## Leveraging Consumer Preferences to Increase Whole Grain Consumption: Findings from the 2023 Whole Grain Consumer Insights Survey

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### Disclosures

- Caroline Sluyter and Kelly LeBlanc are both employees of Oldways, the 501(c)3 nonprofit that founded and runs the Oldways Whole Grains Council
- No commercial support was received for this presentation

## Housekeeping

- Attendees will receive an email within ONE WEEK with CPEU certificate, slides, and recording
- Visit oldwayspt.org/CPEU to register for upcoming webinars or view recordings of previous webinars
- Please submit any questions using the Q&A function in Zoom
- Please join us for our upcoming webinars!



Webinar Ancient, Ancestral, Heritage, Pseudo, and Modern: The Whole Nine Grains

September 26 • 2:00 PM E.T.



Webinar

Diet & Lifestyle for Cancer Prevention and Survivorship Evidence over opinion

October 17 • 2:00 PM E.T.

## **About Oldways**

### Our Vision

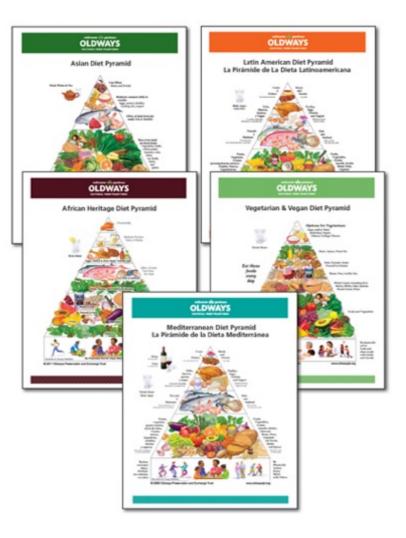
A healthier, happier life through cultural food traditions.

#### Our Mission

We inspire people to embrace the healthy, sustainable joys of the old ways of eating.

#### Best Known for

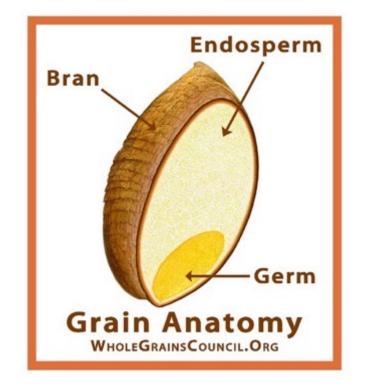
Creating the Mediterranean Diet Pyramid and other Heritage Diet Pyramids, Creating the Whole Grain Stamp, Culinary Travel



### **About the Oldways Whole Grains Council**

#### **Our three-part mission:**

- To help consumers find whole grain foods and understand their health benefits
- To help manufacturers and restaurants create delicious whole grain foods
- To help the media write accurate and compelling stories about whole grains



## The Whole Grain Stamp Program





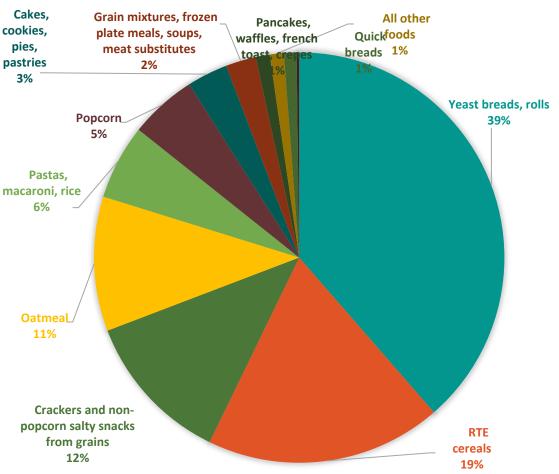


- ALL grain is whole grain
- Minimum of 16g whole grain per serving
- At least 50% of grain is whole grain
  - Minimum of 8g whole grain per serving
- More refined grain than whole grain
- Minimum of 8g whole grain per serving

No product with less than 8g of whole grain per serving can use the Whole Grain Stamp, so consumers can be confident that they are getting **at** least a half serving of whole grain from any product bearing the Stamp.

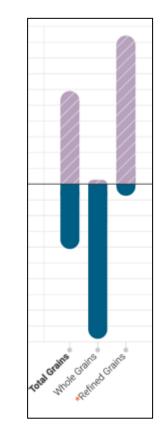
## Setting the Stage: Existing Whole Grain Data

**Bread** and **cereal** are the main sources of whole grain in US diets (NHANES 2012)



Albertson AM, Reicks M, Joshi N, Gugger CK. Whole grain consumption trends and associations with body weight measures in the United States: results from the cross sectional National Health and Nutrition Examination Survey 2001–2012. *Nutrition Journal*. 2016;15:8. Available at: <a href="https://www.ncbi.nlm.nih.gov/pubmed/26801989">https://www.ncbi.nlm.nih.gov/pubmed/26801989</a>

98% of Americans are falling short of recommended whole grain intake (2020-2025 DGA, citing NHANES 2016)





### Setting the Stage: Consumers Overwhelmingly Recognize Whole Grains as Healthy

- Nearly 80% of consumers perceive whole grains as healthful, more than all other food groups and nutrients listed except fiber (IFIC, 2020)
- More than half of consumers are trying to eat more whole grains (IFIC, 2021)
- Respondents found grains to have the smallest negative impact on the environment of all foods listed (IFIC, 2021)
- 62% of millennials and 52% of baby boomers report that the "perfect dish" that is healthy, tasty, and good for the planet would contain whole grains (Gervis, 2021)

## **About Our Survey and Its Demographics**

Region	
Northeast	19%
Midwest	23%
South	36%
West	22%
Gender	
Male	51%
Female	48%
Non-binary	0%
Age/Generation	
Gen Z (18–22)	7%
Millennials (23–38)	29%
Gen X (39–54)	31%
Boomers (55-73)	28%
Silent Generation (74+)	6%

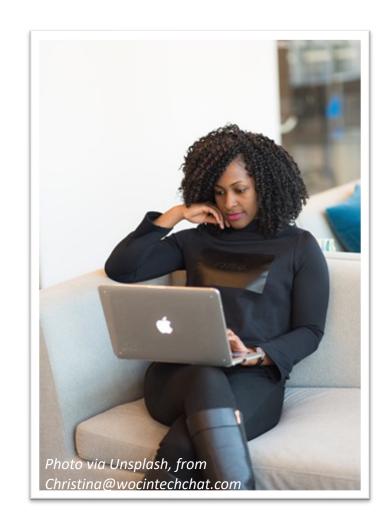
Race	
Caucasian	65%
Black	16%
Hispanic or Latinx	19%
Asian	7%
American Indian	3%
Other	1%
Prefer not to answer	0%
Income	
Under \$25,000	16%
\$25,000-\$49,999	31%
\$50,000-\$74,999	16%
\$75,000-\$99,999	16%
\$100,000-\$124,999	7%
\$125,000-\$149,999	7%
\$150,000-\$249,999	5%
\$250,000 or more	2%

#### Children in Household

Yes	29%	
No	71%	
<b>Children's Ages</b> (of those who said yes to having children in household)		
Age 5 and under	33%	
6-12 years	55%	
13-17 years	49%	
Education		
Some high school or less	3%	
Completed high school	18%	
Trade/technical school	5%	
Some college	23%	
Completed college	35%	
Graduate degree	16%	

## Why Conduct the Survey?

- National survey reporting on whole grain intake (NHANES) lags 4-5 years behind
- The latest NHANES data we have on whole grain intake is still from pre-COVID (2018)
- The food and nutrition landscape has changed rapidly over the last few years



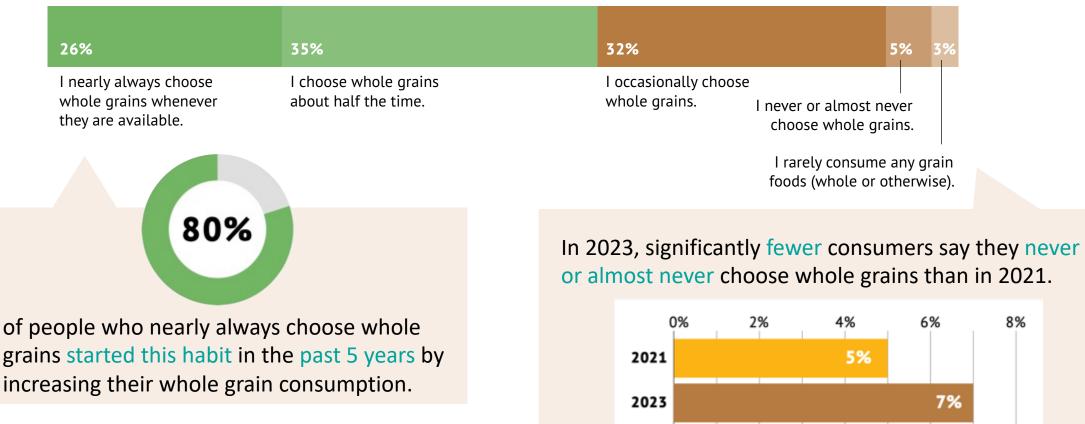
## **Outline of Key Findings**

- 1. Whole grain intake on the rise
- 2. The Whole Grain Stamp as a powerful and trusted tool
- 3. The importance of whole grain content labeling and thirdparty certifications
- 4. Consumer sensitivity to food prices
- 5. Low-carb and gluten-free fad diets on the decline
- 6. Sustainability as a motivation for choosing whole grains

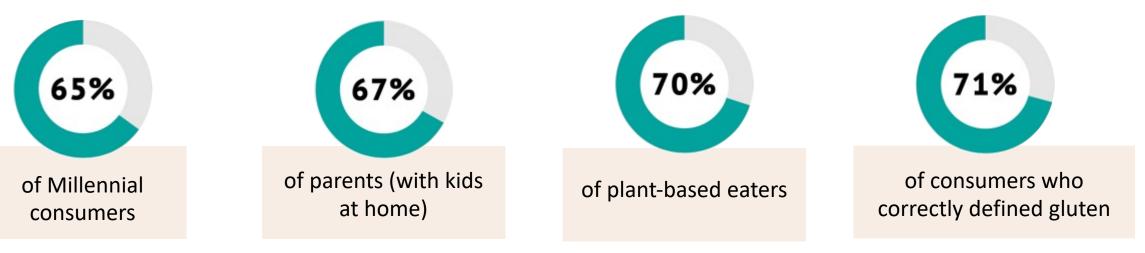
## #1: Consumers want to increase their whole grain intake

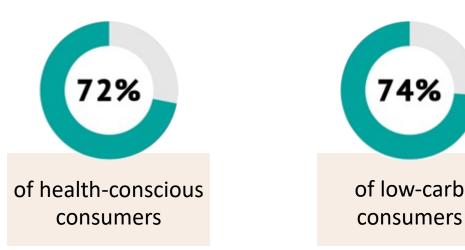
## A majority of all consumers – 61% – say they choose whole grain options at least half the time.

#### **Overall consumer habits when choosing whole grains**



## In many demographic groups, an even larger majority of consumers choose whole grains at least half the time.





Surprisingly, low-carb consumers are the most likely to choose whole grains at least half the time. This may indicate that they are really just avoiding low-quality, refined carbohydrates and seeking to replace those foods with whole grains and other high-quality carbohydrate sources.

# Additionally, more than half of consumers have increased their whole grain consumption in the past five years.

#### Changes in whole grain consumption over the past five years

21%	36%	3	6%	
l have increased my consumption of whol grains a great deal.	I have increased my e consumption of whole grains somewhat.	Sa	eat about the ame amount c vhole grains.	of 4% I have decreased my consumption of whole grains somewhat.
				3% I have decreased my consumption of whole grains a great deal
0% 20	% 40%	60%		
	57%	All consumers		
		67% Parents of young children (age 0-	-	

## More than three quarters of consumers think they should eat more whole grains.

Percentage of consumers who believe they should increase their whole grain intake

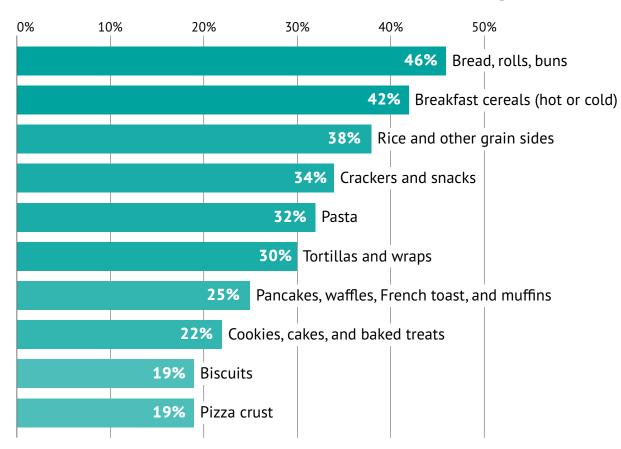
Yes, I think I should eat a lot more whole grains – than I already do [**37%**]

No, I don't think I need
to eat more whole grains than I already do [24%]

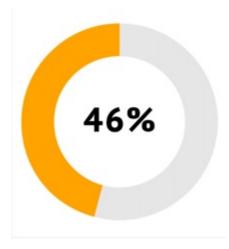
Yes, I think I should - increase my whole grain intake somewhat [40%]

### Breads, breakfast cereals, and grain sides are the foods most commonly consumed as whole grains.

#### Frequency with which consumers choose whole grain versions of foods

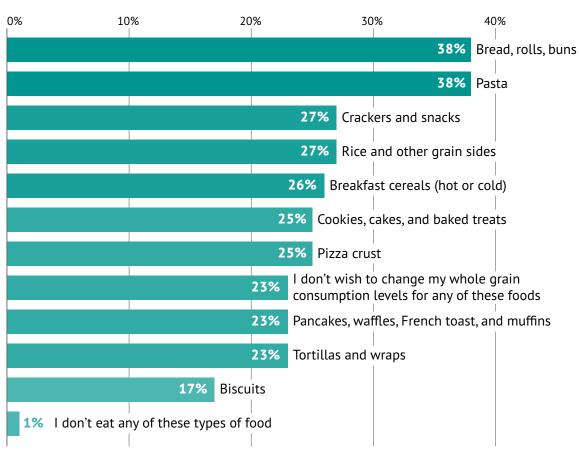


Consumers choose whole grain breads, rolls, and buns nearly half the time.



# Most consumers wish they ate more whole grains, particularly breads, pasta, crackers and snacks, and grain sides.

#### Percentage of consumers who want to increase their whole grain consumption in each category



Significantly more consumers are interested in eating more whole grain pasta compared to 2021.

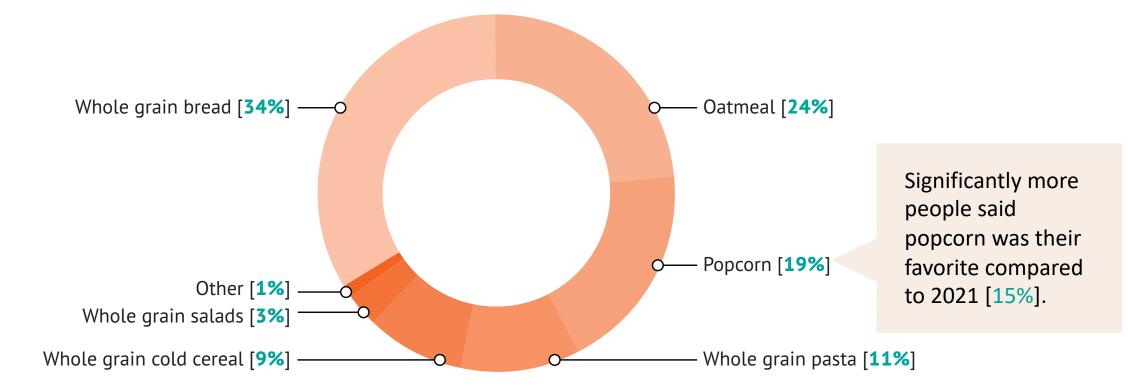


76%

of consumers want to increase the whole grains they eat in at least one of these categories.

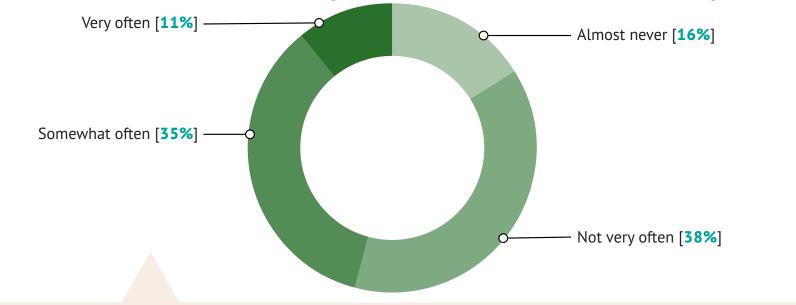
## Of those who eat whole grain foods, one in three says whole grain bread is their favorite food, with oatmeal as the runner-up.

Consumers' one favorite whole grain food

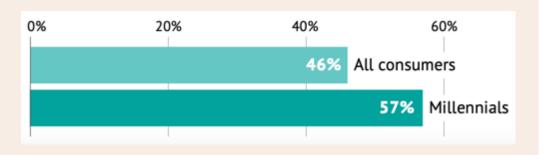


## Nearly half of consumers choose whole grain options at restaurants at least somewhat often.

Frequency with which consumers choose whole grains at restaurants or when ordering take-out/delivery

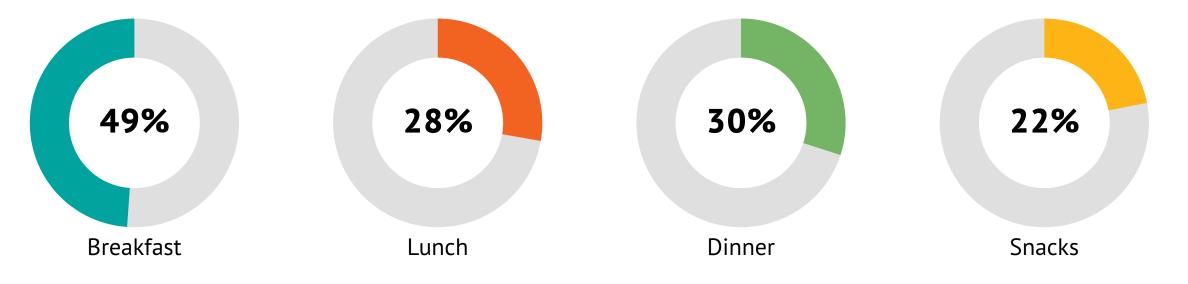


Millennials are the demographic group most likely to choose whole grains at restaurants somewhat or very often.



## Half of consumers eat whole grains for breakfast most or all of the time.

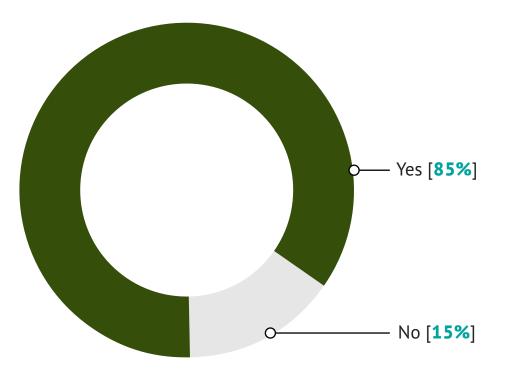
Meal during which consumers eat whole grains "most of the time" or "all of the time"

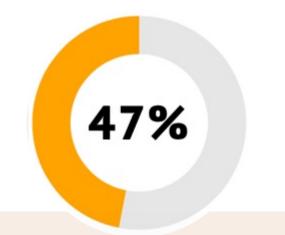


## #2: The Whole Grain Stamp is a powerful marketing tool and a trusted source of whole grain information

## **85% of consumers say they trust the Whole Grain Stamp.**

Percentage of consumers who trust the Whole Grain Stamp to accurately state whole grain content



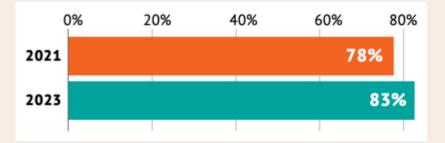


of consumers think using the Whole Grain Stamp is one of the best ways to encourage more whole grain consumption.

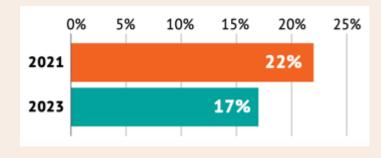
## Four out of five consumers would use the Whole Grain Stamp as part of their purchasing decisions.

Consumer likeliness to purchase a product with the Whole Grain Stamp Yes, seeing the Whole Grain Stamp would make me more likely to buy a product [39%] Yes, but I would also consider other factors (sugar, sodium, etc.) [44%]

This year, significantly more people say the Stamp would make them more likely to buy a product (with just over half also considering other factors).

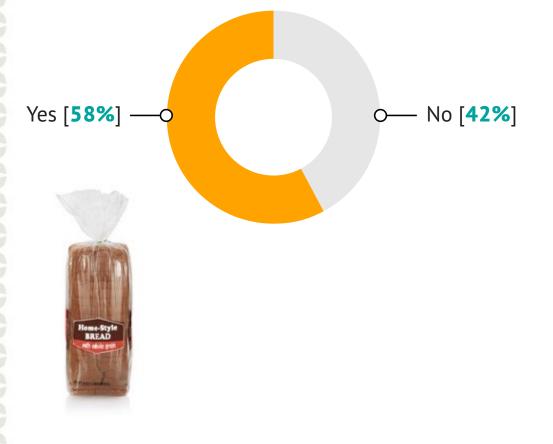


Significantly fewer people say the Stamp would not impact their purchasing decision.

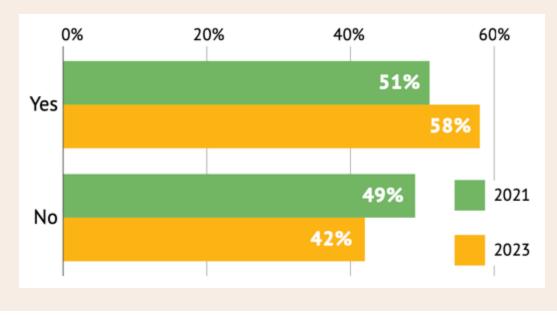


### If a product does not use the Whole Grain Stamp, more than half of consumers would be skeptical of its whole grain claims.

Percentage of consumers who would question whole grain claims on products without the Stamp

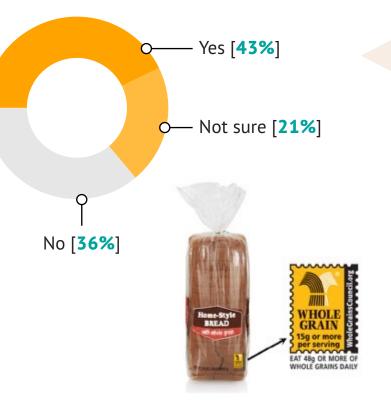


Compared to 2021, even more consumers would question a product's whole grain claims without the Stamp.

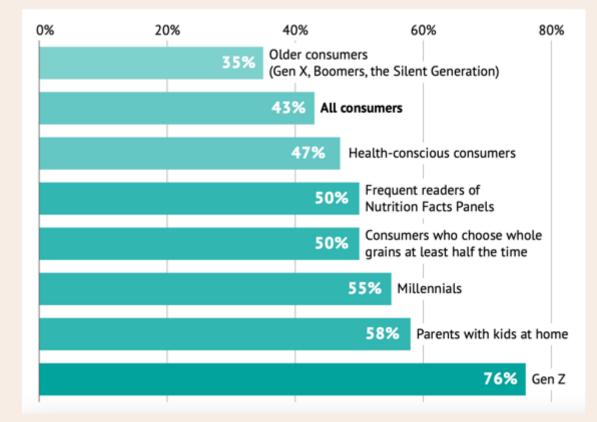


### **Close to half of all consumers recognize the** Whole Grain Stamp, and three quarters of Gen Z consumers recognize it.

Percentage of consumers who have seen the Whole Grain Stamp on packaging

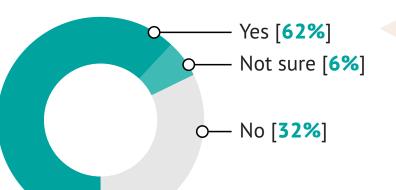


While older consumers don't recognize the Stamp as often, other demographic groups are much more likely to have seen it:

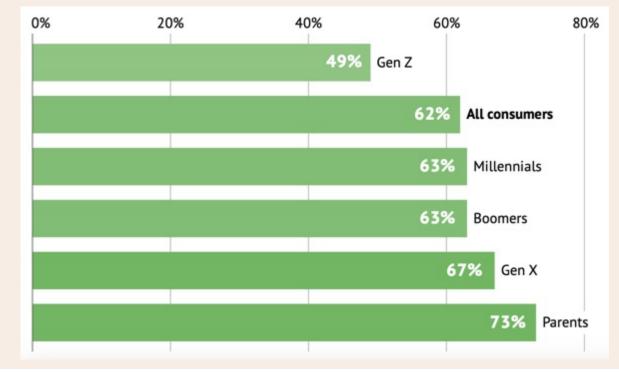


## **Over half of the consumers who recognize the Whole Grain Stamp look for it when shopping.**

Percentage of consumers who have seen the Whole Grain Stamp *and* look for it when choosing products

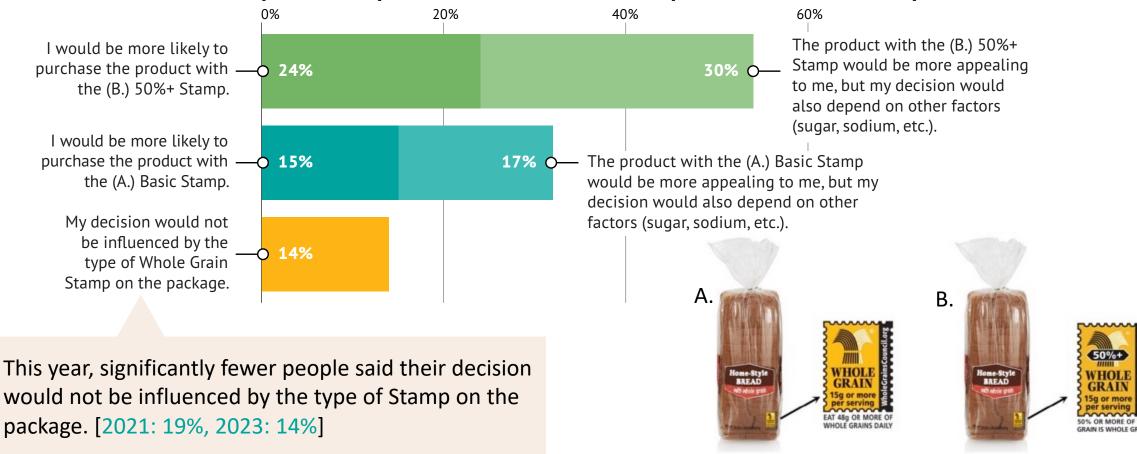


Interestingly, although the vast majority of Gen Z consumers recognize the Stamp, they are less likely to use it when choosing products. However, Millennials, Boomers, Gen X, and parents are more likely to use it.



# **55% of consumers would be more likely to purchase a product bearing the 50%+ Stamp than a product bearing the Basic Stamp.**

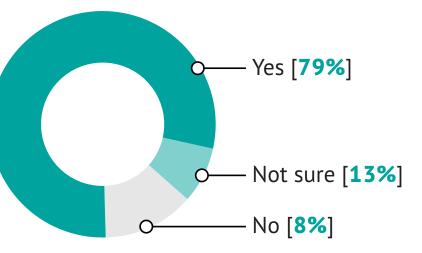
#### Consumer likeliness to purchase a product with the 50%+ Stamp versus the Basic Stamp



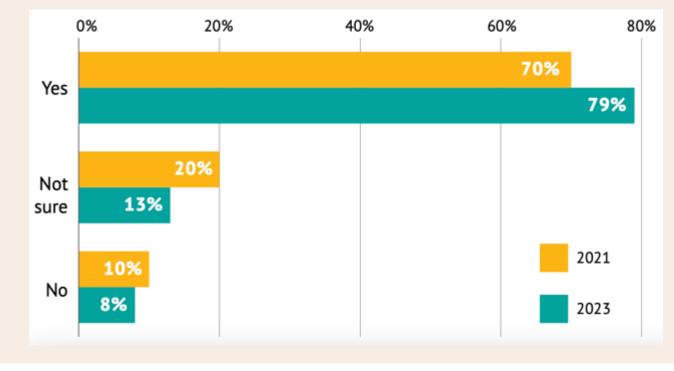
#3: Consumers want to know the whole grain content of their foods and they feel more confident when they see third-party certifications

# A significant majority of consumers want the whole grain content of products to be included on the packaging.

Consumer interest in seeing whole grain content displayed on packaging

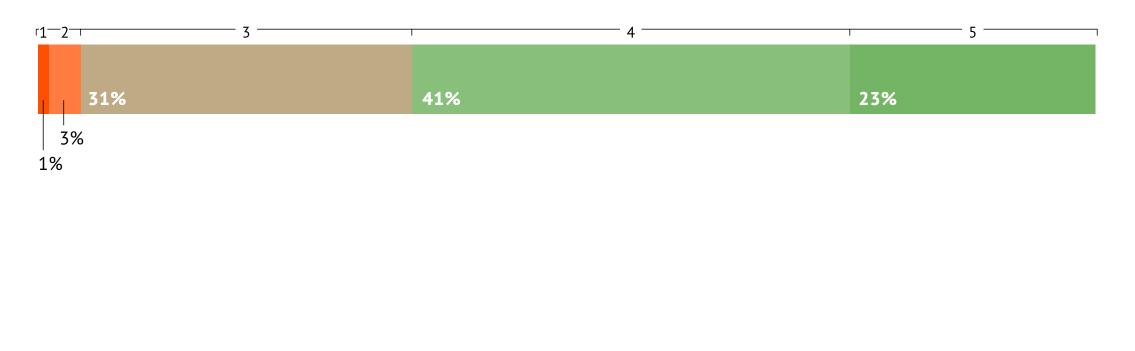


Compared to 2021, even more consumers want whole grain content included, and fewer don't want it included or aren't sure.



### About two thirds of consumers say packaging symbols like the Whole Grain Stamp give them more confidence in the product they're buying.

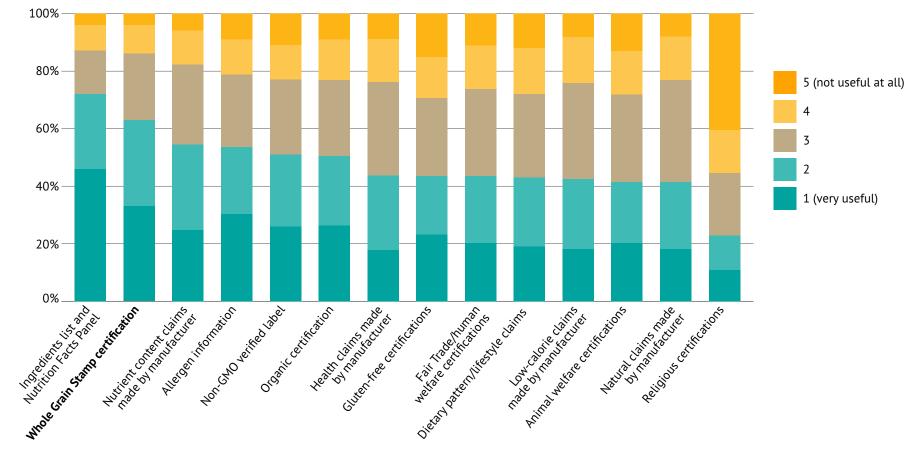
Consumer confidence in products with independent, third-party food packaging symbols Ranked on a scale of 1 (Much less confidence) to 5 (Much more confidence)



### After the Nutrition Facts Panel, the Whole Grain Stamp is the second most highly rated packaging label in terms of usefulness.

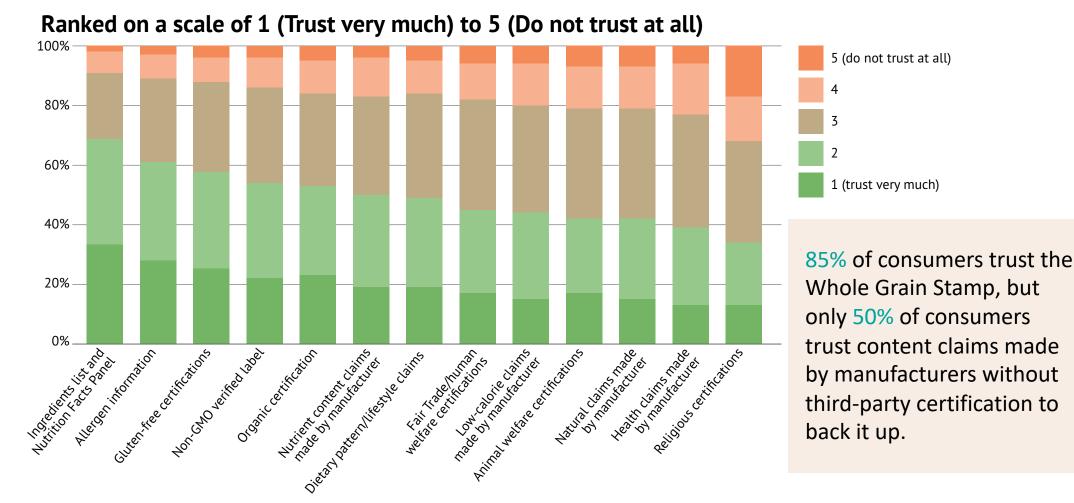
Usefulness of a product's packaging information in consumer decision-making

Ranked on a scale of 1 (Very useful) to 5 (Not useful at all)



### Most consumers trust the ingredients list, Nutrition Facts Panel, allergen information, and gluten-free certifications, among others.

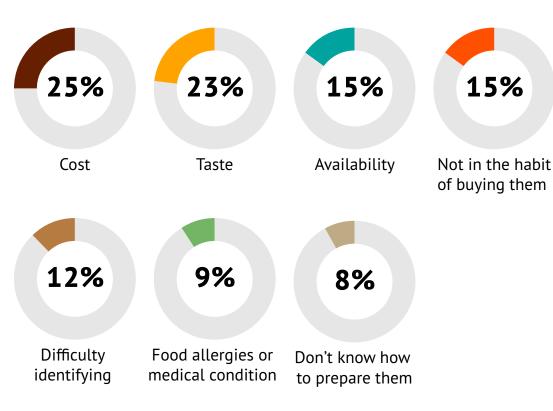
Trustworthiness of a product's packaging information



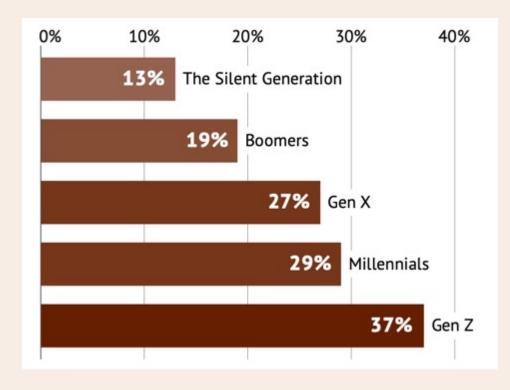
## #4: Consumers, especially those in younger generations, are feeling more sensitive to food prices

# **Cost** is the most significant barrier to eating more whole grains, especially for younger generations.

Significant barriers to increasing whole grain intake



Cost ranked as a significant barrier by different age groups



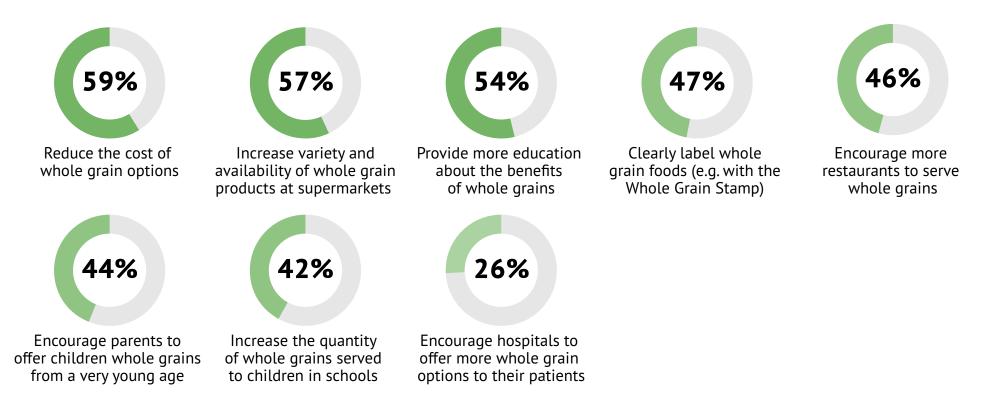
# Top influences on purchasing decisions include flavor, health, familiarity, price, and a desire to try new foods.

**Consumer Purchasing Decisions** 

63%	The taste and flavor of the product is a major factor in my purchasing decision.
55%	Buying healthy food is important to me.
52%	I eat mostly foods that I'm familiar with.
51%	The price of the product is a major factor in my purchasing decision.
49%	I like to try new foods and ingredients.
46%	l seek out products that are quick and easy to prepare.
40%	l try to avoid added sugars.
31%	I look for products that contain whole grains.
30%	I like to buy prepared meals that I can heat up at home.
27%	I purchase food from local producers, farmers' markets and/or farm shares.
27%	I look for products that contain a lot of fiber.
23%	I buy a lot of organic foods.
23%	I try to choose foods that are environmentally sustainable and good for the climate.
16%	l try to avoid carbohydrates.

# Consumers believe reducing cost, increasing variety/availability, and providing education are the best ways to promote whole grains.

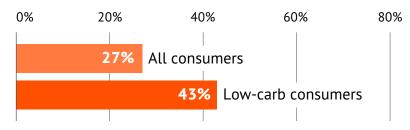
Consumer beliefs about strategies to encourage more whole grain consumption



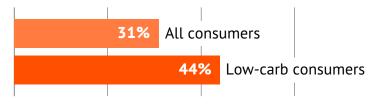
## **#5: Low-carb and gluten-free** fad diets are on the decline and those who say they are avoiding carbs are not avoiding whole grains.

### While we often assume that low-carb dieters have lower whole grain consumption, those who said they avoid carbs are more likely to:

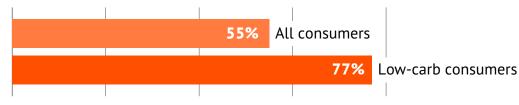
Look for high-fiber foods when shopping (Q2)



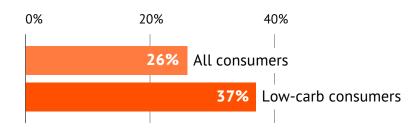
Look for whole grains when shopping (Q2)



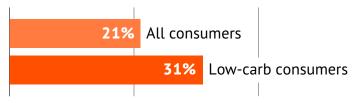
#### Say that healthy food is important to them (Q2)



Nearly always choose to eat whole grains (Q6)



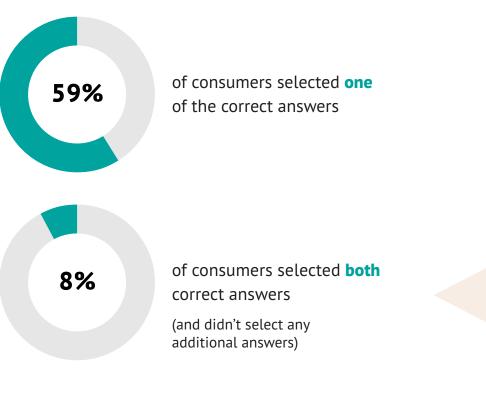
Have increased their whole grain intake a great deal in the last five years (Q7)



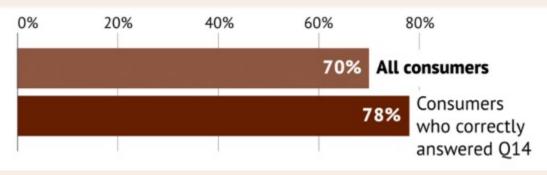
# Over half of American consumers have some idea what gluten is—but few can fully define it correctly.

In the survey, there were two correct answers to the question "What is gluten?"

- **1.** It's a protein found in wheat, barley, and rye.
- 2. It helps bread dough stretch and rise.



The eight percent who fully answered this question correctly (indicating that they know what gluten is) are more likely to report that they do *not* avoid gluten.

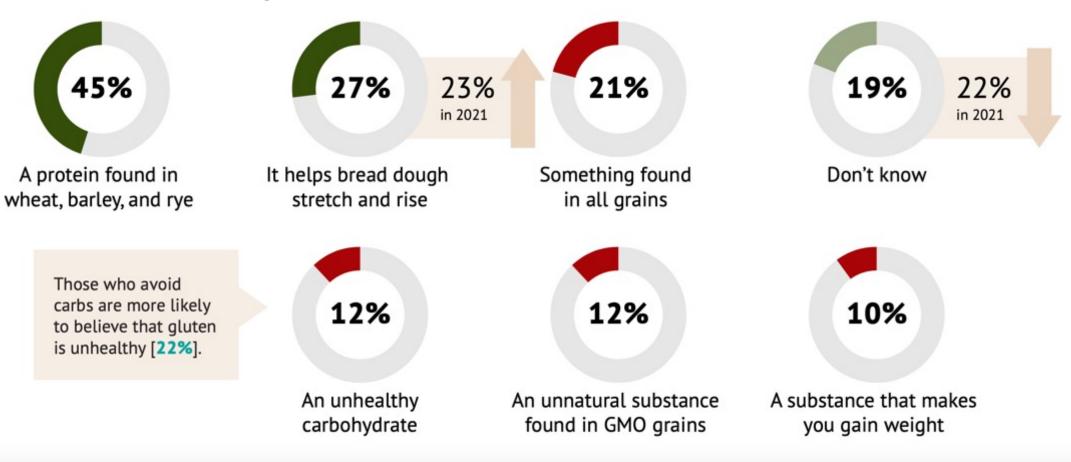


The eight percent who answered correctly are also much more likely to have a college or graduate degree.

 64% have a college or graduate degree [compared with 51% in the general pool of respondents]

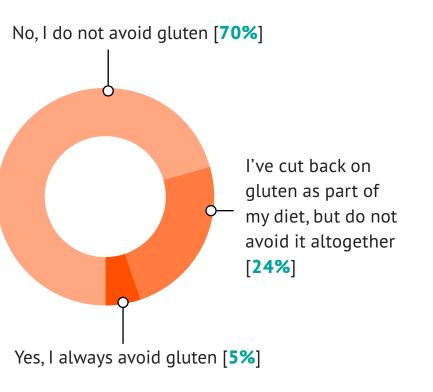
### This year, significantly more consumers correctly identified that gluten helps dough stretch and rise.

**Consumers' definitions of gluten** 

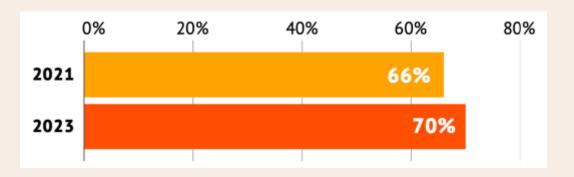


# Overall, fewer people are avoiding gluten compared to 2021. 94% of consumers eat gluten some or all of the time.

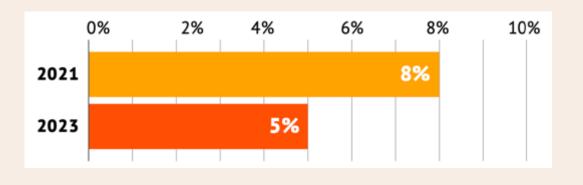
#### Gluten avoidance among consumers



#### Significantly more people say they do not avoid gluten,

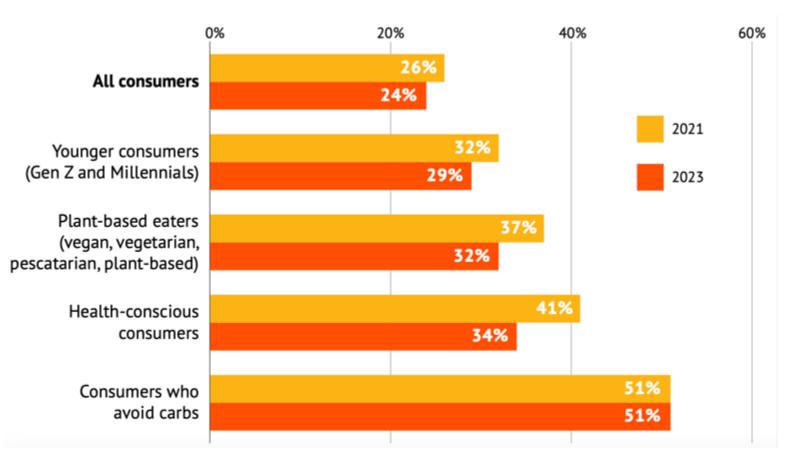


#### and fewer people say they always avoid gluten.



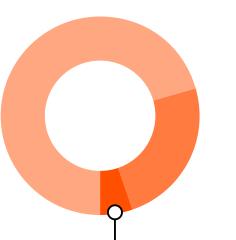
# About a quarter of consumers have cut back on gluten but are not following a true gluten-free diet.

Demographic groups who report cutting back on gluten, 2021 and 2023



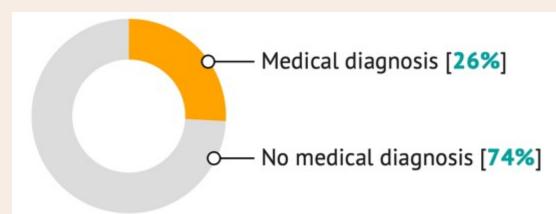
Note: People with a medically-diagnosed gluten problem (such as celiac disease) must avoid even the smallest crumb of gluten-containing foods for a gluten-free diet to be effective.

# Three out of four consumers who always avoid gluten are doing so without a medical diagnosis.



Yes, I always avoid gluten

Among the five percent who always avoid gluten, only about a quarter have been medically diagnosed with a gluten problem.

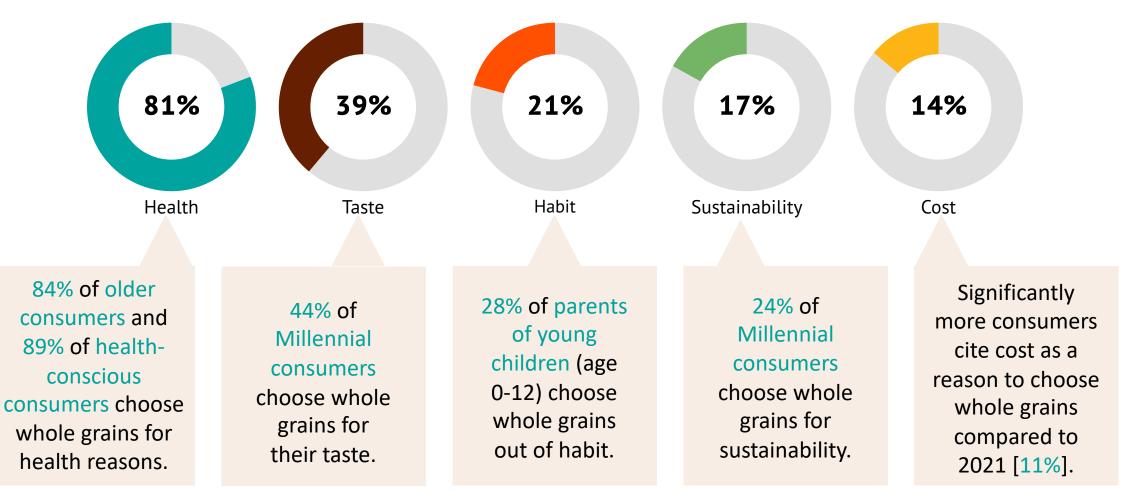


• The medically diagnosed respondents make up 1.33% of all respondents, which lines up with the estimated prevalence of celiac disease in the general population.

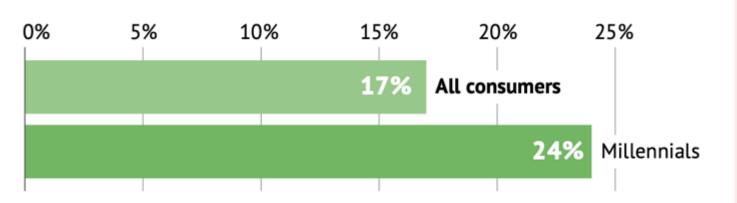
## #6: Millennials lead the way when it comes to choosing whole grains for sustainability.

## Health is still the leading reason for choosing whole grains, but it's not the only one.

**Reasons consumers choose whole grains** 



## **Sustainability** is increasingly a motivation for choosing whole grains, especially for Millennials.

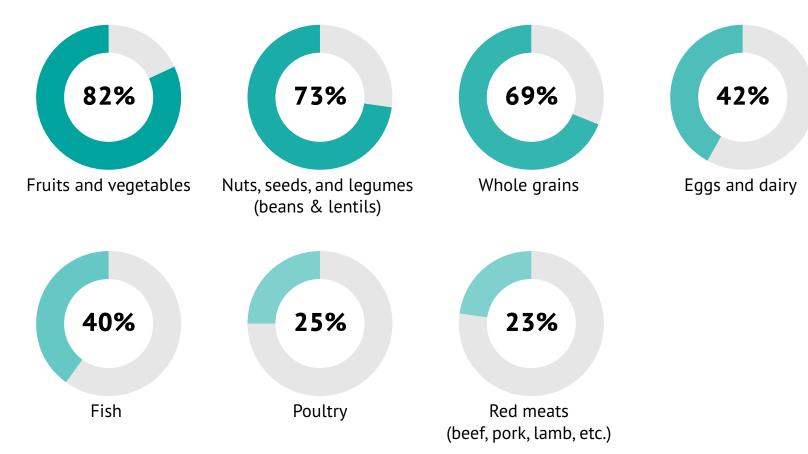


Sustainability as a motivation for choosing whole grains

Compared to all consumers, Millennials are also more likely to choose foods that are environmentally sustainable and good for the climate [27%, compared with 23% of all consumers], and they are more likely to buy organic food [32%, compared with 23% of all consumers].

## Two thirds of consumers consider whole grains to be sustainable and environmentally friendly.

Foods perceived by consumers as sustainable and environmentally friendly



## #7: Other takeaways from our survey results

Although taste is ranked as a significant barrier to eating more whole grains, more consumers consider the taste to be a benefit.



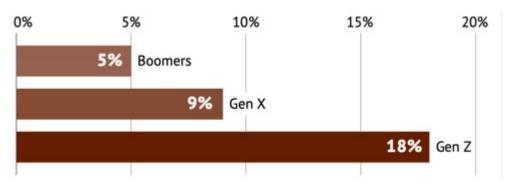
of consumers say the taste of whole grains is **a barrier** 



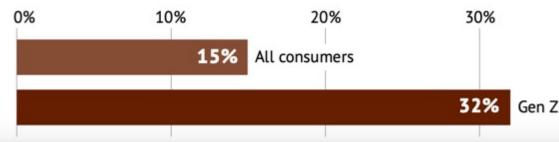
of consumers say the taste of whole grains is **a benefit** 

Of those who say they nearly always choose whole grains, 45% see taste as a benefit and only 18% see it as a barrier, suggesting that the more exposure you have to whole grains, the more you come to appreciate the nuttier, more robust flavors. For Gen Z, not knowing how to prepare whole grains and not being in the habit of buying them are particularly significant barriers.

Not knowing how to prepare whole grains ranked as a significant barrier by different age groups

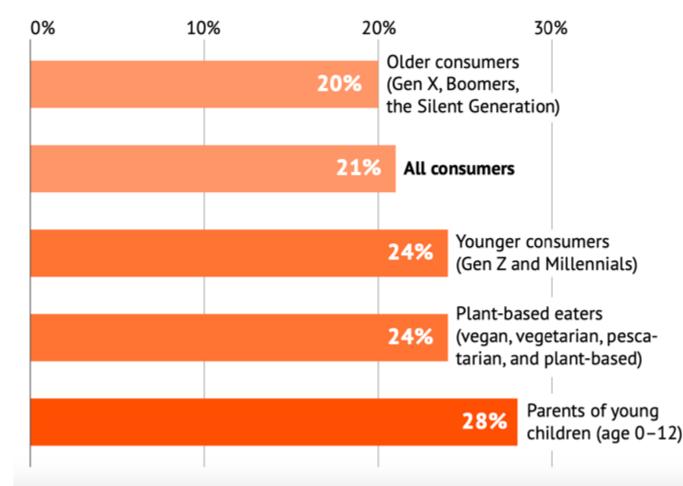


#### Not being in the habit of buying whole grains ranked as a significant barrier by different age groups



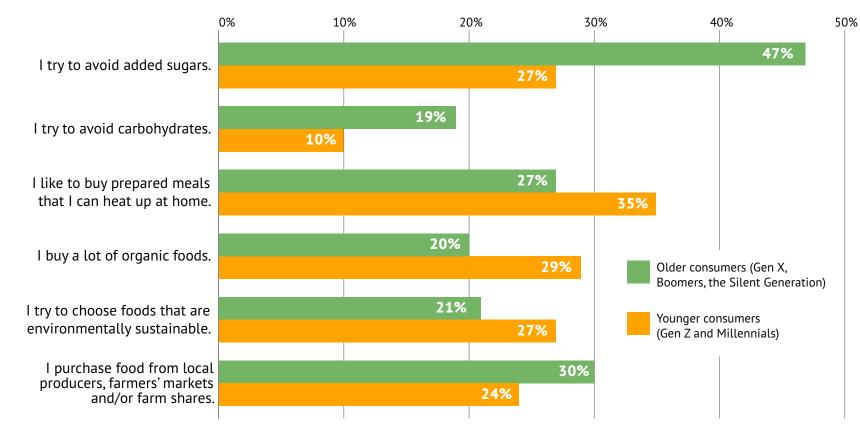
### Young consumers, parents of young children, and plant-based eaters are more often in the habit of choosing whole grains.

Percentage of households by demographic group in the habit of purchasing whole grain foods



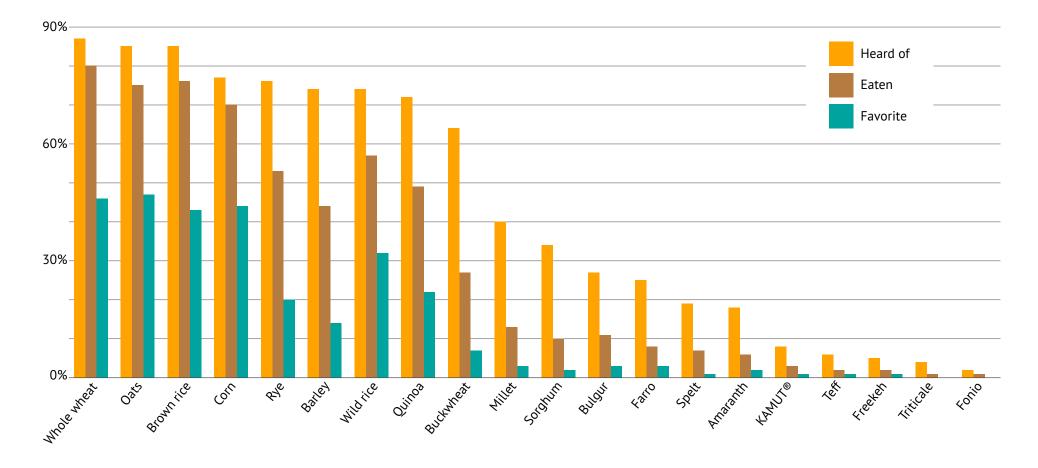
# Older consumers are more likely than younger consumers to avoid carbohydrates, added sugar, and prepared meals when shopping.

#### **Comparing purchasing decisions, younger versus older consumers**



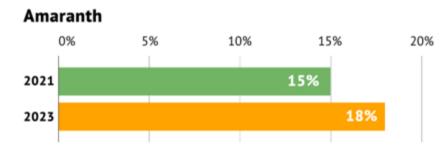
### Whole wheat, oats, and brown rice are the most well-known grains overall. Quinoa is the most well-known "ancient grain."

Percentage of consumers selecting each grain they've heard of, eaten, and consider a favorite



## This year, significantly more people have heard of amaranth, millet, and teff.

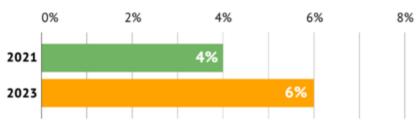
#### Grains that consumers have heard of, 2021 and 2023



Millet

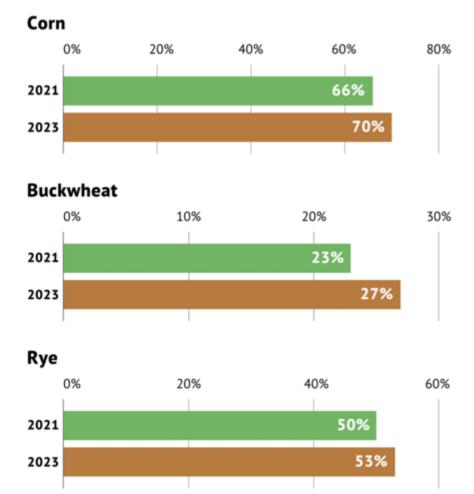


Teff



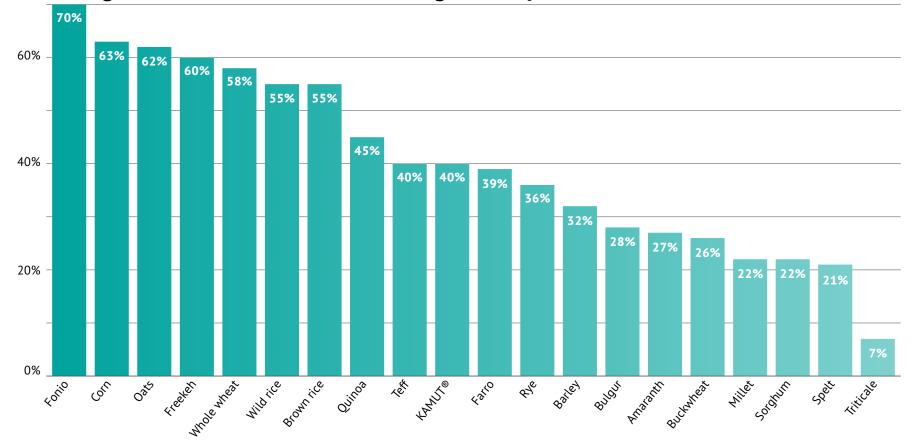
## This year, significantly more people have tried corn, buckwheat, and rye.

#### Grains that consumers have eaten, 2021 and 2023



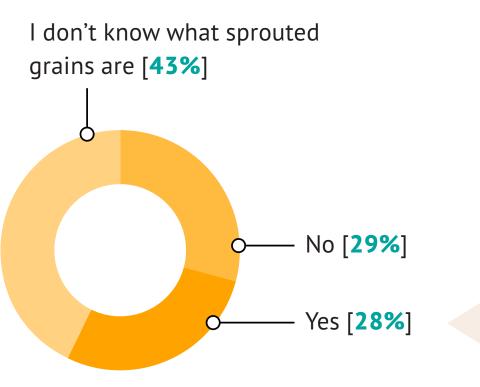
# Less familiar grains like fonio, freekeh, teff, and farro become favorites once consumers have tried them.

Percentage of consumers who consider a grain they've eaten to be a favorite

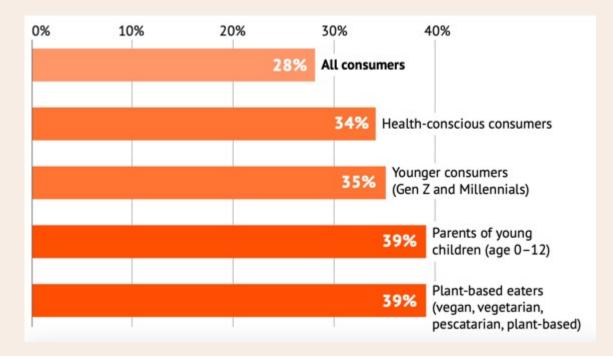


## Only about a quarter of consumers know about sprouted grains and seek them out.

Percentage of consumers who eat/buy products made with sprouted grains

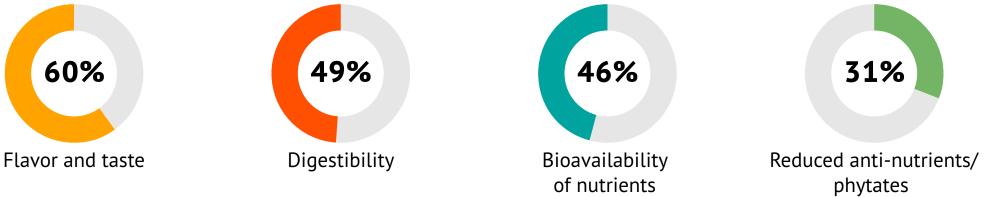


Significantly more consumers in the following demographic groups reported seeking out sprouted grains:



## The top reason consumers choose sprouted grains is their flavor and taste.



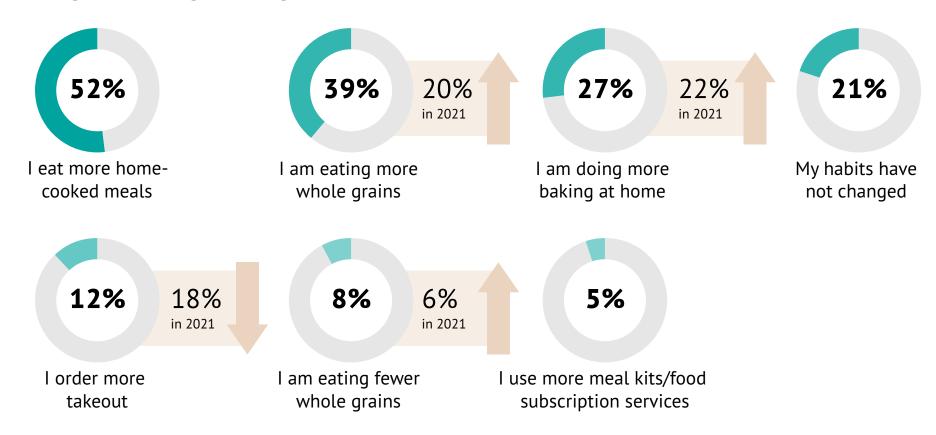


#### Frequency with which consumers of sprouted grains choose them

25%	35%	40%
I nearly always choose sprouted grains whenever they are available.	I choose sprouted grains about half the time.	I occasionally choose sprouted grains.

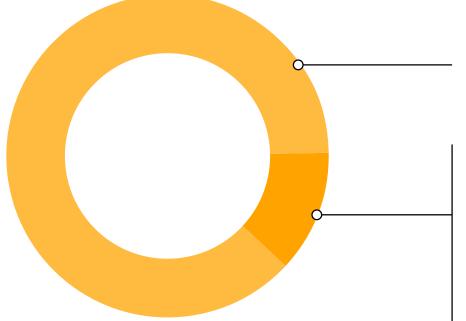
### Half of American consumers are eating more home-cooked meals, and over a third are eating more whole grains.

Changes in eating/cooking habits in the past 5 years



## The vast majority of consumers are omnivores.

**Consumer eating habits and preferences** 



**Omnivore** (I eat plants, meats, seafood, eggs and dairy) [88%]

**Plant-based** (I don't necessarily eliminate animal products, but focus on eating mostly plants, such as fruits, vegetables, whole grains, legumes, etc.) [5.4%]

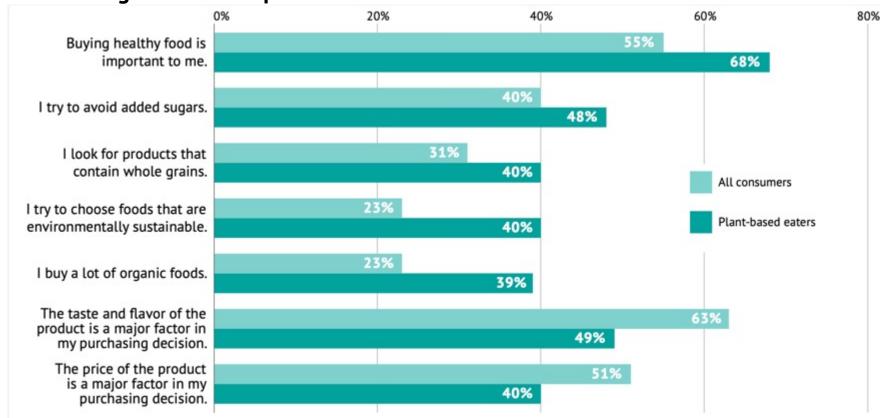
**Pescatarian** (I don't eat meat, but I do eat seafood, along with plants, eggs and dairy) [**3.2%**]

**Vegetarian** (I don't eat meat or seafood, but I eat plants, eggs and dairy) [2.2%]

**Vegan** (I don't eat any animal products, meaning no meat, seafood, eggs, or dairy) [1.2%]

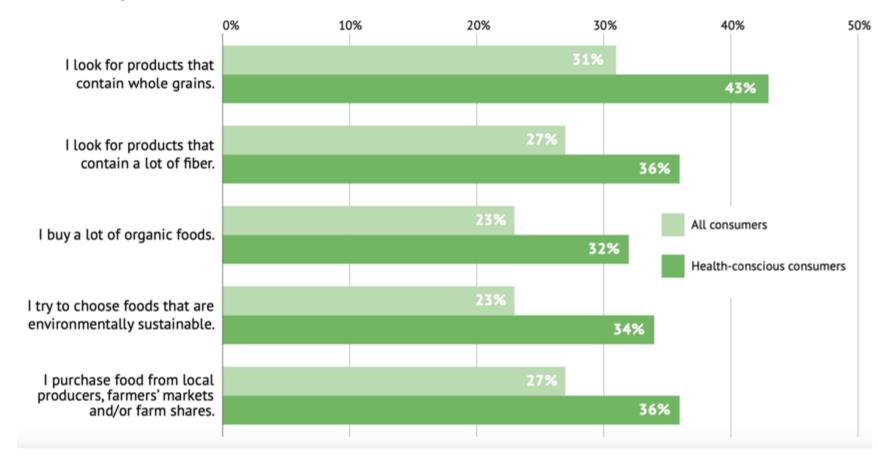
### Consumers who eat a plant-based diet prioritize foods that are healthy, whole grain, sustainable, or organic.

**Purchasing decisions of plant-based eaters** 



### Consumers who are health-conscious also look for whole grain, organic, or sustainable foods. They buy from local producers more frequently.

Purchasing decisions of consumers who say that healthy food is important to them

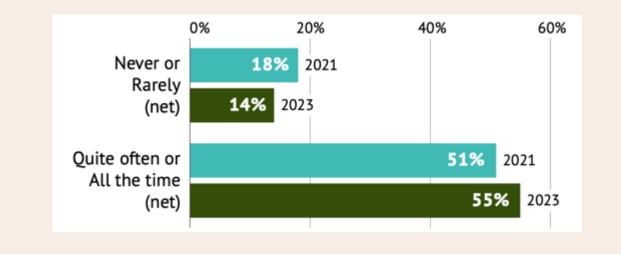


# Most consumers – 86% – say they read packaging labels like the Nutrition Facts Panel at least some of the time.

Frequency with which consumers read packaging labels when buying food

3	% 11%	31%	36%	19%
 N	Rarely ever	Some of the time	Quite often	All the time

Between 2021 and 2023, fewer consumers said they never or rarely read packaging labels, and more consumers read them quite often or all the time.



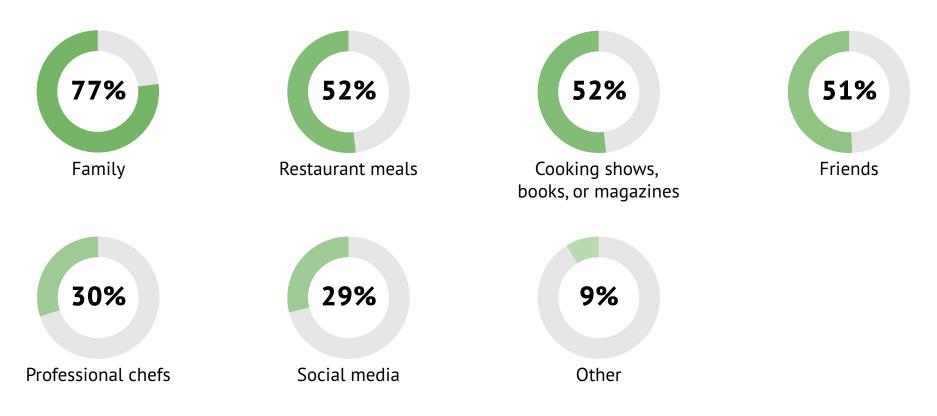
## When deciding what to eat, consumers most commonly consider how tasty, healthy, and nutritious a food is.

Percentage of consumers who marked each factor as one of the top five that they consider when deciding what to eat



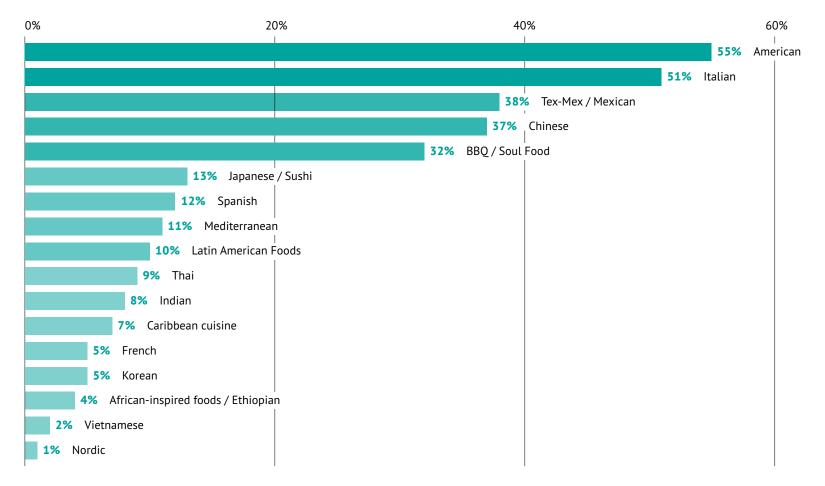
### Family, restaurant meals, and cooking shows or books are the most popular sources of meal and recipe inspiration for consumers.

Percentage of consumers who marked each inspiration source as one of their top three most influential



### Among American consumers, the most popular cuisines are American, Italian, Tex-Mex/Mexican, Chinese, and BBQ/Soul Food.

Percentage of consumers who marked each cuisine as one of their top three favorites



# Fewer younger consumers favor the top-ranked cuisines; they appear interested in a broader range of cuisines.

Differences in cuisine preferences between older consumers (Gen X, Boomers, the Silent Generation) and younger consumers (Gen Z and Millennials)

Cuisine	Older Consumers	Younger Consumers	Change
American	58%	51%	-7
Italian	53%	46%	-7
Tex-Mex/Mexican	41%	34%	-7
Chinese	40%	31%	-9
BBQ/Soul Food	32%	32%	0
Japanese/Sushi	10%	18%	+8
Mediterranean	11%	11%	0
Spanish	9%	17%	+8
French	5%	5%	0
Latin American Foods	8%	13%	+5
Thai	9%	8%	-1
Caribbean cuisine	6%	9%	+3
Indian	8%	7%	-1
Korean	4%	7%	+3
African-inspired/Ethiopian	2%	7%	+5
Nordic	1%	1%	0
Vietnamese	3%	2%	-1

## Profile of Whole Grain Stamp Enthusiasts

### Demographic Profile of Whole Grain Stamp Enthusiasts

- More likely to be young (Gen Z and Millennials) [46% of Stamp enthusiasts, compared with 36% of consumers overall]
  - SIGNIFICANTLY more likely to be parents [43% of Stamp enthusiasts have children under 18 in their household, compared with 29% of consumers overall]



More likely to be Black or Latinx [43% of Stamp enthusiasts, compared with 34% of consumers overall]



Slightly more likely to follow some kind of plant-based diet (vegan, vegetarian, pescatarian, or plant-based) [16% of Stamp enthusiasts compared with 12% overall]

## What They Look For When Shopping

Those who actively seek out the Whole Grain Stamp are more likely to...

- Actively seek out whole grains
- Look for high-fiber foods
- Buy healthy food
- Try new ingredients

Buy organic food

- Choose foods for sustainability reasons
- Buy from farmers' markets and local producers

They are less likely to ...



- Say taste and flavor are major influences on their purchasing
- Stick to eating foods they're familiar with
- Be highly price-sensitive

## **Stamp Enthusiasts and Whole Grains**

These shoppers are more likely to...

- Say they choose whole grains at least half the time
- Choose whole grains because of their great taste, and for environmental reasons
- Say they are in the habit of choosing whole grains
  - View the taste of whole grains as a benefit rather than a barrier

Be familiar with other lesserknown whole grains

- Be familiar with sprouted grains
- Choose whole grain options whenever available at restaurants

## **Stamp Enthusiasts and Whole Grains**

Additionally...

Their consumption of whole grain foods across **every category** (e.g. breads, pastas, cereals, crackers, tortillas, pizza crusts, etc.) is **significantly higher** than respondents overall *AND* they are still much more likely to say they want to eat significantly more whole grains than they already do

91% of Stamp enthusiasts say they want the whole grain content of foods (grams of whole grain) displayed on product packaging [compared with 79% of consumers overall]

75% of these shoppers say that *not* seeing the Stamp makes them question a product's whole grain claims [this is true of 58% of all shoppers]

## **Additional Characteristics**

Those who actively seek out the Stamp are also more likely to...

- Eat a lot of home-cooked meals and bake frequently
- Use meal kits and food subscription services

Read the Nutrition Facts
 Panels on products they're buying

• Look for and trust thirdparty labeling These shoppers believe the best ways to increase whole grain consumption are:

#1 - increase variety &
availability of whole grains
#2 - provide more education
about benefits of whole grains
#3 - reduce the cost of whole
grain options

## Summary of Key Survey Findings

- 1. Whole grain intake on the rise
- 2. The Whole Grain Stamp as a powerful and trusted tool
- 3. The importance of whole grain content labeling and thirdparty certifications
- 4. Consumer sensitivity to food prices
- 5. Low-carb and gluten-free fad diets on the decline
- 6. Sustainability as a motivation for choosing whole grains

## Questions?

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