

## Do consumers notice the source of messages about foodborne illness outbreaks?

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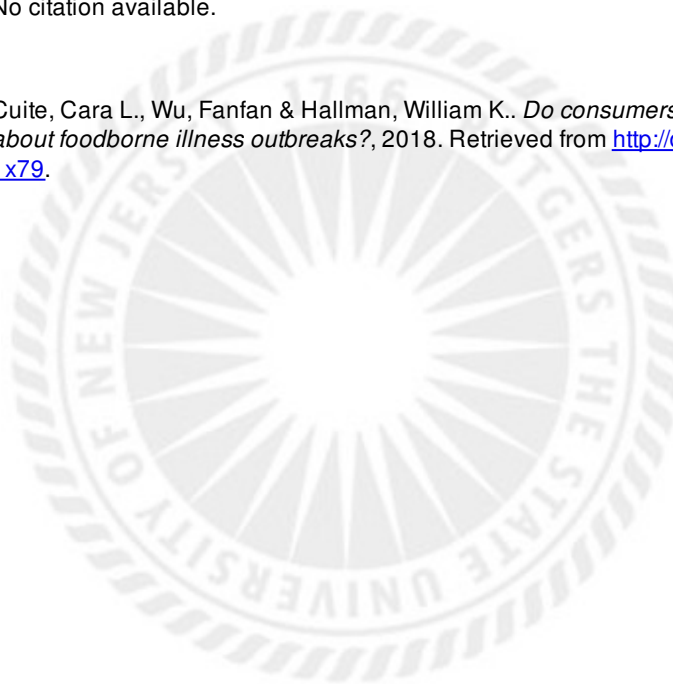
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# Do Consumers Notice the Source of Messages about Foodborne Illness Outbreaks?

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## Introduction

The United States has had two well publicized outbreaks of *E. coli* O157:H7 associated with romaine lettuce during 2018. One took place in winter and spring, and the other is ongoing (as of November 30, 2018). However, the romaine outbreak in winter and spring of 2018 was unusual in terms of who communicated with the public about how to respond.

The early 2018 outbreak involved romaine lettuce in Canada and the US. While the public health agencies of each country acknowledged the outbreak, there was no official recall of romaine lettuce. However, the Consumers Union, an advocacy group that publishes *Consumer Reports*, advised American consumers to avoid romaine lettuce, and this was widely reported in the news. Given how unusual it is for an advocacy group to provide this type of guidance while the government did not, we conducted an experiment to see if American consumers would notice the source of this advice.

## Method

- Online survey of a sample of 1472 American adults.
- Data were collected in May and June, 2018, shortly after the *E. coli* outbreak had ended.
- This experimental module appeared toward the end of a longer survey.
- Participants were presented with a hypothetical scenario about an *E. coli* outbreak that mimicked the romaine lettuce outbreak, however the affected food was cucumbers.
- The text of the announcement was based on actual media stories about the romaine lettuce recall.
- The group announcing the guidance was experimentally varied as a between- subjects factor. Respondents saw one of the following as the source of the advice:
  - US Food and Drug Administration,
  - Canadian Food Inspection Agency, or
  - Consumers Union (CU).

## Experimental Stimuli

Below is an example of what a participant who had been assigned to the FDA condition would have seen.

- Text in **red** varied by experimental condition, such that participants saw only one of the sources.
- Two other experimental manipulations were included in the messages, but are not discussed here.

*At least two people were killed and dozens sickened by E. coli outbreaks in Canada and the United States that have been linked to cucumbers. In all, at least 58 people in both countries have been sickened, and two — one in California and one in Canada — have died. In the United States, at least 17 reports of illness in 13 states have been tied to the outbreak. In Canada, authorities are investigating 41 cases of illnesses linked to E. coli from May and June. E. coli is a bacterium that has caused a number of deadly foodborne illness outbreaks in recent years.*

*Most of those patients reported eating cucumbers before they became ill, according to the **U.S. Food and Drug Administration (FDA)**, the government agency in charge of protecting public health by ensuring fruits and vegetables are safe, adding, "Individuals reported eating cucumbers at home, as well as in prepared salads purchased at grocery stores, restaurants and fast food chains."*

*What does this mean for US consumers? **FDA** officials said it was urging shoppers to avoid cucumbers out of an abundance of caution. They suggest that consumers discard any uneaten cucumbers, even if they were partially eaten without anyone getting sick. "Because this outbreak involves a strain of E. coli bacteria (O157:H7) that can lead to serious illness including kidney failure, **FDA** is asking everyone to follow our recommendations and avoid any cucumbers," the organization said in a news release.*

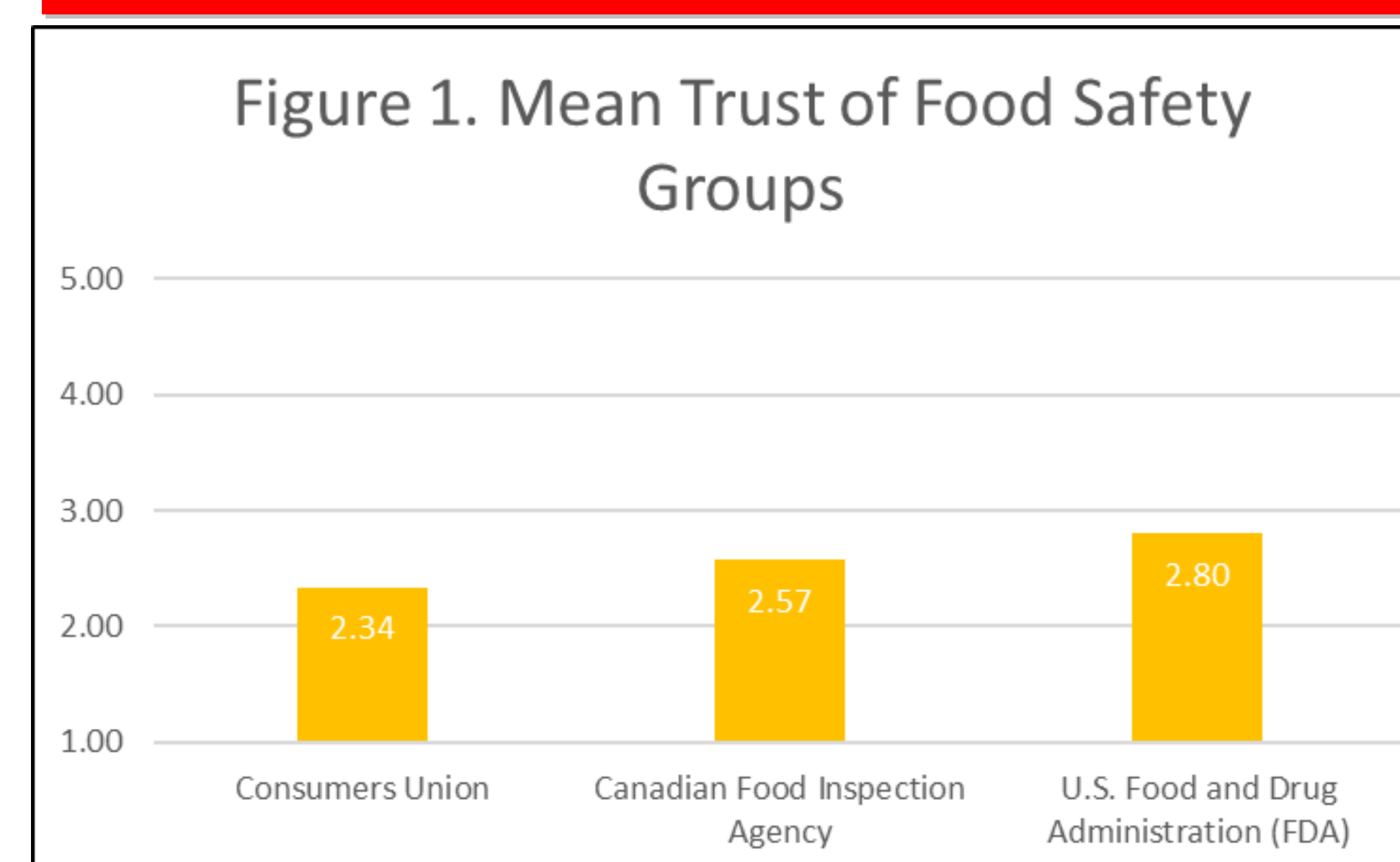
## Results

There were no significant differences attributable to which source made the announcement on any of the dependent variables, which included:

- Likelihood of purchasing cucumbers
- Likelihood of eating cucumbers
- Likelihood of serving cucumbers to your children
- Perceived safety of eating cucumbers
- Likelihood of getting sick if cucumbers eaten

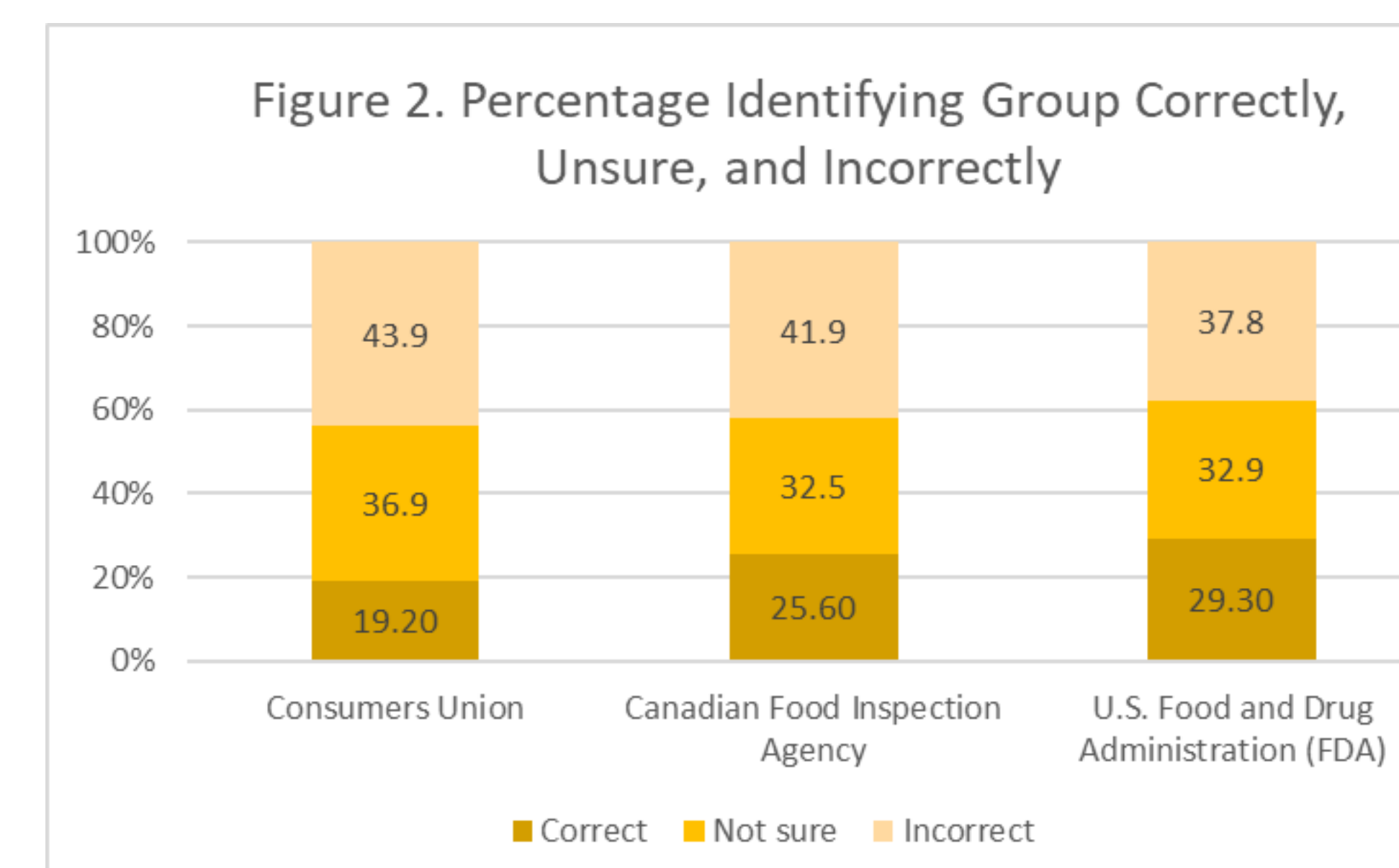


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Note. "How much do you trust the following to keep food safe to eat?" 1 "not at all"- 5 "a great deal"

As indicated in Figure 1, participants reported slightly higher levels of trust in the FDA than the CFIA, which were both slightly higher than trust in the Consumers Union. Trust was measured on a 5 point scale, with mean trust for all of the groups falling just below the middle of the scale.



Participants were significantly more likely to correctly identify the group that they saw named as leading the investigation than the other groups. However, across all conditions, 34% of respondents said they did not recall who had announced that there was an outbreak, and that did not vary by experimental condition. In addition, the accuracy of naming the correct group was low, with only between 19% and 29% being correct depending on condition. On average, participants were able to accurately name FDA about 50% more often than CU.

## Conclusion

The data presented here suggest that when people learn about a foodborne illness outbreak and recommended actions, many do not pay attention to the source of the message. About one-third of the participants said they did not recall who had identified the outbreak and less than a third correctly recognized the source. In addition, the identity of the source making the announcement had no effect on risk perceptions or behavioral intentions.

These data also suggest that, if a non-governmental organization decides to advise the public not to eat a certain food during a foodborne illness outbreak when the government declines to (as was the case earlier this year), the public may not notice the lack of governmental support for the advice. What happened in the early 2018 romaine lettuce recall represents a significant departure from normal procedures of government-issued food recalls and advisories. Although Consumers Union is a reputable organization and has similar levels of trust from the public as FDA. However, if it continues to get ahead of FDA/CDC in advising consumers to avoid certain foods in the wake of a foodborne illness outbreak, there may be potential unintended consequences.

## Acknowledgments

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