

Food Waste Baseline Survey

Survey Interviews Conducted: September 5-15, 2016

320-714

Fairbank, Maslin, Maullin, Metz & Associates – FM3

PUBLIC OPINION RESEARCH & STRATEGY

Survey Methodology

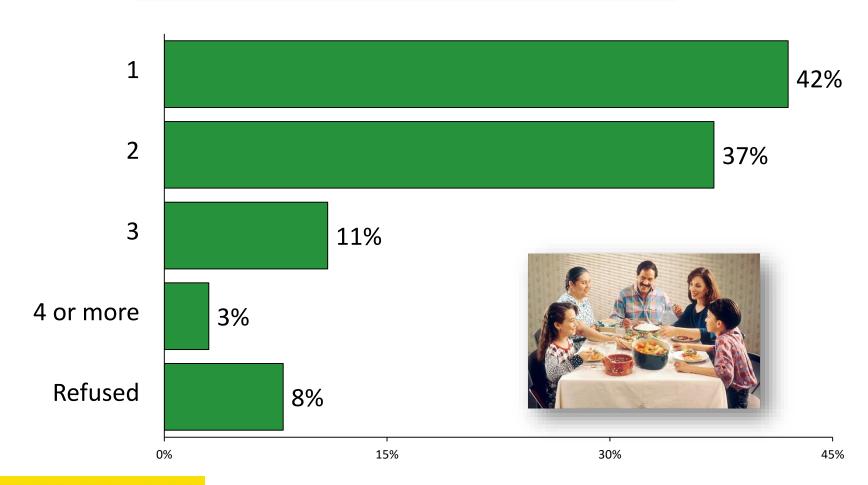
- 400 telephone interviews with parents of children under 18 in Alameda County
 - Survey respondents were also the person in their household primarily responsible for either grocery shopping or cooking
- Interviews conducted September 5-15, 2016
- Interviews on landlines and cell phones
- ❖ Margin of sampling error of +/- 4.9% at the 95% confidence level
- Some percentages may not sum to 100% due to rounding
- Census data was used to set demographic quotas to match the demographics of Alameda County parents.



Key Demographic Characteristics

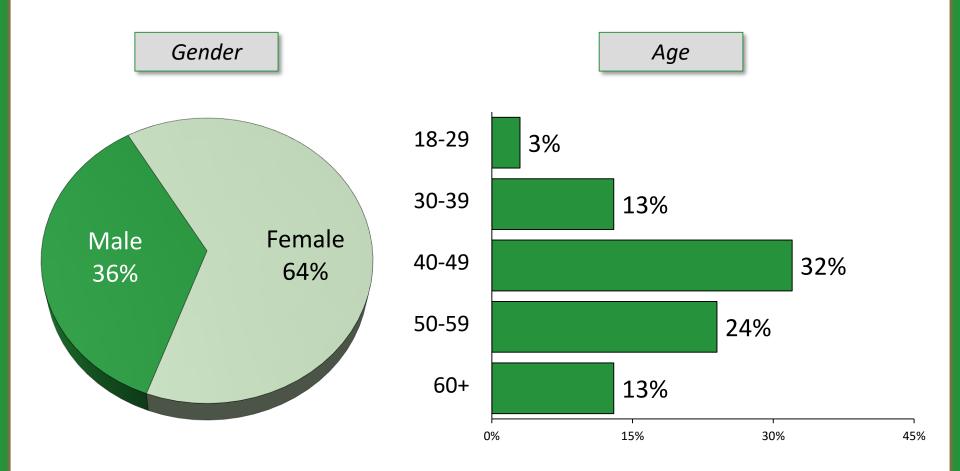
Few parents interviewed had more than two children.

How many children under 18 live in your house?



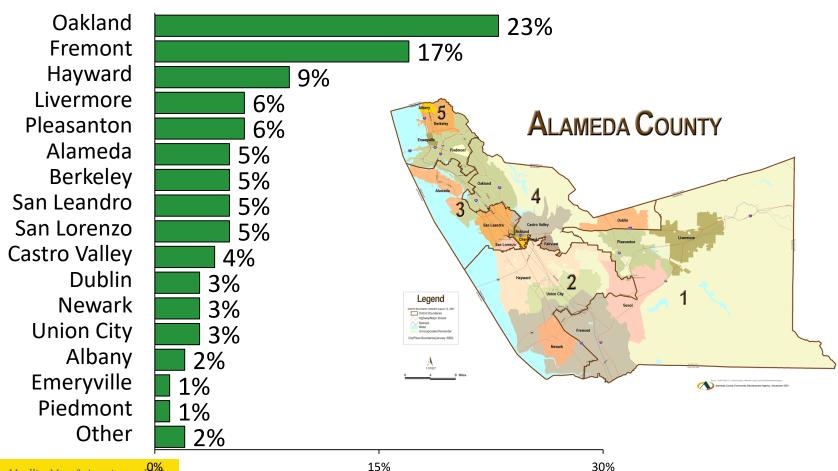
Q2.

Nearly two-thirds of respondents were women and they tended to be in their 40s and 50s.

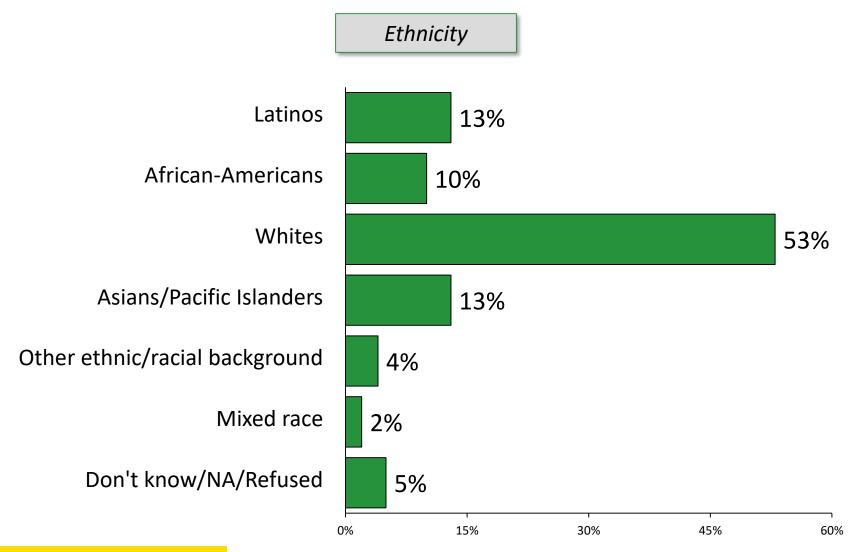


The geographic distribution reflects Census data for households with children under 18.

Are you a resident of Alameda County? In which City do you live?

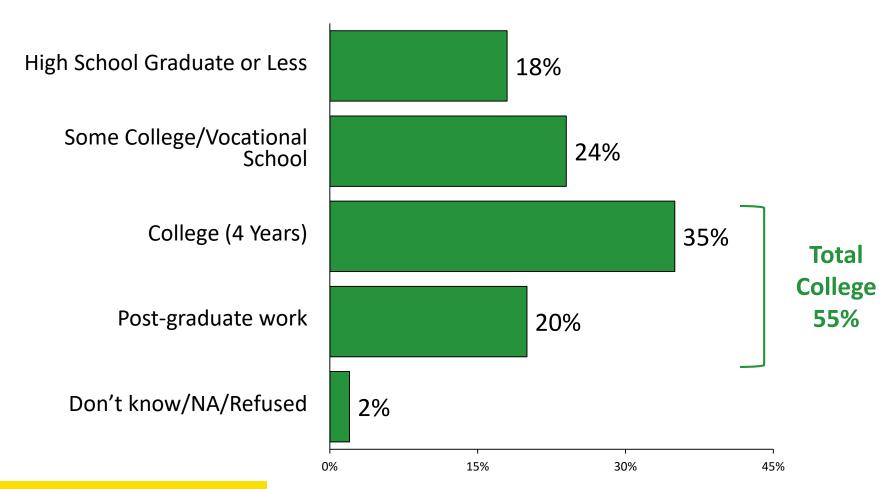


Survey respondents were slightly more likely to be white than the overall adult population.



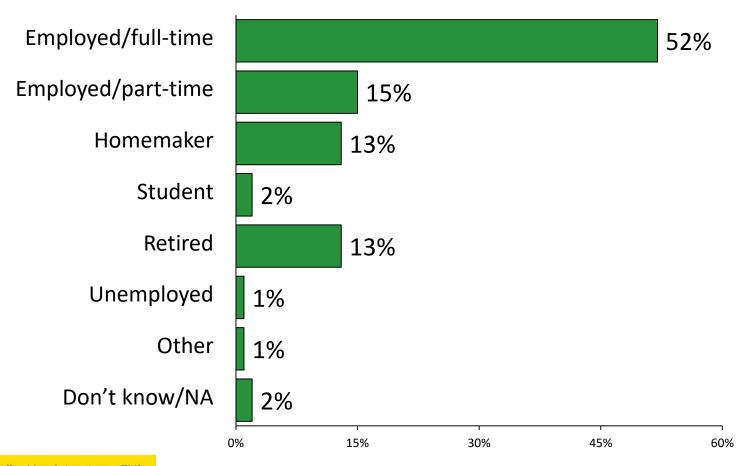
A majority were college-educated.

What was the last level of school you completed?



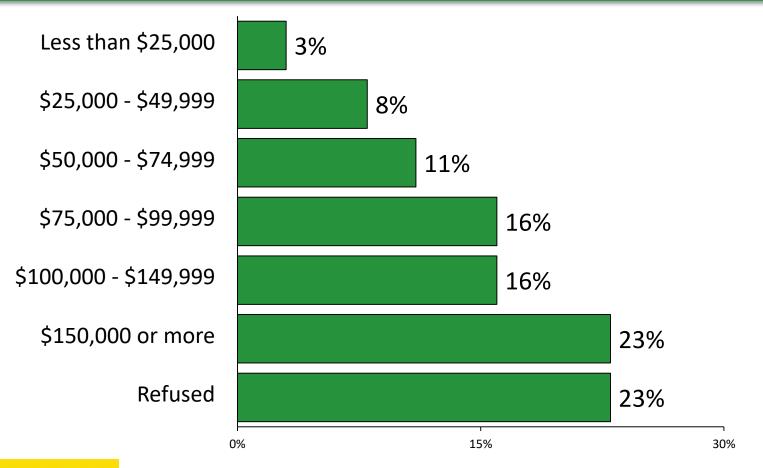
Half of parents were employed full-time.

Are you employed outside the home, or are you a homemaker, a student, or retired?



Household incomes also skewed slightly higher.

I don't need to know the exact amount, but I'm going to read you some categories for household income. Would you please stop me when I have read the category indicating the total combined income for all the people in your household before taxes in 2015?





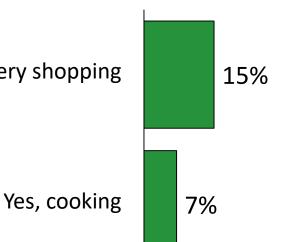
Current Food Waste Practices

Three-quarters of respondents were responsible for both cooking and grocery shopping in their households.

Are you the person primarily responsible for purchasing and preparing food in your household?

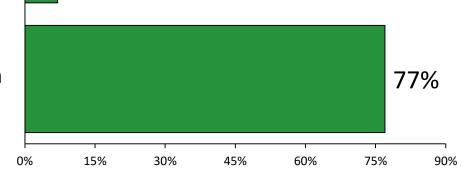


Yes, grocery shopping

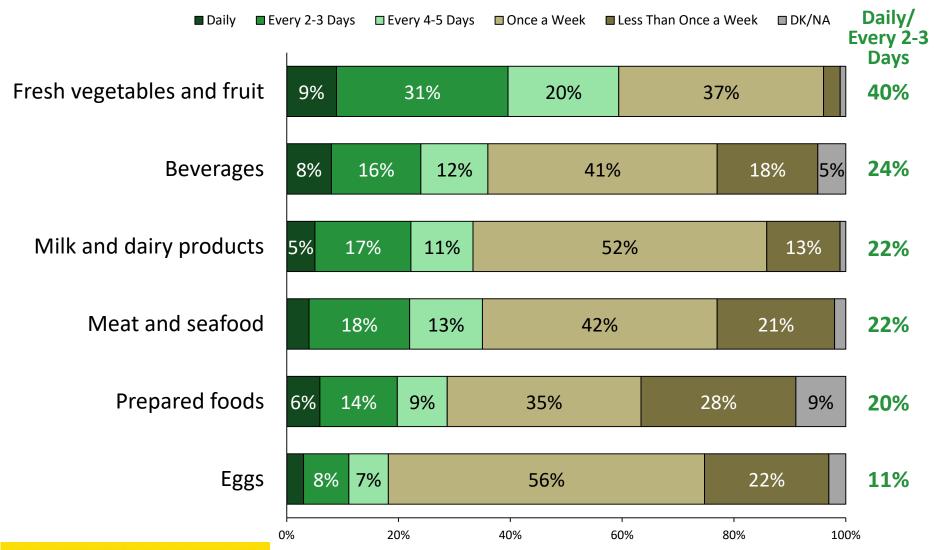




Yes, both



Fresh vegetables and fruit are purchased with the greatest frequency.

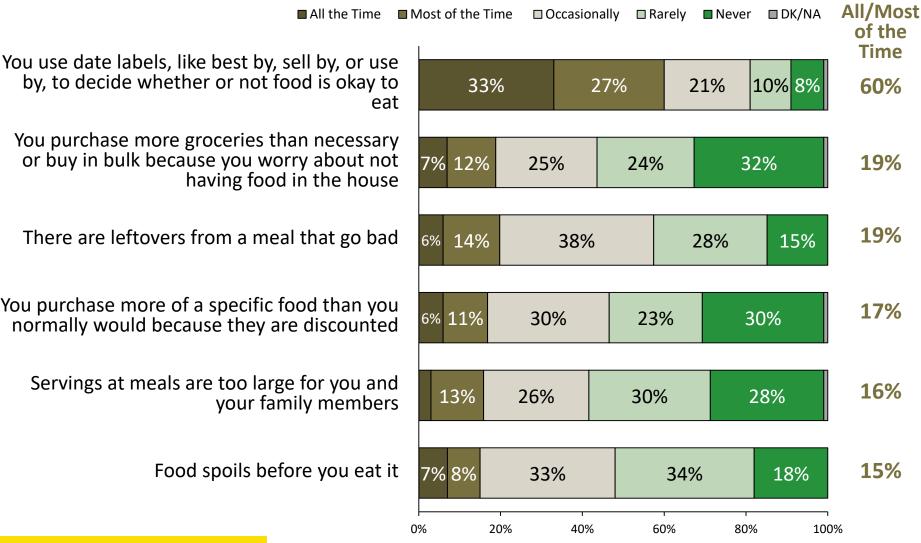


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And along with milk and dairy, vegetables and fruit were the most likely to be thrown out due to spoiling.

Items	Spoiled	Partially Uneaten	Leftovers	Excess Food	DK/NA
Fresh vegetables and fruit	66%	11%	9%	2%	12%
Beverages	19%	12%	8%	5%	57%
Milk and dairy products	56%	3%	5%	4%	32%
Meat and seafood	29%	16%	28%	3%	23%
Prepared foods	23%	23%	26%	2%	26%
Eggs	22%	10%	8%	10%	51%

Date labels are by far the most common reason parents throw out food.



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Q12. There are many different reasons why people throw out some of the food they purchase. I am going to read you a list of different situations that may cause you to throw out food. For each one please indicate how often this situation is the reason you and your family throw food out: all the time, most of the time, occasionally, rarely, or never.

African-American parents were most likely to purchase excess amounts of discounted or bulk food.

(All of the Time/Most of the Time/Occasionally)

		Ethnicity				
Reasons	All Parents	Latinos	African- Americans	Whites	Asians/ Pacific Islanders	All Parents of Color
You use date labels, like best by, sell by, or use by, to decide whether or not food is okay to eat	81%	83%	83%	83%	78%	80%
There are leftovers from a meal that go bad	57%	63%	63%	56%	49%	57%
Food spoils before you eat it	48%	43%	52%	48%	47%	47%
You purchase more of a specific food than you normally would because they are discounted	47%	50%	65%	43%	45%	50%
You purchase more groceries than necessary or buy in bulk because you worry about not having food in the house	43%	42%	53%	42%	39%	43%
Servings at meals are too large for you and your family members	42%	45%	41%	40%	42%	42%

Geographic differences were generally minor.

(All of the Time/Most of the Time/Occasionally)

		Region		
Reasons	All Parents	North County	South County	Valley
You use date labels, like best by, sell by, or use by, to decide whether or not food is okay to eat	81%	86%	78%	77%
There are leftovers from a meal that go bad	57%	59%	53%	64%
Food spoils before you eat it	48%	55%	42%	49%
You purchase more of a specific food than you normally would because they are discounted	47%	44%	48%	50%
You purchase more groceries than necessary or buy in bulk because you worry about not having food in the house	43%	45%	43%	39%
Servings at meals are too large for you and your family members	42%	40%	45%	37%

Parents under 40 were notably more likely to purchase excess bulk groceries.

(All of the Time/Most of the Time/Occasionally)

	All	Age			
Reasons	Parents	18-39	40-49	50-59	60+
You use date labels, like best by, sell by, or use by, to decide whether or not food is okay to eat	81%	76%	88%	82%	74%
There are leftovers from a meal that go bad	57 %	57%	53%	66%	56%
Food spoils before you eat it	48%	47%	42%	53%	46%
You purchase more of a specific food than you normally would because they are discounted	47%	55%	44%	38%	52%
You purchase more groceries than necessary or buy in bulk because you worry about not having food in the house	43%	65%	39%	35%	39%
Servings at meals are too large for you and your family members	42%	41%	41%	37%	38%

Varied Food Wasters

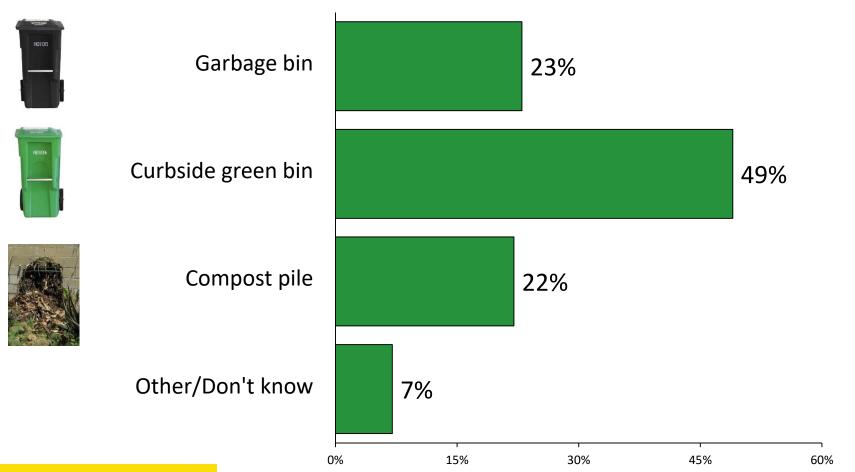
- Respondents were presented with six different reasons for wasting food.
- We looked specifically at those who acknowledged one of the reasons applies to them at least occasionally.
- ❖ Then we grouped respondents by the number of reasons they acknowledged 0-2, 3-4 or 5-6 times.
- Those in the 0-2 bucket are only wasting food for a couple of different reasons.
- Those in the 5-6 bucket are wasting food for a wide variety or reasons.

The demographic profiles of those who waste foods in multiple ways are...

0-2 Ways	3-4 Ways	5-6 Ways
35% of the Sample	39% of the Sample	26% of the Sample
HH Income <\$50,000	Ages 50-59	Non-College-Educated Women
HH Income <\$75,000	College-Educated Women	Some College Education
HH Income \$50,000-\$75,000	Women Ages 50+	Fremont
Asians/Pacific Islanders	Other/Mixed Ethnicity	African-Americans
Unemployed	Whites	Some College or Less
Ages 60+	HH Income \$100,000+	HH Income \$75,000-\$100,000
Dispose of Food in Green Bin	Have 2 Children at Home	High School Educated
Men	Four-year College or More	HH Income \$50,000-\$75,000
College-Educated Men	Ages 50+	Ages 18-39
Men Ages 50+	Four-year College Graduates	Have 3+ Children at Home

Half of respondents say that they use their curbside green bin to dispose of food scraps.

How do you dispose of discarded food? Do you throw it in the _____?



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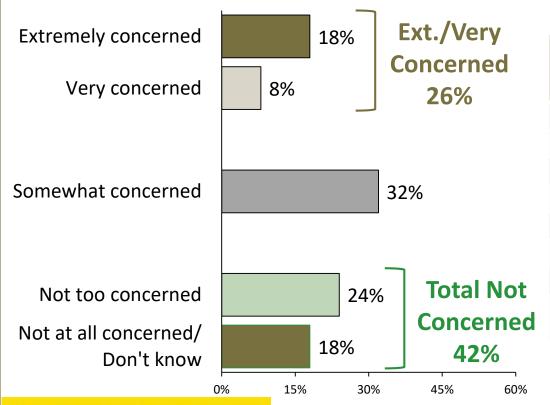
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Attitudes Towards Food Waste

A quarter of parents are extremely or very concerned about the amount of food waste in their households.

How concerned are you about the amount of food that is thrown out uneaten, or wasted, in your home: extremely concerned, very concerned, somewhat concerned, not too concerned, or not at all concerned?

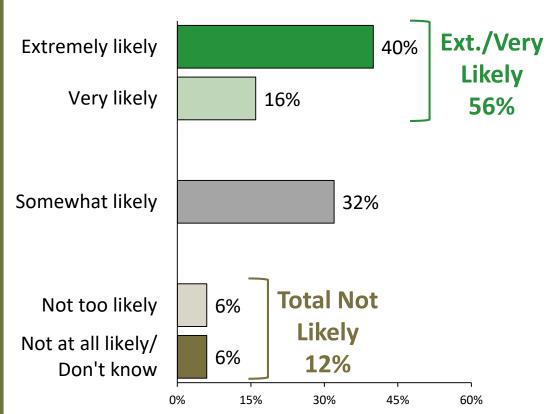


Q9.

Demographic Group	Ext./ Very Concerned	% of Sample
All Parents	26%	100%
Have 3+ Children at Home	33%	14%
HH Income <\$50,000	33%	11%
Ages 18-39	32%	17%
Women Ages 18-49	31%	34%
Some College Education	31%	24%
African-Americans	31%	10%
Non-College Educated Women	30%	29%

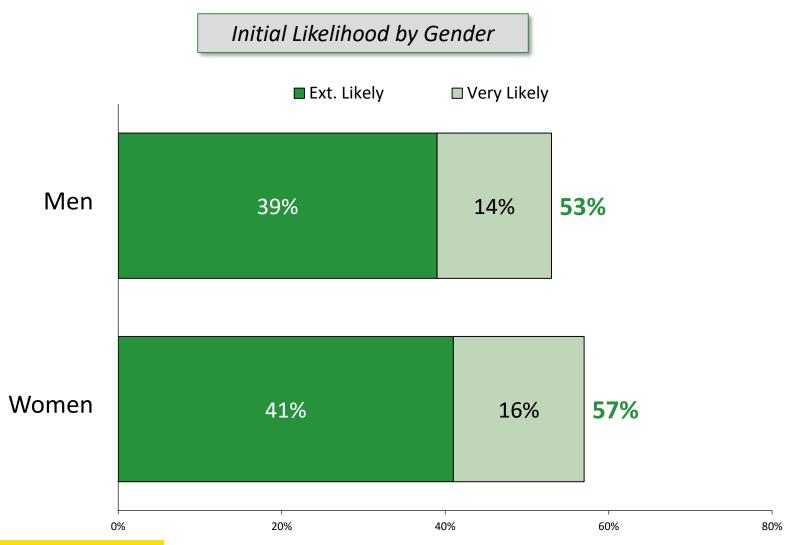
Despite low levels of concern, a majority claims they try to prevent home food waste.

On a daily basis, how likely are you to take steps to prevent food from going to waste in your home: extremely likely, very likely, somewhat likely, not too likely, or not at all likely?

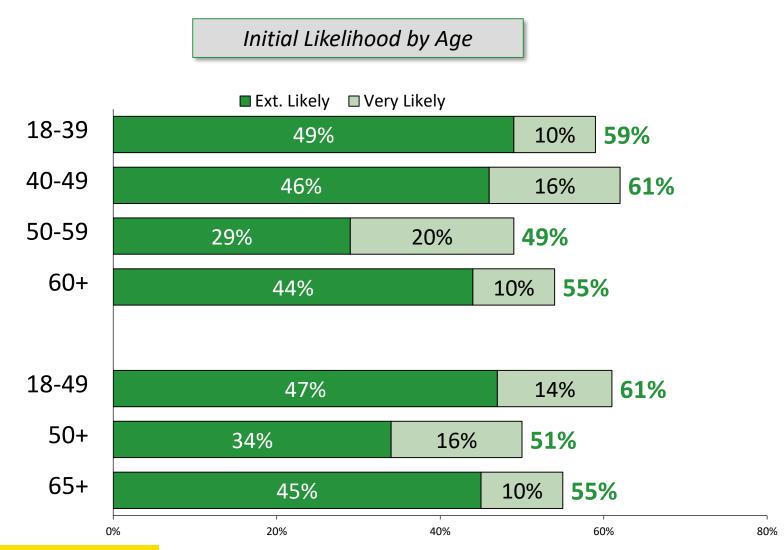


Demographic Group	Ext./Very Likely	% of Sample
All Parents	56%	100%
Post-Graduate Educated	65%	20%
HH Income <\$50,000	65%	11%
Men Ages 18-49	64%	16%
Other/Mixed Ethnicity	64%	11%
Ages 18-49	61%	49%
Ages 40-49	61%	33%
Some College Education	60%	24%

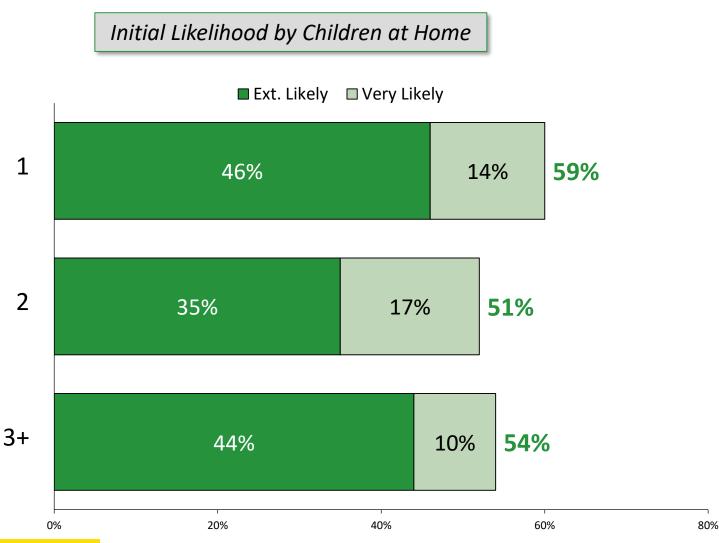
Women are slightly more likely than men to make efforts to prevent food waste.



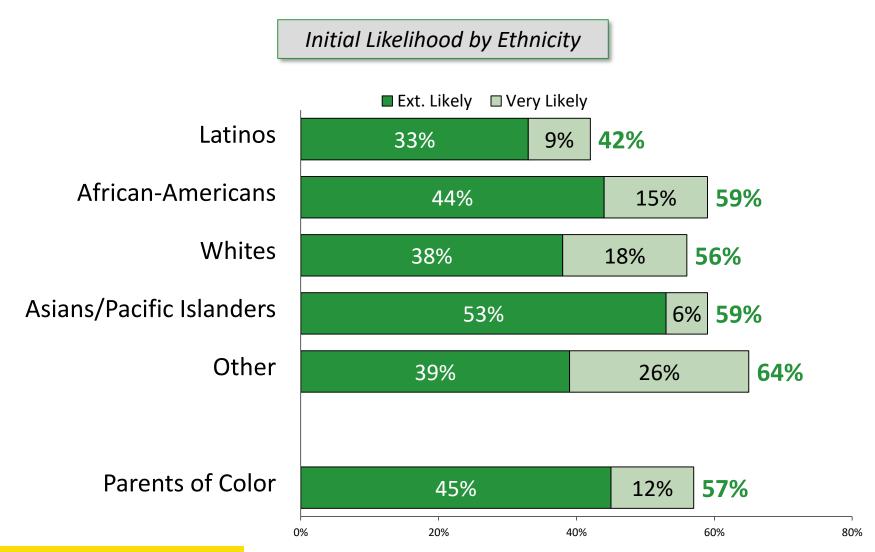
Parents in their 50's are the least likely to try and reduce their food waste.



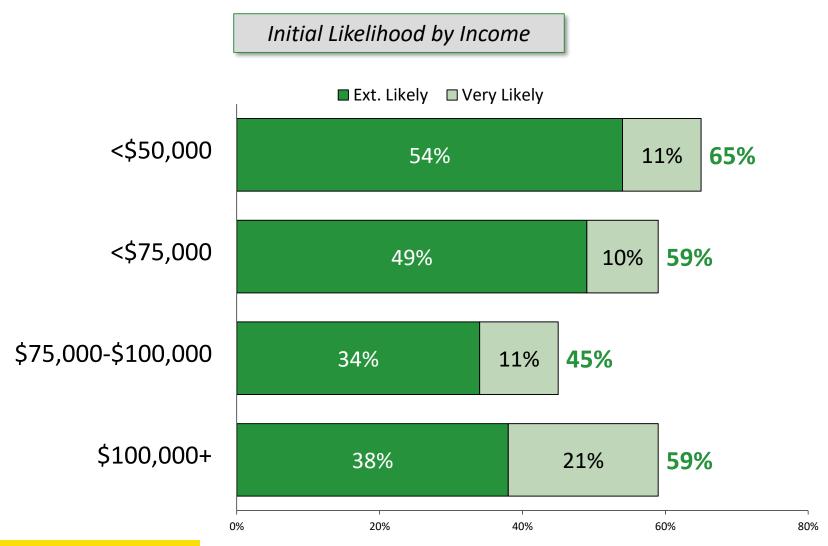
Parents of only children are most likely to take steps to prevent food waste.



Asian and Pacific Islander parents say they are most likely prevent food waste; Latinos least likely.

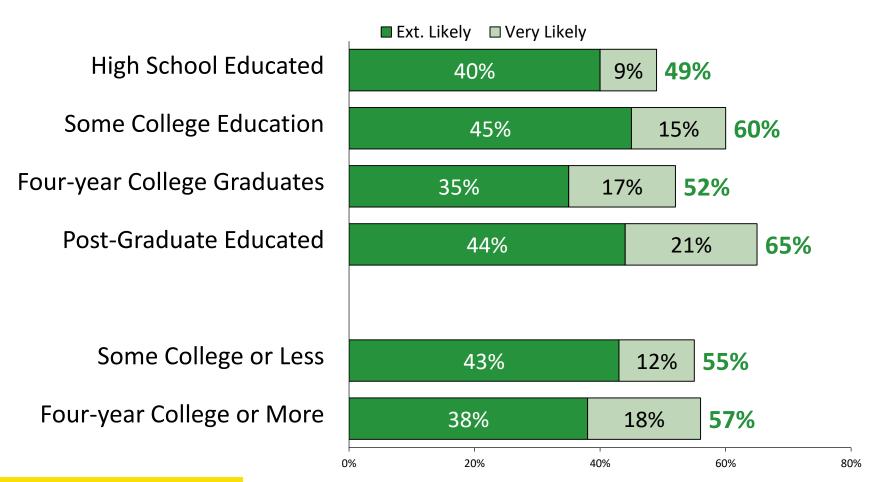


Low-income parents are more likely than their higher income counterparts to take prevent food waste.

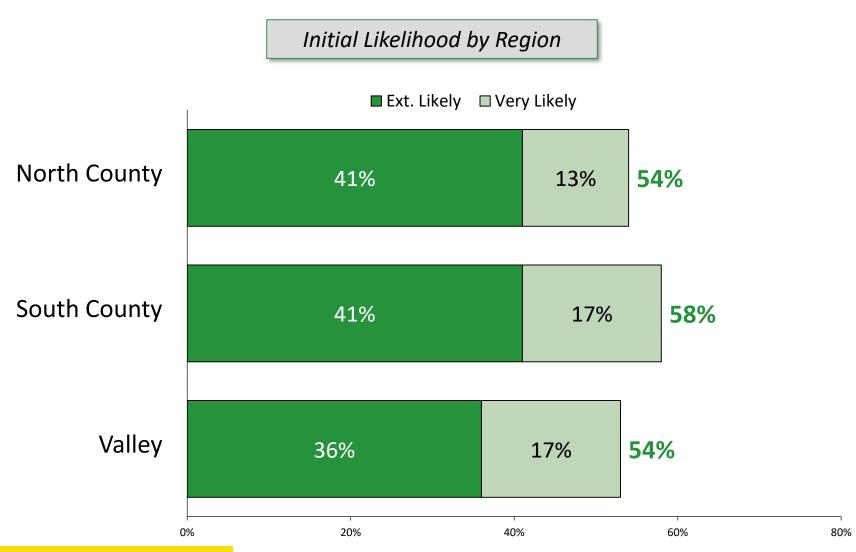


There is variation by education level, with postgraduate educated parents most likely.





Geographical differences were minor.

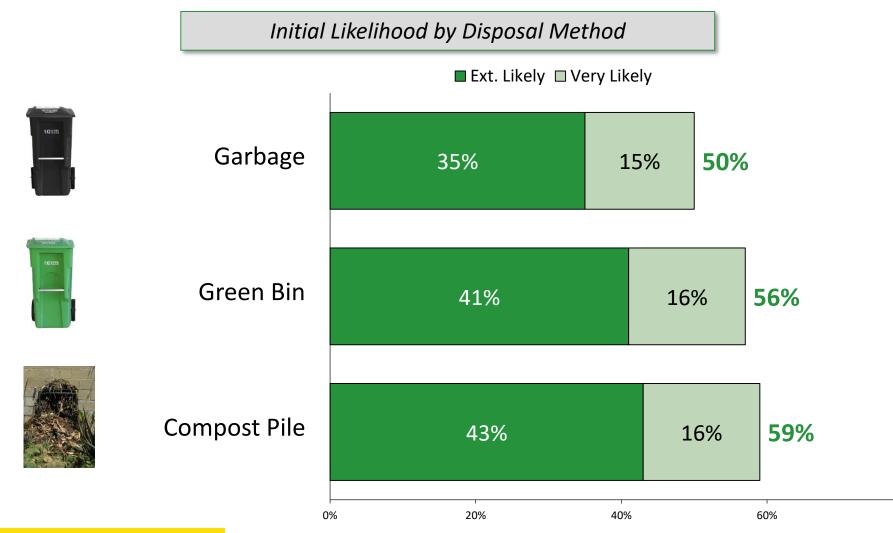


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The likelihood of preventing waste among those who are concerned about food waste is comparable to the likelihood of those who are <u>not</u> concerned.



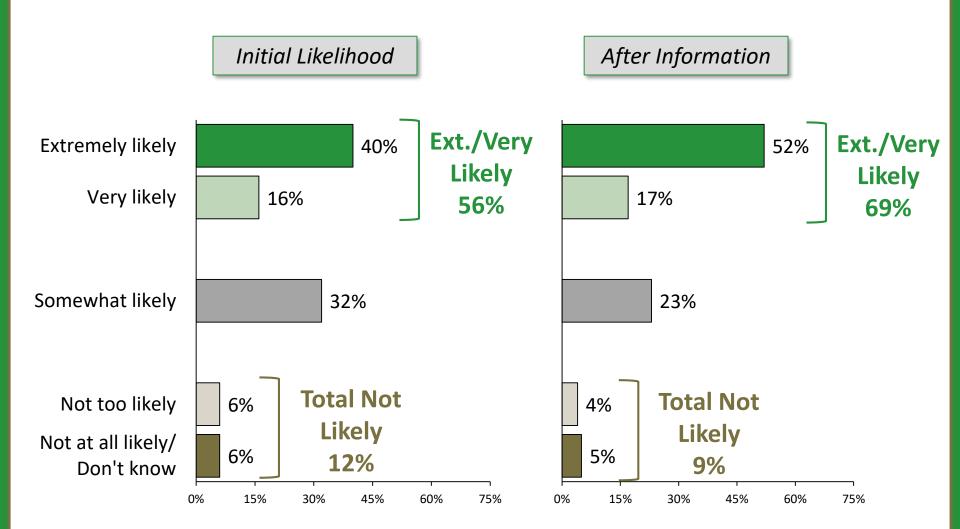
Parents who compost or use a green bin are more likely to prevent food waste than are those who use the garbage bin for food scraps.





Identifying Persuadable Groups

When parents learned more about the issue their likelihood of preventing waste grew.



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Segmenting by Consistency of Likelihood

Consistent Extremely/Very Likely:

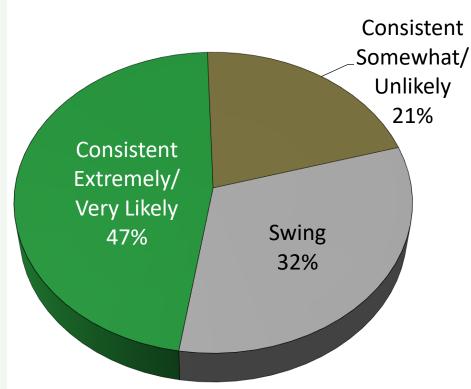
Respondents who consistently said they were extremely or very likely to take steps to prevent food waste in their homes.

Consistent Somewhat/Unlikely:

Respondents who consistently said they were somewhat likely, not too likely, or not at all likely to take steps to prevent food waste.

Swing: Respondents who do not fall into any of the other categories – remaining consistently undecided or switching positions.

The following slide shows demographic groups that *disproportionately* fall into one category or the other.



Demographic Profile of the Segments

Consistent Extremely/ Very Likely	Swing	Consistent Somewhat/ Unlikely
47% of the Electorate	32% of the Electorate	21% of the Electorate
Other/Mixed Ethnicity	Men Ages 50+	HH Income \$75,000-\$100,000
Post-Graduate Educated	Ages 50-59	Have 2 Children at Home
College-Educated Women	Latinos	Four-Year College Graduates
Women Ages 18-49	College-Educated Men	Oakland
Ages 40-49	High School Educated	Men Ages 50+
Some College Education	Ages 50+	Ages 60+
Ages 18-49	Dispose of Food in Garbage Bin	Latinos
Women	Men	Other/Mixed Ethnicity
Women Ages 50+	HH Income \$100,000+	Dispose of Food in Compost Pile
Ages 18-39	African-Americans	College-Educated Men
Have 3+ Children at Home	Have 1 Child at Home	Ages 18-39
Asians/Pacific Islanders	Have 3+ Children at Home	Non-College Educated Men
HH Income <\$50,000	Employed	Men

Those whose likelihood of preventing food waste increased over the course of the survey

Demographic Groups	Intensity Movers	% of Sample
All Parents	27%	100%
Latinos	42%	13%
High School Educated	37%	19%
Men Ages 50+	36%	17%
Dispose of Food in Garbage Bin	34%	23%
Non-College-Educated Men	33%	14%
Ages 50-59	32%	25%
HH Income \$50,000-\$75,000	32%	11%

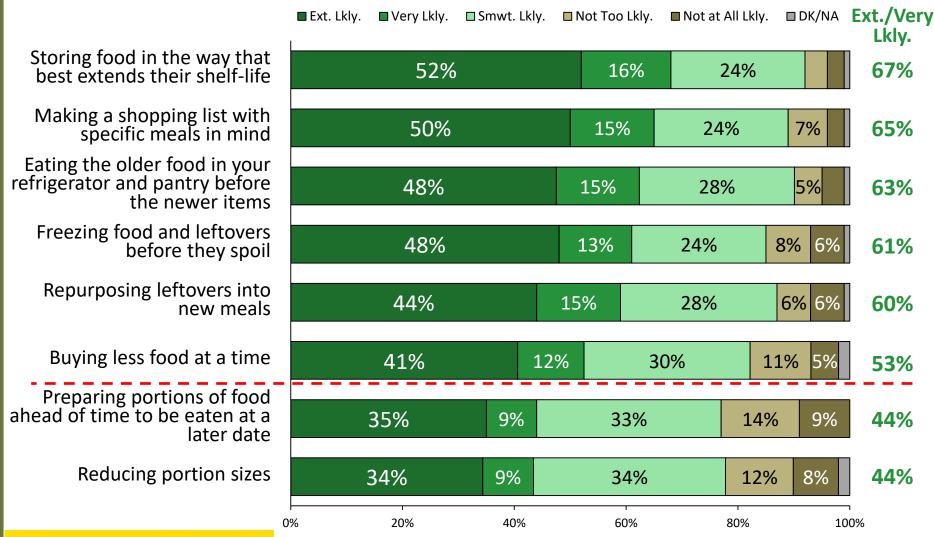
Those who are concerned about food waste and extremely/very willing to do something about it

Extremely/Very Concerned	Extremely Concerned
17% of the Electorate	12% of the Electorate
HH Income <\$50,000	HH Income <\$50,000
African-Americans	Have 3+ Children at Home
HH Income <\$75,000	HH Income <\$75,000
Have 3+ Children at Home	Ages 18-39
	Women Ages 18-49
	Non-College-Educated Women
	Some College Education
	HH Income \$50,000-\$75,000



Preventing Food Waste

Among a list of potential actions to reduce food waste, storing food in an appropriate manner and making a shopping list emerged as the most likely.



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Q16. I am going to read you a list of things you can do to prevent wasting food in your household. Please tell me if this sounds like something you are: extremely likely, very likely, somewhat likely, not too likely, or not at all likely to do to prevent food from being wasted.

Varied Action Takers

- Respondents were presented with eights different things they could do to prevent food from being wasted.
- We looked specifically at those who suggested they would be extremely or very likely to do each one.
- ❖ Then we grouped respondents by the number of actions they were likely to do: 0-2, 3-5 or 6-8.
- Those in the 0-2 bucket are only likely to do a couple of things.
- Those in the 6-8 bucket are willing to do a number of different things.

The demographic profiles of those who engage in different levels of food waste reduction activities are...

0-2 Actions	3-5 Actions	6-8 Actions
22% of the Sample	37% of the Sample	41% of the Sample
Dispose of Food in Garbage Bin	Latinos	HH Income \$50,000- \$75,000
HH Income <\$50,000	Men Ages 18-49	Unemployed
HH Income <\$75,000	Ages 40-49	HH Income <\$75,000
Ages 18-39	College-Educated Men	Ages 60+
HH Income \$50,000- \$75,000	HH Income \$100,000+	Women Ages 50+
Dispose of Food in a Compost Pile	Have 2 Children at Home	Ages 50+
High School Educated	Oakland	Ages 50-59
HH Income \$75,000- \$100,000	Post-Graduate Educated	Men Ages 50+
Asians/Pacific Islanders	Four-year College or More	Other/Mixed Ethnicity
African-Americans	Men	African-Americans

Note...

Younger parents appear most concerned about food waste and indicate the highest conceptual likelihood for taking steps to prevent it in their homes.

However, <u>older parents</u> are more likely to say they are likely to take a wide variety of <u>specific</u> steps to prevent food waste.

African-American parents differed the most among different ethnic groups.

(Extremely/Very Likely)

	All	Ethnicity						
Reasons	All Parents	Latinos	African- Americans	Whites	Asians/ Pacific Islanders	All Parents of Color		
Storing food in the way that best extends their shelf-life	67%	62%	59%	67%	75%	68%		
Making a shopping list with specific meals in mind	65%	63%	57%	66%	67%	64%		
Eating the older food in your refrigerator and pantry before the newer items	63%	71%	55%	66%	54%	62%		
Freezing food and leftovers before they spoil	61%	70%	59%	61%	54%	62%		
Repurposing leftovers into new meals	60%	60%	62%	59%	55%	61%		
Buying less food at a time	53%	61%	61%	52%	53%	56%		
Preparing portions of food ahead of time to be eaten at a later date	44%	44%	60%	44%	40%	47%		
Reducing portion sizes	44%	46%	52 %	42%	47%	48%		

The households with the highest incomes are more likely to take many of the steps. (Extremely/Very Likely)

Deceme	All	Household Income					
Reasons	Parents		\$50,000- \$75,000	\$75,000- \$100,000	\$100,000+		
Storing food in the way that best extends their shelf-life	67%	64%	60%	69%	73%		
Making a shopping list with specific meals in mind	65%	62%	63%	58%	64%		
Eating the older food in your refrigerator and pantry before the newer items	63%	65%	61%	60%	69%		
Freezing food and leftovers before they spoil	61%	55%	61%	59%	67%		
Repurposing leftovers into new meals	60%	55%	56%	58%	64%		
Buying less food at a time	53%	59%	1 60%	↓ 41%	50%		
Preparing portions of food ahead of time to be eaten at a later date	44%	46%	42%	47%	42%		
Reducing portion sizes	44%	52%	1 55%	38%	↓ 35%		

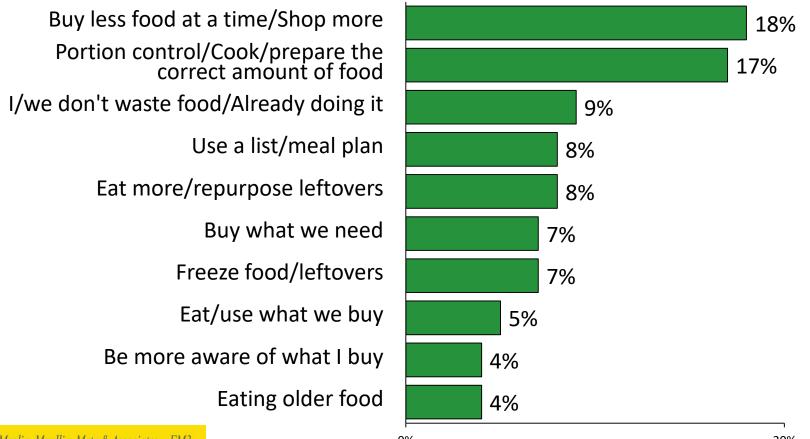
Those living in northern Alameda County are less likely than other residents to engage in food waste reduction.

(Extremely/Very Likely)

	CC., 1 C. ,	//					
		Region					
Reasons	All Parents	North County	South County	Valley			
Storing food in the way that best extends their shelf-life	67%	63%	68%	76%			
Making a shopping list with specific meals in mind	65%	57%	70%	71%			
Eating the older food in your refrigerator and pantry before the newer items	63%	55%	70%	66%			
Freezing food and leftovers before they spoil	61%	60%	65%	54 %			
Repurposing leftovers into new meals	60%	57%	63%	58%			
Buying less food at a time	53%	50%	58%	48%			
Preparing portions of food ahead of time to be eaten at a later date	44%	41%	49%	39%			
Reducing portion sizes	44%	39%	47%	48%			

Shopping more frequently and practicing portion control are seen as the top two ways respondents can reduce waste in their homes.

Given everything we have discussed, what's the one thing you can do to reduce the amount of food you and your family waste?



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20%

Verbatim Comments on How Parents Can Address Food Waste at Home

I can be very conscious of what is in the refrigerator.

I will reduce how much we cook, it will be according to our needs.

I believe the one thing I can do to reduce the amount of food is to make a meal plan.

I believe the one thing I can do to reduce the amount of food that my family waste is to get my kids to eat what I cook.

I think the biggest change we can make is to stop making things that may last two or three days. It's convenient but very wasteful because by day three you'll be tired of whatever it is.



Messaging

Framing food waste in terms of how many people it could feed is most effective in raising concern about the issue.

The amount of food thrown out each year could feed 3.5 billion people globally.

In the United States alone, we throw out \$48 billion worth of food each year.

In 2014, almost half of all low-income households in Alameda County were food insecure.

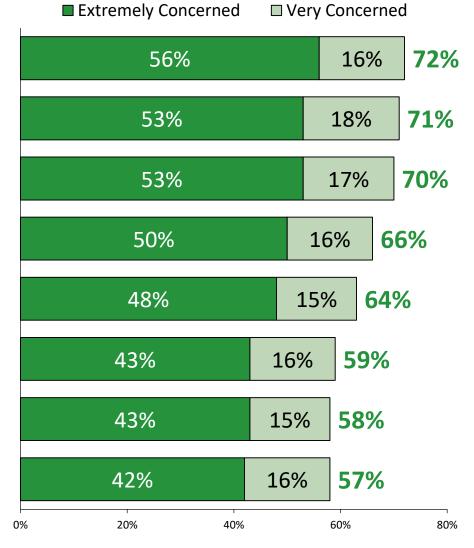
More than 6 million tons of food products are dumped annually in California, enough to fill the Staples Center in Los Angeles 35 times over.

The average family of four wastes \$41,365 to \$42,275 in food each year.

Food waste adds 3.3 billion tons of green-house gases to the atmosphere per year, contributing to climate change.

Tossing an apple is like pouring 25 gallons of water down the drain, and the average American does that 17 times a year.

Discarded food makes up 25% of waste coming from California households.



African American and Asian parents were most concerned about these facts; Latino parents somewhat less concerned.

(Extremely/Very Concerned)

	AH		Ethi	nicity		
Negative Consequences (truncated)	All Parents	Latinos	African- Americans	Whites	Asians/ Pacific Islanders	All Parents of Color
Could feed 3.5 billion people globally	72%	72%	78%	70%	76%	75%
Half of all low-income households were food insecure.	70%	71%	71%	70%	72%	71%
Throw out \$48 billion worth of food each year	71%	74%	77%	68%	80%	75%
6 million tons of food products are dumped annually	66%	66%	73%	65%	65%	67%
The average family of four wastes \$1,365 to \$2,275 in food each year	64%	61%	84%	59%	71%	69%
3.3 billion tons of green-house gases	59%	50%	75%	57%	65%	62%
Tossing an apple is like pouring 25 gallons of water down the drain	58%	51%	76%	56%	71%	62%
25% of waste coming from California households	57%	47%	65%	55%	71%	60%

Concerns about US dollars and California tonnage wasted tend to scale with income.

(Extremely/Very Concerned)

	All	Household Income					
Negative Consequences (truncated)	Parents	<\$50,000	\$50,000- \$75,000	\$75,000- \$100,000	\$100,000 +		
Could feed 3.5 billion people globally	72%	72%	73%	73%	69%		
Half of all low-income households were food insecure.	70%	63%	70%	69%	68%		
Throw out \$48 billion worth of food each year	71%	62%	65%	67%	73%		
6 million tons of food products are dumped annually	66%	59%	61%	64%	71%		
The average family of four wastes \$1,365 to \$2,275 in food each year	64%	49%	58%	67%	58%		
3.3 billion tons of green-house gases	59%	57%	61%	61%	54%		
Tossing an apple is like pouring 25 gallons of water down the drain	58%	53%	60%	53%	54%		
25% of waste coming from California households	57%	56%	55%	57%	54%		

There were few geographic distinctions.

(Extremely/Very Concerned)

No gotive Company (two costs d)	All	Region			
Negative Consequences (truncated)	Parents	North County	South County	Valley	
Could feed 3.5 billion people globally	72%	73%	70%	77%	
Half of all low-income households were food insecure.	70%	70%	70%	71%	
Throw out \$48 billion worth of food each year	71%	71%	72%	70%	
6 million tons of food products are dumped annually	66%	69%	65%	63%	
The average family of four wastes \$1,365 to \$2,275 in food each year	64%	66%	62%	60%	
3.3 billion tons of green-house gases	59%	62%	59%	53%	
Tossing an apple is like pouring 25 gallons of water down the drain	58%	62%	57%	51%	
25% of waste coming from California households	57%	58%	59%	51%	

Messages in Support of Preventing Food Waste

Messages

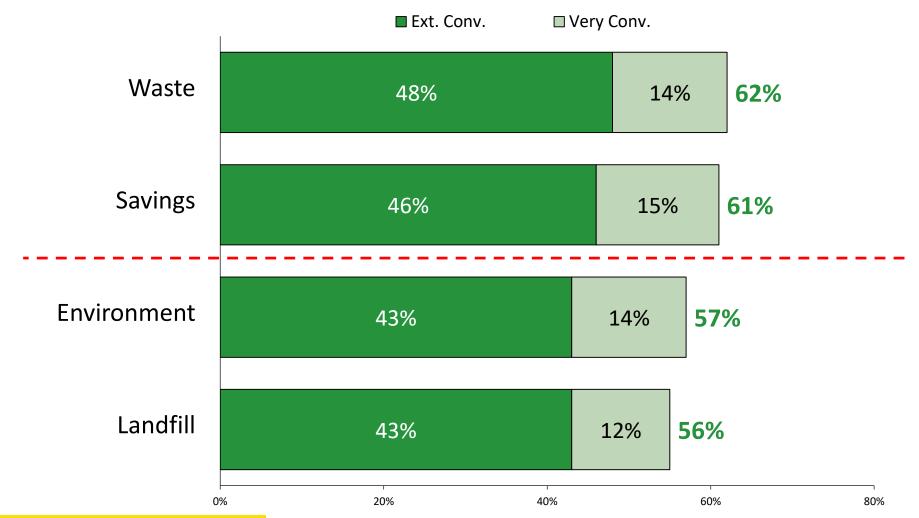
(WASTE) Each year Americans throw out a quarter of the food they buy. Californians alone throw out enough food to fill the Staples Center 35 times. In the meantime, 167,000 families in Alameda County are food insecure. Instead of being wasted, this food could be nourishing families who are struggling to make ends meet.

(SAVINGS) The average family of four can save up to \$2,275 each year by reducing food waste. \$2,000 is a lot of money for anyone, and with our area's rising cost of living these are savings that would be better spent on your family's needs rather than on uneaten food.

(ENVIRONMENT) Food waste has a significant impact on our environment and is a major contributor to climate change. Food waste in America adds twice as many greenhouse gases to the atmosphere as all the cars in California. Just throwing out a single apple is like pouring 25 gallons of water down the drain. By preventing food waste, we can preserve and protect precious natural resources.

(LANDFILL) Food is the single largest source of waste in California. Six million tons of food are thrown out annually, making up 16% of our waste stream. Nearly all of the food that is wasted goes directly into the landfill.

Putting the amount of food waste in context, as well as household dollars wasted, were the most compelling messages.



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Q14. I am going to read you a list of reasons why you may want to reduce the amount of food that is thrown out uneaten in your household. Please tell me if you find it extremely convincing, very convincing, somewhat convincing, or not convincing as a reason to prevent food waste in your household.

These arguments were generally more compelling to parents of color than to white parents.

	ΔII	VII			Ethnicity				
Reasons	All Parents	Latinos	African- Americans	Whites	Asians/ Pacific Islanders	All Parents of Color			
Waste	62%	68%	69%	58%	68%	67%			
Savings	61%	54%	75%	57%	69%	67%			
Environment	57%	61%	57%	55%	62%	61%			
Landfill	56%	60%	74%	47%	67%	64%			

A message about savings is very compelling to those with a household income between \$75,000 and \$100,000 per year.

Dancoura	All		Househol	ld Income	
Reasons	Parents	<\$50,000	\$50,000- \$75,000	\$75,000- \$100,000	\$100,000+
Waste	62%	\$ 55%	62%	62%	58%
Savings	61%	56%	\$ 50%	73%	58%
Environment	57%	47%	59%	55%	52%
Landfill	56%	57%	55%	52%	52%

The environmental argument works best in north County; landfill less so in the Valley.

Reasons	All Parents	Region			
		North County	South County	Valley	
Waste	62%	61%	63%	58%	
Savings	61%	60%	64%	55%	
Environment	57%	64%	52%	54%	
Landfill	56%	57%	58%	46%	

The waste argument was most compelling across all key target groups.

Reasons	All Parents	Swing	Intensity Movers	Concerned and Likely	Likely to take 6-8 of the Actions
Waste	62%	61%	72%	73%	71%
Savings	61%	53%	61%	80%	72%
Environment	57%	54%	62%	66%	62%
Landfill	56%	55%	61%	77%	64%



Conclusions

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- Parents surveyed display generally low levels of concern about food waste, with only 26% "extremely" or "very" concerned.
- A majority initially say they are likely to take steps to reduce food waste (56%) and as they learn more this number grows (69%).
 - Higher educated parents, women, and parents under 50 were the most likely to consistently say they would reduce food waste.
 - However, lower-income parents and parents over age 50 were the most likely to engage in a broad variety of activities to reduce their food waste.
- Perishables like fruit, vegetables and dairy are thrown out most frequently; typically, this is because they are spoiled. Meat, seafood and leftovers are often disposed of in the form of spoiled food and leftovers.
- Use-by date labels are the primary driver of disposal across demographic groups, although the youngest parents are the most likely to purchase excess food for fear of not having enough at home.
- Though the message detailing the magnitude of waste was most compelling among key persuadable groups, there is message variation among many subgroups.
- The most common things parents said they could and would do to prevent food waste were changing food storage practices, shopping more frequently, and practicing portion control.

Different interpretations?

What else should we look at?

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