

What consumers say they do...What they actually do: A comparison

Janet B. Anderson, M.S., R.D.
Clinical Associate Professor/ Utah State University
Director/ Safe Food Institute

Introduction

- Direct observation methodology
 - 122 subjects
 - Bag of groceries and a recipe
 - Videotaped food preparation
 - Administered a survey
 - Coded tapes for food safety behaviors

Handwashing Before Food Preparation

● Survey

- How often do you wash your hands with soap before preparing food?
 - 60% all of the time
 - 28% most of the time
 - 12% some of the time

● Observation

- 52% washed hands
 - 32% cold water, soap
 - 6% cold water
 - 5% hot water, soap
 - 2% hot water
 - 2% hot water, soap, and agitation
 - 2% cold water, soap and agitation
 - 1% sanitizing wipe

Time Spent Washing Hands

● Survey

- How long should you spend washing your hands before preparing food?
 - Average Time: 56 sec.
 - Range: 3-180 sec.

● Observation

- Average Time: 7 sec.
- Range: 1-46 sec.



Handwashing After Handling Raw Eggs

● Survey

- Not washing your hands after handling raw eggs
 - 75% report this is risky behavior

● Observation

- 60% of subjects that prepared recipes with eggs failed to wash their hands after handling raw eggs (n=76)

Method to Determine Doneness

● Survey

- How do you know when hamburgers are done?
 - 64% cut the meat
 - 19% color of juice
 - 8% look at outside
 - 3% cook for certain time
 - 1% use thermometer

● Observation

- Overall
 - 30% cut the meat with knife
 - 34% used a utensil on the surface (juice)
 - 58% looked at outside
 - 0% cooked for certain time
 - 3% thermometer
 - 7% tasted the meat

Thermometer Use

Survey

- How often do you use a thermometer when cooking?
 - 10% always
 - 10% often
 - 35% occasionally
 - 41% rarely
 - 3% never

Observation

- Only 3% used a thermometer
- 1 subject used the thermometer properly



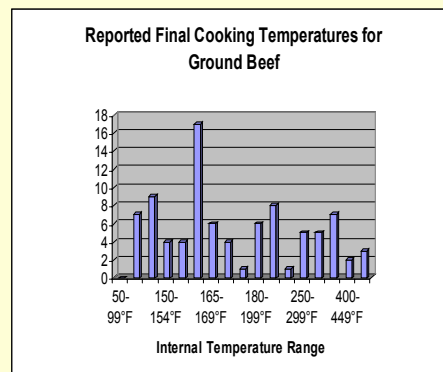
Final Cooking Temperatures

Survey

- To what internal temperature should ground beef be cooked?
 - Range 100-500°F
 - 9% reported accurate temperature (160°F)

Observation

- Ground beef
 - Range 129-197°F
 - 46% undercooked the ground beef entrée (n=36)



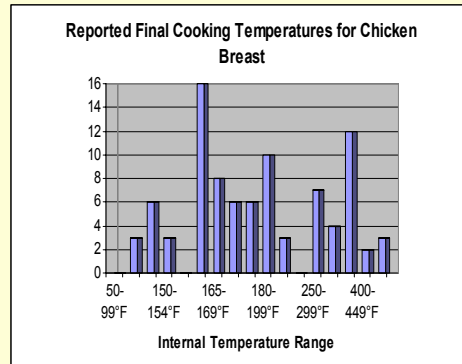
Final Cooking Temperature

Survey

- To what internal temperature should chicken breast be cooked?
 - Range 100-500°F
 - 3% reported accurate temperature (170°F)

Observation

- Chicken Breast (n=33)
 - Range 132-191°F
 - 82% of subjects undercooked the chicken entree



Internal Temperature

Survey

- 89% report eating meatloaf that is pink in the middle is risky behavior
- 84% report eating rare ground beef is risky

Observation

- Meatloaf final internal temperature ranged from 129-197°F
- 46% of subjects undercooked the beef



Serving Entree

● Survey

- 99% report serving the cooked entrée on the same platter that was used for the raw meat or poultry without washing is risky

● Observation

- None of the subjects served the cooked entrée on the same plate as the raw food.

Method for Kitchen Counter Cleaning

● Survey

- What do you use most often to clean your counter tops in your kitchen?
 - 76% dishcloth
 - 14% sponges
 - 10% paper towels

● Observation

- 46% cont. cloth
- 26% cloth
- 10% cont. sponges
- 7% sponges
- 7% paper towels
- 2% scrub brushes



Method of Storage of Leftovers

• Survey

- How would you store a large pot of soup or stew?
 - 35% a large, deep container with a cover
 - 33% original pot
 - 25% small, shallow containers with covers
 - 4% small, shallow containers without covers
 - 3% a large, deep container without a cover

• Observation

- Stored leftover entrée in:
 - 23% original cooking container
 - 7% large, deep container
 - 48% shallow container
 - 23% with a cover

Determining if Leftovers are Safe to Eat

• Survey

- How do you determine if a leftover casserole that has been in your fridge for a while is safe to eat?
 - 52% smell it
 - 37% look
 - 11% taste

• Actual Behavior

?

Storage of Leftovers in the Refrigerator (Days)

● Survey

- How long do you leave leftovers in the refrigerator and still consumer them?
 - 54% 1-3 days
 - 14% 4-6 days
 - 31% 7-10 days

● Actual Behavior

?

Conclusion

- Consumers are not doing what they say they do.
- Why?
 - Unaware of their behavior.
 - People forget what they do.
 - Answer with what is considered appropriate.

Conclusion

- Surveys are good for assessing consumer food safety knowledge and attitude.
- Observational methodologies are necessary when assessing consumer food safety behavior.

Thinking Globally -- Working Locally
A Conference on Food Safety Education

