

Enhancing U.S. FDA's Communication on Foodborne Illness Outbreaks and Food Recalls through Consumer Research | An Overview of A Research Program

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IAFP Annual Conference, 07/15/2024

Meet the Research Team



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CONSUMER RESEARCH PROGRAM

Enhancing FDA's Communication on
Foodborne Illness Outbreaks and Food Recalls

Qualitative Research

**Safety Alert & Outbreak Advisory
Template Testing**
1-on-1 Interviews | [July 2021](#)



**Focus Groups on
Food Recalls**
[June 2023](#)

Quantitative Research

Quick Turnaround Surveys

Quick Turnaround Survey
on Frozen Strawberries Recall
[April 2023](#)

Quick Turnaround Survey
on Flour Recall
[May 2023](#)

Quick Turnaround Survey
on Cinnamon Applesauce Pouches Recall
[November 2023](#)

Quick Turnaround Survey x 3, TBD

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- **Goal:** To understand consumer preferences on how to best frame the FDA/CFSAN safety alerts and outbreak advisories
- **Interview Details:**
 - A total of 36 interviews with U.S. consumers
 - National recruit, with a mix of age, gender and race/ethnicity
- **Actions:** Based on the research findings, FDA updated its outbreak advisory template

Outbreak Investigation of E. coli O157:H7: Packaged Salad (Jan 2022)

BEFORE

FDA's investigation is ongoing

The FDA and CDC, in collaboration with state and local partners, are investigating illnesses in a multistate outbreak of *E. coli* O157:H7. According to the CDC, as of January 6, 2022, 10 people infected with the outbreak strain of *E. coli* O157:H7 have been reported from four states. Consumer purchase data indicate that seven people purchased Nature's Basket Power Greens or Simple Truth Organic Power Greens at grocery stores before becoming sick. Based on those purchase dates, the latest "best if used by" date is estimated to be December 20, 2021. These two salad blends consist of organic spinach, mizuna, kale, and chard; both brands were manufactured by the same processor.

FDA has initiated a traceback investigation on the products of interest. To date, no single production code has been identified by the traceback. For the estimated production code range that may have been available for purchase to ill consumers, records collected indicate that leafy greens used in these products were sourced from Salinas and Imperial Valley, CA, and Yuma, AZ. FDA continues to evaluate the available information to determine if a single source, such as a farm or ranch, can be identified. Some challenges encountered in this traceback are those often seen in tracing back leafy greens. These include multiple consumer purchases of the same product on different days, lack of product lot codes tracked to retail stores from distribution centers, and the inability to directly link product lot codes to consumer purchase data. Additionally, the range of possible production dates falls into the harvest transition period from central and northern CA to southern CA and AZ growing regions, and as this product has multiple components, some production days of the product include ingredients co-mingled from multiple growing regions.

At this time, the available evidence does not indicate that there are implicated products currently on the market. FDA and state partners are continuing to work with firms of interest to determine if there are additional or unexpired products that could potentially be affected. This is an ongoing investigation and additional information will be provided as it becomes available.

Recommendation

Although this product is past expiration and should no longer be available for purchase, if consumers froze Nature's Basket or Simple Truth Power Greens salad blend with a "Best if Used By" date through December 20, 2021, they should discard it.

TEMPLATE TEST - Outbreak Investigation of E. coli O157:H7: Power Greens Packaged Salad (January 2022)

AFTER

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TEMPLATE TEST

Product: Nature's Basket or Simple Truth Power Greens salad blend with a "Best if Used By" date through December 20, 2021

Symptoms of *E. coli*: Symptoms begin anywhere from a few days after consuming contaminated food or up to nine days later. Symptoms include severe stomach cramps, diarrhea, fever, nausea, and/or vomiting.

Stores affected: XXXX in XX states

Status: Ongoing/Closed

Recommendation:

- CDC announced this outbreak is over. The product is past expiration and should no longer be available to consumers. Therefore, there are no recommendations for consumers, retailers, or suppliers.
- Consumers who have symptoms should contact their health care provider to report their symptoms and receive care.



[Additional Product Images](#)

Current Update

March 2, 2022

The FDA and CDC, in collaboration with state and local partners, investigated illnesses in a multistate outbreak of *E. coli* O157:H7. According to the CDC, as of March 2, 2022, this outbreak has ended. Consumer purchase data indicated that seven people purchased Nature's Basket Power Greens or Simple Truth Organic Power Greens at grocery stores before becoming sick.

FDA conducted a traceback investigation on the products of interest. Farms from both the

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Quick Turnaround Surveys

Quick Turnaround Survey
on Frozen Strawberries Recall
[April 2023](#)

Quick Turnaround Survey
on Gold Medal Flour Recall
[May 2023](#)

Quick Turnaround Survey
on Cinnamon Applesauce Pouches Recall
[November 2023](#)

Quick Turnaround Survey x 3, TBD

Quick Turnaround Consumer Surveys

- **Goal:** To collect quick turnaround consumer data during an **ongoing** food recall/outbreak, to inform FDA's communications during these events.

METHODS

- **Question bank:** question topics include consumer awareness and perception of a recall/outbreak, consumption of recalled product(s), behaviors, information sources, etc.
- **Survey length:** 15 mins, 50-60 questions
- **Sample size:** 1,200 respondents/survey
- **Non-probability web panel (Dynata):** balanced to US population
- **Survey timeline:** Complete fielding a survey within 3-4 weeks, after the decision to field a survey on a recall/outbreak

Completed Surveys

- **Frozen strawberries recall** (Hepatitis A)
 - Recall issued: March 17th, 2023
 - Survey fielded: March 31st – April 5th, 2023
 - Sample size: 1,235 respondents
- **Flour recall** (*Salmonella*)
 - Recall issued: April 28th, 2023
 - Survey fielded: May 17th – May 21st, 2023
 - Sample size: 1,208 respondents
- **Cinnamon applesauce pouches recall** (Lead)
 - Recall issued: October 30th, 2023
 - Survey fielded: November 17th – November 26th, 2023
 - Sample size: 1,543 respondents



RESULTS

- **Awareness**
 - Awareness of the recall
 - Awareness of advice associated with the recall
- **Behavior**
 - Possession of recalled products
 - Behavior
- **Perception and emotion**
- **Information sources and trust**
- **Regular consumption** of food products associated with the recall
- **Demographics and covariates**

SELECTED RESULTS

from the
First Two Surveys



- **Awareness**
 - Awareness of the recall
 - Awareness of advice associated with the recall
- **Behavior**
 - Possession of recalled products
 - Behavior
- **Perception and emotion**
- **Information sources and trust**
- **Regular consumption** of food products associated with the recall
- **Demographics and covariates**

Frozen Strawberries

Have you heard or read anything in the last 2-3 weeks about a recall of frozen strawberries , meaning that some frozen strawberries are being removed from the market because of a potential health hazard? The recalled frozen strawberries were sold at stores such as Costco, Aldi, and Trader Joe's. (N = 1,235)

- Yes
- No
- Don't know

The full set of questions

A subset of questions

Frozen strawberries sold at several stores, including Costco and Aldi, and in a frozen fruit blend at Trader Joe's are being recalled because of the products' potential link to an outbreak of hepatitis A infections. FDA recommends consumers to not eat recalled frozen strawberries. These recalled products should be returned or thrown away.

Flour

Have you heard or read anything in the last 2-3 weeks about a recall of Gold Medal flour meaning that some Gold Medal flour is being removed from the market because of a potential health hazard? This nationwide recall was issued by the company General Mills because some of the flour has been linked to an outbreak of *Salmonella* infections. (N = 1,208)

- Yes
- No
- Don't know

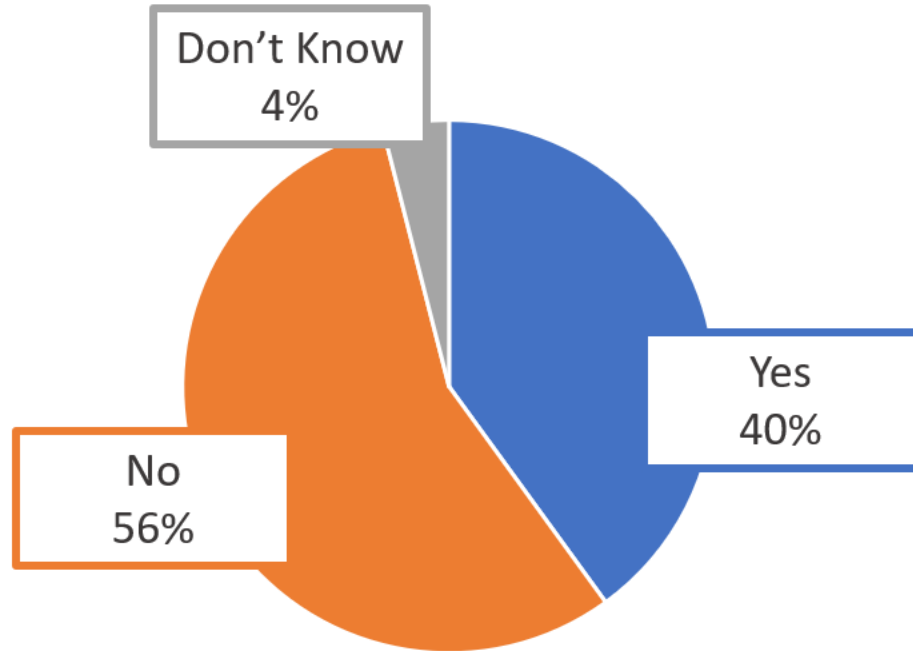
The full set of questions

A subset of questions

On April 28, 2023, General Mills announced a recall of some of its Gold Medal flour because some of the flour has been linked to an outbreak of Salmonella infections. FDA recommends consumers NOT eat recalled Gold Medal flour. These recalled products should be thrown away.

Frozen Strawberries/Flour Comparison Awareness of the Recall

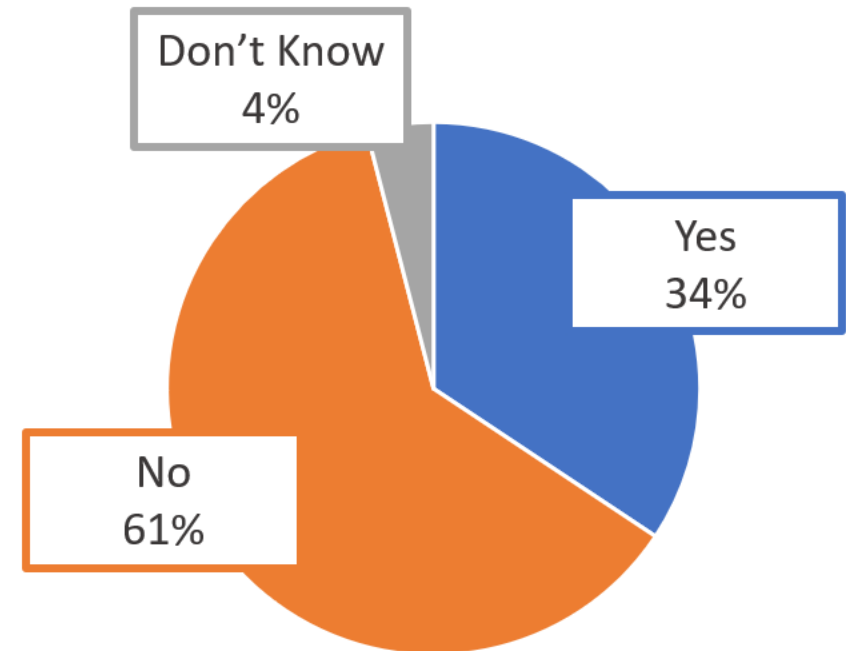
Have you heard or read anything in the last 2-3 weeks about a recall of frozen strawberries... (N = 1,235)



Significant predictors of awareness:

- Education: college education or higher
- Consumption of frozen strawberries (in the past 12m)
- Frozen strawberries in homes
- Race/ethnicity: non-Hispanic other

Have you heard or read anything in the last 2-3 weeks about a recall of Gold Medal flour... (N = 1,208)



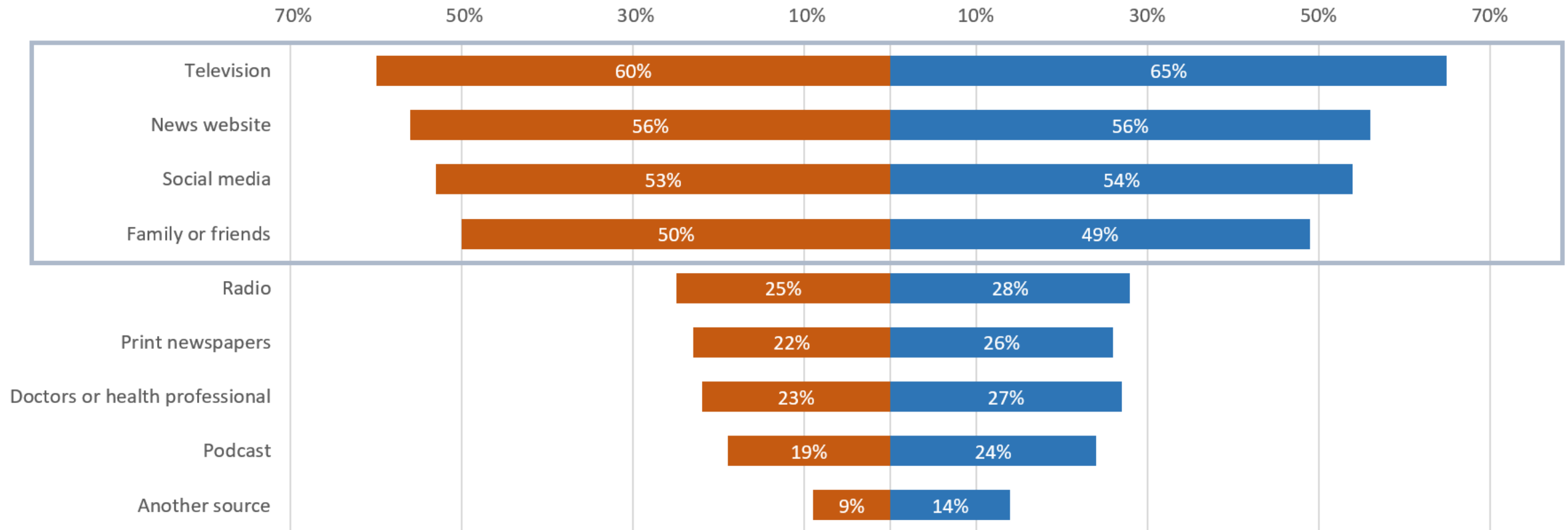
Significant predictors of awareness:

- Education: college education or higher
- Having Gold Medal flour in home
- Use or eat flour regularly

Frozen Strawberries/Flour Comparison Information Source

From which of the following information sources have you heard or read in the last 2-3 weeks about the frozen strawberries recall? Please select all that apply. (N = 488)

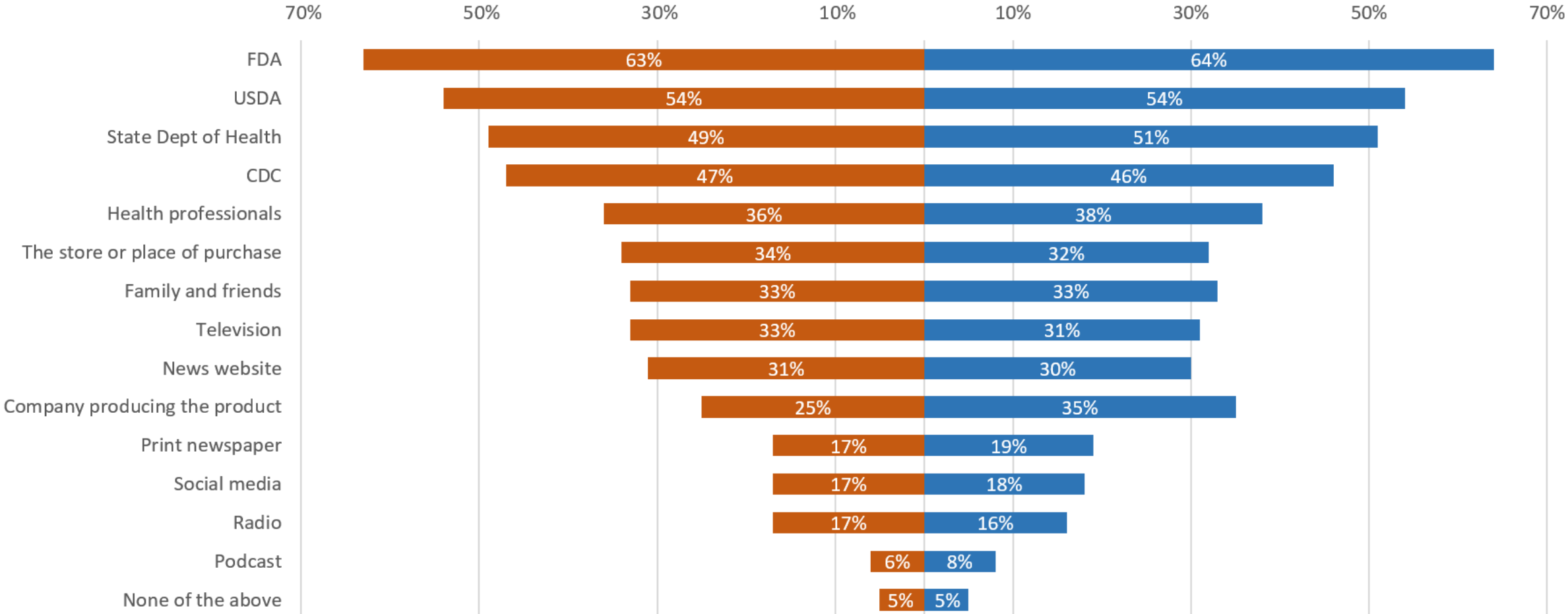
From which of the following information sources have you heard or read in the last 2-3 weeks about the flour recall? Please select all that apply. (N = 412)



Strawberry/Flour Comparison Trust

In terms of the frozen strawberries recall recommendations, which information sources do you trust? (N = 1,235)

In terms of the flour recall recommendations, which information sources do you trust? (N = 1,208)



NEXT STEPS

- Further analysis of the surveys that have been completed
 - Media coverage
- Future research under this research program
- Data dissemination & discussion

ACKNOWLEDGEMENT

FDA

Lindsay Walerstein
Corinne Mowla
Julia Mangia
Sheila Alaghemand
Cathy Abi-Khattar
Kris Butler
Catherine Beer
Mouhamed Halwani
Chris Butler
Martine Ferguson
Chris Colburn

Westat

Bethany Tennant
Frost Hubbard
Terry Pierce
Victoria Hoverman
Darby Steiger

RTI International

Jenna Brophy
Sheryl Cates
Peyton Williams

CDC

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QUESTIONS

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