



2023

WHOLE GRAIN CONSUMER INSIGHTS SURVEY

Executive Summary

The Oldways Whole Grains Council's 2023 Whole Grain Consumer Insights Survey was conducted to answer key questions about whole grain consumption, and consumer knowledge and habits around whole grains. The survey also examined consumer recognition and attitudes toward the Whole Grain Stamp. This was the fourth time the Oldways Whole Grains Council has surveyed American consumers to better understand the whole grain landscape in the US.

This year's online survey of 1,500 Americans, ages 18 to 89, was nationally census-representative for age, gender, race/ethnicity, region, and income. Of all respondents, 73% reported that they are the primary food purchaser for their household and 27% make about half the food purchasing decisions for their household. The survey was conducted from May 23 - June 7, 2023.

The most significant findings from this year's survey are centered on:

- Whole grain consumption: how often consumers choose whole grains, why consumers choose whole grains (or not), whether consumers are looking to increase their whole grain intake, familiarity with different whole grains, when consumers are most likely to eat whole grains, and which types of food are most often consumed in whole grain form
- How sustainability and environmental considerations influence food choices/diet
- Awareness of sprouted grains and their associated benefits
- Knowledge of gluten and who must avoid it

- The importance of clear whole grain labeling and the impact, utility, and degree of trust in third-party certifications and other package labels
- Trust, recognition, and understanding of the Whole Grain Stamp

Some of this year's most compelling findings include:

Three-quarters of Americans think they should increase their whole grain intake.

American consumers are actively seeking whole grain products and ingredients. More than one third of respondents (39%) say they have started eating more whole grains in the past five years and 61% of consumers tell us they now choose whole grains at least half the time. Twenty-six percent of consumers tell us they nearly always choose whole grains whenever they are available. This year, significantly fewer people said they never or almost never choose whole grains (5% in 2023, compared with 7% in 2021). When asked if they are getting enough whole grain, 77% of consumers tell us they think they should increase their intake.

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

We are proud to report that 85% of consumers trust the Whole Grain Stamp. Not only is the Whole Grain Stamp seen as one of the most useful package labels on the market (ranked second in utility after the Nutrition Facts Panel), but it's also significantly better trusted than content claims made by manufacturers themselves. Only 50% of consumers trust content claims made by manufacturers without

third-party certification to back it up. This year, significantly more people say seeing the Stamp would make them more likely to buy a product (83% in 2023, compared with 78% in 2021). Just over half of these respondents would also consider other factors beyond the Stamp (ingredients, nutrients, etc.). Another shift this year is that significantly more consumers say they would question a product's whole grain claims if they didn't see the Whole Grain Stamp (58% in 2023, compared with 51% in 2021).

Consumers want to know the whole grain content of their foods and seeing third-party certifications boosts consumer confidence.

Consumer interest in the whole grain content of their foods is on the rise. The vast majority of consumers (79%) wish information about the whole grain content of products was included on product packaging (compared with just 70% of consumers in 2021). About two-thirds of consumers (64%) say seeing third-party packaging symbols like the Whole Grain Stamp gives them more confidence in the products they are buying. The Whole Grain Stamp provides the whole grain content information consumers want, making it easy to identify and compare whole grain products when shopping, while also providing the peace-of-mind that third-party labeling offers. When we asked shoppers to rank the usefulness of various types of package labeling (allergen information, gluten-free certification, non-GMO verification, etc), the Whole Grain Stamp was the second most highly rated label, with only the Nutrition Facts Panel receiving higher marks.

Consumers, especially those in younger generations, are feeling more sensitive to food prices.

Inflation has caused food prices to increase at alarming rates over the past few years and consumers are feeling the effects. The percentage of consumers who told us the price of products is a major factor in their purchasing decisions rose this year, from 47% in 2021 to 51% in 2023. Our survey also found that younger generations are much more likely to cite cost as a significant barrier to whole grain consumption (37% of Gen Z, 29% of Millennials, 27% of Gen X, 19% of Boomers, 13% of Silent Generation). Efforts to achieve price parity between whole and refined grain products may be more important than ever right now.

Low-carb diets are on the decline and those who say they are avoiding carbs are not avoiding whole grains.

Fad diets that involve low- or no-carb eating patterns are on the decline. This year's survey found that fewer people say they are avoiding carbs (16% in 2023, compared with 18% in 2021), and among Gen Z and Millennial consumers the numbers are even lower – only 10% of these younger generations are avoiding carbs. While we often assume that low-carb dieters have lower whole grain consumption, those who said they avoid carbs were more likely to say they choose whole grains whenever they are available (37%, compared with 26% of all respondents). This group was also more likely to have increased their whole grain intake a great deal in the last five years (31%, compared with 21% of all respondents). This may indicate that carb-sensitive consumers are differentiating based on the nutritional quality of different carbohydrate sources and gravitating toward high-quality carbs, like whole grains.

Confusion about gluten persists, but gluten-free fad diets are on the decline.

About half of American consumers have some idea what gluten is, but very few (8%) can fully define it correctly. Although one quarter of consumers told us they have cut back on gluten somewhat, 94% of people say they eat gluten some or all of the time, meaning that they are not following a true gluten-free diet. This year, significantly more people said they do not avoid gluten than did in 2021 (70% in 2023, compared with 66% in 2021). Conversely, significantly fewer people said they always avoid gluten (5% in 2023, compared with 8% in 2021). Only 1.33% of respondents told us they avoid gluten entirely due to a medical diagnosis, which lines up with the estimated prevalence of celiac disease in the general population.

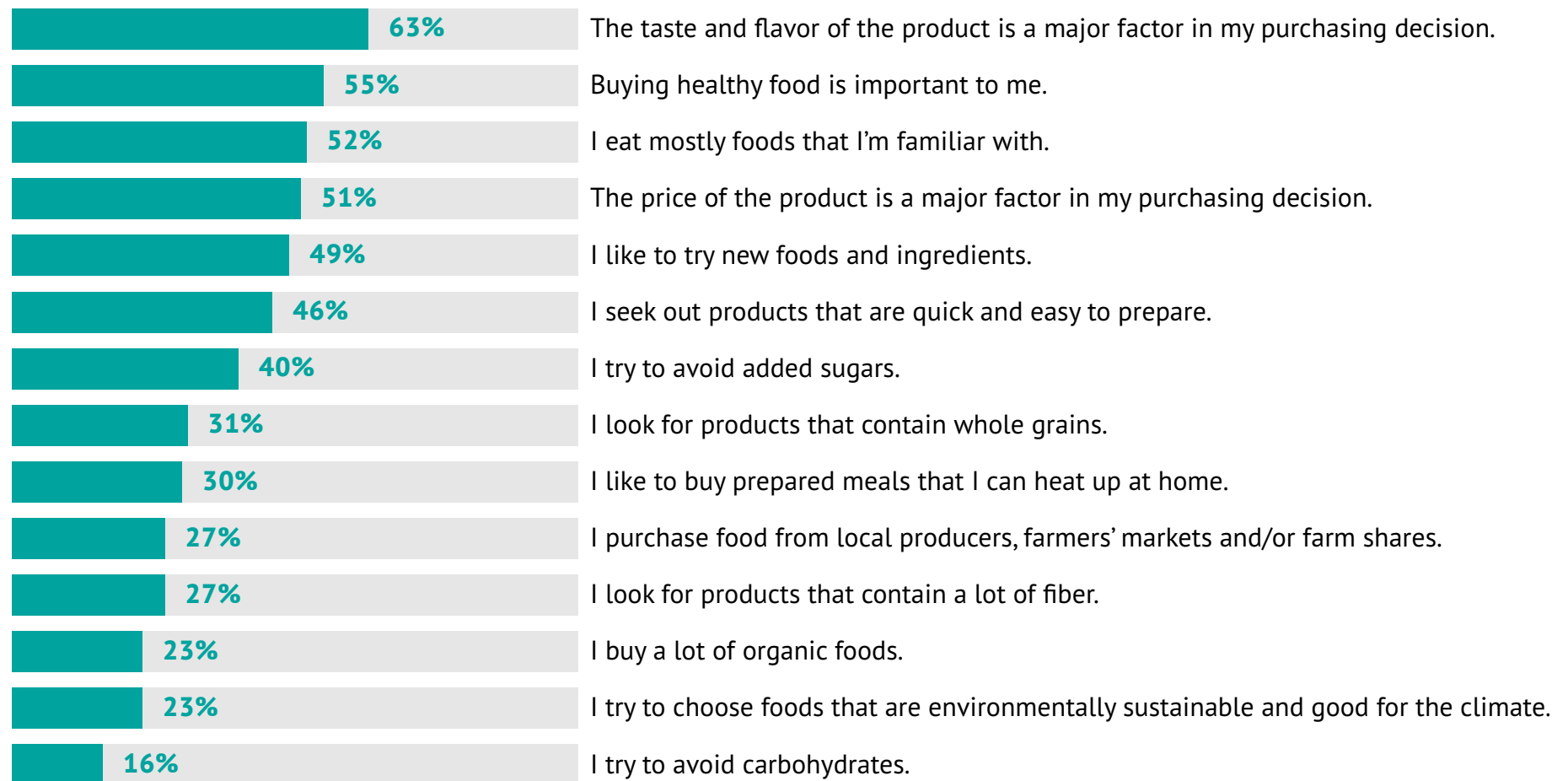
Millennials lead the way when it comes to shopping with sustainability in mind.

Millennials are significantly more focused on the sustainability benefits of whole grains compared to other generations, with 24% of this group saying they choose whole grains for that reason (compared with 14% among Gen Z, Gen X, Boomers, and the Silent Generation). Millennials are 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). Three-quarters of Millennials (72%) say they think of whole grains when they think of foods that are sustainable and environmentally friendly. The only food group that scored higher among Millennials was fruits & vegetables with 78%.

Consumer Food Habits

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

Consumer purchasing decisions

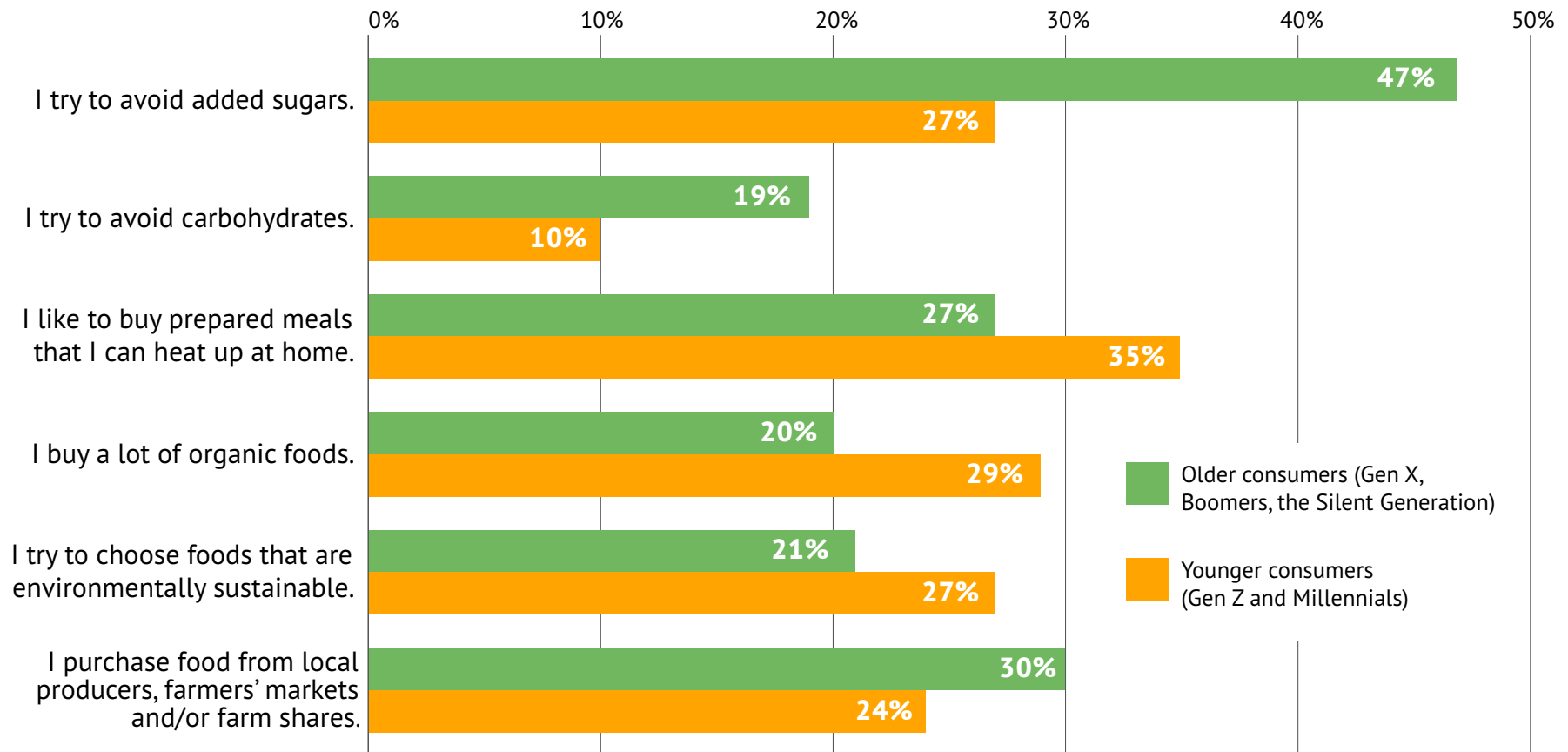


Q2. Which of the following statements best describe your food purchasing decisions? (Select all that apply)

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

They're also less likely to choose organic or environmentally sustainable foods, but are more likely to buy food from local producers and farmers' markets.

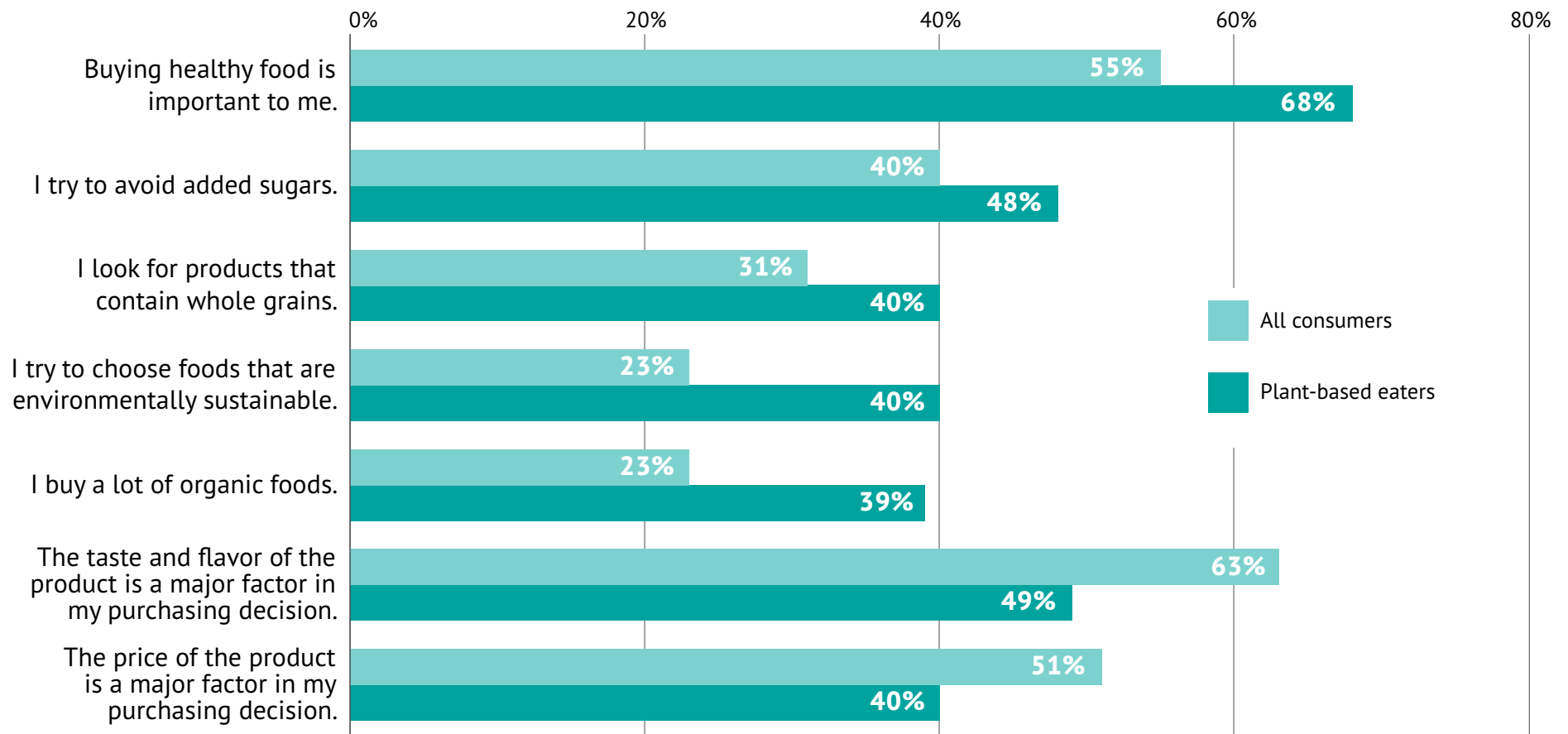
Comparing purchasing decisions, younger versus older consumers



Q2. Which of the following statements best describe your food purchasing decisions? (Select all that apply)

Consumers who eat a **plant-based diet** (vegan, vegetarian, pescatarian, and plant-based) prioritize foods that are **healthy, whole grain, sustainable, or organic**. Flavor and price are less of a concern.

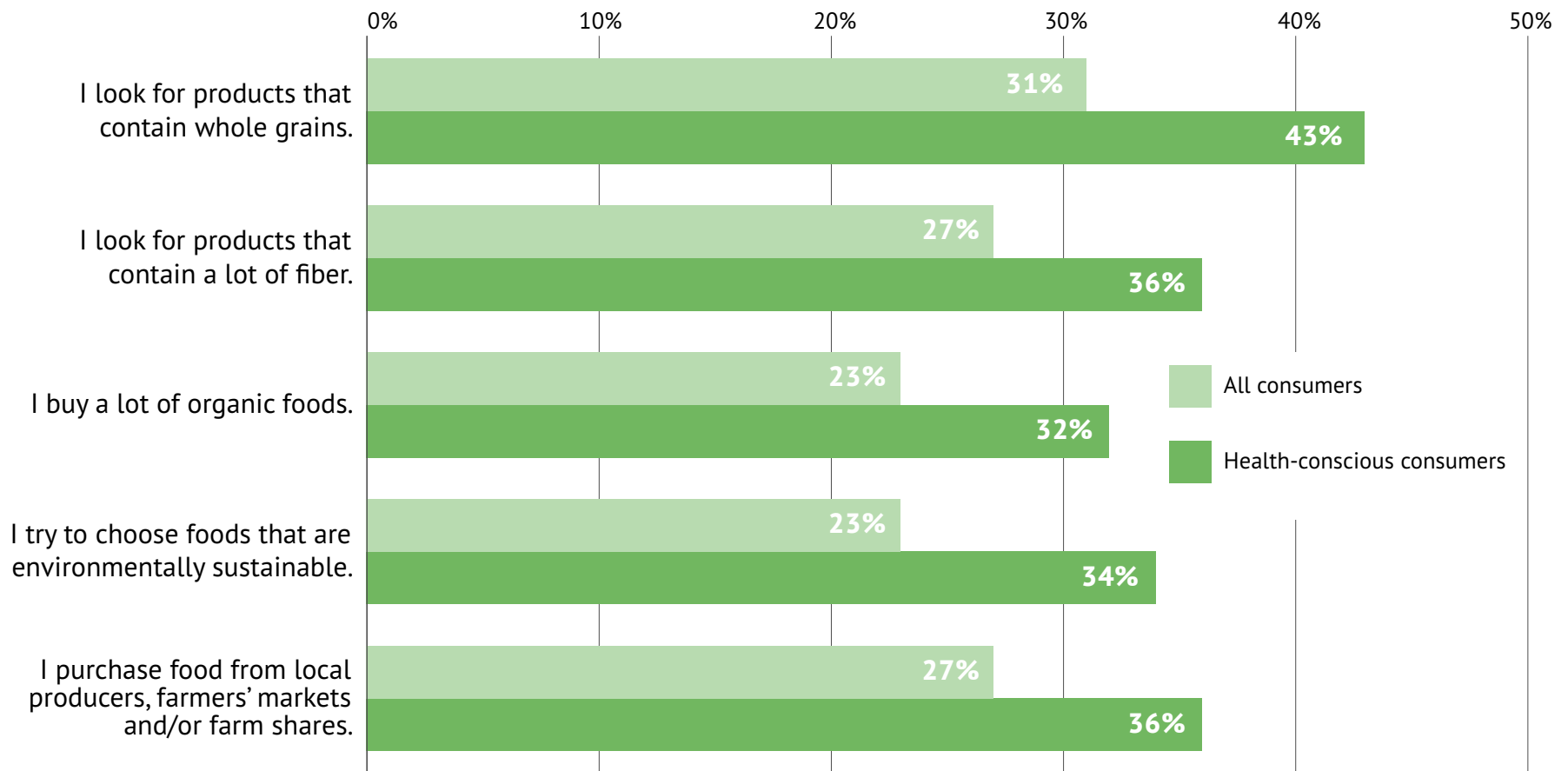
Purchasing decisions of plant-based eaters



Q2. Which of the following statements best describe your food purchasing decisions? (Select all that apply)

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

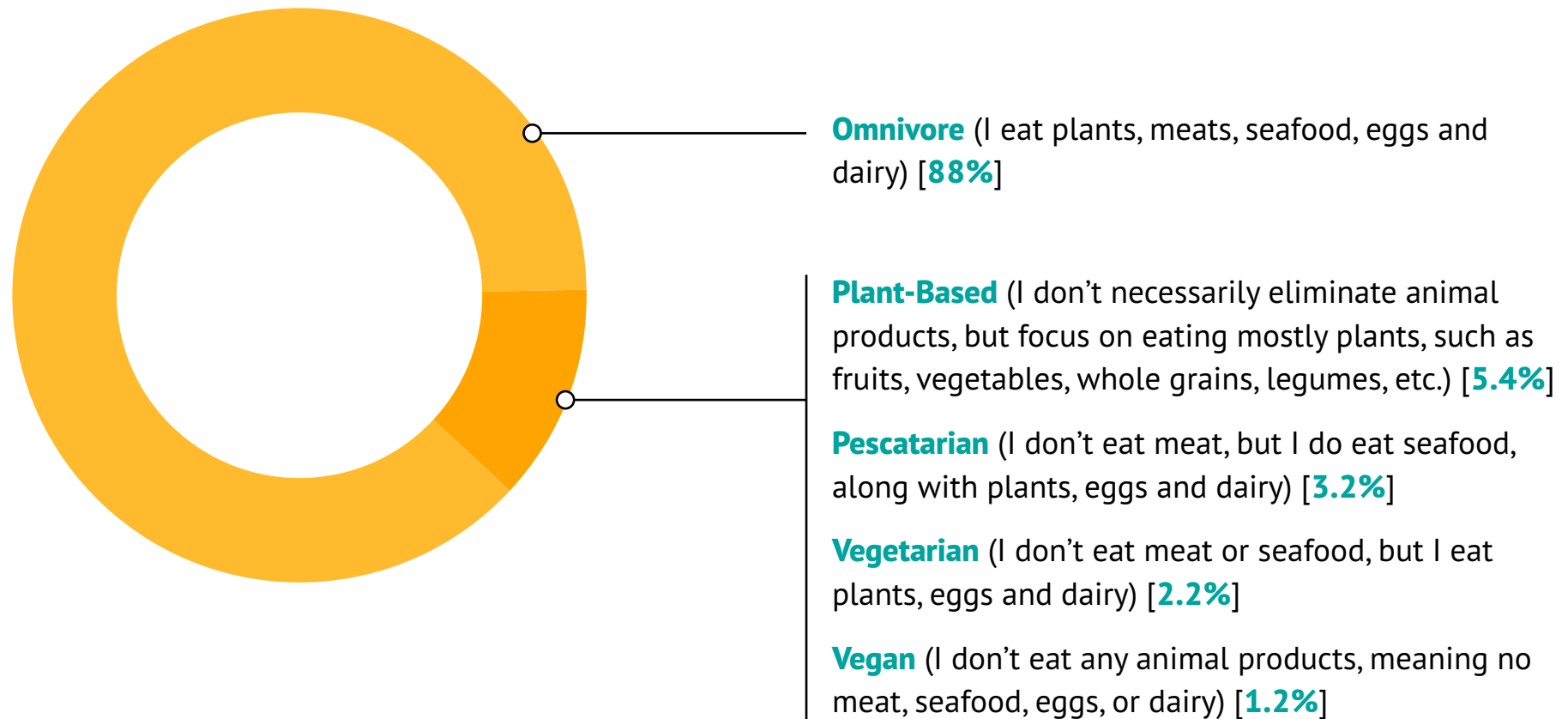


Q2. Which of the following statements best describe your food purchasing decisions? (Select all that apply)

The vast majority of consumers are **omnivores**.

Consumers who say (in Q2) that buying healthy food is important to them are slightly more likely to eat some variety of a plant-based diet [**15%** compared with 12% of total respondents].

Consumer eating habits and preferences



Q3. How would you best describe your eating habits & preferences? (Select one)

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

However, **46%** of the people who placed Taste among their top five ranked it as their top deciding factor, whereas only **20%** who selected Healthy said it was their top deciding factor.

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

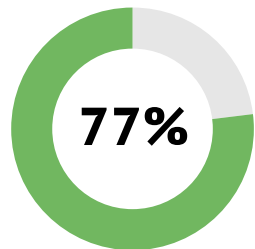


Q31. When you're deciding what to eat, what factors do you consider from the list below. Please rank your top 5 factors.

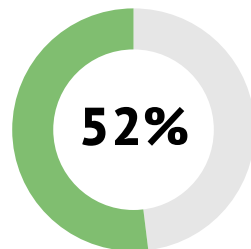
Family, restaurant meals, and cooking shows or books are the most popular sources of meal and recipe inspiration for consumers.

60% of those who marked Family among their top three ranked it as their top source of inspiration.

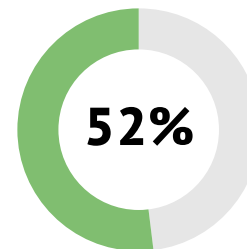
Percentage of consumers who marked each inspiration source as one of their top three most influential



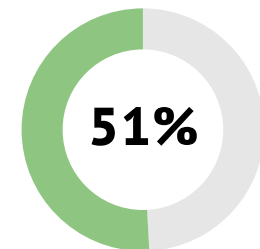
Family



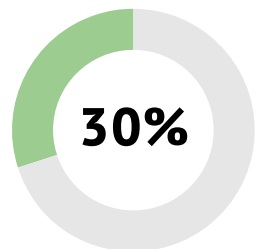
Restaurant meals



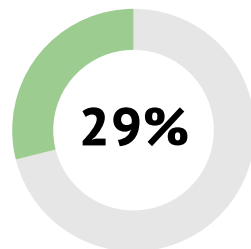
Cooking shows,
books, or magazines



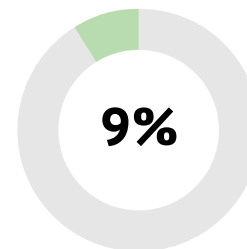
Friends



Professional chefs



Social media



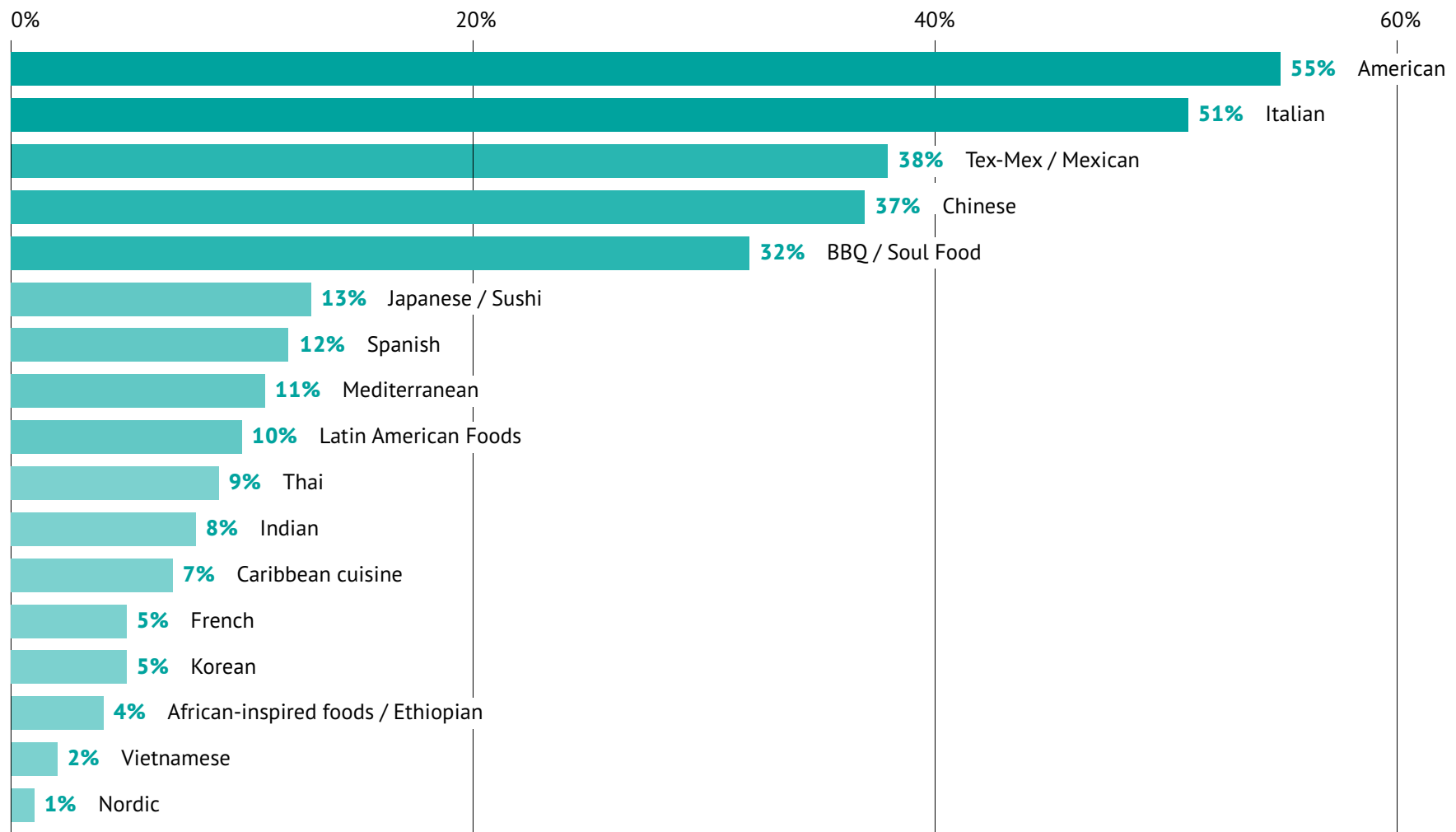
Other

Responses included: "experience," "my imagination," "price and availability of ingredients," "foods I've had in the past," "cravings," "online recipes," "the food in my refrigerator and pantry"

Q32. When it comes to meal/recipe inspiration, which of the following do you find to be the most influential? Please rank your top 3.

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



Q33. What are your top 3 favorite cuisines? Select your top 3.

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

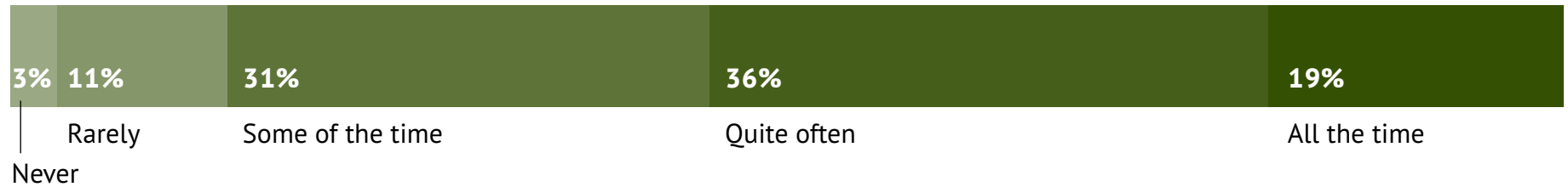
Differences in cuisine preferences between older consumers (Gen X, Boomers, the Silent Generation) and younger consumers (Gen Z and Millennials)

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

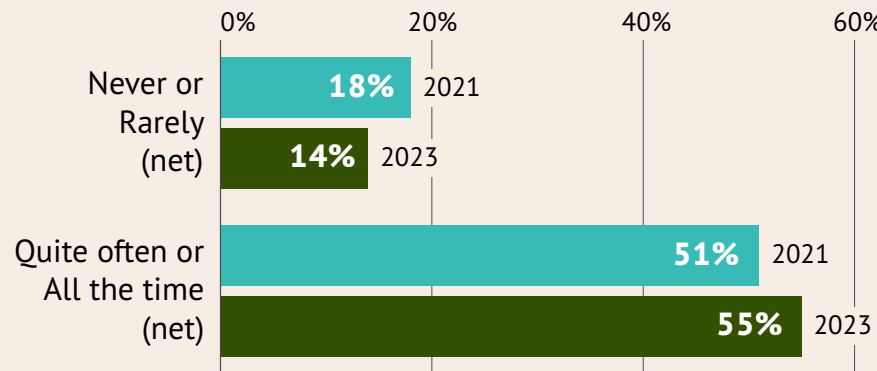
Q33. What are your top 3 favorite cuisines? Select your top 3.

Most consumers—86%—say they **read packaging labels** like the Nutrition Facts Panel **at least some of the time**. Half of consumers read them quite often or all the time.

Frequency with which consumers read packaging labels when buying food



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**.

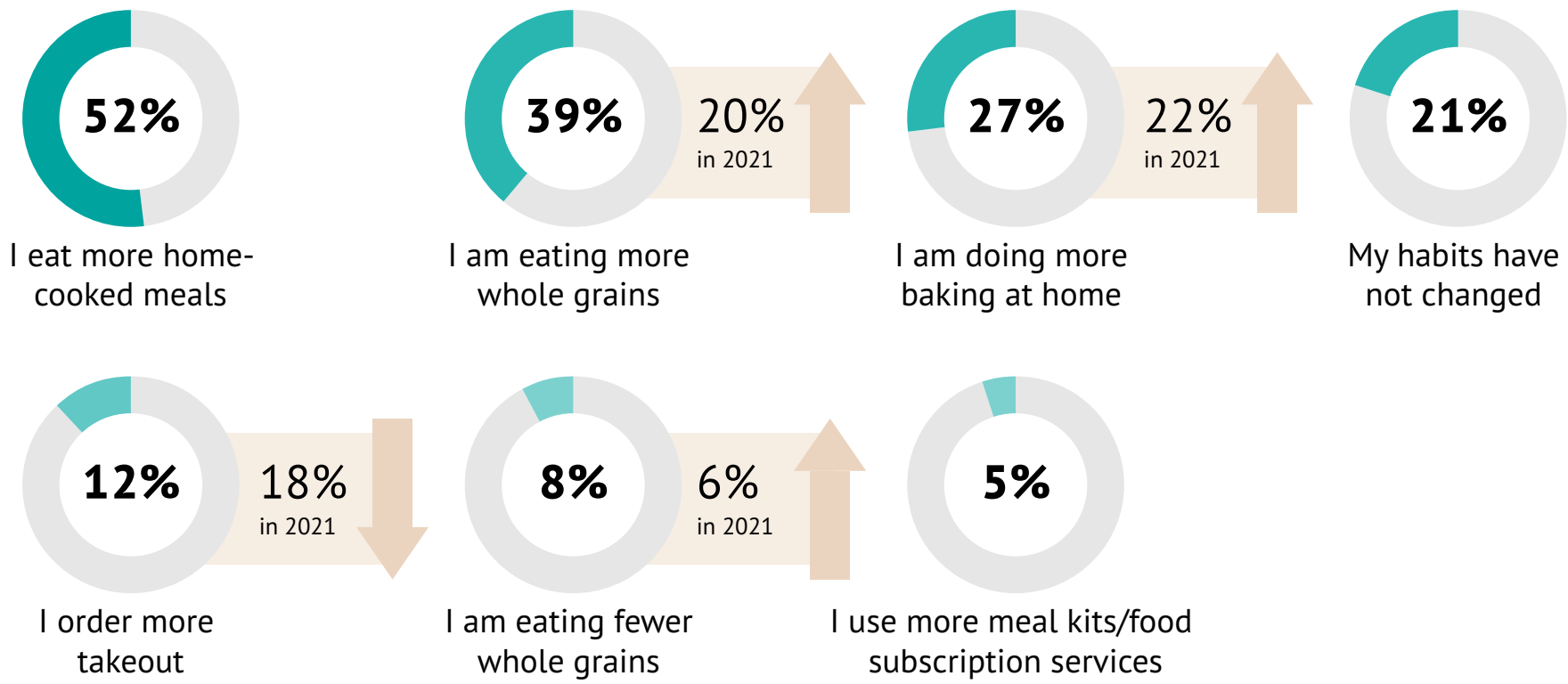


Q34. When you are buying food and/or groceries, how often do you read the labels, i.e., the ingredients and/or the Nutrition Facts Panel? (Select one)

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

Furthermore, significantly more consumers are eating more whole grains than in 2021, though more consumers also report eating fewer whole grains. Consumers are also doing more home baking and ordering less takeout.

Changes in eating/cooking habits in the past 5 years

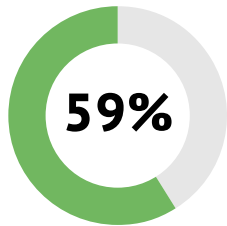


1% of respondents chose "Other"
 Responses included: "no changes," "I'm eating less processed foods," "I'm eating more frozen meals," "we're eating more plant-based meals"

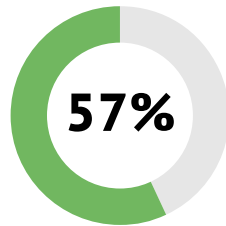
Q22. How have your eating/cooking habits changed in the past five years? (Select all that apply)

American consumers believe **reducing cost, increasing variety and availability**, and **providing education** are the best ways to encourage more people to eat whole grains.

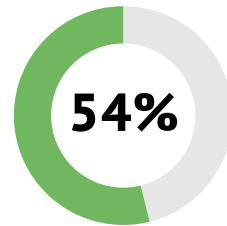
Consumer beliefs about strategies to encourage more whole grain consumption



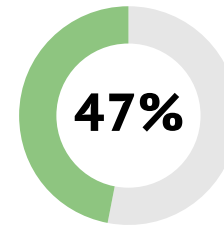
Reduce the cost of whole grain options



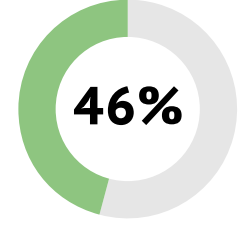
Increase variety and availability of whole grain products at supermarkets



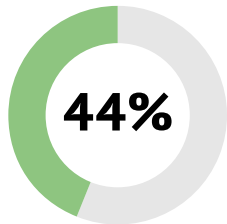
Provide more education about the benefits of whole grains



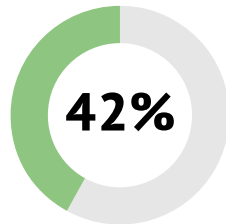
Clearly label whole grain foods (e.g. with the Whole Grain Stamp)



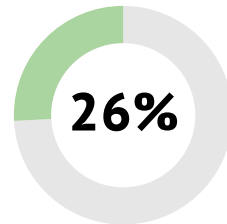
Encourage more restaurants to serve whole grains



Encourage parents to offer children whole grains from a very young age



Increase the quantity of whole grains served to children in schools



Encourage hospitals to offer more whole grain options to their patients

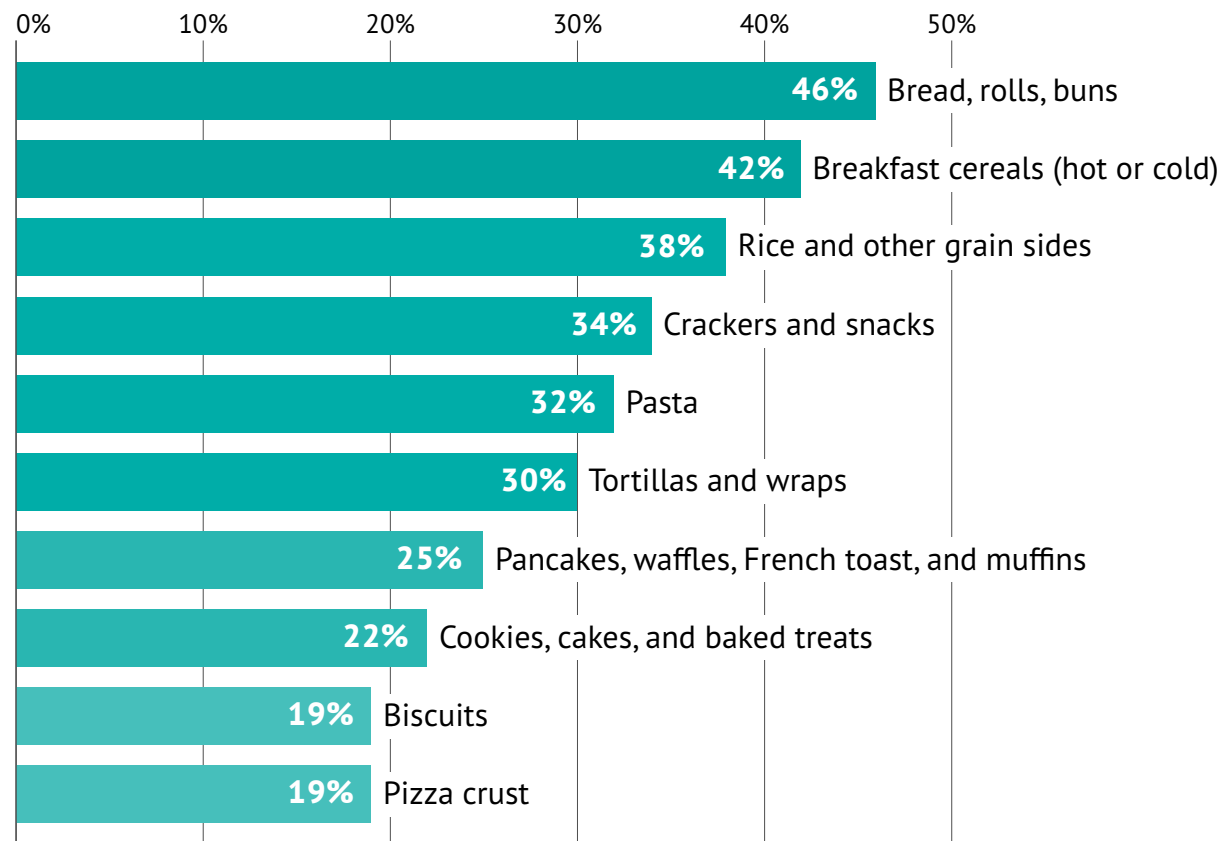
1% of respondents chose "Other"
Responses included: "make them taste better," "teach people about the ingredients and how to cook them," "take out the pesticides and gluten," "provide whole grain food boxes to those in need," "provide more recipes"

Q22a. Whole grains offer significant health benefits to those who consume them regularly. They help reduce your risk of stroke, type 2 diabetes, heart disease, and colorectal cancer; they reduce inflammation in your body, and they help you maintain a healthy body weight. What do you think would be the best way to encourage people to eat more whole grains? (Select all that apply)

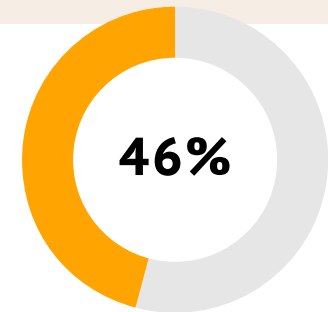
Whole Grain Consumption

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**.

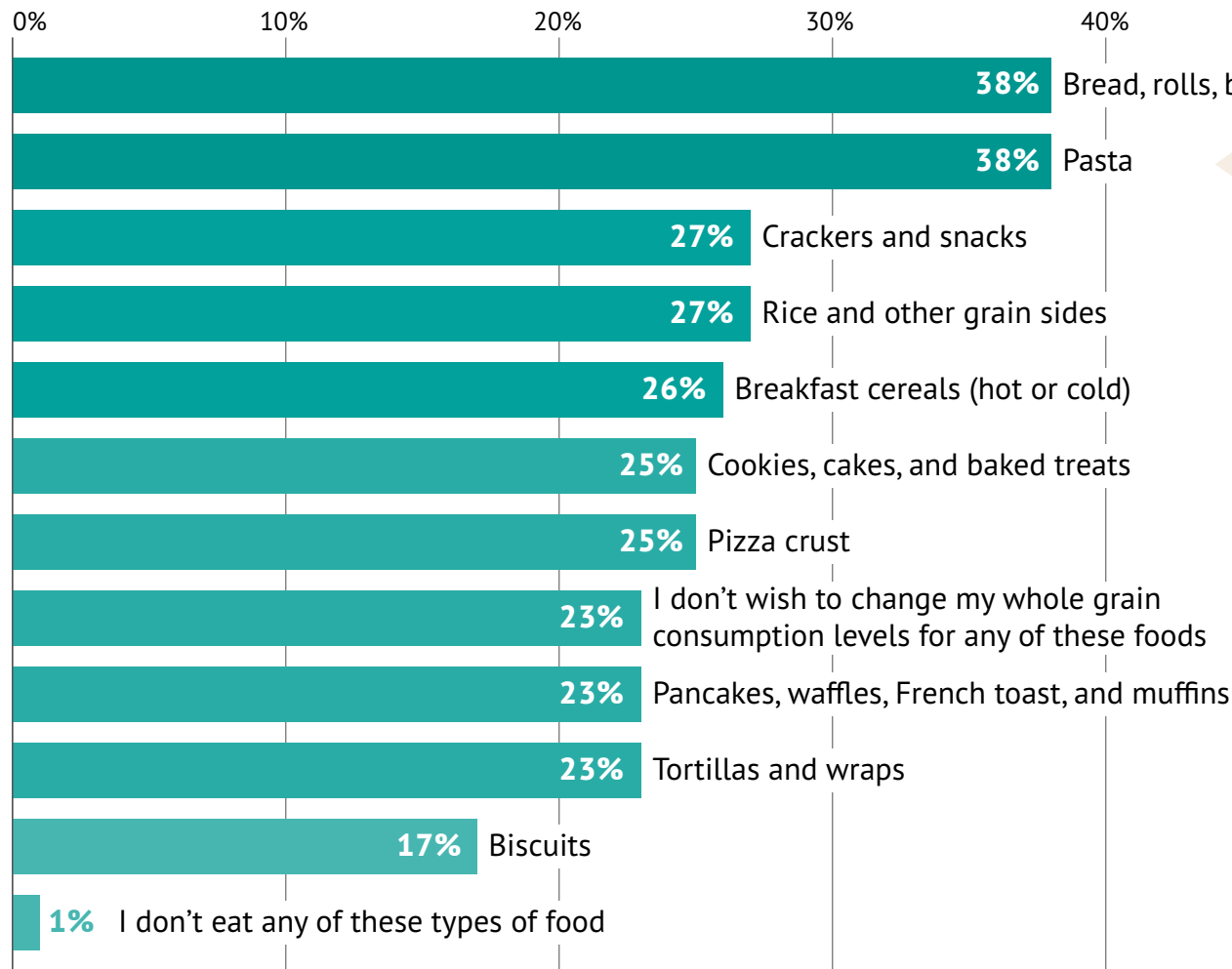


These numbers represent the average percentage consumed as whole grains across all those who said they eat each type of food.

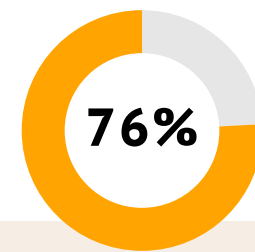
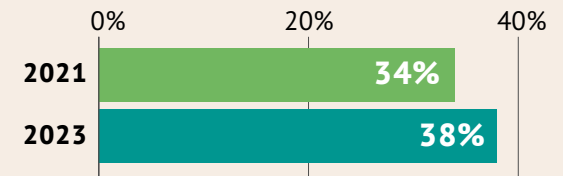
Q4. How often do you choose whole grain versions of foods? For each of the following foods that you typically eat, please indicate what percent of the time the food is whole grain.

Most consumers wish they ate more whole grains, particularly **bread, 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.

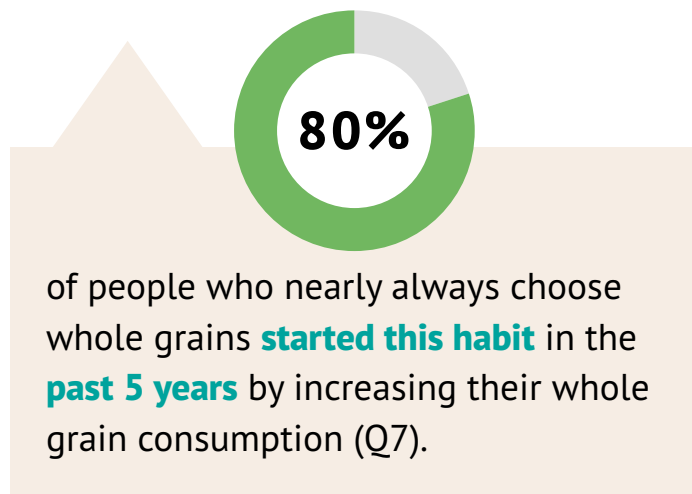
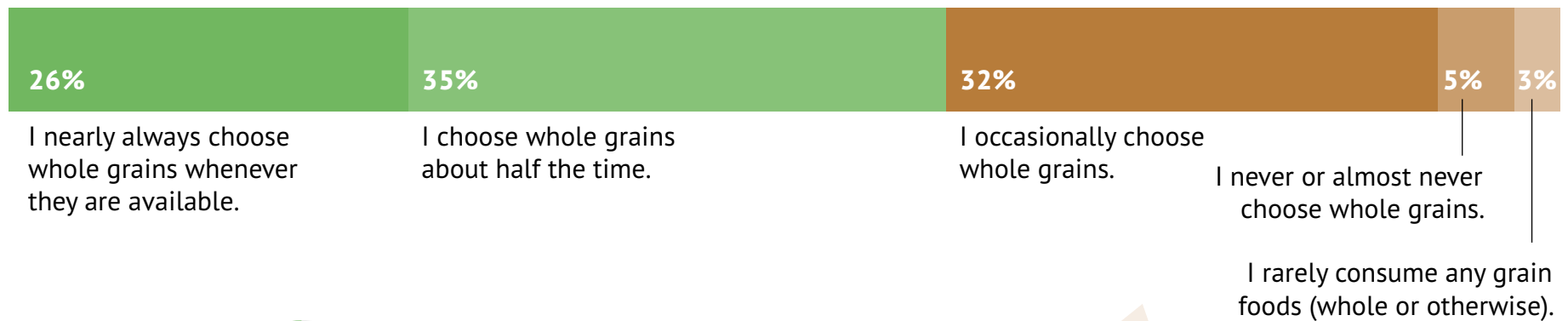


of consumers **want to increase** the whole grains they eat in at least one of these categories.

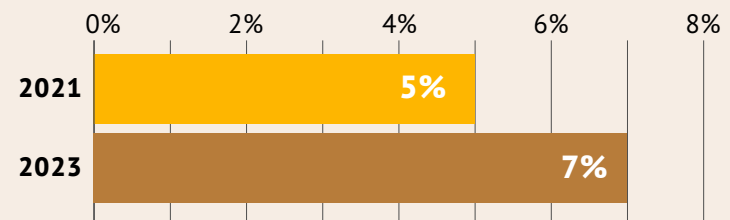
Q5. For which of the following food categories do you wish your whole grain consumption was higher?

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

Overall consumer habits when choosing whole grains

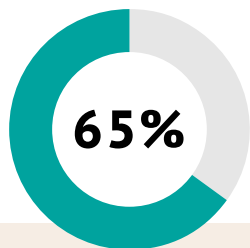


In 2023, significantly **fewer** consumers say they **never or almost never** choose whole grains than in 2021.

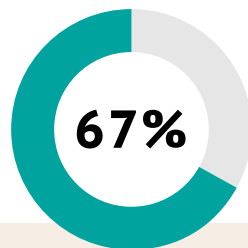


Q6. Which of the following statements best describes your habits in choosing grain foods? (Select one)

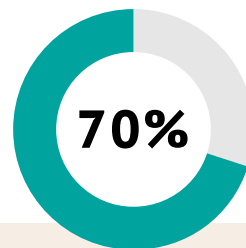
In many demographic groups, an **even larger majority** of consumers choose whole grains at least half the time.



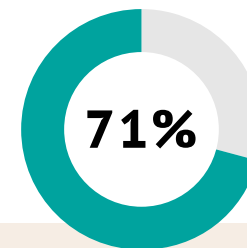
of Millennial consumers



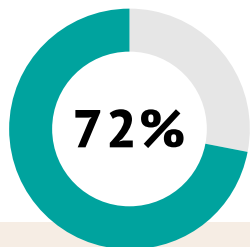
of parents (with kids at home)



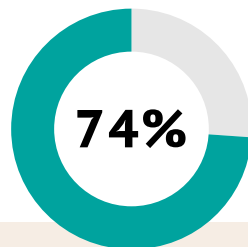
of plant-based eaters (vegan, vegetarian, pescatarian, and plant-based)



of consumers who correctly defined gluten (Q14).



of health-conscious consumers



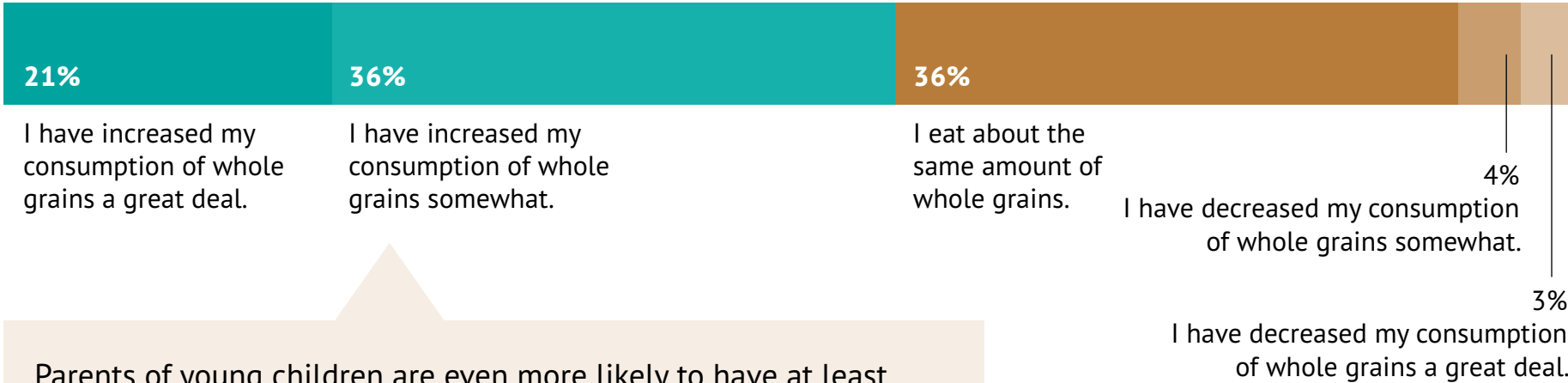
of low-carb consumers

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.

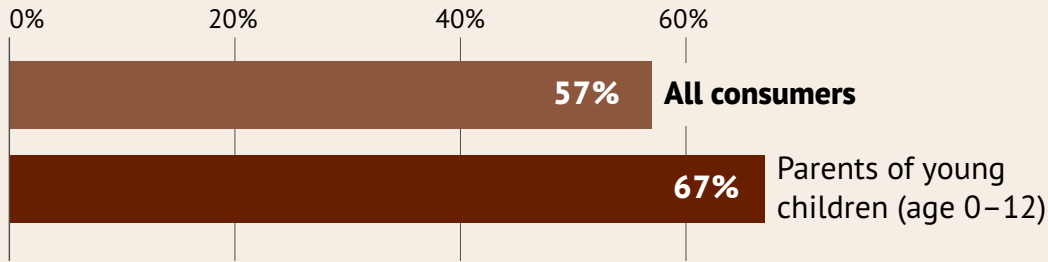
Q6. Which of the following statements best describes your habits in choosing grain foods? (Select one)

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



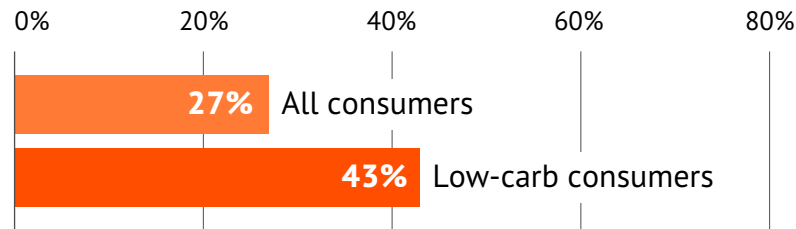
Parents of young children are even more likely to have at least somewhat **increased** the amount of whole grains they eat.



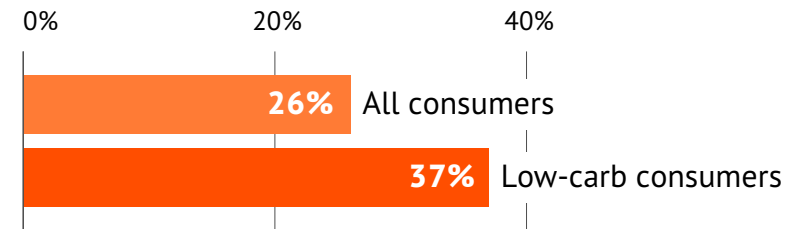
Q7. Compared to five years ago, how has your consumption of whole grains changed? (Select one)

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

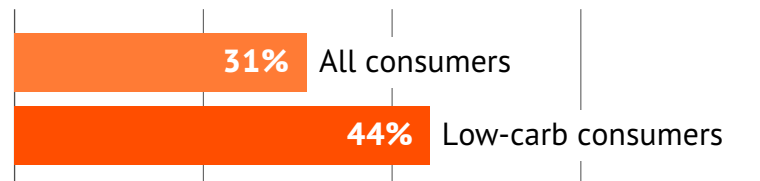
Look for high-fiber foods when shopping (Q2)



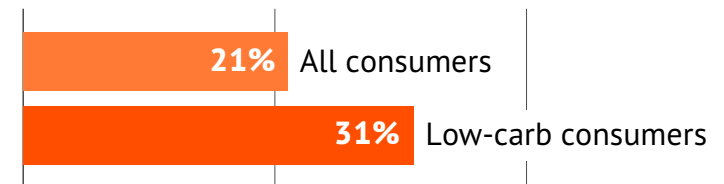
Nearly always choose to eat whole grains (Q6)



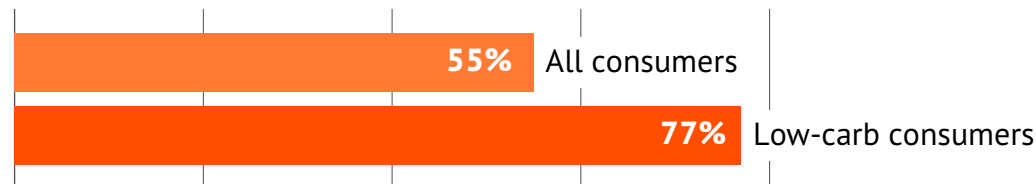
Look for whole grains when shopping (Q2)



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



Say that healthy food is important to them (Q2)

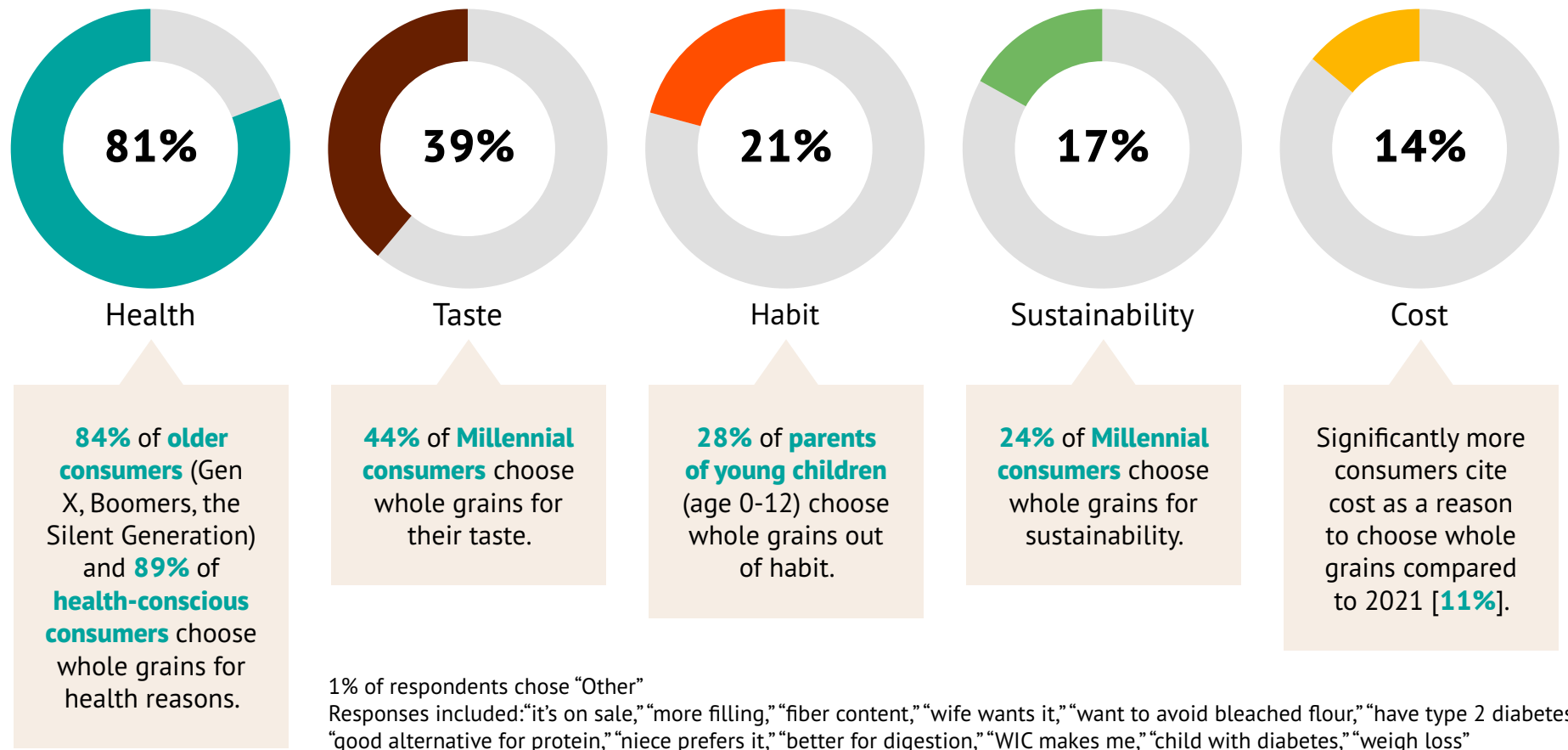


Q2. Which of the following statements best describe your food purchasing decisions? (Select all that apply) / Q6. Which of the following statements best describes your habits in choosing grain foods? (Select one) / Q7. Compared to five years ago, how has your consumption of whole grains changed? (Select one)

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

Additionally, each reason listed is prioritized more highly by certain demographics.

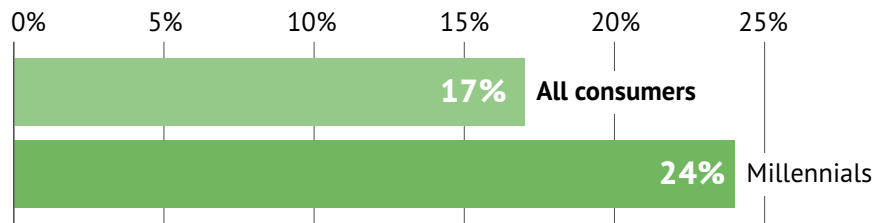
Reasons consumers choose whole grains



Q8. Why do you choose whole grains? (Select all that apply)

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

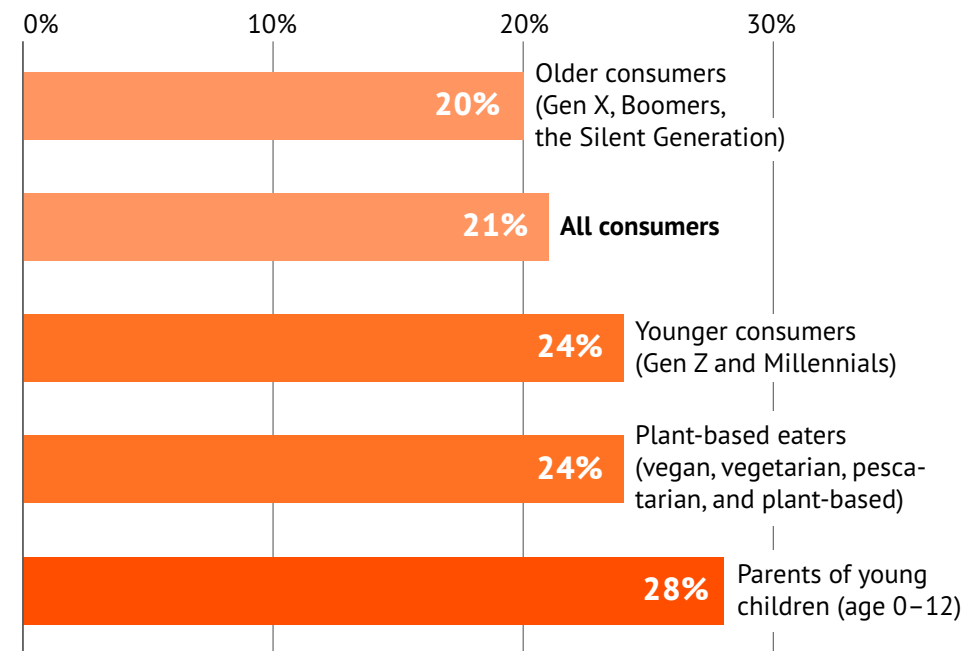
Sustainability as a motivation for choosing whole grains



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].

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

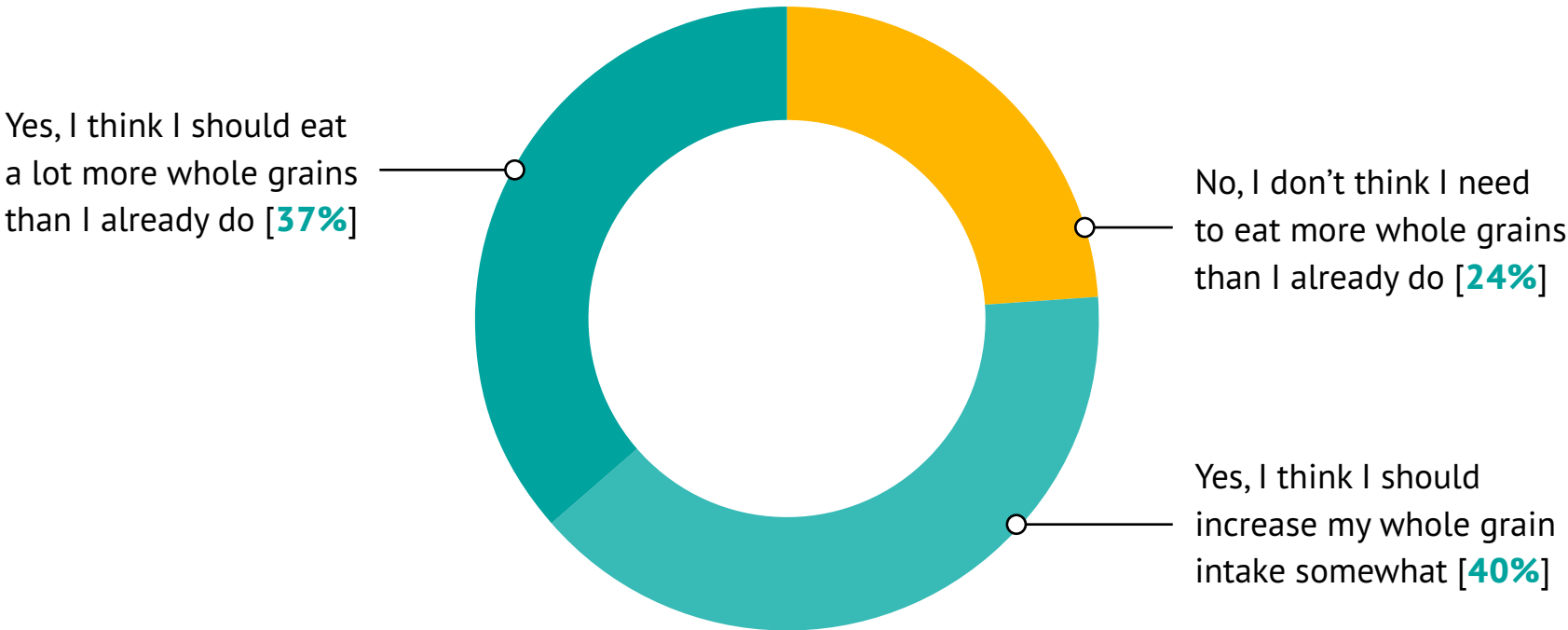
Percentage of households by demographic group in the habit of purchasing whole grain foods



Q8. Why do you choose whole grains? (Select all that apply) / Q2. Which of the following statements best describe your food purchasing decisions? (Select all that apply)

Three-quarters of consumers think they should **eat more** whole grains.

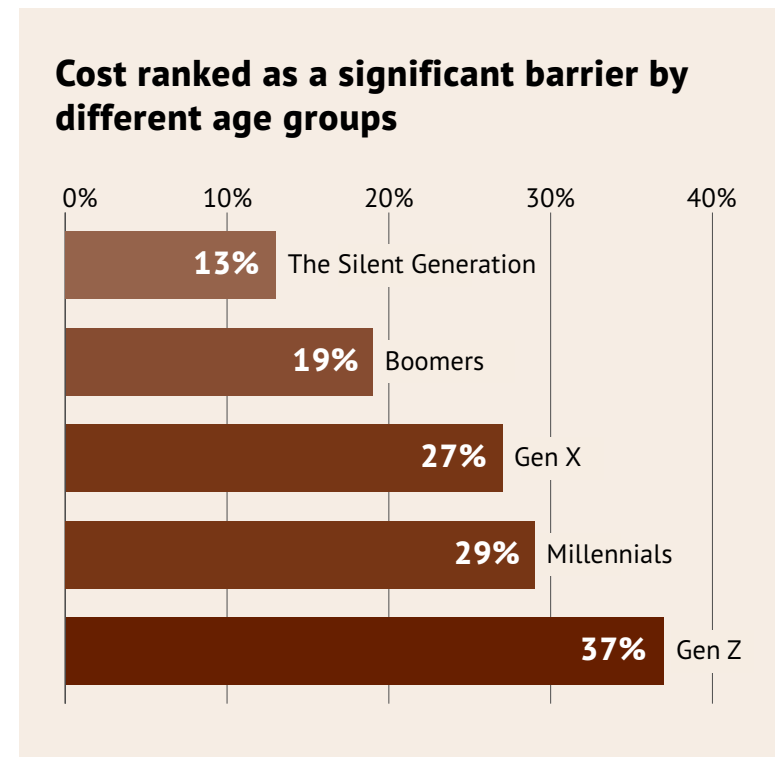
Percentage of consumers who believe they should increase their whole grain intake



Q8a. Do you think you should increase your whole grain intake? (Select one)

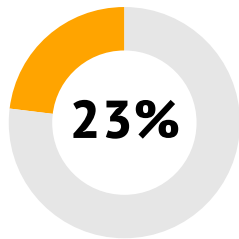
Cost is the most significant barrier to eating more whole grains, especially for **younger generations**.

Significant barriers to increasing whole grain intake

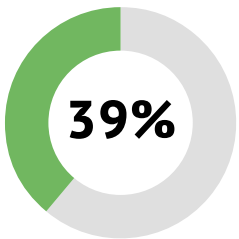


Q9a. How much of a barrier are each of the following factors for you when it comes to eating whole grains more often? (Select one per row)

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**

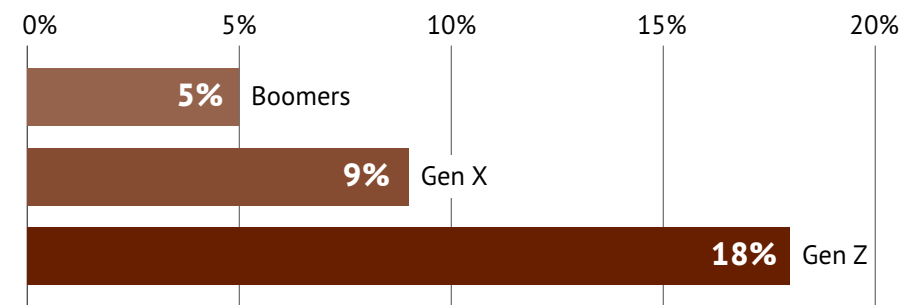


of consumers say the taste of whole grains is a **benefit**

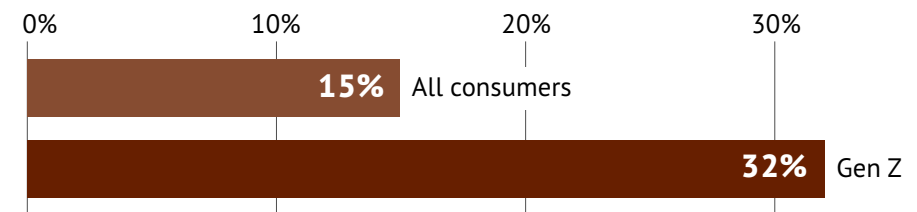
Of those who say they nearly always choose whole grains (Q6), **45%** see taste as a benefit and only **18%** see it as a barrier, suggesting that the more exposure you have to whole grains, the more you come to appreciate the nuttier, more robust flavors.

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



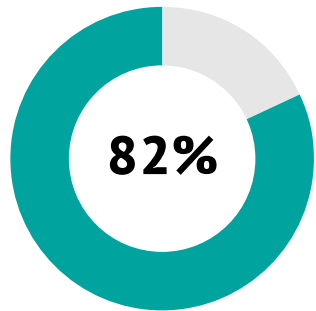
Not being in the habit of buying whole grains ranked as a significant barrier by different age groups



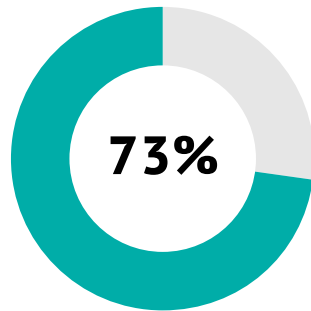
Q9a. How much of a barrier are each of the following factors for you when it comes to eating whole grains more often? (Select one per row)

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

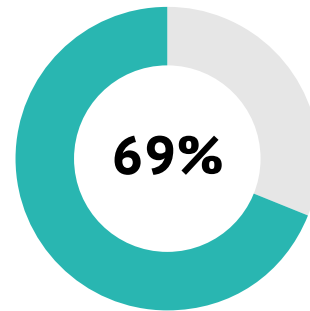
Foods perceived by consumers as sustainable and environmentally friendly



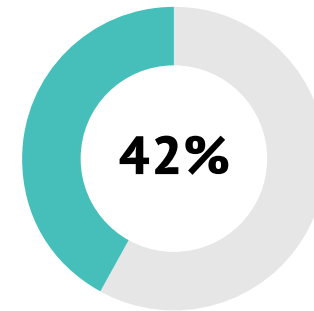
Fruits and vegetables



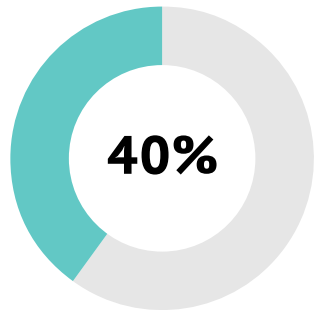
Nuts, seeds, and legumes (beans & lentils)



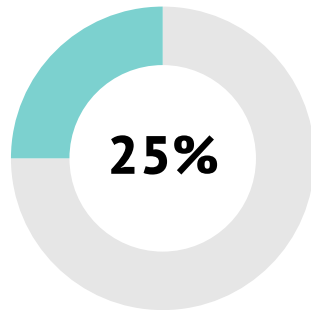
Whole grains



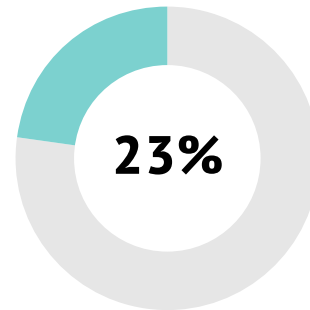
Eggs and dairy



Fish



Poultry



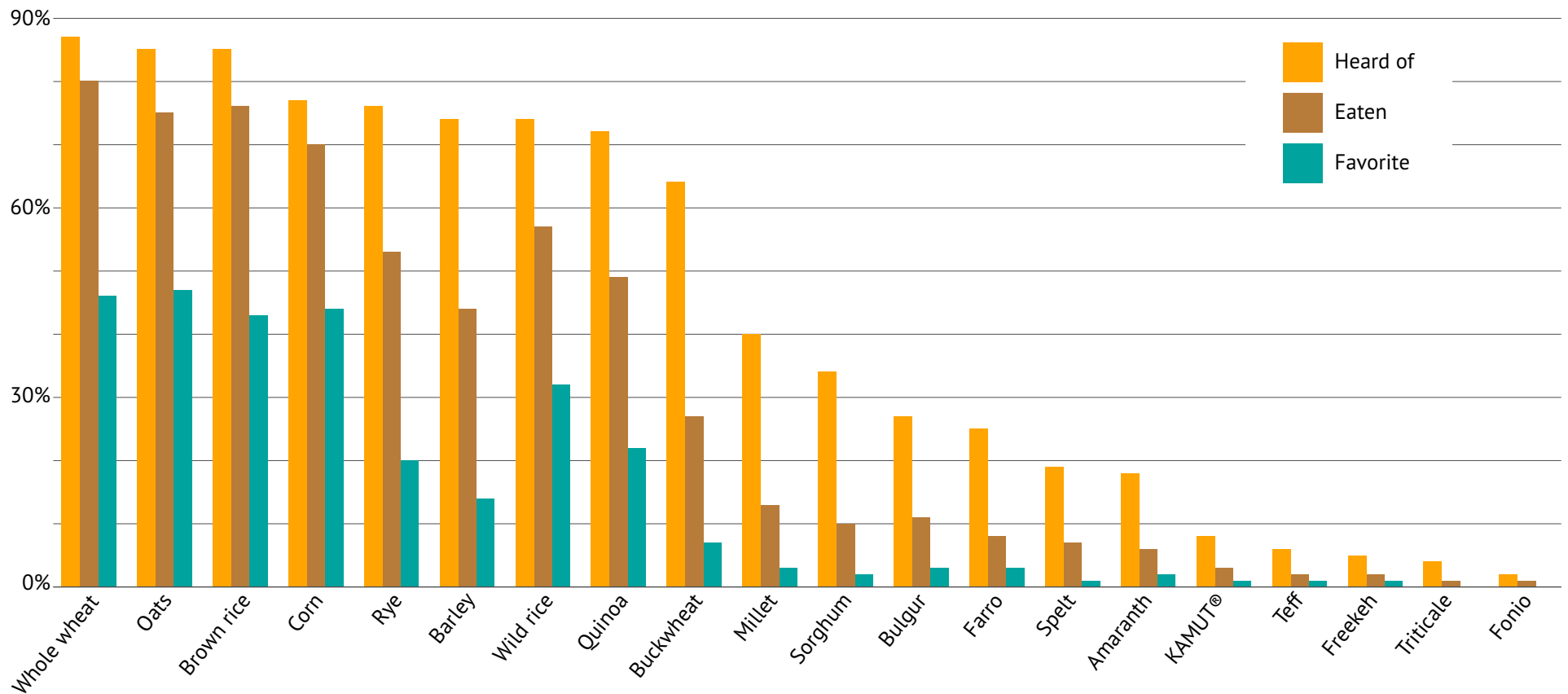
Red meats (beef, pork, lamb, etc.)

2% of respondents chose "Other"
Responses included: "all of the above can be produced sustainably," "all can be good and all can be bad," "they all come at a cost," "bugs," "organic food," "food is always environmentally friendly it's people that do things poorly"

Q11. When you think about foods that are sustainable and environmentally friendly, what types of foods do you picture? (Select all that apply)

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

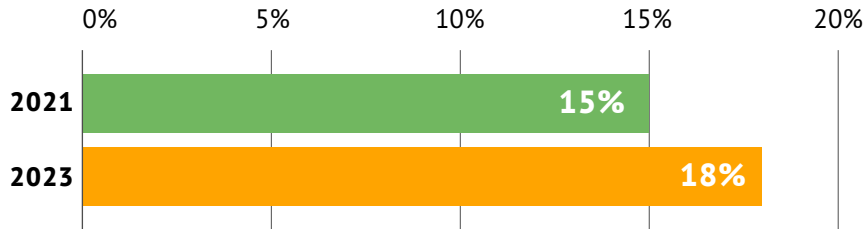


Q17. Which of the following whole grains have you heard of? (Select all that apply) / Q18. Which of the following whole grains have you eaten? (Select all that apply) / Q19. Which of the following whole grains are your favorites? (Select all that apply)

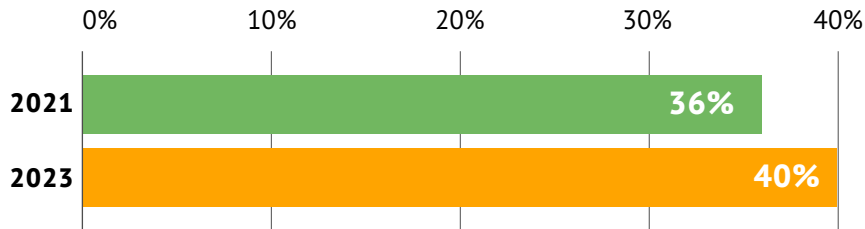
This year, significantly more people have heard of **amaranth**, **millet**, and **teff**.

Grains that consumers have heard of, 2021 and 2023

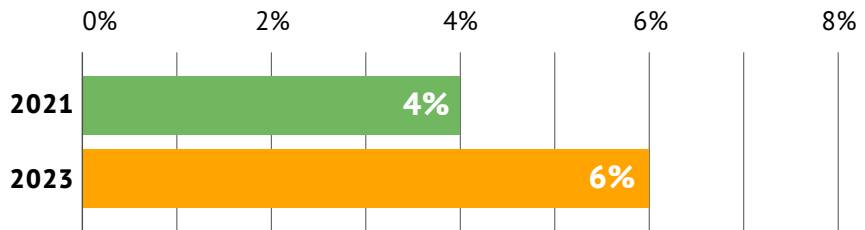
Amaranth



Millet



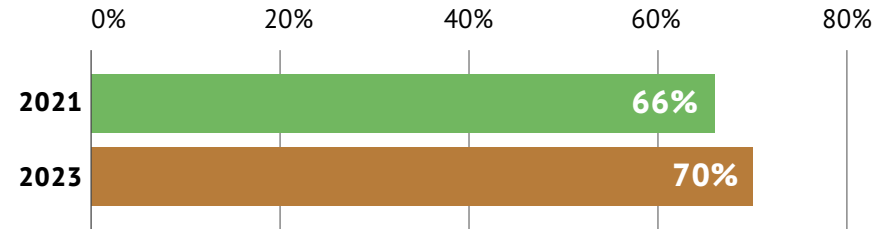
Teff



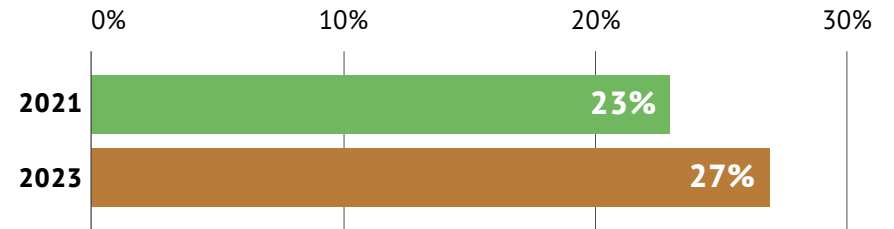
This year, significantly more people have tried **corn**, **buckwheat**, and **rye**.

Grains that consumers have eaten, 2021 and 2023

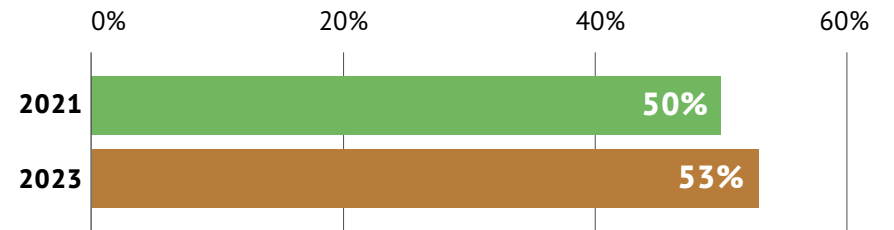
Corn



Buckwheat



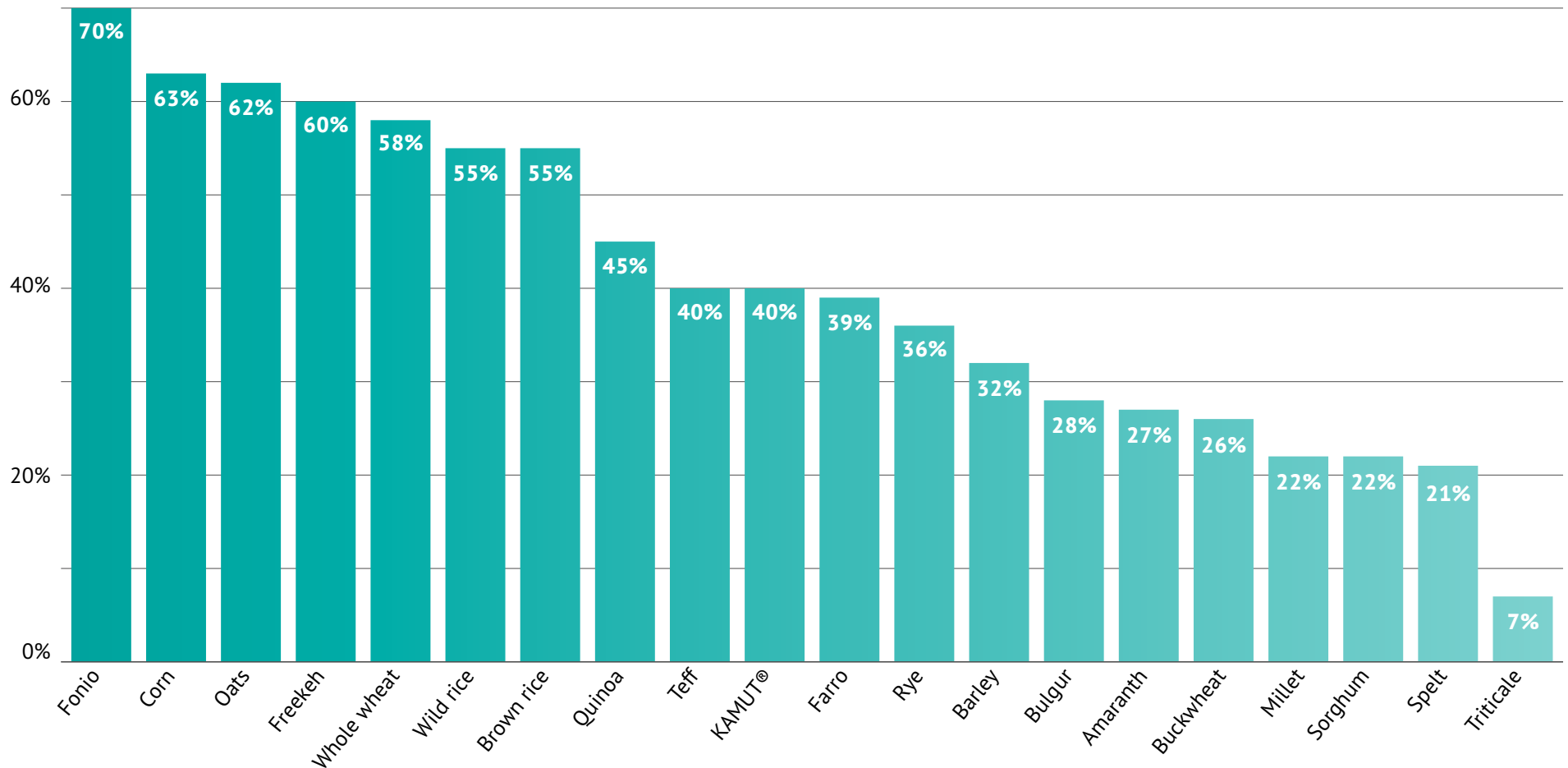
Rye



Q17. Which of the following whole grains have you heard of? (Select all that apply) / Q18. Which of the following whole grains have you eaten? (Select all that apply)

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

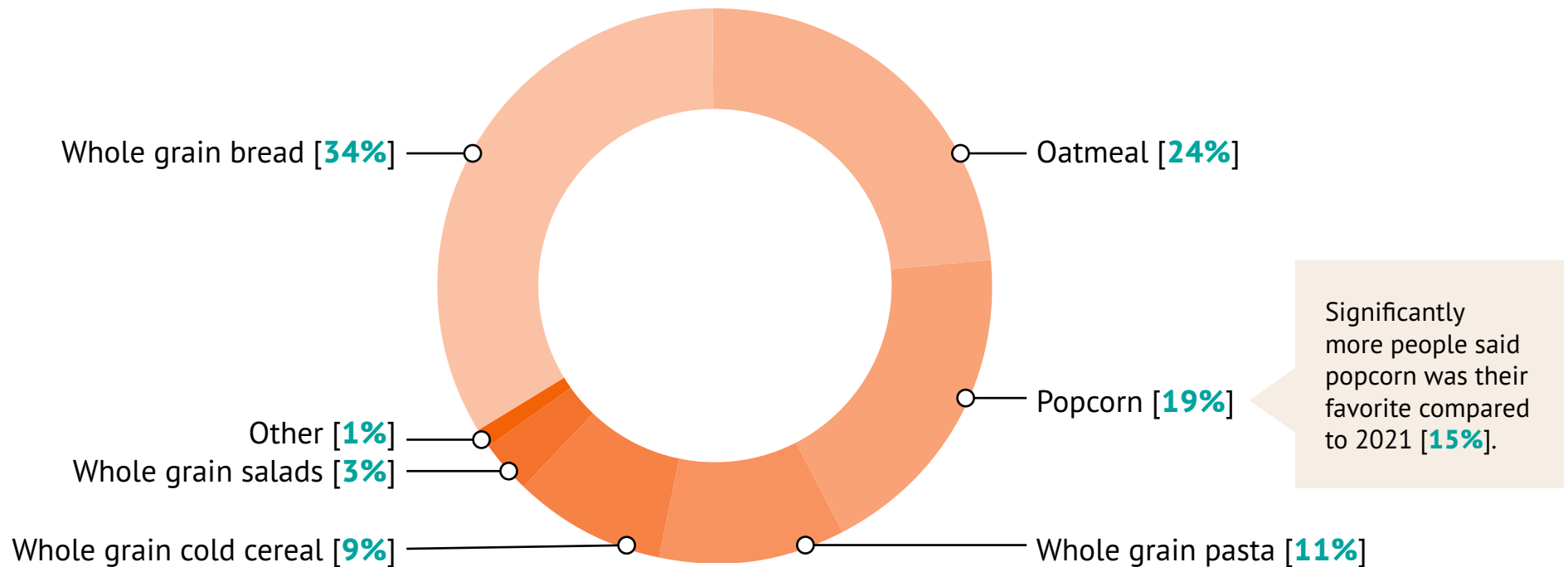


Q18. Which of the following whole grains have you eaten? (Select all that apply) / Q19. Which of the following whole grains are your favorites? (Select all that apply)

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

While whole grain pasta is often described as a food that's difficult to produce in whole grain form, one in ten consumers considers it their favorite whole grain food.

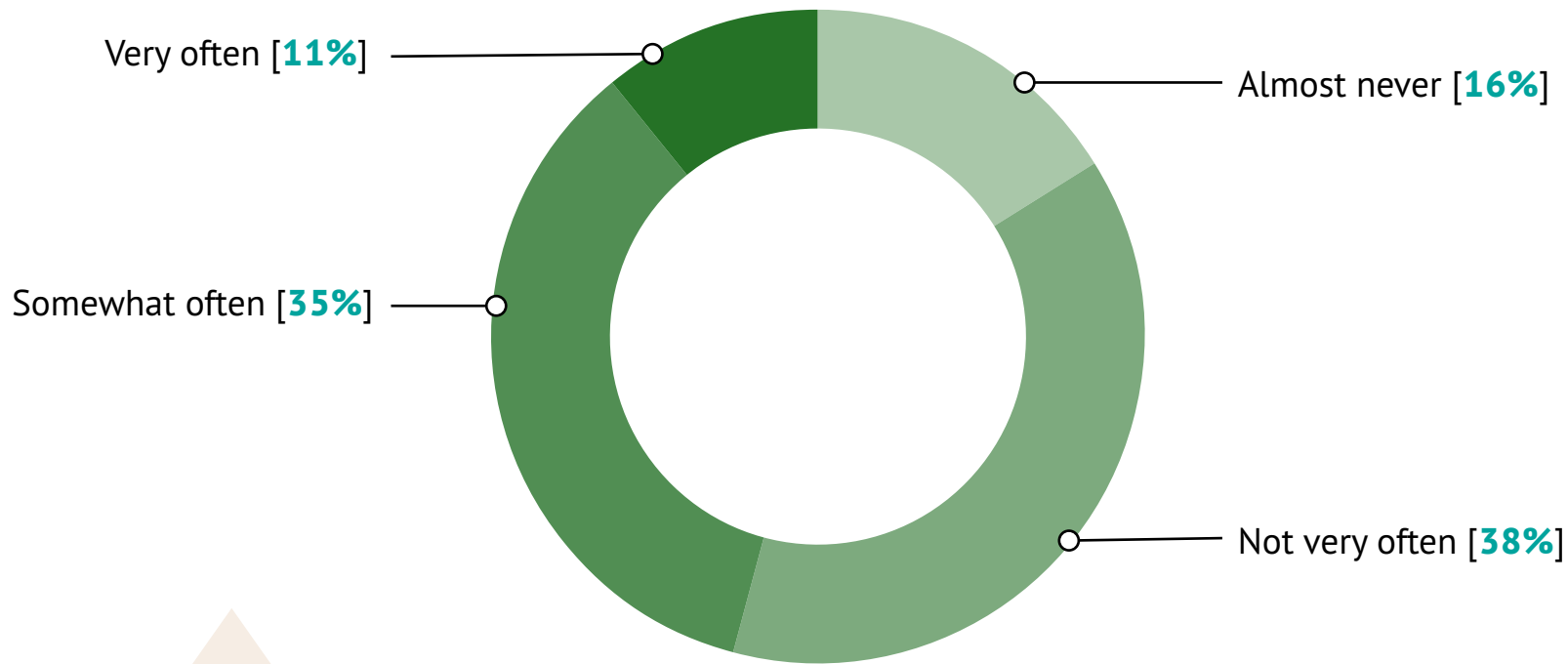
Consumers' one favorite whole grain food



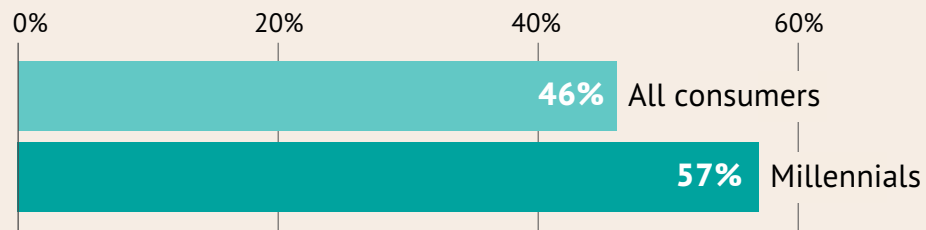
Q20. What is your one favorite whole grain food?

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



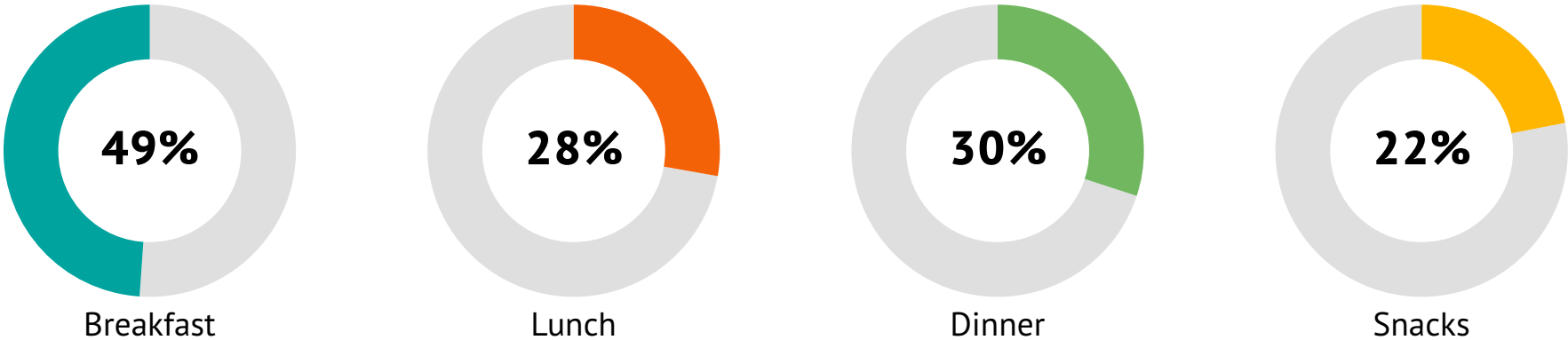
Millennials are the demographic group **most likely** to choose whole grains at restaurants somewhat or very often.



Q10a. How often do you choose whole grain options when dining at a restaurant or ordering take-out/delivery? (Select one)

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

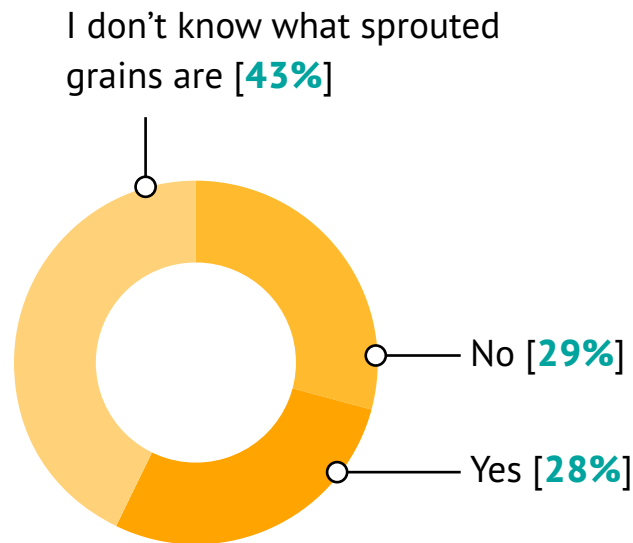
Meal during which consumers eat whole grains “most of the time” or “all of the time”



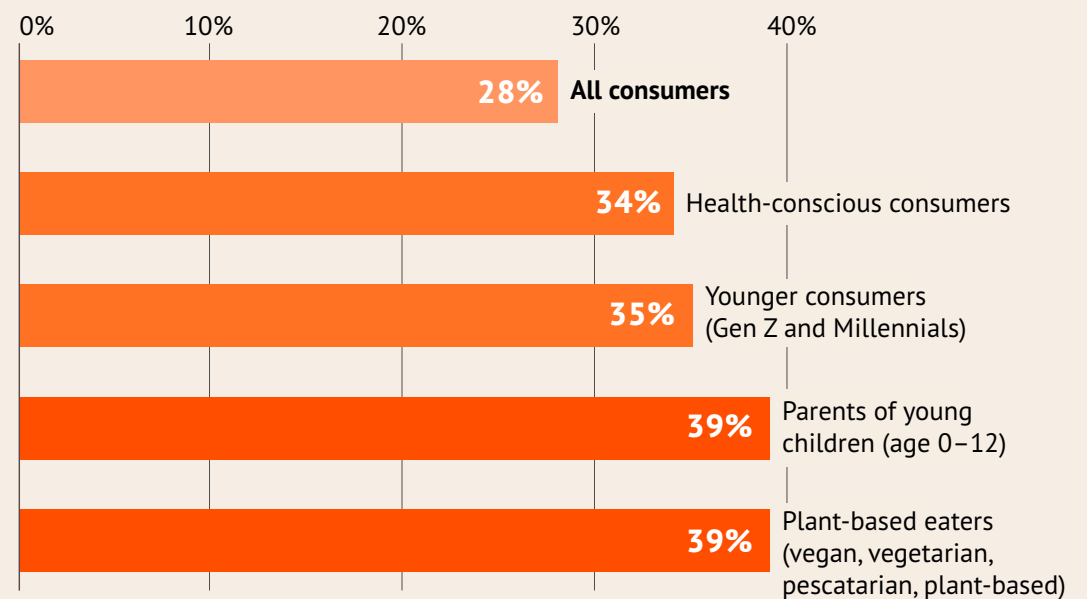
Q21. For each of the following meals, how often do you eat whole grains? (Select one per row)

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



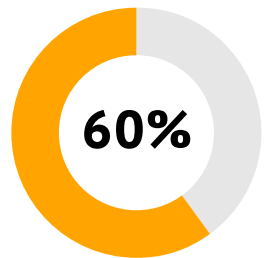
Significantly more consumers in the following demographic groups reported seeking out sprouted grains:



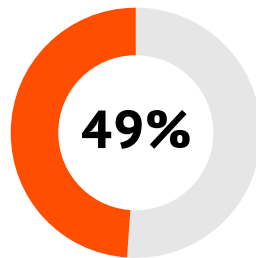
Q12. Do you eat/buy products made with sprouted grains?

The top reason consumers choose sprouted grains is their **flavor and taste**. Of the consumers who eat sprouted grains, a majority—60%—choose them **at least half the time**.

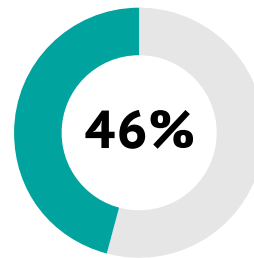
Reasons for choosing sprouted grains



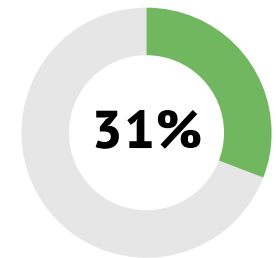
Flavor and taste



Digestibility



Bioavailability of nutrients



Reduced anti-nutrients/phytates

5% of respondents chose "Other"

Responses included: "I've heard that it's healthier," "low sugar," "I know they are good for me," "general health aspects," "healthier and better for my family," "glucose impact," "habit"

Frequency with which consumers of sprouted grains choose them

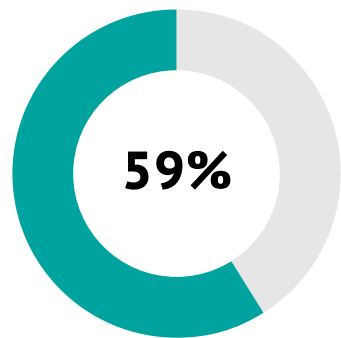


Q13. Why do you choose sprouted grain foods? (Select all that apply) / Q13a. How often do you choose sprouted grain foods? (Select one)

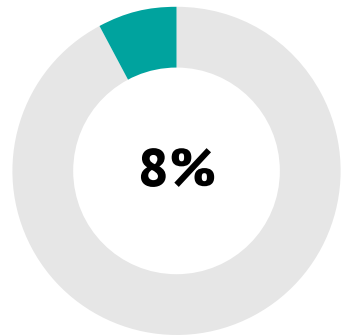
Over half of American consumers have **some idea what gluten is**—but few can fully define it correctly.

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.

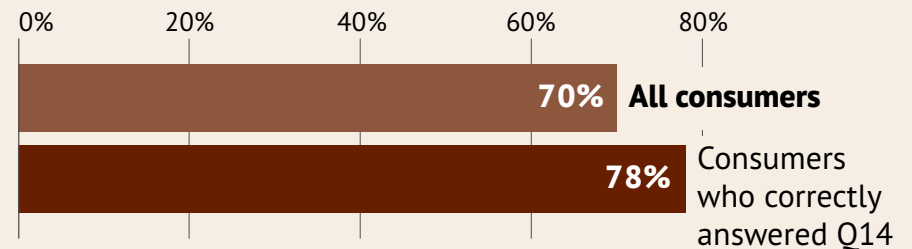


of consumers selected **one** of the correct answers



of consumers selected **both** correct answers (and didn’t select any additional answers)

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 (Q15).



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

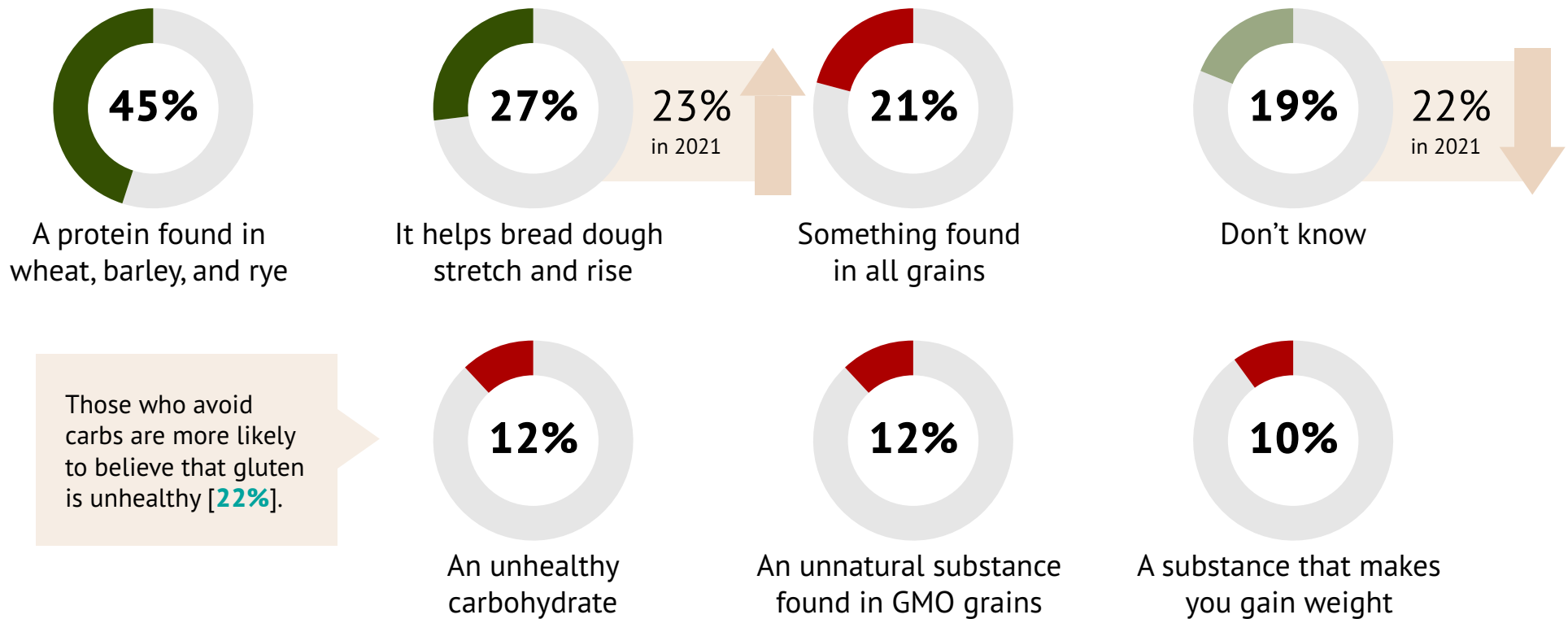
- **64%** have a college or graduate degree [compared with 51% in the general pool of respondents]

Q14. What is gluten? (Select all that apply) / Q15. Do you actively avoid gluten?

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

Additionally, significantly fewer consumers reported that they don't know what gluten is.

Consumers' definitions of gluten



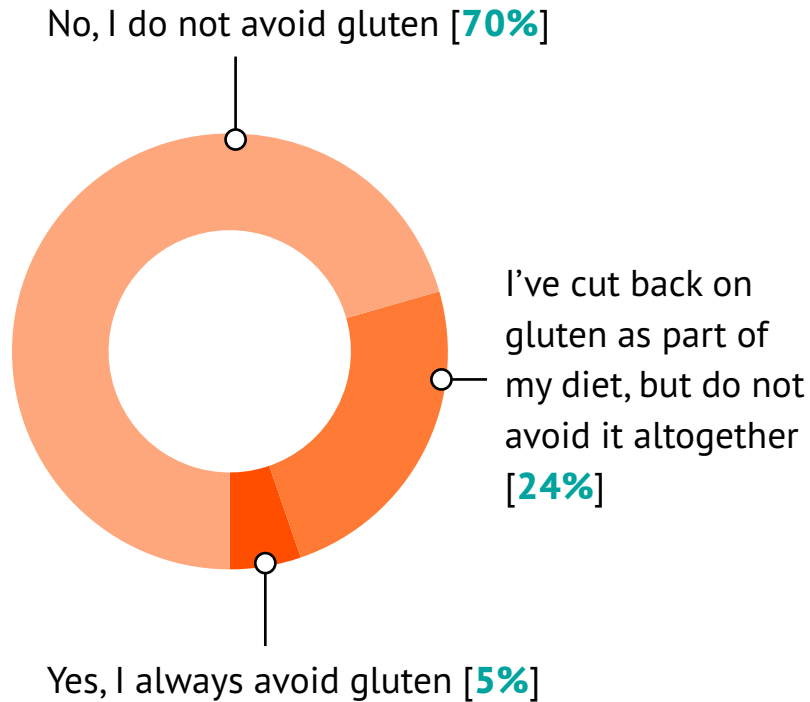
1% of respondents chose "Other"
 Responses included: "something people with celiac disease shouldn't have," "health issue," "substance my wife needs to avoid"

Q14. What is gluten? (Select all that apply)

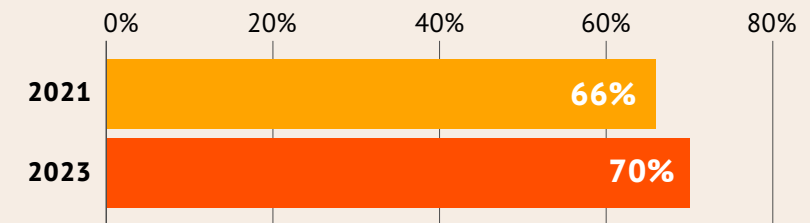
Overall, **fewer** people are **avoiding** gluten compared to 2021.

94% of consumers eat gluten some or all of the time.

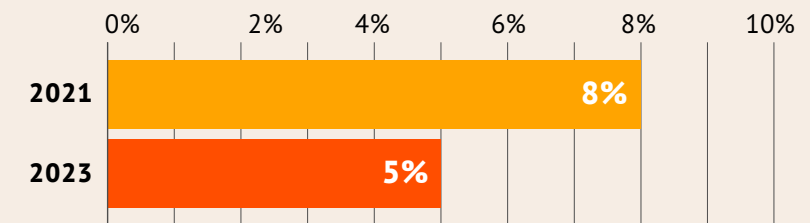
Gluten avoidance among consumers



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



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

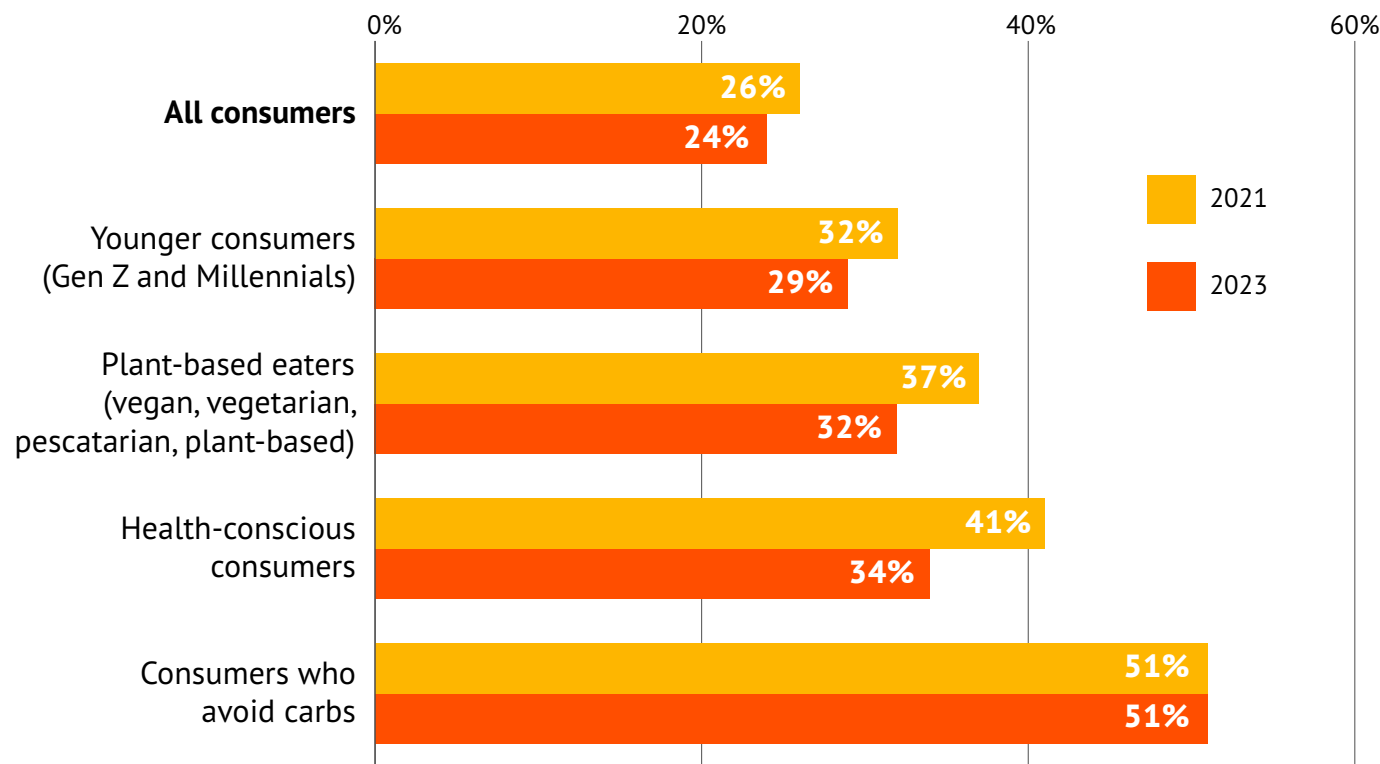


Q15. Do you actively avoid gluten?

About **a quarter** of consumers have **cut back on gluten** but are not following a true gluten-free diet. This number is even higher for some demographic groups.

However, although these demographic groups cut back on gluten at higher rates, fewer of those consumers report cutting back on gluten compared to 2021.

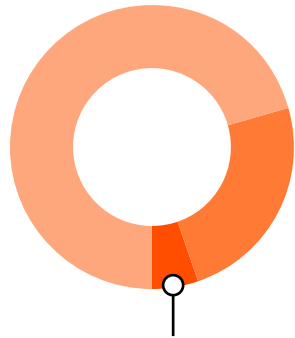
Demographic groups who report cutting back on gluten, 2021 and 2023



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.

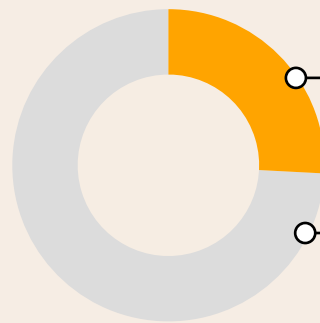
Q15. Do you actively avoid gluten?

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.



Medical diagnosis [26%]

No medical diagnosis [74%]

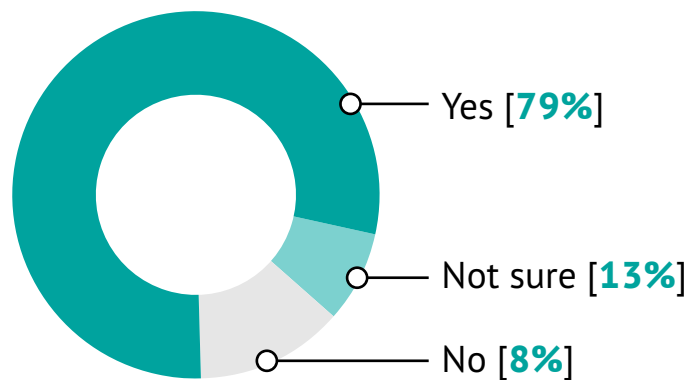
- The medically diagnosed respondents make up **1.33%** of all respondents, which lines up with the estimated prevalence of celiac disease in the general population.

Q15. Do you actively avoid gluten? / Q16. Do you have a medically-diagnosed problem with gluten such as celiac disease?

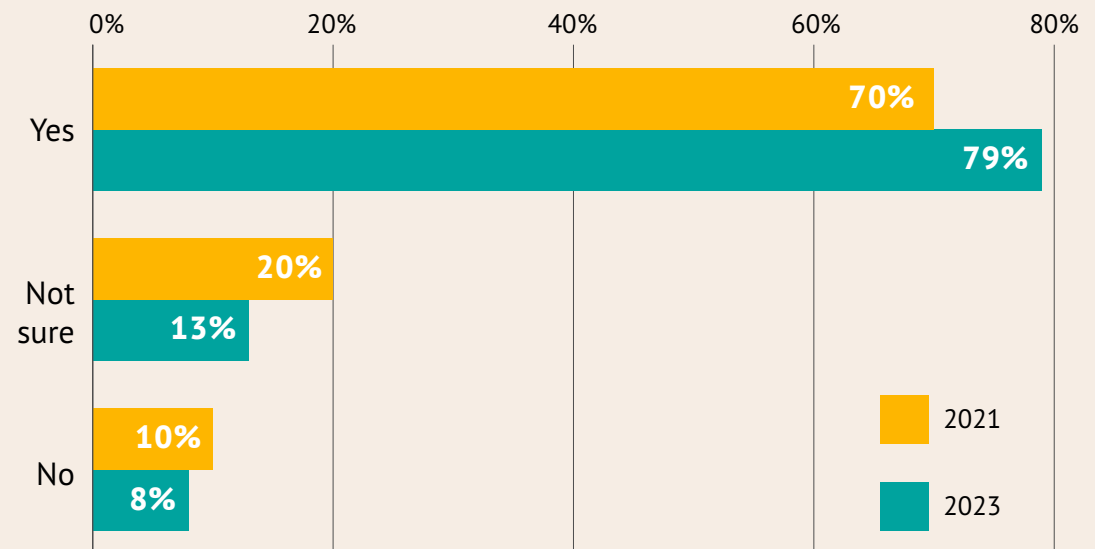
Whole Grain Labeling

A **significant majority** of consumers want the whole grain content of products to be **included on the packaging** (something the Whole Grain Stamp offers consumers).

Consumer interest in seeing whole grain content displayed on packaging



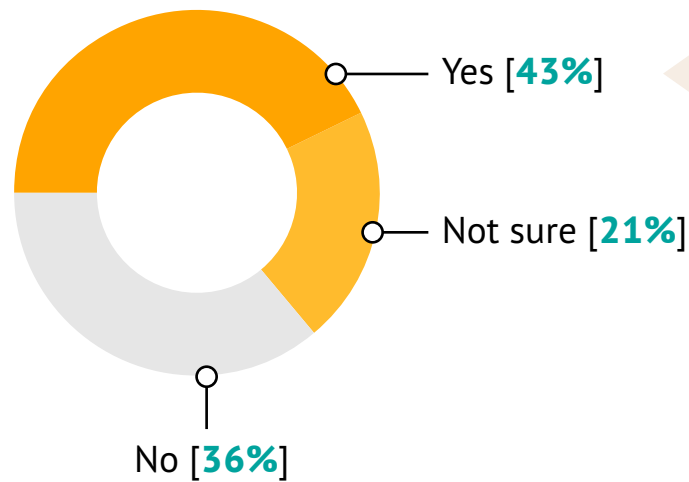
Compared to 2021, **even more** consumers **want whole grain content included**, and fewer don't want it included or aren't sure.



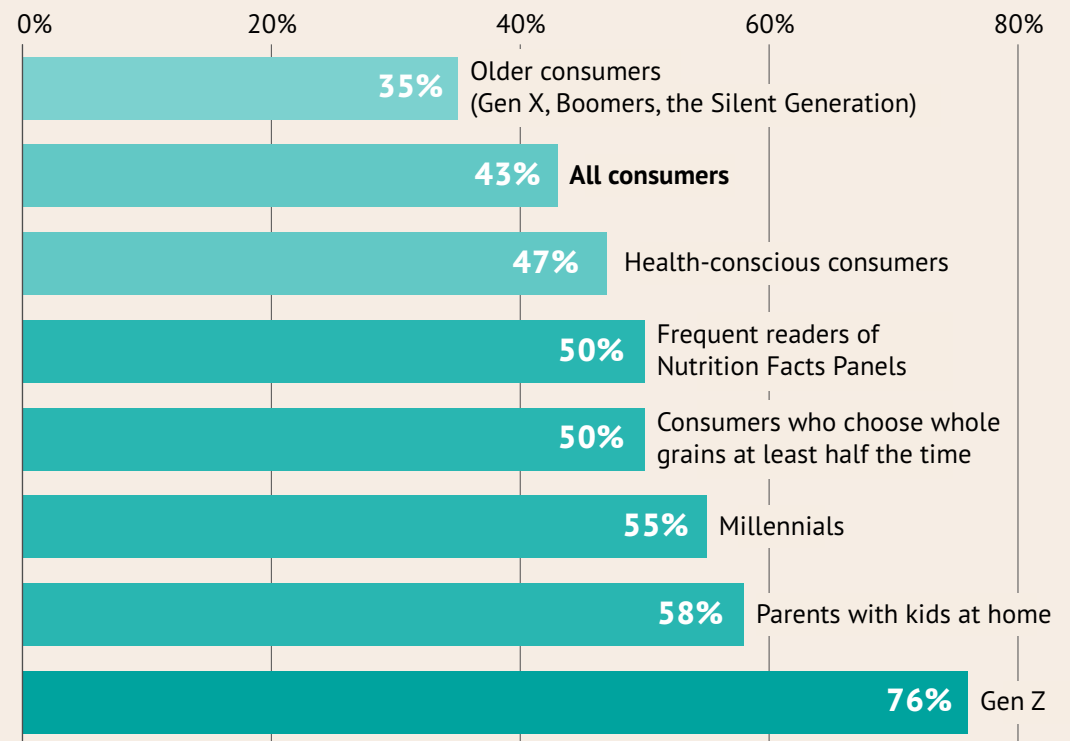
Q23. The whole grain content of packaged food is not currently included on the product's Nutrition Facts Panel. Is the whole grain content of a food something you wish was displayed on the product packaging?

Over **one-third** 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



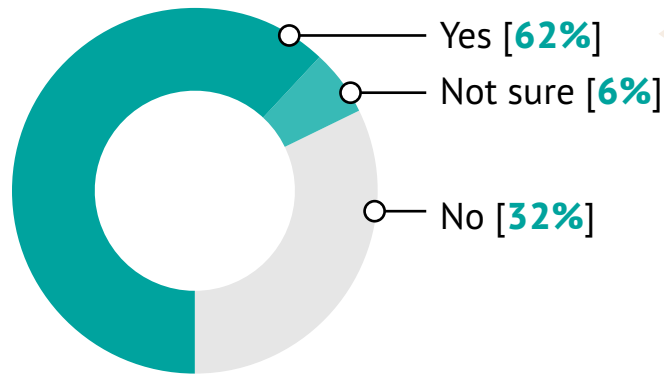
While older consumers don't recognize the Stamp as often, other demographic groups are much more likely to have seen it:



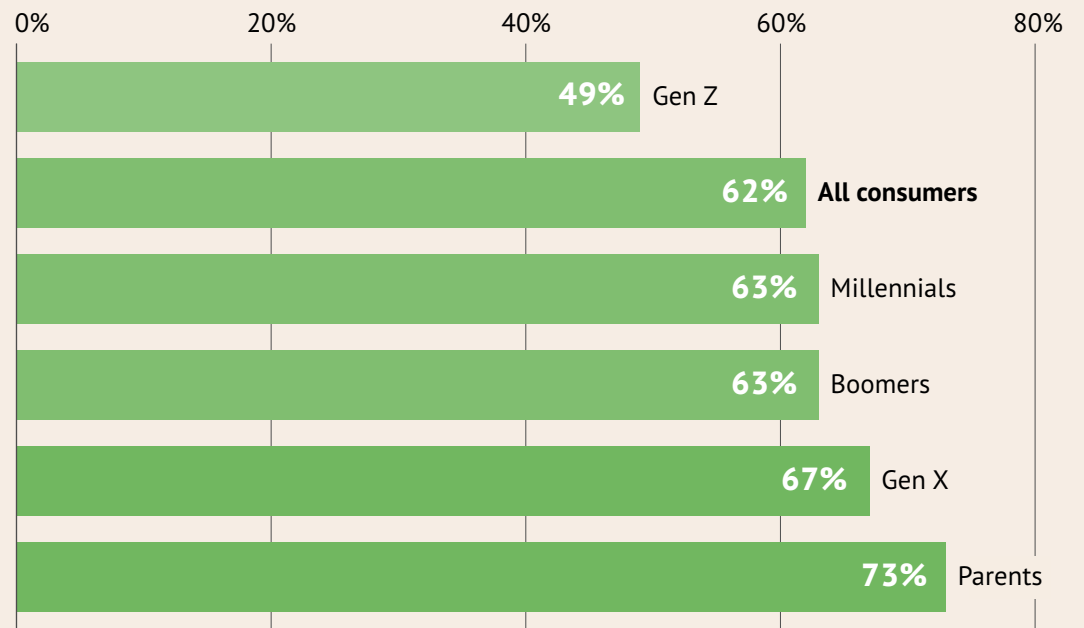
Q24. Have you seen the Whole Grain Stamp on packages?

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.

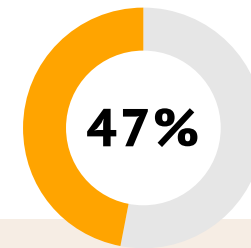
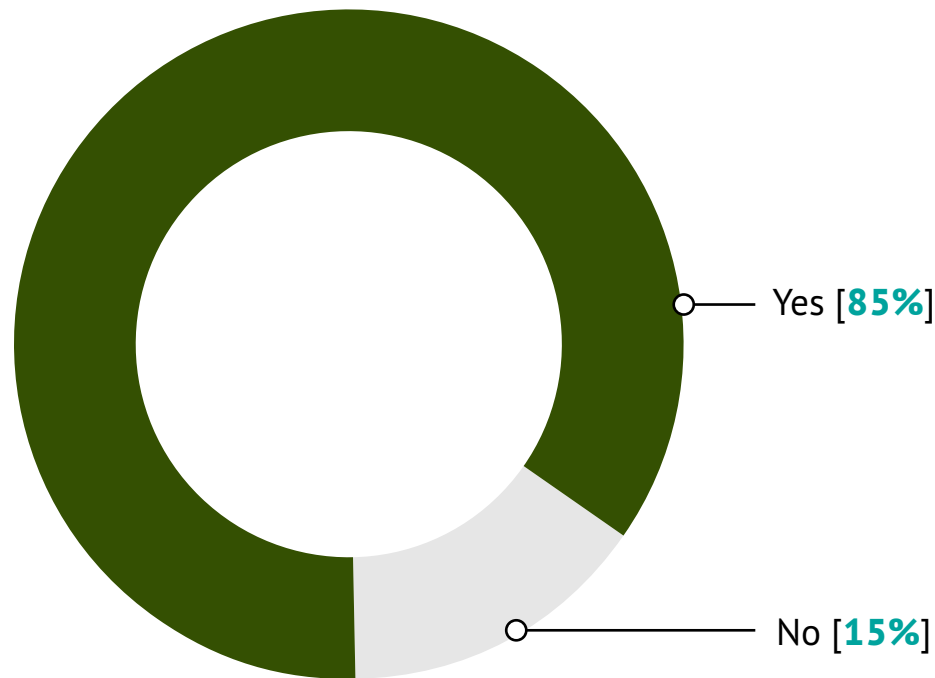


Q24a. Do you look for the Whole Grain Stamp when choosing products to buy? [Note: Only shown if Q24=YES]

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

Gen Z has the most trust in the Stamp [92%]. The Whole Grain Stamp is an easy, *trusted* way for companies to provide the whole grain content information we know consumers are looking for (see Q23).

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.

Q25. The Whole Grain Stamp is provided by an independent, third-party organization, certifying how much whole grain is in a product. Do you trust the Whole Grain Stamp to accurately state a product's whole grain content? / Q22a. [...] What do you think would be the best way to encourage people to eat more whole grains? (Select all that apply)

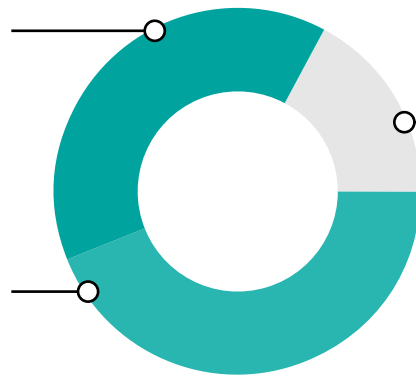
Four out of five consumers would use the Whole Grain Stamp as part of their purchasing decisions.

Just over half of those consumers would also look at other factors like sugar and sodium content.

Consumer likeliness to purchase a product with the Whole Grain Stamp

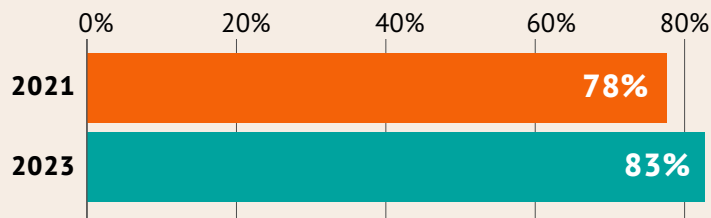
Yes, seeing the Whole Grain Stamp would make me more likely to buy a product [39%]

Yes, but I would also consider other factors (sugar, sodium, etc.) [44%]

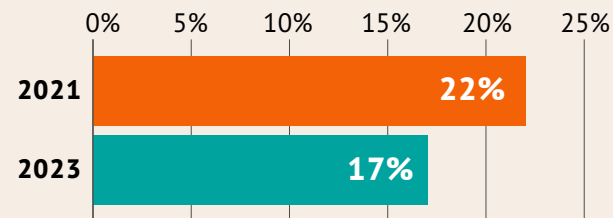


No, seeing the Whole Grain Stamp would not sway my purchasing decision [17%]

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.

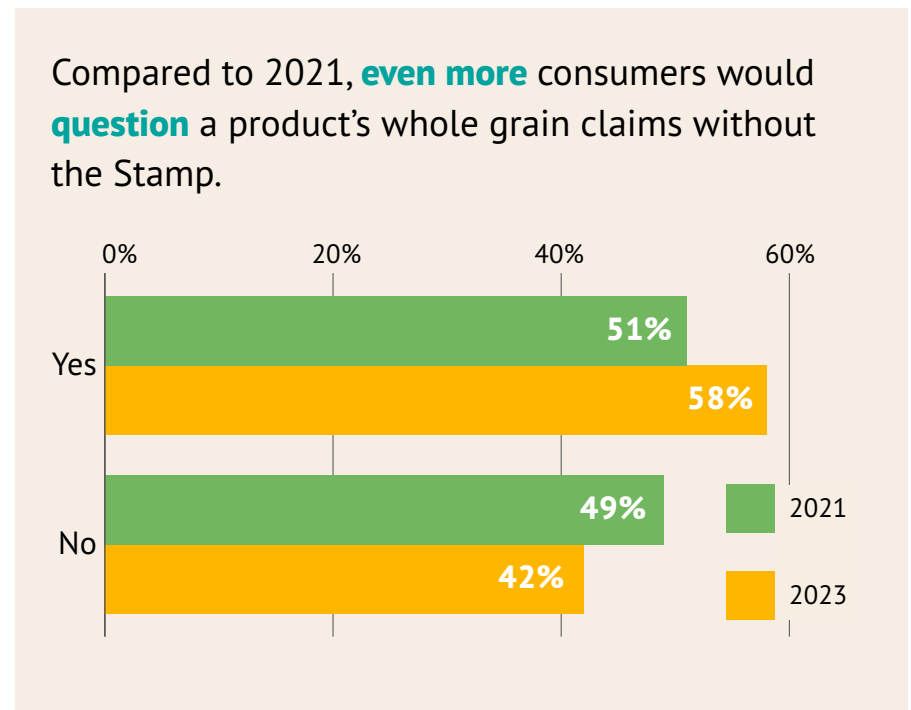
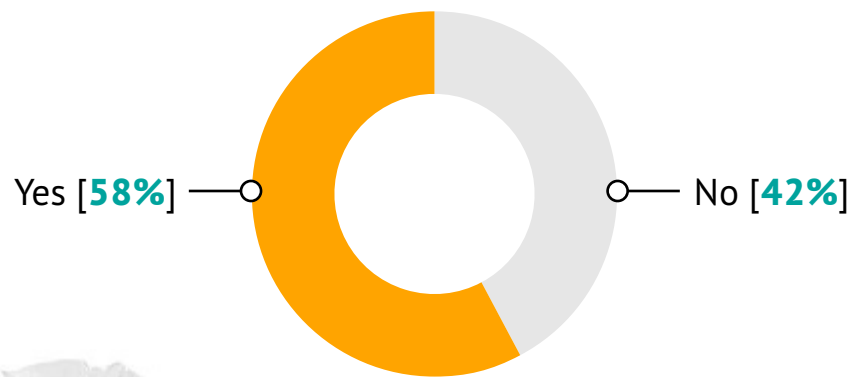


Q26. When comparing similar foods, does seeing the Whole Grain Stamp make you more likely to buy a product?

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

Young shoppers (Gen Z and Millennials) [65%] and parents with kids at home [67%] would be even more skeptical.

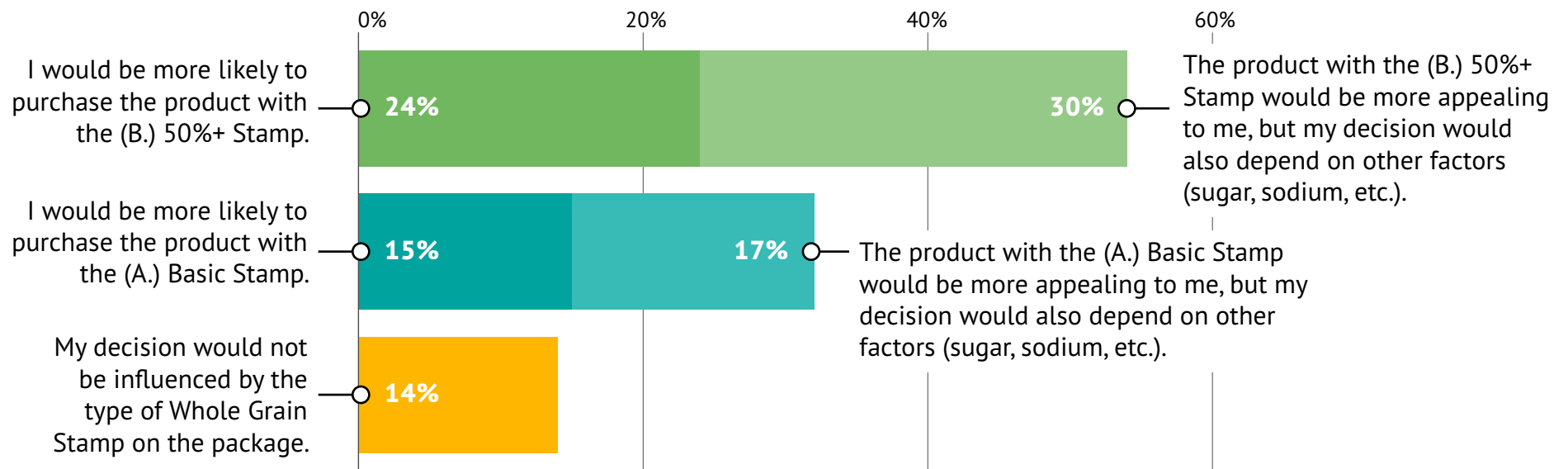
Percentage of consumers who would question whole grain claims on products without the Stamp



Q27. This is the same product, but without the Whole Grain Stamp. If you do not see the Whole Grain Stamp on a package, do you question the product's claims about whole grains?

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



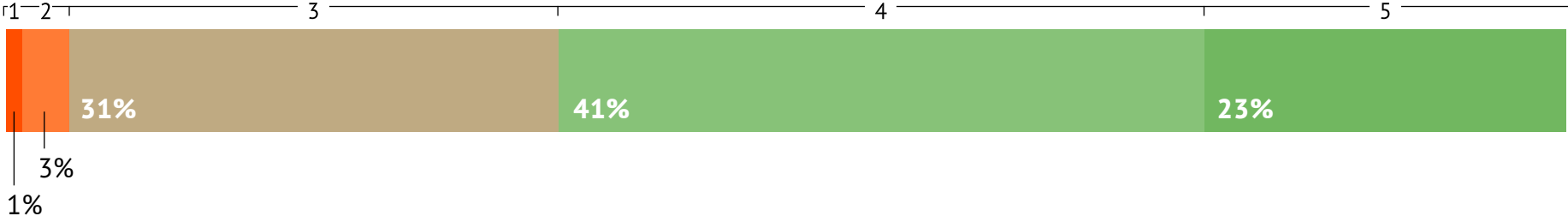
This year, significantly fewer people said their decision would not be influenced by the type of Stamp on the package. [2021: 19%, 2023: 14%]



Q29. If you saw the following two products on a store shelf, which would you be more likely to purchase? (Select one)

About **two-thirds** of consumers say packaging symbols like the Whole Grain Stamp give them **more confidence** in the product they are buying.

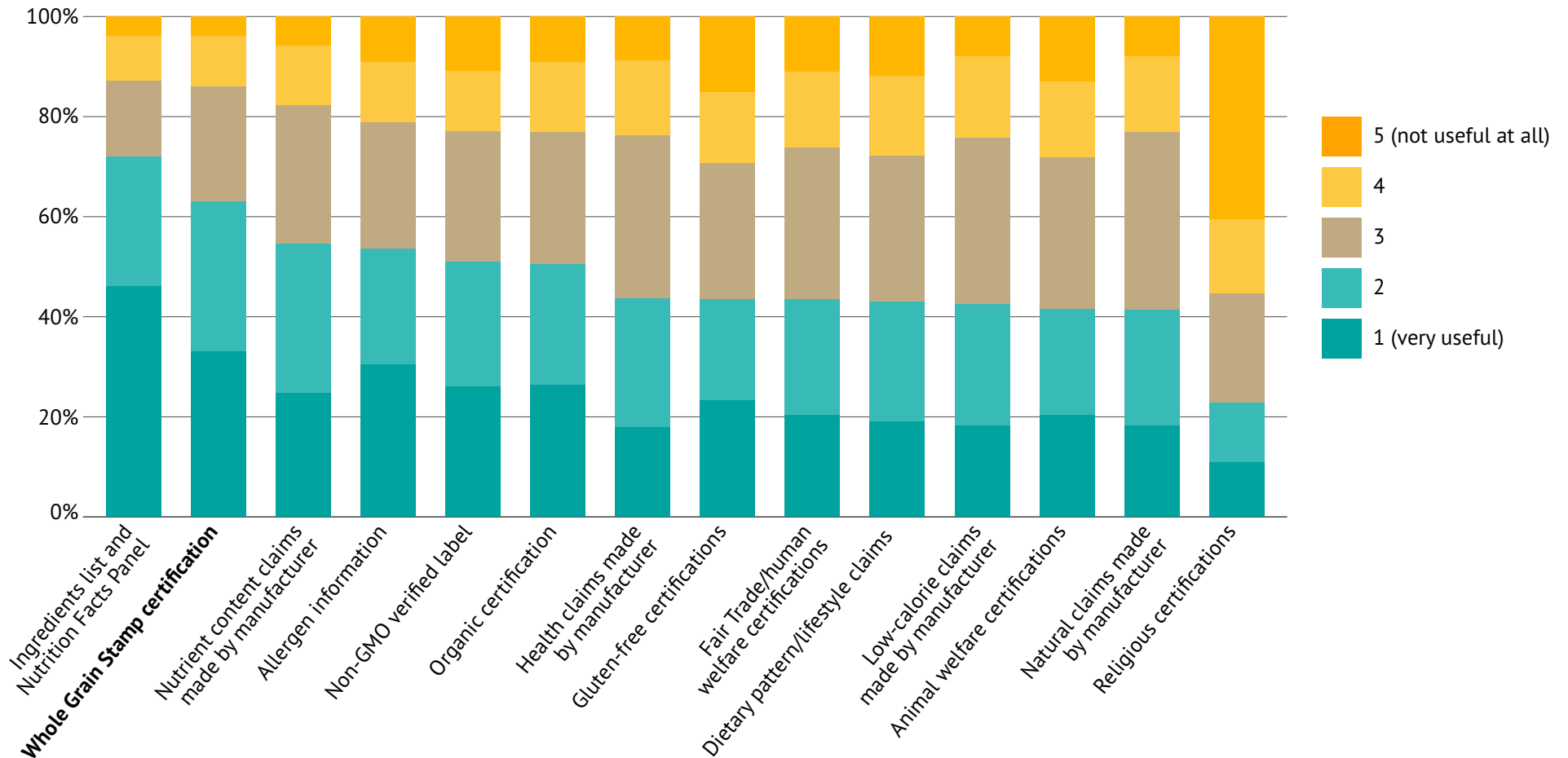
**Consumer confidence in products with independent, third-party food packaging symbols
Ranked on a scale of 1 (Much less confidence) to 5 (Much more confidence)**



Q30. When you see packaging symbols (like the Whole Grain Stamp) that are provided by independent, third-party organizations on food packages, does it give you more or less confidence in the product you're buying? Please pick a point on the scale where 1 means Much less confidence, and a 5 means Much more confidence.

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

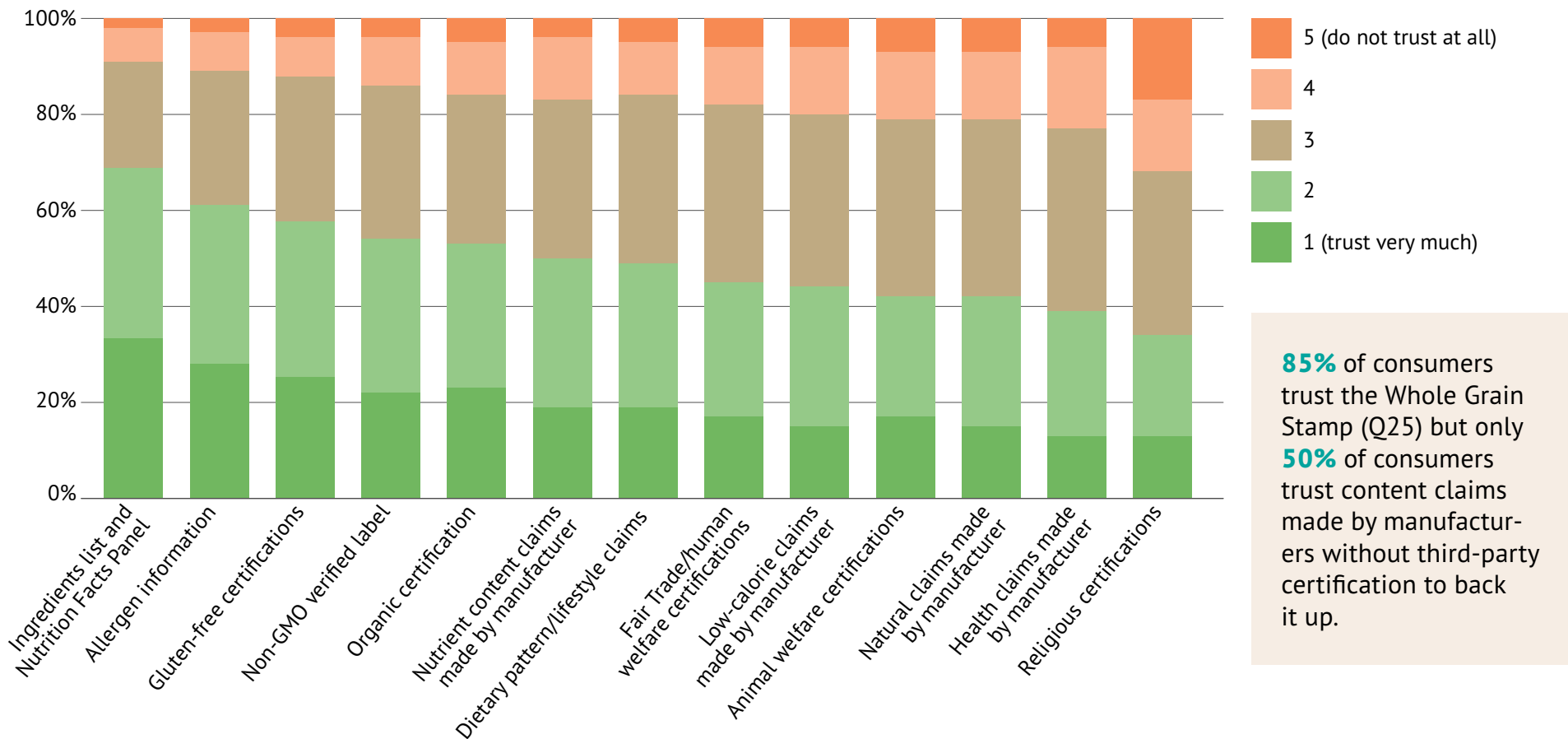
Usefulness of a product’s packaging information in consumer decision-making
Ranked on a scale of 1 (Very useful) to 5 (Not useful at all)



Q30a. How useful are the following types of packaging information in helping you to make purchasing decisions? (Select one per row)

Most consumers **trust** the ingredients list and Nutrition Facts Panel, allergen information, gluten-free certifications, the non-GMO verified label, and organic certifications.

Trustworthiness of a product's packaging information
Ranked on a scale of 1 (Trust very much) to 5 (Do not trust at all)



Q30b. How much do you trust the following types of packaging information? (Select one per row)

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%

Children's Ages (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%

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Oldways Preservation Trust



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For questions or more
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