platform: Fight Bac (84%) or Be Food Safe (38%)
- Audiences:
  - Children/ students K-12 (94%)
  - Low income populations (16%)
  - People who are buying food (14%)
Consumer Food Safety Educator Profile 5
School System (K-12)

- Channel: in-person (96%) or online (22%)
- Reaches 101 - 500 people annually (56%)
- Will not measure impacts (54%)
Going Forward

- More collaboration between public and private sectors
- Additional systematic collections of what is already being done/what needs to be done in educating consumers
- Increased willingness for food safety educators to share programming information
- Focus on previously overlooked target audiences
- Development of effective program evaluation materials