

Unified Analysis: Research Basis for Recent Food Safety Education Outreach Efforts

Presented by

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This presentation is based on work RTI International conducted under contract with the non-profit Partnership for Food Safety Education. RTI conducted a unified analysis of existing research on consumer food safety education. For more information contact Shelley Feist, PFSE Exec. Director at 202-220-0651.



Recent Research on Consumer Food Safety Practices

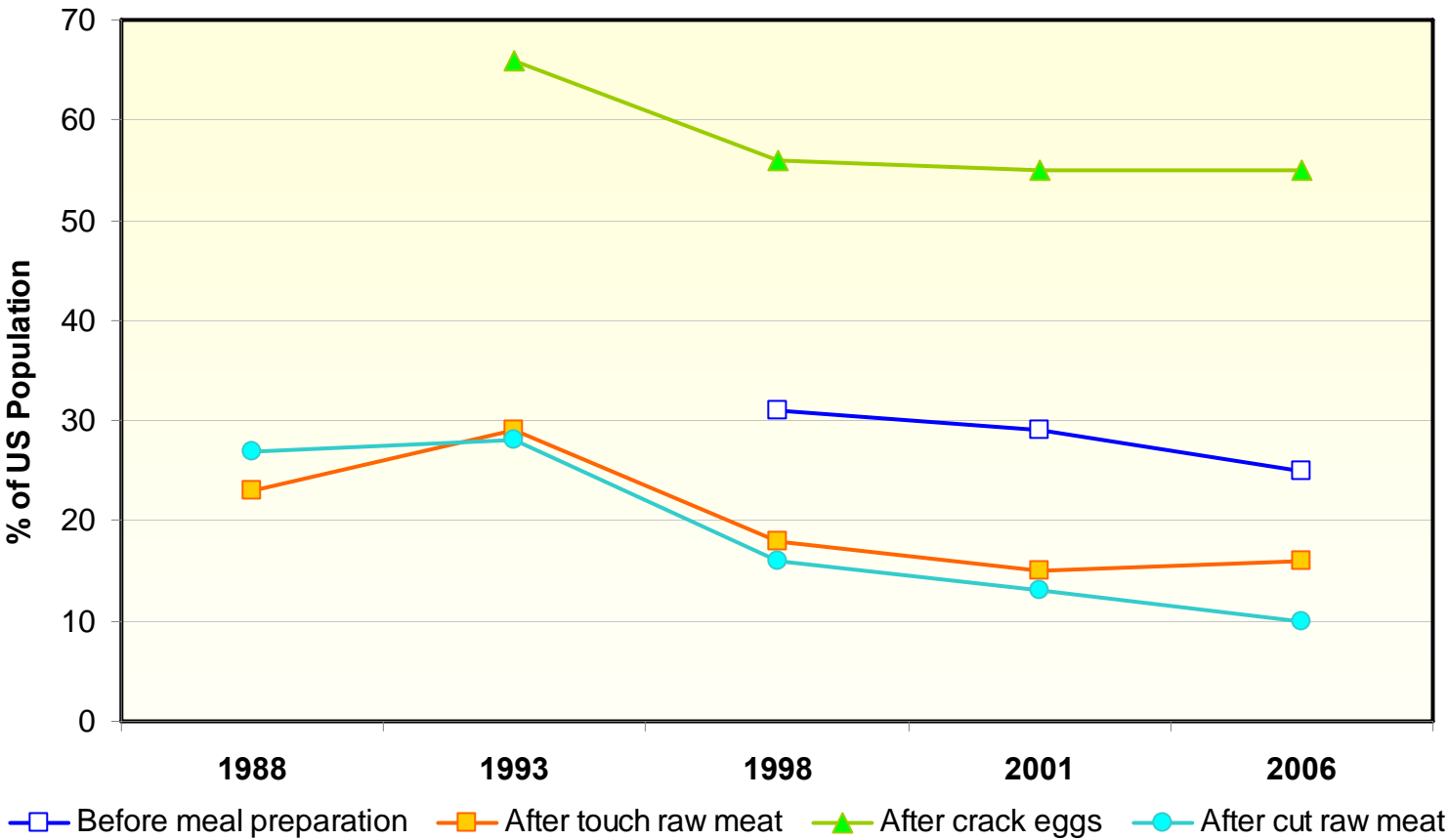
- FDA/FSIS Food Safety Surveys (1988–2006)
- ADA/ConAgra Food Foundation “Home Food Safety: It’s in Your Hands” 2002 Survey (Cody, 2003)
- Survey of Consumer Storage Practices for RTE Foods (RTI, TSU, & KSU, 2005)
- Safe Food Handling: American Attitudes and Behavior Survey (PFSE, 2004)
- Focus group research conducted by the PFSE, FSIS, FDA, and CDC
- Meta-analysis on food safety knowledge and practices (Patil, Cates, Morales, 2005)
- Review of food safety studies (Redmond and Griffith, 2003)



Clean and Separate



% of US Population that Reported Practicing UNSAFE Behaviors for Washing Hands or Cutting Boards



Awareness and Behavioral Compliance for “Clean” Messages

Message	Seen/ Heard	Always Do	Usually Do	Gap
Thoroughly wash and sanitize any surface used for raw meat, poultry, or seafood before using for fresh fruits and vegetables	94%	76%	14%	-18
Wash hands with warm water and soap for at least 20 seconds <u>after</u> handling raw meat, poultry, seafood, or eggs	85%	65%	19%	-20
Wash fresh fruits and vegetables under cool running tap water	80%	61%	24%	-19
Wash hands with warm water and soap for at least 20 seconds <u>before</u> handling raw meat, poultry, seafood, or eggs	74%	53%	21%	-21
Wash fruits and vegetables just before preparing or eating	71%	49%	26%	-22
Scrub firm produce, such as melons and cucumbers with a clean produce brush	49%	26%	17%	-23

Source: PFSE (2004).



Awareness and Behavioral Compliance for “Separate” Messages

Message	Seen/ Heard	Always Do	Usually Do	Gap
When at home, store fresh fruits and vegetables separate from raw meat, poultry, and seafood	92%	77%	16%	-15
Never place cooked food on a plate that has previously held raw meat, poultry, or seafood	91%	73%	9%	-18
Wash cutting boards, utensils, and countertops with warm water and soap after preparing each food	94%	67%	19%	-27
When shopping, keep fresh fruits and vegetables separate from raw meat, poultry, and seafood	78%	53%	23%	-25
Use one cutting board for fresh fruits and vegetables and a separate one for raw meat, poultry, and seafood	71%	47%	15%	-24
Store raw meat, poultry, or seafood on the bottom shelf of the refrigerator	46%	33%	18%	-13

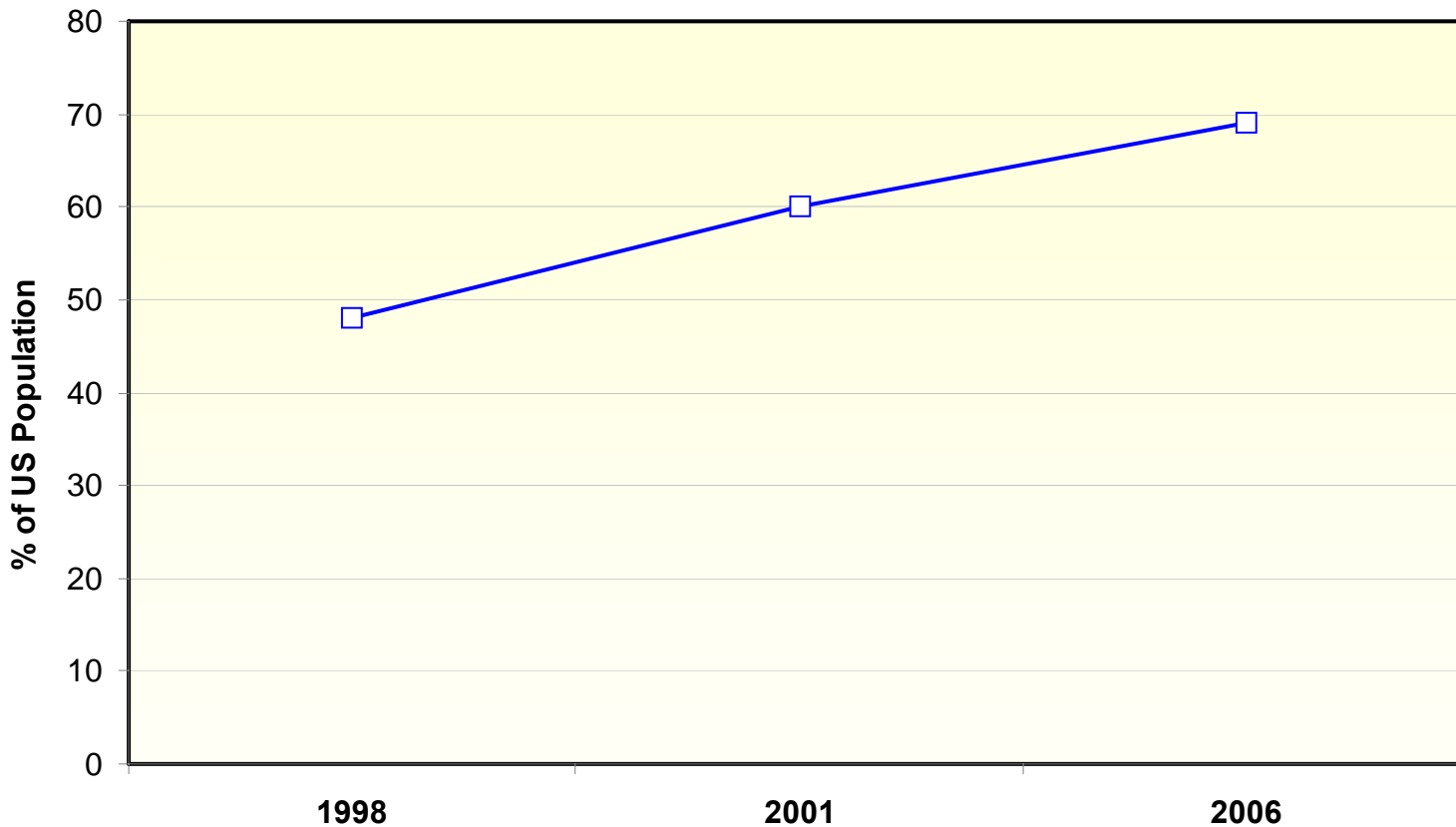
Source: PFSE (2004).



Cook



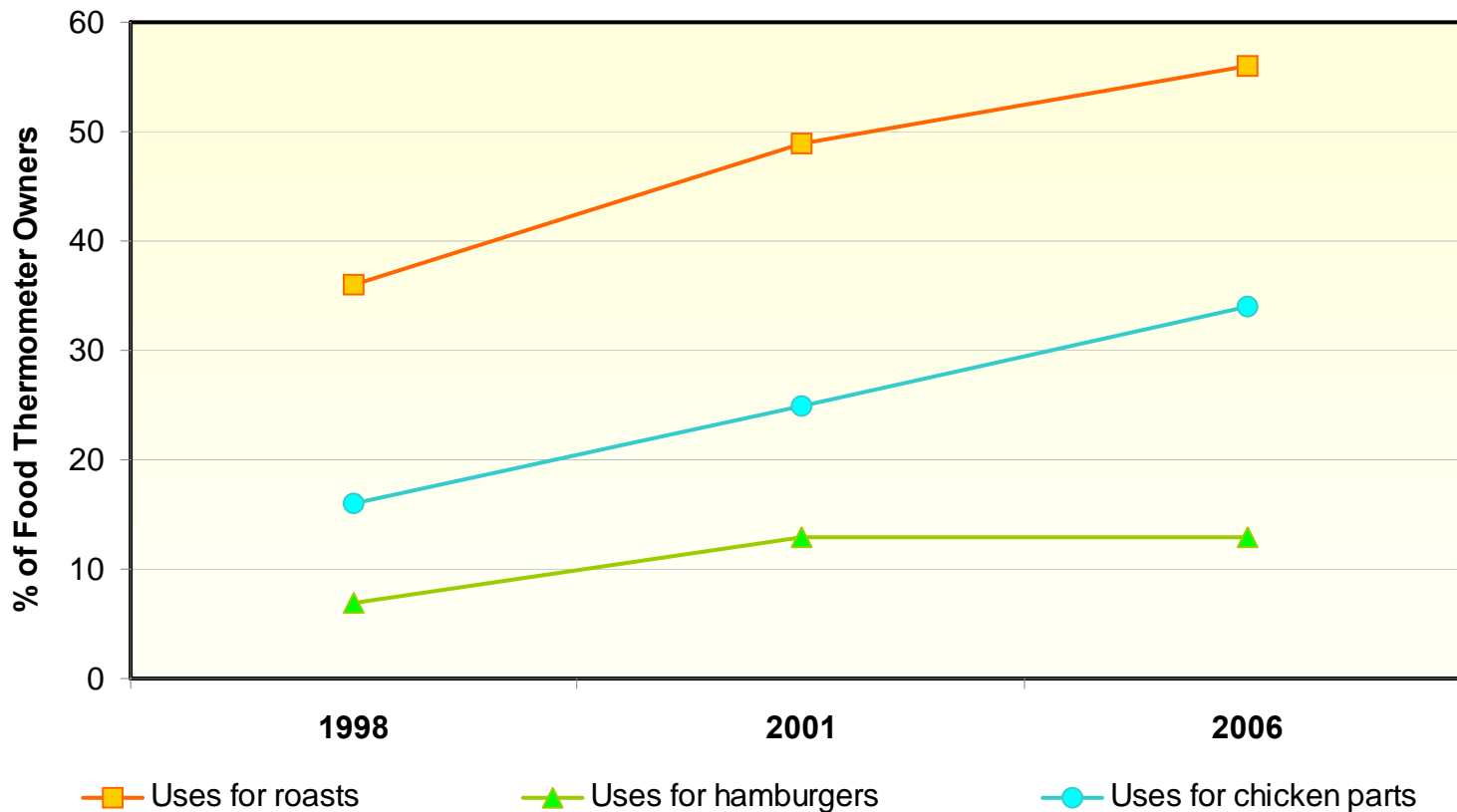
% of US Population that Reported Having a Food Thermometer



Source: FDA/FSIS Food Safety Surveys



% of Food Thermometer Owners Who Reported Using Food Thermometers



Source: FDA/FSIS Food Safety Surveys



Awareness and Behavioral Compliance for “Cook” Messages

Message	Seen/ Heard	Always Do	Usually Do	Gap
When cooking in a microwave, make sure foods are heated thoroughly	87%	65%	24%	-22
Cook eggs until the yolk and white are not runny	70%	51%	16%	-19
Bring sauces, soups, and gravy to a rolling boil when heating	65%	48%	26%	-17
Use a food thermometer for checking the internal temperature of meat and poultry when cooking	78%	31%	18%	-47
To prevent listeriosis, thoroughly heat all ready-to-serve meats such as lunch meats and hot dogs	35%	29%	17%	-6

Source: PFSE (2004)

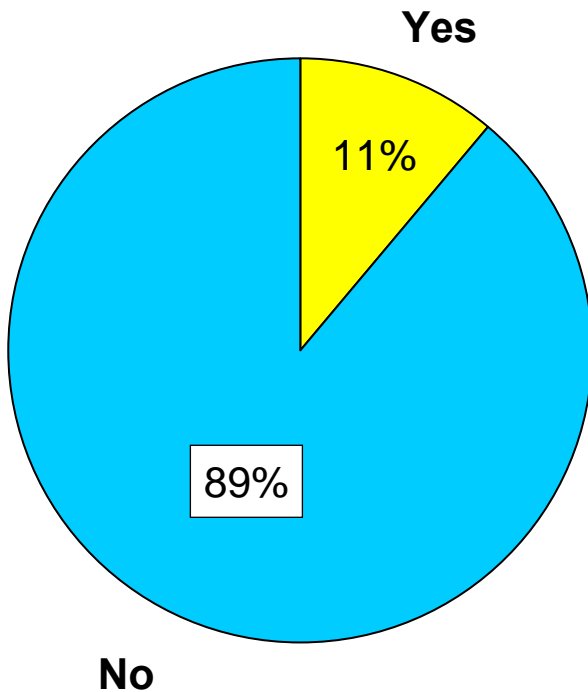


Chill

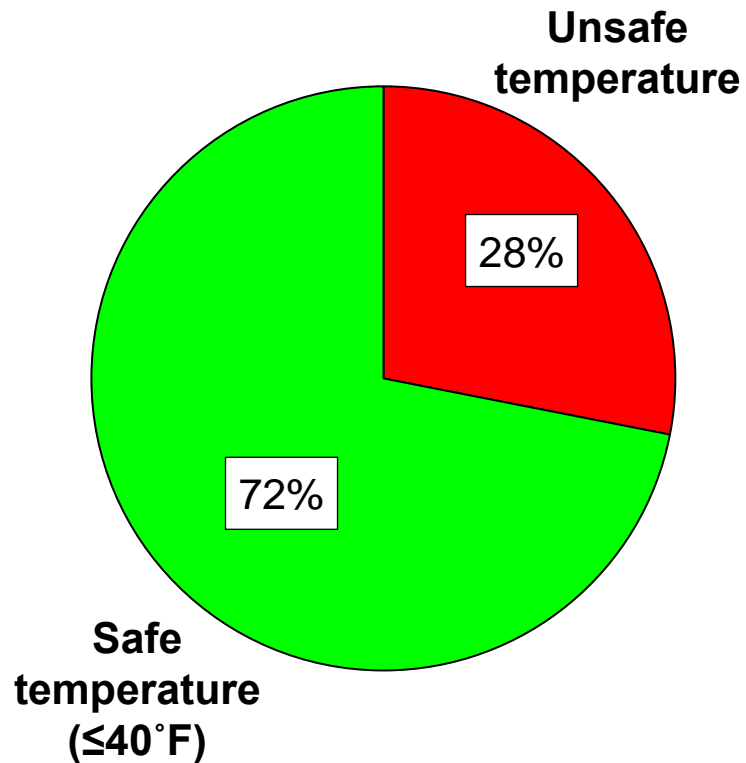


Ownership and Use of Refrigerator Thermometers

Have refrigerator thermometer



Refrigerator temperature (using study-provided thermometer)



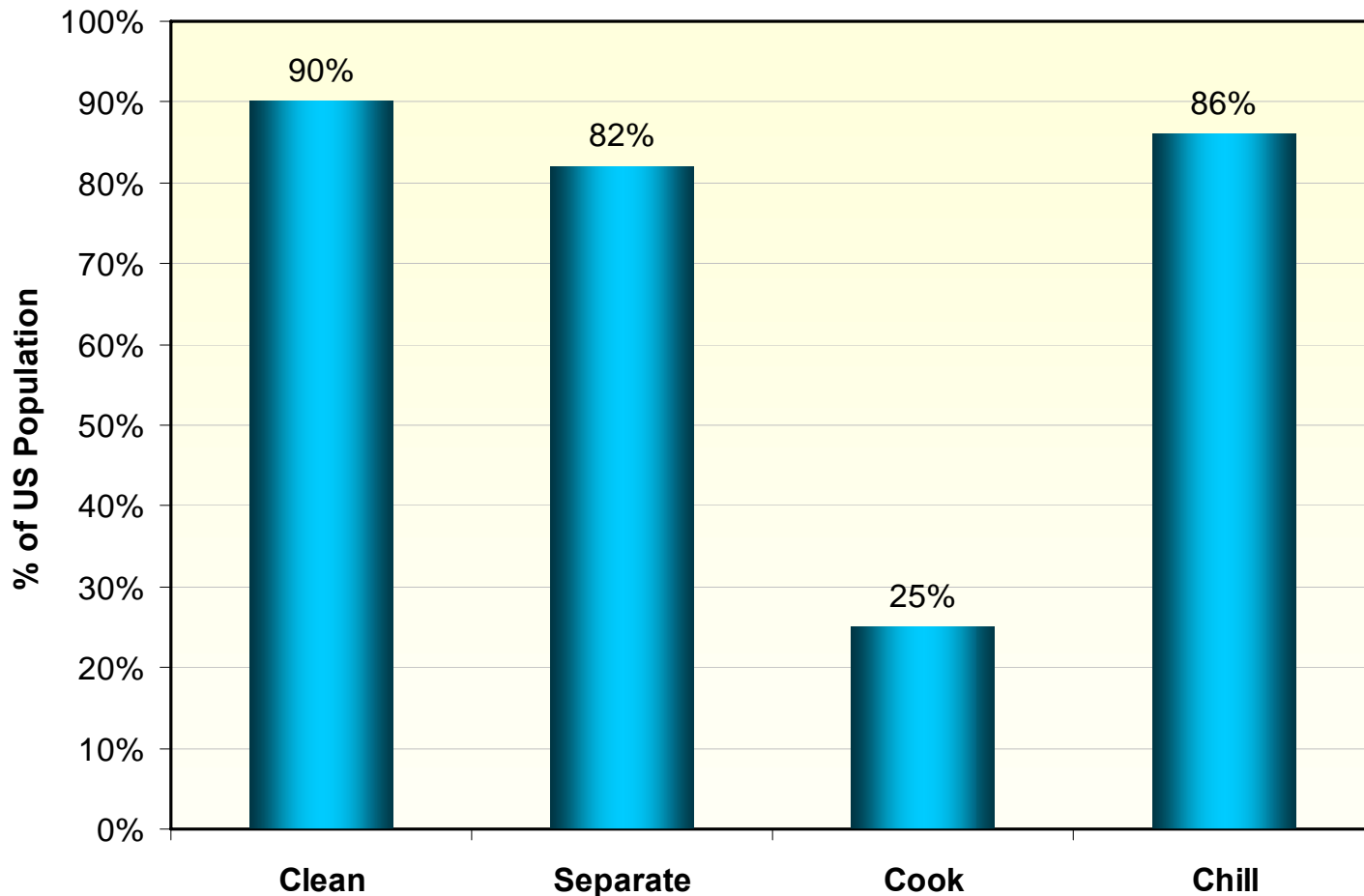
Awareness and Behavioral Compliance for “Chill” Messages

Message	Seen/ Heard	Always Do	Usually Do	Gap
Maintain your refrigerator at 33–41°F	64%	56%	23%	-8
Defrost frozen foods in the refrigerator, cold water, or microwave	89%	53%	28%	-36
Use refrigerated leftovers within 3 to 4 days	78%	43%	30%	-35
Discard perishable foods left at room temperature for more than two hours	71%	38%	25%	-33
Use a refrigerator thermometer	57%	35%	12%	-22

Source: PFSE (2004).



Comparison of 2002 Reported Practices to *Healthy People 2010* 79% Targets



Source: ADA/ConAgra Food Foundation “Home Food Safety: It’s in Your Hands” 2002 Survey (Cody, 2003).



Key Findings...

- Most studies are based on surveys of reported practices, which often overstate actual behavior
- Gap exists between knowledge and behavior
- Safe food handling practices are not always followed
- Most consumers are confident that they safely prepare food at home



Key Findings...

- Consumers have improved their safe handling practices, especially for clean and separate, but the job is not done yet!
- Areas for improvement
 - Handling of fresh produce
 - Using a food thermometer, especially for small cuts of meat and poultry
 - Messages related to chilling foods—refrigerator thermometer use, proper defrosting, safe storage of foods
 - Prevention practices for listeriosis among at-risk populations



Going Forward...Addressing Data Gaps

- More observation studies are needed to measure actual behavior
- Need to conduct surveys and studies of specific subpopulations and develop targeted food safety education programs
 - Older adults who live alone
 - Older adults with chronic illnesses that can be immuno-compromising
 - Parents and guardians of infants

