

## 2024 Use Food Well Research

#### **Campaign Survey and Qualitative Study**

Ву

PRR, Inc.

For the

Washington Center for Sustainable Food Management, Solid Waste Management Program

Washington State Department of Ecology

Olympia, Washington

November 2024, Publication 24-07-041



## **Publication Information**

This document is available on the Department of Ecology's website at: <u>https://apps.ecology.wa.gov/publications/summarypages/2407041.html</u>

#### **Cover photo credit**

• PRR, Inc. photo from campaign launch in April 2024.

#### **Contact Information**

Center for Sustainable Food Management Washington State Department of Ecology 300 Desmond Drive SE Lacey, WA 98503 Phone: 360-628-4031 FoodCenter@ecy.wa.gov

Website<sup>1</sup>: Washington State Department of Ecology

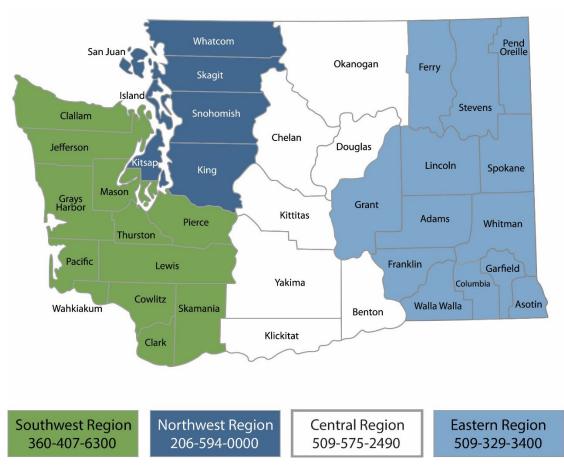
## **ADA Accessibility**

The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188.

To request an ADA accommodation, contact Ecology by phone at 460-407-6000 or email at SWMPublications@ecy.wa.gov. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website for more information.

<sup>&</sup>lt;sup>1</sup> www.ecology.wa.gov/contact

## **Department of Ecology's Regional Offices**



#### **Map of Counties Served**

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
Headquarters	Across Washington	PO Box 46700 Olympia, WA 98504	360-407-6000

## Use Food Well Research Campaign Survey and Qualitative Study

#### Comprehensive Report November 2024

The Washington Center for Sustainability Food Management Washington State Department of Ecology

Olympia, WA

November 2024 | Publication 24-07-041



## **Table of Contents**

List of Figures	6
Figures	6
Executive Summary	7
Overview	7
Key Findings	7
Recommendations	8
Main Findings	9
Food waste frequency and reason, current attitudes and concerns	9
Awareness of campaign messaging	9
Current behaviors and changes	10
Future strategies and resources	10
Methods	
Sampling	11
Survey timeline and sample	11
Organization of the research questions	11
Demographic profile / Who we heard from	
Age	12
Gender	13
Race and ethnicity	13
Household size	14
Children in household	15
Education	16
Languages spoken at home	17
Household income	17
Detailed findings	
What items are discarded and why?	19
Current attitudes and concerns about food waste	22
Awareness of National Food Waste Prevention Week	24
Awareness of campaign messaging	24
Current behavior and changes	26
Future strategies and resources	33
Relationship between campaign exposure and other variables	37

## List of Figures

#### Figures

Figure 1. Age	. 13
Figure 2: Gender	. 13
Figure 3: Race and Ethnicity	. 14
Figure 4: Household size	. 15
Figure 5: Number of children under 18 years of age in household	. 16
Figure 6: Highest level of education	. 16
Figure 7: Language(s) spoken at home	. 17
Figure 8: Total household income in 2023	. 18
Figure 9. How often different types of food are discarded	. 20
Figure 10. Reasons for discarding different types of food	. 21
Figure 11. Sentiments and behaviors related to food waste	. 22
Figure 12: Concern about food waste	. 23
Figure 13: Awareness of National Food Waste Prevention Week	. 24
Figure 14: Awareness of recent messages about food waste reduction	. 24
Figure 15: Source(s) of recent messages about food waste reduction	. 25
Figure 16: Recent information about tips to reduce food waste	. 26
Figure 17: Steps taken to reduce food waste in the past two months	. 27
Figure 18: New steps taken to reduce food waste in the past two months	. 27
Figure 19. Frequency of steps taken to reduce food waste	. 30
Figure 20: Changes over time in steps taken to reduce food waste	. 32
Figure 21. Interest in strategies and resources to reduce waste	. 34
Figure 22. Preferred communication channels	. 36

## **Executive Summary**

#### Overview

#### Purpose and goals

The Department of Ecology (Ecology) conducted a mixed-method study in 2023 to inform how to best develop an innovative public education and behavior change campaign with the goal of reducing food waste in Washington State. In April 2024, we launched the behavior change campaign. In summer of 2024, we conducted a second survey to measure changes in awareness and behaviors related to food waste. In addition, we studied awareness of campaign messaging, identified effective campaign and messaging strategies, and explored future strategies and opportunities.

#### **Research approach**

We used a quantitative method with a random sample of 15,000 households throughout Washington invited to take the survey. During random sampling, we oversampled in areas with high EJScreen Index scores (details on page 10) to ensure we heard from a more representative sample of Washingtonians. We also worked with community partners for outreach among Spanish-speaking participants. In addition, we conducted a paid online panel to prioritize specific groups that were underrepresented in the primary survey response pool. The survey received 1,645 valid responses.

## **Key Findings**

- Behaviors related to food waste (frequency and type) and attitudes and concerns about food waste have remained consistent since 2023. Overall, 2% more respondents (17%) were very concerned about food waste in 2024 compared to the baseline survey (15%) in 2023.
- Only 11% of respondents were aware of the National Food Waste Prevention Week. Younger people were more likely to be aware.
- Regarding awareness of campaign messaging, overall 58% of respondents said they had read, seen or heard about food waste reduction in general and or at least one of the topics in the campaign in the past two months. People who have encountered new information about food waste reduction in the past two months are more likely to be more concerned about food waste, change their behaviors and be more interested in getting more information on how to reduce food waste.
- Respondents who said they had read, seen or heard about food waste reduction in general and or at least one of the topics in the campaign in the past two months are also more likely to use strategies to reduce food waste more often than they were before the campaign. This feedback suggests the campaign was effective in changing people's attitudes and behaviors.
- Overall, 70% of respondents have taken steps to reduce their food waste and 31% of them have introduced new steps in the past two months. Those that made these changes

are more likely to be younger, live in large households, live with children, use Spanish and or identify as Hispanic or Latinx, or identify as Black, Indigenous, and People of Color (BIPOC).

- Regarding future strategies and resources, respondents' top interests stayed the same as 2023. More than half of all respondents (57%) preferred to receive more information about reducing food waste from grocery stores.
- Respondents who are younger, who live with children, and/or who live with more people, who use Spanish, and/or who identify as Hispanic or Latinx, women, and BIPOC respondents tended to be more interested in giveaway items (such as fridge magnets and shopping bags, 72% of respondents) and different online tools and apps (68% -77%).

#### Recommendations

- Prioritize campaign towards young people, families with children, people who use Spanish and or identify Hispanic or Latinx, identify as BIPOC as they tend to be the audiences most engaged with our messaging.
- Continue to frame the campaign through a money-saving lens to get people motivated.
- Continue to offer practical tips and easy to implement strategies in campaign messaging.
- Partner with grocery stores to expand campaign messaging (e.g. by including storage tips at the produce area).
- Consider working with produce suppliers for stay fresh for longer packaging and smaller portions.
- Offer giveaways items as an incentive for key audiences.
- Engage children and families through local school districts and young adults via social media to start a cultural shift.

## **Use Food Well Post-Campaign Survey**

## Main Findings

# Food waste frequency and reason, current attitudes and concerns

- Behaviors related to discard foods, attitudes and concerns about food waste have remained consistent since 2023. Overall, 2% more respondents were very concerned about food waste in 2024 compared to the baseline survey in 2023 (17% in 2024 vs. 15% in 2023). Overall, 50% of respondents were concerned about food waste (somewhat concerned and very concerned) in 2024, compared to 49% of respondents in 2023.
- Overall, the following groups tend to be more concerned about food waste, take more steps to reduce food waste and have more interest in strategies and resources to reduce food waste:
  - Respondents who identify as BIPOC
  - Respondents who live with children
  - Respondents who speak Spanish at home, took the survey in Spanish, and or who identify as Hispanic or Latinx
  - Respondents who live in larger households
  - Respondents who are younger

### Awareness of campaign messaging

- Only 11% of respondents were aware of the National Food Waste Prevention Week. Younger people were more likely to be aware.
- While 17% of respondents said they have read, seen or heard anything about food waste reduction in the past two months, overall 58% of respondents said they had read, seen or heard about food waste reduction in general and or at least one of the topics in the campaign in the past two months.
- Respondents who have encountered information about food waste reduction in general in the past two months are more likely to be concerned about food waste, be more interested in learning more to reduce their food waste, take new steps to reduce food waste in their household, use strategies to reduce food waste more often than two months ago and they are more likely to be are younger, live in larger household, have children, identify as BIPOC, have higher education level, and have higher income level.
- Top sources of information about food waste reduction were TV (33%), newspaper (22%), Facebook (21%) and grocery stores (20%).

#### **Current behaviors and changes**

 Overall, 70% of respondents have taken steps to reduce their food waste and 31% of them have introduced new steps in the past two months. Those that have taken these steps are more likely to be younger, live in large households, live with children, use Spanish and or identify as Hispanic or Latinx, or identify as BIPOC. The top themes of those newly adopted steps are related to grocery shopping, food storage, awareness and planning and cooking.

## Future strategies and resources

- When shown a list of strategies and resources to help reduce food waste, most respondents said they are at least somewhat interested in all options provided. Respondents' top interests stayed the same as 2023.
- Regarding communication channels, more than half of all respondents preferred to receive more information about reducing food waste from grocery stores (57%). In 2023, top channels were website and email, though in the 2023 survey we did not ask about grocery stores.
- Respondents who are younger, who live with children, and/or who live with more people, who speak Spanish at home, who took the survey in Spanish, and/or who identify as Hispanic or Latinx, women, and BIPOC respondents tend to be more interested in giveaways (such as fridge magnets and reusable shopping bags with storage tips, 72% of respondents), and different online tools and apps (68%-77%).

## Methods

## Sampling

- We aimed to get a representative sample of adults in Washington state by using address-based random sampling in all counties in Washington. We sent mailers (initial invitation and reminder) to 15,000 randomly sampled households in all WA census tracks.
- During random sampling, we oversampled in census tracts with a high EJScreen index score to ensure we heard from groups who have been often excluded from public decision-making and tend to be less likely to respond to government agency surveys.
   EJScreen was developed by the EPA to provide demographic, socioeconomic and environmental information per geographic area. A high EJScreen index score indicates a large minority population, with greater socioeconomic vulnerability.
- We also used partnerships with libraries, stores and community-based organizations (CBOs) to recruit for Spanish-speaking participants, who are also typically less likely to respond to mailed invitations.
- In addition, we conducted a paid online panel to prioritize specific groups that were underrepresented in the primary survey response pool. These included people who have children in the household; people without a college degree; people who identify as Black, Indigenous, or people of color; and people who are younger than 55 years of age.

#### Survey timeline and sample

- We fielded the primary survey online from June 22 to July 29, 2024 and fielded the panel survey online from July 31 to August 7, 2024. Ten \$200 gift cards were distributed to winners from sweepstake drawing from the primary survey respondents. All panel participants who completed the survey were compensated directly by the survey panel vendor.
- Eighteen community partners and CBOs supported our outreach effort in the Spanish-speaking communities.
- The survey received a total of 1,645 valid responses, including 106 from outreach and 630 from the panel. Most responses (93%) were received in English, with 120 in Spanish. The survey participants were diverse in demographic characteristics such as age, gender, race and ethnicity, income, home language, education, household size, and parental status.

### **Organization of the research questions**

In the 2023 baseline survey, we structured our research questions to gain a comprehensive understanding of the current landscape for our Washington population in order to gather insights to inform the outreach campaign. In 2024, we kept most of the questions the same and

added questions to assess awareness of campaign messaging, behavioral change post-campaign and new opportunities for campaign messaging. The survey structure was as follows:

- First, we asked about the types of food items being discarded, their frequency of disposal, and the reasons behind it.
- Next, we asked if respondents remember anything related to food waste reduction in the past two months to assess awareness of campaign messaging.
- Next, we asked about respondents' perception about their current efforts in reducing food waste and if they have done anything new in the past two months.
- Finally, we asked for suggestions on effective strategies and additional resources to help people reduce their food waste. Additionally, participants were asked to specify their preferred channels for receiving information related to food waste reduction and to recommend potential partners for our future campaign.

## Demographic profile / Who we heard from

We used data from the U.S. Census Bureau<sup>2</sup> to compare the demographics of survey respondents to the state population. Overall, the survey respondents were roughly representative of the Washington State population, with a few small differences.

## Age

As shown in Figure 1, we heard from respondents of all age groups, including 7% who are ages 18-24, 19% who are ages 35-44, 18% who are ages 45-54, 16% who are ages 55-64, 13% who are ages 65-74, and 5% who are 75 or older. Compared to the state population, we heard from more people in the middle age groups, with more respondents age 35-44 (22% of survey respondents vs. 17% of the population) and age 45-54 (18% of survey respondents vs. 16% of the population). We heard from fewer respondents on either end, with fewer respondents age 18-24 (7% of survey respondents vs. 11% of the population) and age 75 or older (5% of survey respondents vs. 8% of the population).

<sup>&</sup>lt;sup>2</sup> Primarily the 2020 5-year American Community Survey, supplemented by data from the 2020 U.S. Census

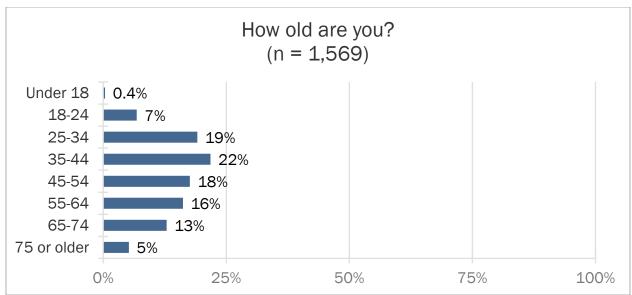


Figure 1. Age

### Gender

Women represented a higher proportion of survey respondents (63%), as shown in Figure 2. An additional 34% identify as men, 1% identify as non-binary, and 0.3% identify with genders not listed in the survey question. Please note that respondents could select more than gender identity, so totals may add up to more than 100%.

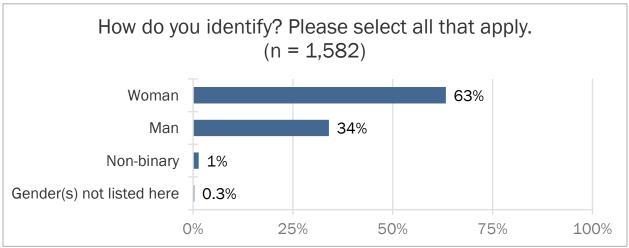


Figure 2: Gender

## Race and ethnicity

Most survey respondents identified as white (71%), with an additional 16% identifying as Hispanic or Latinx, 8% as Asian or Asian American, 5% as Black or African American, 4% as American Indian or Alaska Native, 0.9% as Native Hawaiian or Pacific Islander, 0.6% as Middle Eastern or North African, and 2% as "Other races not listed here," as shown in Figure 3. Please note that respondents could select more than one racial or ethnic identity, so totals may add up to more than 100%.

Overall, 33% of respondents identified as Black, Indigenous, and People of Color (BIPOC). This was determined based on respondents who provided information about their racial or ethnic identities. Respondents were categorized as BIPOC if they selected at least one of the following racial or ethnic identities: "American Indian or Alaska Native", "Asian or Asian American", "Black or African American", "Hispanic or Latinx", "Native Hawaiian or Pacific Islander", "Middle Eastern or North African", "Other race or ethnicity". Respondents were categorized as white if they selected "White" and no other racial or ethnic identity.

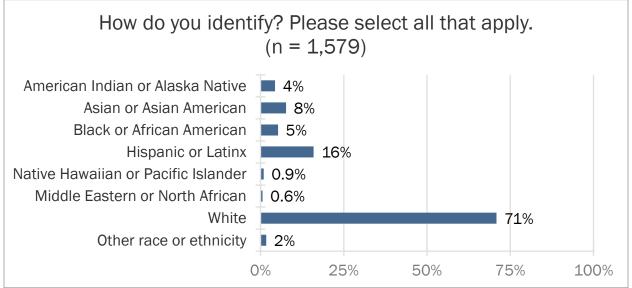


Figure 3: Race and Ethnicity

Compared to the state population, more survey respondents identified as Hispanic or Latinx (15% of survey respondents vs. 11% of the population), while fewer identified as white (67% of survey respondents vs. 69% of the population) or as Asian or Asian American (7% of survey respondents vs. 10% of the population).

## Household size

Survey respondents live in households of varying sizes, as shown in Figure 4. About 1 in 3 live in two-person households (33%), while 18% live in three-person households, another 18% in four-person households, 9% in five-person households, and about 6% live in households of six or larger. An additional 15% live alone.

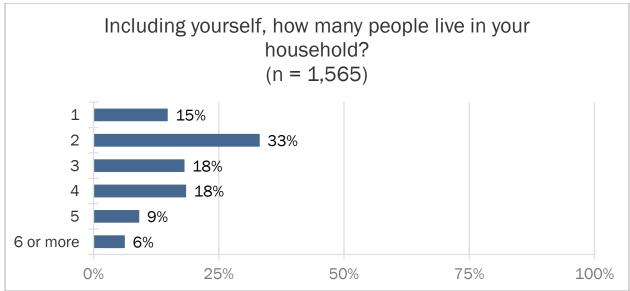


Figure 4: Household size

We heard from more people living in larger households than we would expect based on the state population. More respondents reported living in households with three (18% vs. 15% of the population), four (19% vs. 13% of the population), five (9% vs. 6% of the population), or six or more (6% vs. 4% of the population) residents. Fewer respondents live alone (15% vs. 27% of the population) or with one other person (33% vs. 35% of the population).

## Children in household

We heard from a mix of households with and without children as shown in Figure 5. More than half of respondents did not have people under the age of 18 living in their household (55%). About 17% had one child in the household, another 17% had two children in the household, 7% had three children in the household. 2% had four children, and 1% had five or more children in the household.

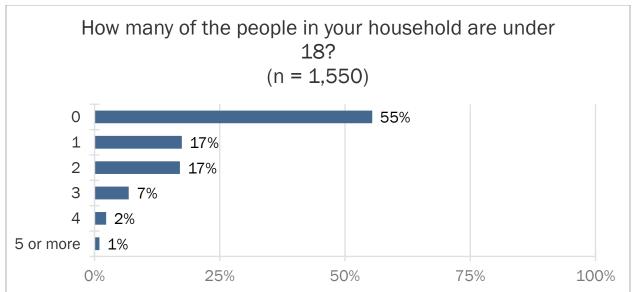


Figure 5: Number of children under 18 years of age in household

## Education

While survey respondents represented a variety of educational backgrounds as shown in Figure 6, many hold a college degree or higher (41%), with 23% being college graduates and another 18% holding a post-graduate or professional degree. Another 12% hold an associate degree and 22% had completed some college or vocational school. About 20% hold a high school diploma or GED, and only 5% reported an educational attainment of high school graduation or less.

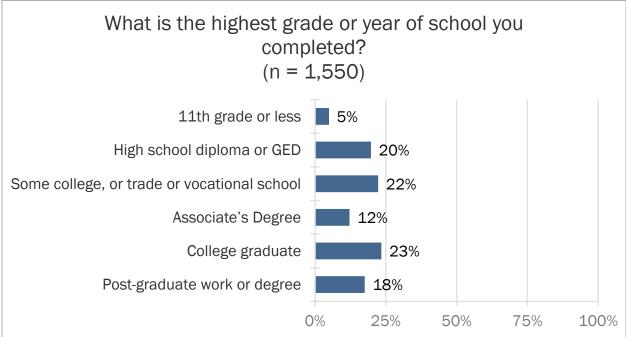


Figure 6: Highest level of education

Compared to the state population, survey respondents tended to report higher levels of education. We heard from fewer people whose highest completed grade of school was 11<sup>th</sup> grade or less (5% vs. 8% of the population) or high school diploma/GED (20% vs. 22% of the population), while we heard from more people with an associate's degree (12% vs. 10% of the population) or post-graduate work/degree (18% vs. 14% of the population).

### Languages spoken at home

Most respondents reported English (91%) as a language they use at home. An additional 12% reported using Spanish at home and 1% reported using Chinese (Mandarin) at home. While fewer than 1% of respondents reported using each of the other languages, a diversity of languages were represented by the respondents, as shown in Figure 7.

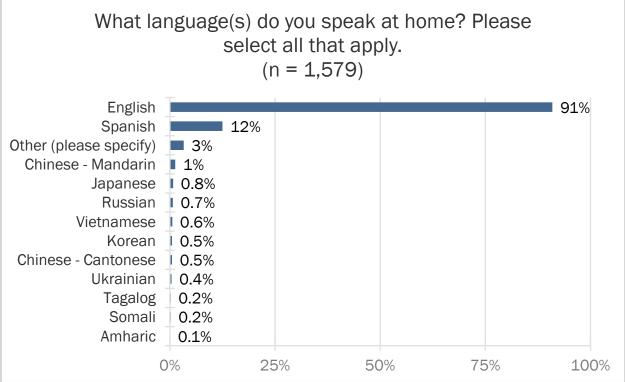


Figure 7: Language(s) spoken at home

## Household income

Survey respondents represented a range of household incomes, as shown in Figure 8. The median household income reported was between \$50,000 to \$74,000, with:

- 35% from households with incomes under \$50,000,
- 16% from households with incomes under \$25,000, and
- 47% from households with incomes above \$75,000, including
- 17% with incomes above \$150,000.

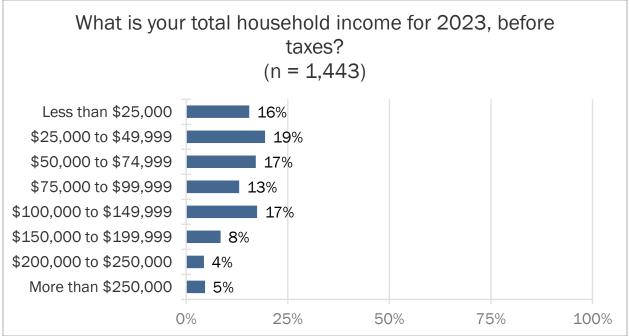


Figure 8: Total household income in 2023

While survey respondents tended to report slightly lower household incomes than we would expect based on the population, the difference is very small – less than 2% difference between the percentage of the survey respondents and the percentage of the population in each income category.

## **Detailed findings**

#### What items are discarded and why?

Behaviors related to discarding different types of foods remained consistent from 2023. Vegetables and fruits are among the most frequently self-reported discarded food items, along with other leftovers. In comparison, seafood and eggs, as well as rice, noodles, and pasta are not discarded as often.

As shown in Figure 9, vegetables, fruits, and other leftovers were the most frequently discarded food items, with:

- 57% of respondents reporting that they discard vegetables at least once a month, and 15% do so at least once a week,
- 55% of respondents reporting that they discard **fruits** at least once a month, and 18% do so at least once a week, and
- 54% of respondents reporting that they discard other leftovers at least once a month, and 20% do so at least once a week.

In comparison, seafood and eggs, as well as rice, noodles, and pasta are not discarded as often, with few people reporting that they discard these items at least once a month (8%, 10%, and 13%, respectively).

How often do you discard: At least once a week At least once a month Never or rarely							
Seafood	2024	6%	92%				
	2023	7%	90%				
<b>F</b>	2024	8%	90%				
Eggs	2023	7%	91%				
	2024	10%	87%				
Rice, noodles, pasta	2023	5% 9%	86%				
	2024	5% 15%	80%				
Meat, poultry	2023	7% 17%	76%				
Dairy (milk, yogurt,	2024	5% 22%	74%				
cheese, etc.)	2023	5% 23%	72%				
			· · ·				
Publication 24-07-041			Use Food Well Campaign Research	n Report			

Sauces, dips, guacamole, hummus,	2024	26	%		70%	
dressings, pastes, etc.	2023	5% 2	9%		66%	
Bread, tortillas, buns,	2024	6% 2	7%		67%	
wraps	2023	7% 2	29%		65%	
Any other lefteware	2024	20%	34	%	4	6%
Any other leftovers	2023	23%		36%		41%
Fruita	2024	18%	37	′%	4	5%
Fruits	2023	21%	3	4%	4	5%
	2024	15%	42	.%	Ĺ	13%
Vegetables	2023	18%	4	-2%		40%
	C	)%	25%	50%	75	% 100%

Figure 9. How often different types of food are discarded

- Respondents who are **older** tend to report discarding dairy, eggs, and fruit **more often**.
- Respondents who live with children tend to discard fruit less often.

Reasons for discarding foods also remained the same as findings from 2023. Spoiling was the most common reason foods were discarded, especially for fruits and vegetables, followed by past expiration date, and made or bought too much.

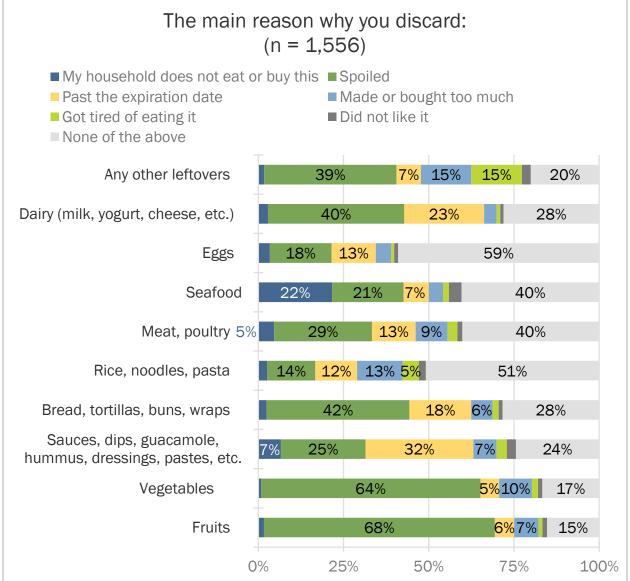


Figure 10 shows the reasons why different types of foods were discarded.

Figure 10. Reasons for discarding different types of food

## Current attitudes and concerns about food waste

Nearly all respondents (95%) agree that throwing away food is a waste of money, while nearly one-third (32%) disagree that it damages the environment. These attitudes have remained consistent since 2023.

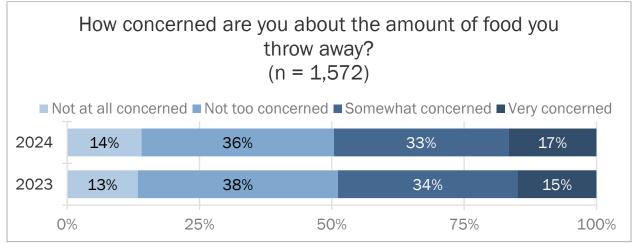
When asked whether they agree or disagree with the following statements, 95% of respondents agreed that throwing away food is a waste of money, 85% agreed that they feel guilty when they throw away food, 84% agreed that the steps they personally take can make a big difference in society, 82% agreed that they can reduce how much food their household throws away, and 77% agreed that practical information, ideas, and tips could help them reduce food waste at home. 60% of respondents agreed that throwing away food damages the environment.

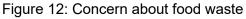
Do you agree or disagree with the following statements? Agree Disagree Not applicable							
Throwing away food damages	2024	60%	<mark>32%</mark> 7%				
the environment.	2023	62%	<mark>32%</mark> 7%				
Practical information, ideas, and tips could help me reduce	2024	77%	<mark>13%</mark> 10%				
food waste at home.	2023	76%	<b>15%</b> 9%				
I can reduce how much food	2024	82%	<mark>12%</mark> 6%				
my household throws away.	2023	84%	<mark>11%</mark>				
The steps I personally take to	2024	84%	12%				
avoid wasting food can make a big difference in our society.	2023	81%	15%				
I feel guilty when I throw away	2024	85%	<mark>10%</mark>				
food.	2023	84%	<mark>11%</mark> 5%				
Throwing away food is a	2024	95%					
waste of money.	2023	96%					
	0	% 25% 50% 7	5% 100%				

Figure 11. Sentiments and behaviors related to food waste

Respondents were equally divided about their concern about food waste – 50% saying they are "not at all" or "not too concerned" and the other 50% saying they are "somewhat" or "very" concerned. Overall, 2% more respondents were concerned in 2024 compared to the baseline survey in 2023.

When asked how concerned they are about the amount of food they throw away, about 14% said they are not at all concerned, 36% said they are not too concerned, 33% said they are somewhat concerned, and 17% said they are very concerned, as shown in Figure 12.





Similar to findings in 2023:

- Respondents who are **more concerned** about food waste tend to discard all categories of food except seafood or eggs **less often** than those who are less concerned.
- Respondents who identify as BIPOC tend to be **more concerned** about food waste than non-BIPOC participants.
- Respondents who live with children tend to be **more concerned** than participants without children.
- Respondents who speak Spanish at home, respondents who took the survey in Spanish, and respondents who identify as Hispanic or Latinx tend to be **more concerned** about food waste.
- Respondents who live in larger households tend to be **more concerned** about food waste.

## **Awareness of National Food Waste Prevention Week**

#### Most respondents (89%) were not aware of the National Food Waste Prevention Week.

Only 11% of respondents were aware of National Food Waste Prevention Week, as shown in Figure 13.

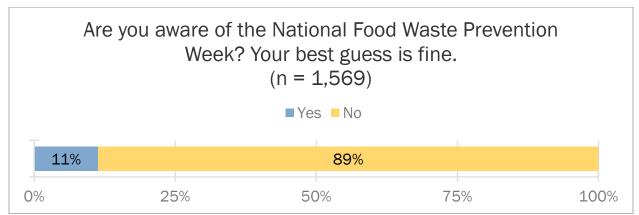


Figure 13: Awareness of National Food Waste Prevention Week

• Respondents who were aware of the National Food Waste Prevention Week tended to be **younger** than those who were not.

### Awareness of campaign messaging

## Most respondents (83%) said they have not read, seen, or heard anything in the past two months about food waste reduction.

Only 17% of respondents said they have read, seen, or heard anything about food waste reduction in the past two months.

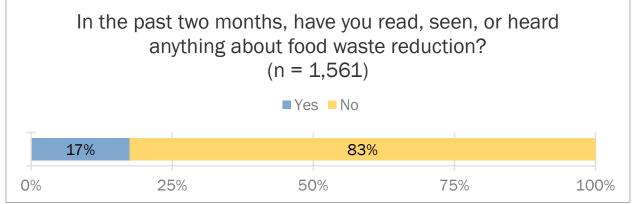


Figure 14: Awareness of recent messages about food waste reduction

Among respondents who said they had read, seen, or heard anything about food waste prevention in the past two months, the most common information source was television (33%).

Respondents who said they had read, seen, or heard anything about food waste reduction in the past two months had received this information from a variety of sources, as shown in Figure 14. Many had received this information from TV news or streaming TV (33%), followed by newspapers (print or online) 22%, Facebook (21%), and at grocery stores (20%). Some respondents also reported receiving this information from Instagram (16%), radio or radio apps (12%), TikTok (10%), email (9%), Twitter (3%), and other social media (3%), including YouTube, News Feed, and Reddit. Other methods (3%) included books, friends and family, community organizations, and mail.

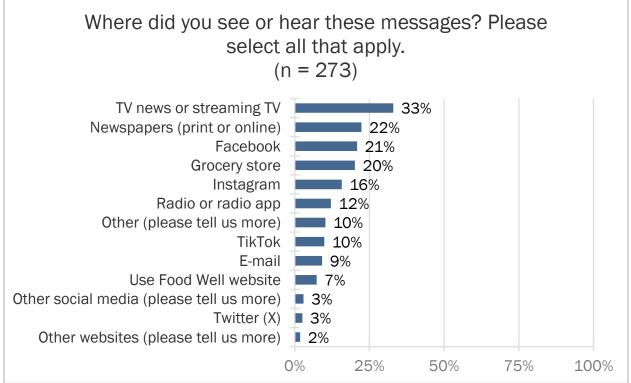


Figure 15: Source(s) of recent messages about food waste reduction

# When shown a list of specific topics related to food waste reduction, most respondents (55%) said they had seen or heard new information about at least one of these topics in the past two months.

Respondents were asked if they have heard or seen any new information about tips to reduce food waste in the past two months, as shown in Figure 16. Many respondents had seen tips on how to best store foods to make sure they last longer (41%), tips on how to shop smarter when going to the grocery store (34%), creative tips on using leftovers to make new dishes (33%), and tips for using up foods before they go bad (29%).

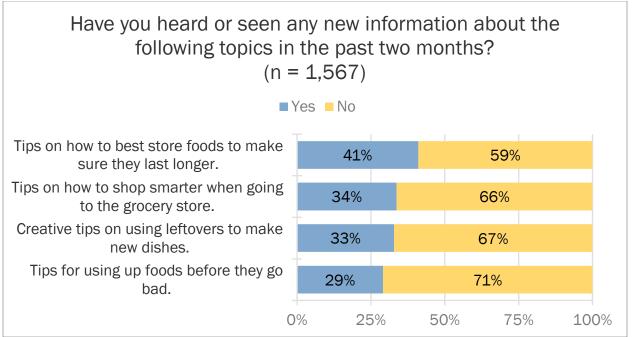


Figure 16: Recent information about tips to reduce food waste

While only 17% of respondents said they had read, seen, or heard anything about food waste reduction in the past two months (see Figure 14), most (55%) said they had seen or heard new information about at least one of the topics shown in Figure 16. Overall, 58% of respondents said they had read, seen, or heard about food waste in general and/or at least one of the topics above in the past two months.

## **Current behavior and changes**

## Overall, most respondents (70%) have taken steps to reduce their food waste, and many (31%) have introduced new steps in the past two months.

When asked if they have taken steps to reduce food waste in the past two months, 70% said they have while another 30% said they have not, as shown in Figure 17.

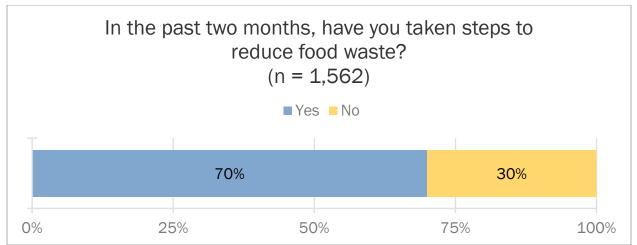


Figure 17: Steps taken to reduce food waste in the past two months

**More often** than those who have not, those who said they **have** taken steps to reduce food waste in the past two months tend to...

- Agree that they feel guilty when they throw away food
- Agree that they can reduce how much food their household throws away
- Agree that the steps they personally take to avoid wasting food can make a big difference in society
- Say they are more concerned about food waste
- Say they have heard about any of the listed tips to reduce food waste

Among respondents who said they have taken steps to reduce food waste in the past two months, 31% said that these steps are new to them.

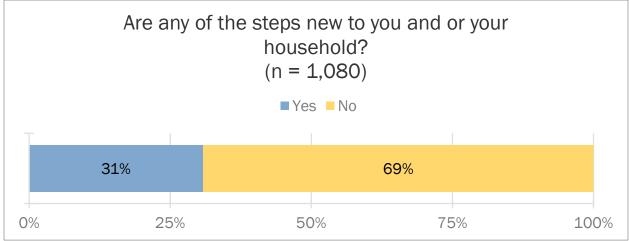


Figure 18: New steps taken to reduce food waste in the past two months

**More often** than those who have not, those who said they **have** taken new steps to reduce food waste tend to...

- Be younger
- Live in households with more people

- Live with at least one person under the age of 18
- Speak Spanish
- Take the survey in Spanish
- Identify as Hispanic or Latinx
- Identify as BIPOC
- Say they have heard tips on how to shop smarter when going to the grocery store, how to best store foods to make sure they last longer, or how to use leftovers to make new dishes
- Say they are more concerned about food waste

## When asked to describe what new steps they have taken to reduce food waste, respondents discussed approaches to grocery shopping, food storage, cooking, and meal planning.

Respondents were asked the open-ended question, "What new steps have you taken to reduce food waste?" The following themes emerged from the 323 responses:

- The most common theme was in the approach to grocery shopping. Rather than buying food in bulk or "stocking up", respondents described buying smaller quantities of food at a time and only buying what they know they need, especially perishable food. Some described going shopping more often but buying less on each trip, while a few described shopping less often.
- Food storage was another common topic. Respondents described a variety of methods to prolong the shelf life of ingredients and leftovers, from rinsing produce to freezing leftovers and canning.
- Respondents also discussed awareness of and planning around the shelf life of foods: paying attention to what items are likely to spoil soon, organizing the fridge to facilitate consuming things that are likely to expire soon first, and planning meals around what needs to be used up.
- Many respondents described changing their approach to cooking, particularly reducing the quantity of food made at a time. Some described cooking more frequently, while a few said they cook less frequently.
- Another theme was around finding uses for food scraps or spoiled food. Composting was the most common tactic. Others mentioned repurposing scraps for broth and using food scraps to feed livestock.
- Meal planning in general was often mentioned, especially in connection with other themes: buying less food but with more intentional planning, planning meals around what ingredients need to be used up, cooking more often.
- Some respondents described changing their eating habits: eating leftovers more often, cooking from home more, eating larger meals and fewer snacks.
- A few mentioned other tactics such as giving away excess food or growing their own produce.

When asked to select from a list of common steps to reduce food waste, behavioral patterns stayed consistent from findings in 2023. Most respondents said that they often or always check the fridge and pantry before grocery shopping (79%), store food to keep it good to eat for as long as possible (77%), use a shopping list (74%), create meals from things that need to be used up (67%), and/or remove bruised or damaged parts of fruits and vegetables and eat the rest (62%).

Respondents were shown a list of common steps taken to reduce food waste and asked how often they did these, as shown in Figure 19.

Steps that most respondents were doing often or always:

- Checking the fridge and pantry before grocery shopping (79%)
- Storing food to keep it good to eat for as long as possible; can include proper storage, organization, labeling, and freezing (77%)
- Using a shopping list (74%)
- Creating meals from things I have that need to get used up (67%)
- Removing bruised or damaged parts of fruits and vegetables and eating the rest (62%)

Steps that fewer respondents were doing often or always:

- Use meal planning (48%)
- Use all parts of the food I buy, such as broccoli stalks, or meat bones for soups (40%)
- Share or give away extra food or leftovers (26%)

How often do you take these steps to prevent food waste in your household? Never Rarely Sometimes Often Always								
*Check fridge and or pantry first before grocery shopping	2024	15%	% 3	3%	46	5%		
Use a shopping list	2024	6% 1	6%	31%	4	3%		
	2023	7% 1	.7%	31%	4	3%		
Store food to keep it good to	2024	199	%	38%		39%		
eat for as long as possible	2023	17%	6	43%		36%		
Remove bruised or damaged parts of fruits and vegetables	2024 5	% 8%	26%	30%		32%		
and eat the rest	2023	7%	23%	38%		29%		
Create meals from things I	2024	5%	27%	40%		27%		
have that need to get used up	2023	6%	25%	44%		24%		
*Use meal planning	2024	8% 14	·% 3	0%	28%	20%		
Use all parts of the food I buy, such as broccoli stalks, or	2024	10% 2	20%	31%	23%	17%		
meat bones for soups	2023	7% 2	0%	31%	27%	14%		
	2024	17%	22%	34%	6	16% 10%		
Share or give away extra food or leftovers	2023	14%	23%	33%	2	21% 10%		
	С	)%	25%	50%	75	% 100		

Figure 19. Frequency of steps taken to reduce food waste.

(\*New item in 2024, no 2023 data. Bar labels that are smaller than 5% were omitted from the chart)

- Respondents who say they check the fridge and/or pantry first before grocery shopping more often tend to also say they discard eggs, fruit, and/or vegetables **more often**.
- Respondents who say they use a shopping list more often tend to be **older**. They also tend to report **higher levels of education**.
- Respondents who say they store food to keep it good to eat for as long as possible more often tend to say they are **less concerned** about food waste. They also report discarding all categories of food **more often**.

- Respondents who say they remove bruised or damaged parts of fruits and vegetables and eat the rest more often tend to be **older**. They also report discarding fruit **more often**.
- Respondents who say they create meals from things they have that need to get used up more often tend to say they discard fruits, vegetables, and/or leftovers **more often**. They also tend to respond to the survey in Spanish.
- Respondents who say they use meal planning more often tend to say they live with a partner.
- Respondents who say they use all parts of the food they buy more often tend to say they discard fruit or other leftovers **more often**.
- Respondents who say they share or give away extra food or leftovers more often tend to report **lower household income**.

# Across all listed steps to reduce food waste, most respondents (72-81%) said that they do these steps about the same as two months ago.

Respondents were asked if they do these steps more often, less often, or about the same compared to two months ago, as shown in Figure 20. While most respondents said they do these steps about the same as two months ago, some said they do them more often:

- Creating meals from things I have that need to get used up (22%)
- Checking the fridge and or pantry first before grocery shopping (22%)
- Using a meal planning (20%)
- Using a shopping list (20%)
- Storing food to keep it good to eat for as long as possible; can include proper storage, organization, labeling, and freezing (18%)
- Using all parts of the food I buy, such as broccoli stalks, or meat bones for soups (16%)
- Removing bruised or damaged parts of fruits and vegetables and eat the rest (16%)
- Sharing or giving away extra food or leftovers (14%)

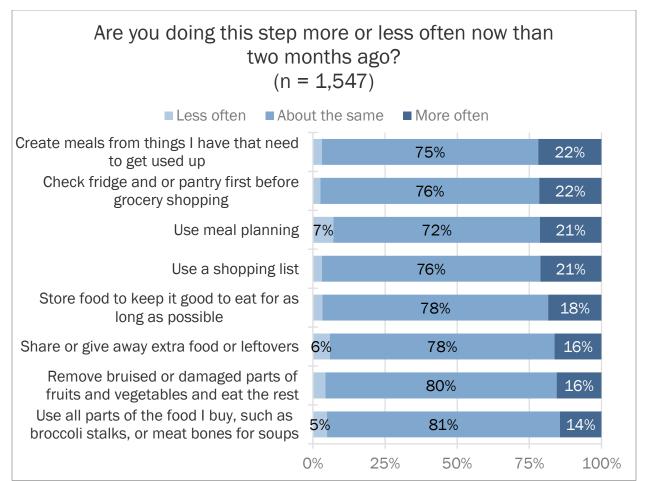


Figure 20: Changes over time in steps taken to reduce food waste

- Respondents who are more concerned about food waste tend to report taking the following steps **more often** than two months ago:
  - $\circ$   $\,$  Create meals from things that need to be used up
  - Check the fridge and/or pantry before going grocery shopping
  - Store food to keep it good to eat for as long as possible
- Respondents who identify as Hispanic or Latinx, who speak Spanish at home, and/or who took the survey in Spanish tend to report taking the following steps **more often** than two months ago:
  - $\circ$   $\,$  Create meals from things that need to be used up
  - Check the fridge and/or pantry before going grocery shopping
  - Use meal planning
  - Use a shopping list
  - Store food to keep it good to eat for as long as possible
  - Use all parts of food
- Respondents who identify as BIPOC and/or who live with people under the age of 18 tend to report using meal planning **more often** than two months ago.

• Respondents who are younger tend to report creating meals from things that need to be used up **more often** than two months ago.

## Future strategies and resources

When shown a list of strategies and resources to help reduce food waste, most respondents said they are at least somewhat interested in all options provided. Respondents' top interests stayed the same as 2023.

Respondents were asked to rate their interest in a list of strategies and resources to help reduce food waste, as shown in Figure 21. Most respondents showed interest in all options provided, with 68% to 89% saying they are at least somewhat interested. The top three most popular options were:

- Stay-fresh-for-longer packaging at the grocery stores (37% said somewhat interested and 52% said very interested)
- Storage tips at the produce area at the grocery store (43% said somewhat interested and 41% said very interested)
- Option of smaller package / portion sizes at the grocery store (40% said somewhat interested and 39% said very interested)

<ul> <li>Please rate your interest in the following items:</li> <li>Not interested</li> <li>Somewhat interested</li> <li>Very interested</li> </ul>								
Stay-fresh-for-longer packaging	2024	11%	37%	52%				
at the grocery store	2023	9%	36%	56%				
Storage tips at the produce area	2024	16%	43%	41%				
at the grocery store	2023	12%	43%	46%				
Option of smaller package / portion sizes at the grocery	2024	21%	40%	39%				
store	2023	19%	41%	40%				
A fridge magnet reminder on	2024	28%	37%	35%				
how to properly store produce to make them last longer	2023	25%	35%	39%				
A fridge magnet with tips on	2024	27%	39%	33%				
how to substitute ingredients in recipes	2023	23%	35%	42%				
Reusable shopping bags with storage tips printed on the bag	2024	29%	40%	32%				
Online tools or apps with suggestions and recipes to use	2024	23%	47%	30%				
up food	2023	21%	45%	34%				
Meal planning apps or tools	2024	33%	41	.% 27%				
generating shopping lists	2023	29%	41%	30%				
Storage tips and recipe ideas	2024	31%	45	% 25%				
from your grocery store app	2023	27%	42%	30%				
	C	)% 2	.5% 50%	6 75% 1009				

Figure 21. Interest in strategies and resources to reduce waste

- Respondents who are more concerned about food waste tend to rate **higher interest** in all items.
- Respondents who are younger, who live with children, and/or who live with more people tend to rate **higher interest** in the following items:

- A fridge magnet reminder on how to properly store produce to make them last longer
- A fridge magnet with tips on how to substitute ingredients in recipes
- Reusable shopping bags with storage tips printed on the bag
- $\circ$   $\,$  Online tools or apps with suggestions and recipes to use up food  $\,$
- Meal planning apps or tools generating shopping lists
- Storage tips and recipe ideas from grocery store apps
- Respondents who speak Spanish at home, who took the survey in Spanish, and/or who identify as Hispanic or Latinx tend to rate **higher interest** in the following items:
  - $\circ$   $\;$  Reusable shopping bags with storage tips printed on the bag
  - Online tools or apps with suggestions and recipes to use up food
  - $\circ$   $\,$  Meal planning apps or tools generating shopping lists  $\,$
  - Storage tips and recipe ideas from grocery store apps
- Additionally, respondents who identify as Hispanic or Latinx tend to rate **higher interest** in a fridge magnet reminder on how to properly store produce.
- Respondents who identify as women tend to rate higher interest in the following items:
  - $\circ~$  A fridge magnet with tips on how to substitute ingredients in recipes
  - Online tools or apps with suggestions and recipes to use up food
- Respondents who identify as BIPOC tend to rate **higher interest** in the following items:
  - Reusable shopping bags with storage tips printed on the bag
  - Storage tips and recipe ideas from grocery store apps

# Respondents expressed interest in receiving information about how to reduce food waste from a variety of communication channels.

More than half of all respondents preferred to receive more information about reducing food waste from grocery stores (57%). Many also preferred to receive information by email (38%) and from the website (35%). Other responses included Facebook (29%), community spaces (26%), television (25%), newspapers (20%), Instagram (20%), TikTok (14%), radio (13%), local school districts (12%), Twitter/X (6%), and other social media (2%), including Reddit, YouTube, and Pinterest. Among respondents who selected "other" (2%) or "other websites" (1%), common responses include mail, community organizations, and municipal waste management websites.

How would you like to receive more information about how you can reduce food waste? Please select all that apply.							
*Grocery stores	2024				56%		
E-mail	2024 2023			37%	47%		
Food waste reduction website	2024 2023			34%	49%		
Facebook	2024 2023			3% 32%			
*Community spaces	2024		24%				
TV news or streaming TV	2024 2023		24%	% 9%			
Newspapers (print or online)	2024 2023		20%	34%			
Instagram	2024 2023		19% 21%				
TikTok	2024 2023	1	.3% 16%				
Radio or radio app	2024 2023		2% 15%				
*My local school district	2024	11	L%				
Twitter (X)	2024 2023	6%	)				
Other social media	2024 2023	■ 2% ■ 2%					
Other websites	2024 2023	I 1% I 2%					
Other	2024 2023	2% 5%					
*I am not interested in this	2024	6%					
		)%	25%	50	)% 7	5%	100%
Figure 22. Preferred communicati	on chan	nels.					

\* New item in 2024 survey.

- Respondents who speak English at home and/or who took the survey in English tend to select grocery stores as their preferred communication channel.
- Respondents who are younger tend to select Instagram and/or TikTok. Respondents who are older tended to select newspapers.
- Respondents who live with children and/or who live in larger households tend to select their local school district and/or TikTok.

# Relationship between campaign exposure and other variables

Overall, compared to people who had not encountered information related to food waste reduction in the past two months, those who had received information related to food waste reduction were more likely to say that:

- They can reduce how much food their household throws away.
- The steps they personally take to avoid wasting food can make a big difference in our society.
- Practical information, ideas, and tips could help them reduce food waste at home.
- Are concerned about the amount of food they throw away.
- Aware of the National Food Waste Prevention Week
- Take new steps to reduce food waste in their household
- Use strategies to reduce food waste more often than 2 months ago
- Are more interested in learning more about strategies to reduce food waste

The demographics of this group include the following attributes:

- Are younger
- Live in larger household
- Have children
- Identify as BIPOC
- Have more education
- Have higher income