

Do Television Chefs Food Handling Practices Impact Consumer Attitudes and Behavior?

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**ADVANCING
FOOD SAFETY**

THROUGH BEHAVIOR CHANGE



What influences consumer behavior?

- Consumers do things by habit
- The popularity of television cooking shows has increased
- Do consumers see chefs practicing recommended food handling behavior?
- Does what consumers see influence their own practices?

Previously Reported Chef Handling Practices

Mathiasen et al, 2004	2002 N=60)	20003 (N=56)
Poor personal hygiene	75%	96%
Cross contamination	72%	86%
Failure to cook food adequately	17%	18%
Failure to avoid unsafe foods	15%	14%



Previously Reported Chef Handling Practices

Evaluation of 100 cooking shows hosted by 24 different chefs

- **Chefs did not demonstrate proper food safety behaviors**
- **Behaviors would lead to cross-contamination**

Most common errors:

- **Handling raw meat without hand washing**
- **Sampling ready to eat foods with hands not utensils**
- **Not giving adequate indicators for meat doneness**

Content of 60 Celebrity Chef Cooking Programs

	Chef 1 Female (%)	Chef 2 Female (%)	Chef 3 Male (%)	Chef 4 Male (%)
No hand washing before cooking	100	100	100	94
Licked fingers	0	8	22	0
No hand washing after handling raw meat	32	38	44	6
Tested for doneness without thermometer	42	38	44	56
*Separated raw and ready to eat food	32	54	22	50
*Mentioned correct temperature	5	38	0	6
Average error/show (count)	5.7	5.4	6.4	5.8

Do chefs influence consumers?

- **Used focus groups to assess consumer response**
 - Must prepare meals in the home
 - Must watch cooking shows
 - Must have seen at least 3 of the 4 chefs
- **Showed clips from each chef**
- **Asked consumer reaction to the specific behavior**
 - Did they notice?
 - Do they handle food in the same way?
 - Given what they saw, would they like to dine with the chef?
- **Developed a survey delivered on the internet to quantify consumer response**

Chef 1 -Cross contamination and temperature

Activity: Cooking meatballs

- **Violation: mixed raw meat with hands, then touched many kitchen items without washing hands**
- **35% admitted that they touched raw meat or chicken without washing their hands**
- **Violation: said it was OK to leave cooked meatballs out all night**
- **46% said the meatballs should only be left out for 2 hours**

Chef 2, Failure to wash hands and use a thermometer

Activity. Barbecue whole chicken

- Violation: Tested chicken doneness by wiggling leg.
- 49% would also use this method
- 30% said they use a thermometer most often
- Violation: Licked fingers. Held leg with fingers, served, licking fingers several times
- 20% acknowledged that they used hands and utensils and 6% used fingers exclusively
- 61% admitted that they sometimes lick their fingers to taste test a dish

Chef 3- cross contamination

Activity. Barbecued squid and prepared salad

- **Violation:** Placed cooked food on the same serving platter that had contained the raw item. Chopped herbs on the same cutting board as raw fish without washing
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- **29% used the same plate for raw and cooked meat or chicken**

Chef 4 cooking to a safe end point temperature

- **Activity.** Prepared stuffed burgers.
- **Violation:** Did not indicate how he knew the meat was done.
- **89% would like to know how the chef knew the meat was done**
- **63% said they would consider using a thermometer if the chef used one**
- **52% thought a thermometer was not necessary if the chef didn't use one**

Participants' Involvement with TV Cooking Shows

- **Watched one of the Chef's cooking show**
 - At least once a week 21% - 43%
 - Every 2-3 weeks 17% - 26%
- **Considered preparing a recipe shown on the show**
 - At least once a week 10% - 22%
 - Every 2-3 weeks 19% - 24%
- **Actually prepared a recipe**
 - At least once a week 7% - 12%
 - Every 2-3 weeks 14% - 18%
 - Once a month 20% - 29%
 - Every few months 24% - 31%

Participants Expectations of chefs' Food Handling Practices

- **25% Believe chefs don't have time to wash their hands or cutting boards on TV**
- **61% Believe chefs cook differently at home or in their restaurant**
- **74% Expect chefs to follow safe handling recommendations when they cook on television**
- **44% Agree that chefs sometimes fail to give viewers the information they need to safely prepare the dish**



Participants' Attitudes toward chefs' Food Handling Practices

Thought less of the chef when the chef –

Licked their fingers instead of washing them 74%

Used the safe cutting board for raw and ready to eat food 68%

Tasted a dish with a used utensil 58%

Tasted with their fingers 47%

Used their fingers instead of utensils 39%

Next Step: Collaborate with food celebrity chefs to model safe handling

Work with food safety educators and the food industry to reach celebrity chefs.

Share findings and encourage formation of a collaborative team to develop a safety handling pledge

- **Chefs involved in developing the program**
- **Model safe handling following Fight BAC principles**
 - **Cook- verify thorough cooking by use of thermometer**
 - **Chill - appropriate temperature control**
 - **Clean - hand, produce washing, no meat washing**
 - **Separate - use of utensils rather than hands**
 - **Plus - Chose safe food**



Television Chefs As Models

- **Chefs don't always follow cleaning and cooking recommendations**
- **Consumers believe the chef's practices are acceptable**
- **Consumers admit they follow the same behaviors at home**
- **Modeling inappropriate behavior could increase the risk of illness from home-prepared food**
- **We have a plan to change behavior**



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