

IOWA STATE UNIVERSITY

Hospitality Management Program

What Motivates Consumers to Report Foodborne Illnesses?

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Presentation based on the following publication:

**Reporting of Foodborne Illness by
U.S. Consumers and Healthcare Professionals**

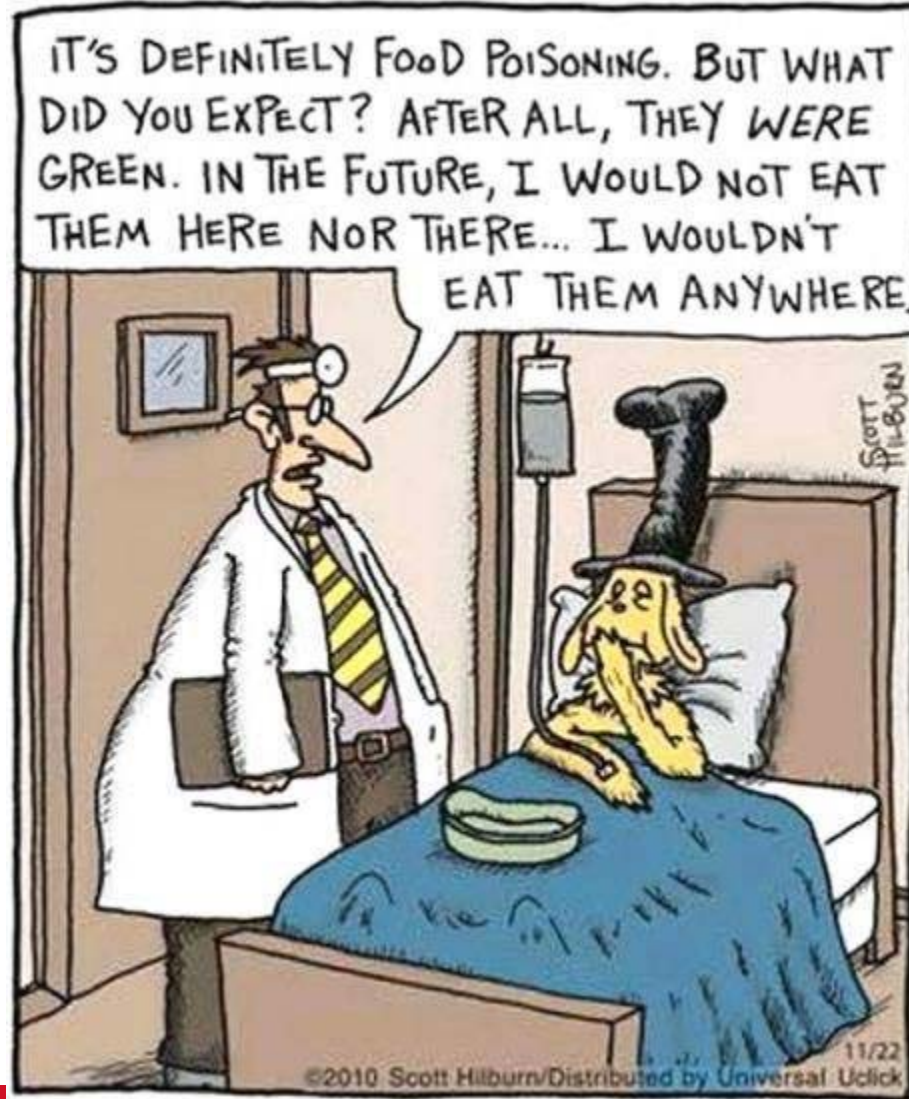
Susan Arendt, Lakshman Rajagopal, Catherine Strohbehn, Nathan Stokes, Janell Meyer, Steven Mandernach

as published in the

***International Journal of Environmental Research & Public Health* 2013,
10(8), 3684-3714; doi:[10.3390/ijerph10083684](https://doi.org/10.3390/ijerph10083684)**

BACKGROUND

- 1,527 foodborne disease outbreaks reported by CDC (2009-10)
- Estimated 48 million foodborne illnesses contracted annually in the U.S. (Scallan *et al.* 2011)
- 57% of Americans indicate concern about food safety (NPR 2011)
- Despite availability of online resources, 62% of patients trust physicians for all health-related information (Hesse *et al.* 2004)
- Healthcare providers report being uncomfortable with their knowledge of foodborne illness, its treatment and its diagnosis (MacDonald *et al.* 2007)



PURPOSE

- **Identify barriers to the under-reporting of foodborne illness by consumers.**
- **Propose solutions to overcome identified barriers**

METHOD

Focus Groups

- Recruitment
 - Phase I: 3 groups in 3 Iowa cities - **35 consumers**
 - Multiple methods: flyers at work sites, public areas, and networks of ISU Extension and Outreach staff
- Facilitation
 - Prior to focus group: Short questionnaire about attitudes toward food safety and demographic information gathered
 - Pseudonyms selected
 - Snacks provided
 - Expedited by experienced moderator and assistant moderator
 - Audio recorded and transcribed

Consumers questioned about:

- Have you ever suffered from food poisoning?
- How did you know your illness was from food and not something else?
- What did you do?
- Did you report it? If so, to whom?
- What could make it easier to report?
- How hard do you think it is to collect a usable stool sample?

RESULTS

- **Questionnaire: Assessing attitudes and collecting demographic information**
- **Focus Groups: In-depth discussion**

Demographic Characteristics of Consumer Focus Group Participants (n=35)

Gender	Frequency	%
Female	26	74.3
Age		
18-25	5	14.3
26-34	7	20.0
35-49	6	17.1
50-64	10	28.6
65-80	7	20.0

Demographic Characteristics of Consumer Focus Group Participants (n=35)

Education	Frequency	%
Some high school	1	2.9
High school diploma	5	14.3
Some college	11	31.4
Bachelor's or Associate's degree	11	31.4
Graduate degree	7	20.0

Demographic Characteristics of Consumer Focus Group Participants (n=35)

Income	Frequency	%
less than \$25,000	13	37.1
\$25,000-\$49,900	11	31.4
\$50,000-\$99,900	6	17.1
\$100,000-\$150,000	3	8.6
more than \$150,000	2	5.7

Demographic Characteristics of Consumer Focus Group Participants (n=35)

Ethnicity	Frequency	%
African-American or Black (Non- Hispanic origin)	2	5.7
Asian	2	5.7
Caucasian/White	30	85.7
Multiracial	1	2.9

Demographic Characteristics of Consumer Focus Group Participants (n=35)

Type of healthcare plan	Frequency	%
Private paid by employer	16	39.0
Private paid by self	6	14.6
Medicaid	3	7.3
None	2	4.8
Other	7	17.0

Consumers' Attitudes:

- Believed they did not have a food allergy (80.0%)
- Past 3 months, ill from something you ate? (34.3% yes)
- Ever sick from something you ate as adult? (91.4% yes)

Food Poisoning Consumer Questionnaire Data

Concern about safety of food purchased to prepare at home	Current Study	Current Study	NPR
	Frequency	%*	%*
Not at all concerned	4	11.4	10.7
Not very concerned	10	28.6	9.5
Somewhat concerned	6	17.1	22.5
Concerned	5	14.3	18.9
Very concerned	9	25.7	38.5

* Percentages sometimes equal more than 100 because multiple responses were allowed

Food Poisoning Consumer Questionnaire Data

Concern about safety of food prepared away from home	Current Study	Current Study
	Frequency	%
Not at all concerned	1	2.9
Not very concerned	3	8.6
Somewhat concerned	10	28.6
Concerned	9	25.7
Very concerned	11	31.4

**Percentages for NPR data were only provided where available

Food Poisoning Consumer Questionnaire Data

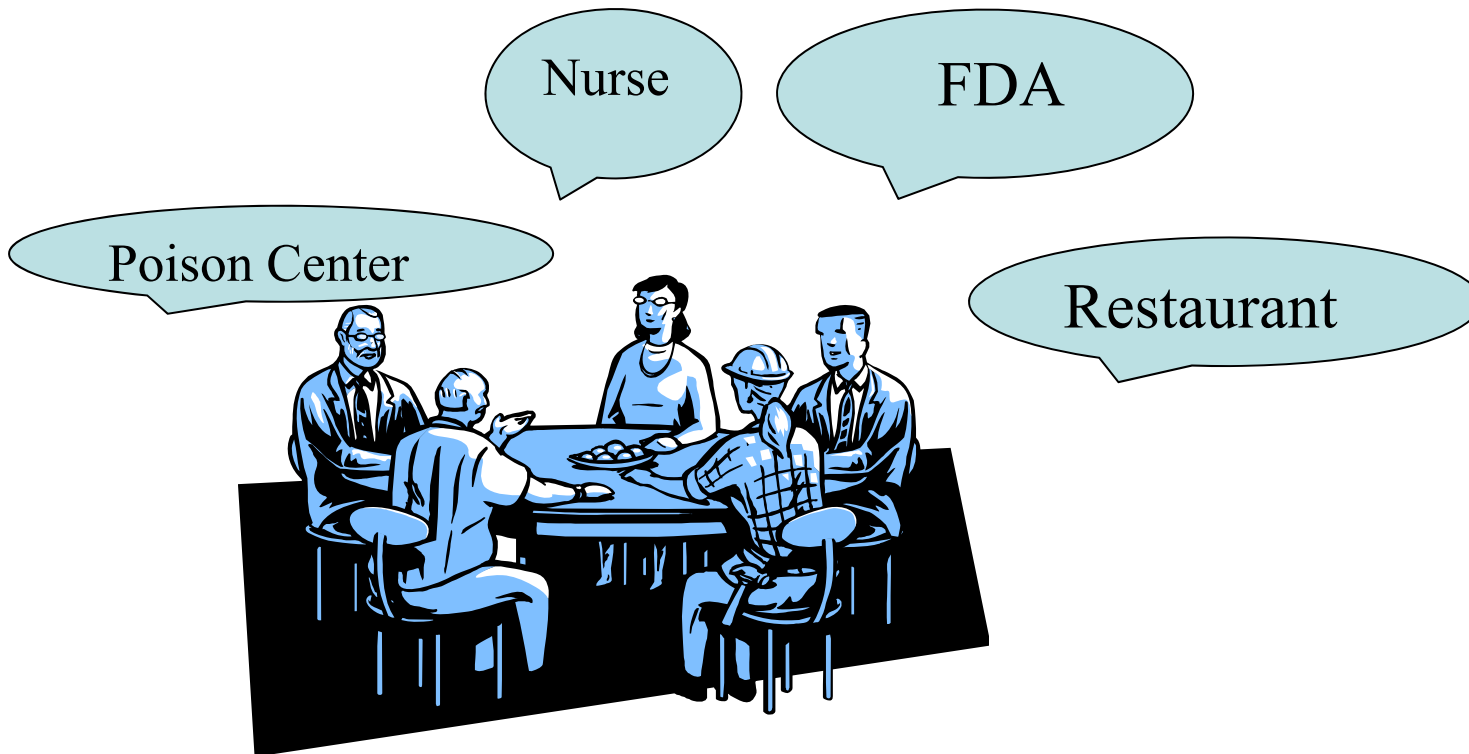
Best approach to reduce risk of foodborne illness	Current Study	Current Study	NPR
	Frequency	%	%
More inspections	16	45.7	20.6
Better quality control	27	77.1	34.5
Stiffer penalties	7	20.0	12.5
Increased governmental oversight	6	17.1	13.5
Better consumer education	22	62.9	18.8

* Percentages sometimes equal more than 100 because multiple responses were allowed

Consumers' Focus Group Responses:

- How did you know you were suffering from a foodborne illness?
 - Themes related to severity and duration of symptoms
- Did you report illness and to whom?
 - Mostly no, because:
 - Unsure of who to contact
 - Too ill to make contact
 - Uncertainty of cause or source of illness
 - Did not think reporting would matter

Some Illustrative Quotes: Who would you report it to?



Some Illustrative Quotes: Stool Samples

How are you gonna set aside a whole another entire day just to point the finger at someone?

when you're that sick, you're thinking, "I don't wanna do it now because I don't wanna leave the bathroom"

If the doctor asked for it, I would, I'd give it to him

What benefit is it to (me) personally?



Consumers' Focus Group Responses:

- What would be the best way to get information about how to report food poisoning?
 - Memorable telephone number (similar to 1-800-BETSOFF)
 - Internet
 - Restaurant postings/package materials
- What would make it easier to report an illness?
 - Education
 - Knowing someone cared
 - Knowing someone will be held accountable

Consumers' Focus Group Responses:

- How hard would it be to collect a stool sample?
 - Difficult: messy, inconvenient process, embarrassing
 - Not difficult: previous experience
- Concerned about providing a stool sample?
 - Yes: new request, scary, inconvenient
 - No: previous experience, needed for diagnosis, can benefit me

CONCLUSIONS & IMPLICATIONS

- Barriers for reporting of FBI exist for consumers
- Identified barriers would best be overcome through:
 - ❑ Targeted education
 - Consumers: stool sample collection resources, why it's important to report, complaint response process and potential outcomes
 - ❑ Improved outreach

CONCLUSIONS & IMPLICATIONS

- Identified barriers would best be overcome through:
 - ❑ Improved access and information regarding FBI reporting process
 - Memorable phone number
 - Stool sample video available:
www.idph.state.ia.us/cade/Foodborne.aspx
 - Reporting information listed on restaurant postings/packaging materials
 - Centralized statewide reporting

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Thank you for your attention! QUESTIONS?

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