Overcoming Consumer Barriers to Healthy Food Safety Behaviors: "Selling" Food Thermometer Use

Susan Conley
Director, Food Safety Education
Food Safety and Inspection Service,
USDA



Mission:

• To increase the use of food thermometers by parents of children under age 10 to reduce the incidence of foodborne illness



Phases in Campaign Development

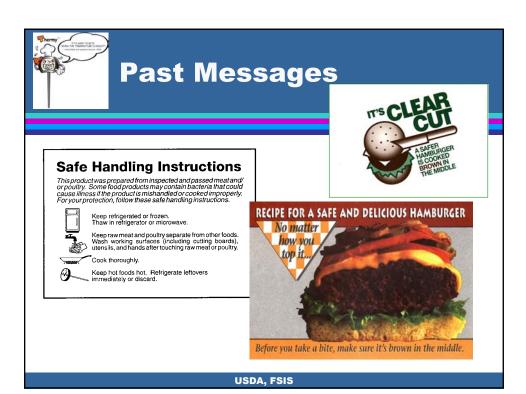
- Phase 1: Campaign for the General Public
- Phase 2: Targeted Audience Segmentation
- Phase 3: Planning and Implementation of Targeted Campaign

USDA, FSIS



Phase 1: General Public Awareness

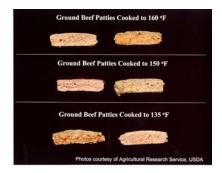
- Long history of encouraging food thermometer use
- Outbreaks changed the awareness -- 1993 E. coli
 O157:H7 outbreak
- Science changed the message





Cooking Studies Show Color Not a Reliable Indicator of Safety

- Cooking by color is misleading
- 1 out of 4
 hamburgers
 turns brown
 before it
 reaches safe
 temperature





Using a food thermometer is the <u>only</u> reliable way to determine if food is safety cooked

USDA, FSIS



But, it is a "Tough Sell"

- In 1994 Hotline survey, less than 50% owned a food thermometer
- Most used it only for the Thanksgiving turkey, if at all
- Very few used it for all meats



1998 National Survey

- Less than 50% of American cooks owned a food thermometer
- Only 3% use it to check small items like hamburgers

USDA. FSIS



Listening to the Customer: Focus Groups Conducted

- Consumer's food safety knowledge quite good
- Used color of meat and "intuition" to test doneness
- Knowledge and use of thermometers limited
- Less than enthusiastic about using a thermometer



Some Barriers Existed...



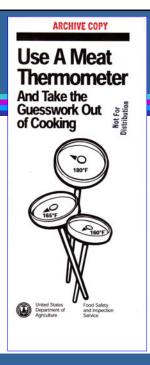


Consumer Attitudes about Food Thermometer Use

- Inconvenience -- "It's a hassle"
- Added expense to purchase a thermometer
- Experience -- feel not necessary
 -- they <u>know</u> when food is done
- Cooking for years without ill effects



They didn't think they were guessing...



USDA, FSIS



Key Findings... Behavior Change is Possible

- Parents of young children are most likely to change behavior but for their children only
- Upscale cooks interested in quality foods might consider use to avoid overcooking



Data Used to Develop a National Campaign

- 1998 Data told us:
 - Target parents of young children
 - Emphasize taste
 - Easy to use everyday
- Campaign focus groups told us:
 - Stress safety
 - Created "Thermy™" character





Campaign Successes

- 2001 National Survey Shows:
 - 60% own a food thermometer
 - Up from 46% in '98
 - 6% use a thermometer when cooking hamburgers
 - Up from 3% in '98
- Thermometer sales
 - Industry sales data show an increase in sales of thermometers

USDA. FSIS



2001 Focus Groups

- Conducted groups with parents of children under 10
- Divided groups based on education level
- Utilized New Methods
 - Provided all of the participants with materials and half with food thermometers prior to the group



Focus Group Results

- Parents confident in ability to safely handle food at home
- Most not aware of importance of using a food thermometer
- Participants who received a food thermometer with educational materials more likely to use one

USDA, FSIS



Phase 2: Audience Segmentation

- Began work in 2001 to further segment audience -- parents of young children
 - Parents are potential early adopters of this behavior
 - Children are at increased risk of foodborne illness



Goals Based on Stages of Behavior Change:

- Among parents of children under 10:
 - increase awareness of the need to use a food thermometer
 - increase intention to use food thermometers
 - increase sales of food thermometers

USDA. FSIS



Goals Based on Stages of Behavior Change:

- Increase trial usage of food thermometers
- increase continued regular usage of food thermometers
- Decrease the incidence of foodborne illness among young children



Immediate Focus on First Goal

- Increase awareness of the need for using food thermometers among parents of children under 10:
 - by 15% by 2004
 - by 60% by 2010*

*Objective coincides with Federal Healthy People 2010 Campaign

USDA, FSIS



Forms of Segmentation

Focus Groups -- Phase 1

- Demographic
- Geographic
- Psychographic
- Behavioral
- Geodemographic
- Household





Segment the Market

- Demographics
- Stages of behavior change
- Perceptions & attitudes
- WHY?
- Improves efficiency
- Improves effectiveness



USDA, FSIS



Using Commercial Models

- Incorporate the power of advanced modeling
 - technology tested and enhanced for nearly 30 years
 - use of "birds of a feather" to find patterns
 - use of a household-by-household insight



Narrowing the Focus

from all people all the time...

...to 62 distinct neighborhood types...

...to 28 neighborhood types with concentrations of children under age 10

USDA, FSIS



Defining Sub-segments

28 neighborhood types into 4 distinct groups:

- demographics (educational attainment)
- lifestyles (purchase behaviors, leisure activities)
- psychographics (willingness to change)

Boomburbs Heartlands Rural Towns Single Moms





Prioritizing Sub-Segments

Use of an Allocations Matrix:

- Number of children under age ten
- Exposure to undercooked meat products
- The quickness of new information motivating behavior changes



Primary Target Selection



Implications of focusing on this target explored with the I-Wheel™ planning tool

















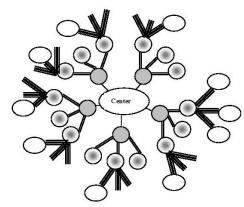


USDA, FSIS



Implications Wheel: Barriers and Bridges Identified

Figure 4. Implications Wheel M





Barriers & Bridges

Barriers:

- May reach a "safety overload"
- Some who are at risk are not informed
- Message may get lost in information overload

Bridges:

- Share ideas with friends and family
- Tend to seek more information about new things

USDA, FSIS



Target Exploration: Become Relevant to their World

- Media preferences (print, radio, TV)
- Shopping habits (groceries, home products)
- Financial behaviors (credit and debt tools)
- Attitudes and beliefs (personal ideals)
- Lifestyles (recreation, travel)
- Automobiles



Boomburbs: Trendsetter Population

- News and information hungry
- Technology-savvy gadget lovers
- Demand high achievement for their children
- Gourmet-conscious "foodies"
- Safety conscious

USDA. FSIS



Boomburbs: Trendsetter Population

- Seeks luxury
- Above average consumers of scientific and technological entertainment
- Influencers in society -- doctors, educators, communicators, political leaders



Boomburbs Preferences

- Magazines --
 - PC Magazine, Martha Stewart Living, Money, Bon Appetit
- Radio --
 - Soft Contemporary, Classic rock, **News/Talk, Drive-time, NPR**
- TV --
 - Comedy Central, E!, Headline **News, The Disney Channel**

USDA. FSIS



Boomburbs Preferences

- Stores --
 - Target, Pier 1 Imports, Gap for Kids, Toys R Us, Macy's, Disney
- Household Products --
 - Burglar alarm, bread machine, electric coffee grinder, Camcorder,
- Food and Drink --
 - Brie cheese, Godiva, lunch kits, toaster pastries



Wide Variety of Information Available...

- Financial Behaviors
- Attitudes and Beliefs
- Lifestyles
- Automobiles

USDA, FSIS



Where They Live

- Phoenix
- Sacramento
- Orlando
- Atlanta

- Albuquerque
- Greensboro
- Annapolis
- Tampa



Desired Behaviors - What We Want Them To Do:

- Become willing to collect information
- Accept that it might apply to them
- Experiment with methods and tools
- Acquire food thermometers, learn to use
- Repeat the behavior every time
- Teach their children and others

USDA. FSIS



Possible Benefits to Emphasize

- Better tasting meat
- Insuring a perfect quality result every time
- Satisfaction from predictability
- Increased confidence in the cooking process



Possible Benefits to Emphasize

- Enjoyment of using a new technology
- Satisfaction from pursuing healthier cooking that is safer for their children

USDA, FSIS



Strategies for Education

- News media stories
- Internet
- Cooking-related TV programs
- Television/film references
- Upscale grocers
- Upscale gadget retailers/catalogs
- Adult education, eg, cooking classes
- Parent-Teacher Organizations



Phase 3: Plans for Reaching Boomburbs

Conduct Boomburbs observational research focus groups

USDA, FSIS



Focus Groups Held in August

- Little knowledge of thermometer use
- Viewed them as inconvenient to use
- Used visual cues to decide if food is done





Focus Groups Barriers

- Family tradition -- thermometers not used by role models
- Don't know how to use food thermometers
- Don't think it necessary to use them on small cuts of meat

USDA, FSIS



Bridges to Use



- Parents concern for children's safety
- Boomburbs interest in food quality and using technology



Other Findings

- Don't know visual signs are not reliable
- Web use high -- as predicted
- Get information from the media

USDA, FSIS



The 4 "P"s for Boomburbs

- Product: Use a food thermometer for everyday meals
- Price: Hassle factor and actual cost to purchase a thermometer
 - Exchange hassle for safety of children



The 4 "P"s for Boomburbs

- Place: Parents of children under 10
- Promotion: Messages and mechanisms we will use to reach them

USDA, FSIS



Phase 3: Plans for Targeted Campaign

- Explore Web site changes specific to Boomburbs
- Work with applicable media to inform Boomburbs about safety issues
- Develop PR plans and educational plans for Boomburbs
- Develop revised support materials for Boomburbs



Plans for Targeted Campaign

- Possibly redesign the Thermy™ character to be more technical or eliminate
- Conduct pilot campaign in a specific city to test materials
- Continue collaboration with thermometer manufacturers to design appealing products

USDA. FSIS



Plans for Targeted Campaign

- Collaborate with industry to produce learning environments at grocers, colleges, etc.
- Design a plan to reach the Boomburbs children in their school environments
- Develop and install a formal tracking & evaluation process; revise objectives



Evaluation Techniques

- Federal Government FoodNet Foodborne Illness Data
- Federal Behavioral Risk Factor Surveillance System
- Federal Consumer Food Safety Survey
- Industry data on Thermometer sales
- Targeted Market Surveys

USDA, FSIS



Stay tuned...

