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# CONSUMER FOOD INSIGHTS

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# INTRODUCTION

Consumer Food Insights (CFI) is a monthly survey of more than 1,200 Americans from across the country. Since January 2022, the Center for Food Demand Analysis and Sustainability (CFDAS) at Purdue University has used this survey to track trends and changes in consumer food demand and food sustainability behaviors.<sup>1</sup> Visit [purdue.ag/CFDAS](http://purdue.ag/CFDAS) or contact [cfdas@purdue.edu](mailto:cfdas@purdue.edu) for more details.

In this issue, we explore the differences between generational cohorts: (1) Gen Z (born after 1996), (2) Millennials (born 1981-1996), (3) Gen X (born 1965-1980) and (4) Boomer+ (born before 1965).<sup>2</sup> We aggregate the last 12 months of data to compare with results with the same time span the year prior (June 2022 - May 2023) for parts of this analysis. New questions this month ask about the consumer response to and experience with rising food prices over the past year.

## KEY INSIGHTS FROM MAY

- Environmental impact is weighted lowest of the six food values, but it scores twice as high among Gen Z compared to Boomer+.
- 56% of Americans report food prices as having risen the most compared to other standard household expenses in the past year.
- The most common food shopping adaptations to food inflation are seeking out sales/discounts, switching to cheaper/generic brands and buying fewer non-essentials.
- Boomer+ consumers are least likely to have changed food shopping behaviors in response to higher prices.
- 37% of Gen Z and Millennials report drawing from savings or going into debt to finance their food purchases.
- Food insecurity remains highest among Gen Z consumers (29%) relative to Millennials (15%), Gen X (13%) and Boomer+ (5%).
- CPI food inflation remained steady at a year-over-year rate of 2.2% for the third month in a row.

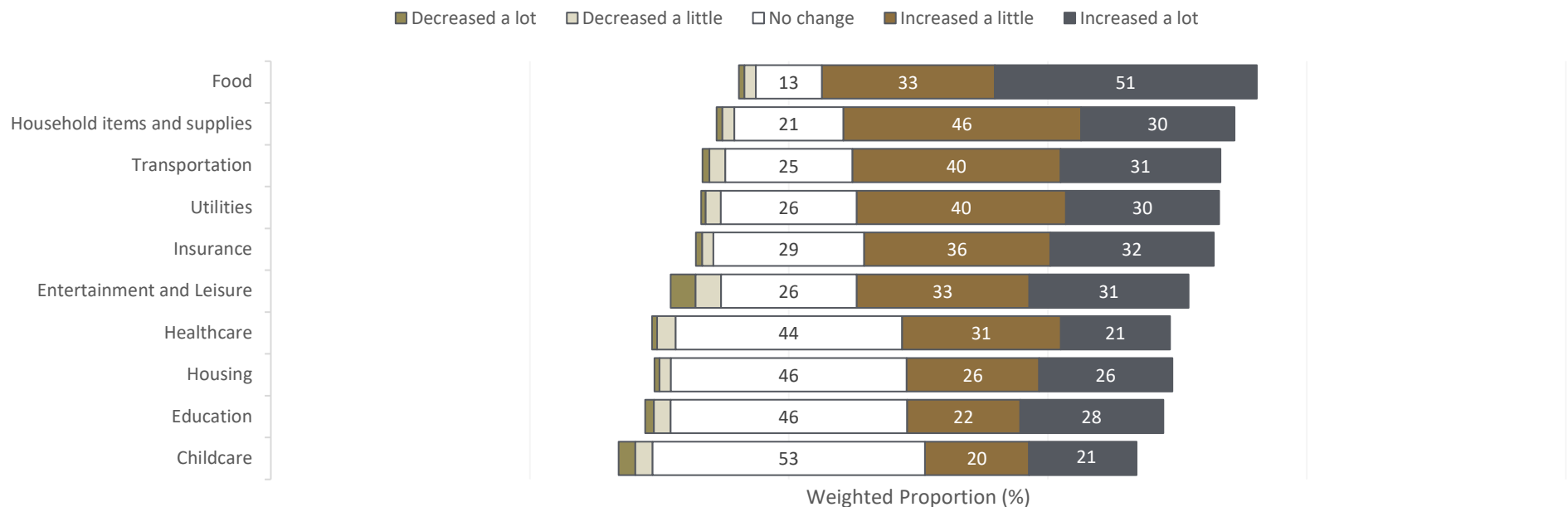


# FOOD PRICE EXPERIENCES

## How have prices of goods and services changed and how do they compare to perceptions of food prices?

Additional questions this month ask consumers to reflect on the cost of their typical household expenses over the last 12 months to see how perceived changes in food prices compare. **Figure 1** shows us that over 80% of consumers report food prices as having "increased a little" or "increased a lot" over the past 12 months. This sentiment and experience aligns with the media attention toward the cost of food in recent months. Conversely, around half of those who have childcare expenses say there has been no change to the cost.

**Figure 1.** How have prices for the following expenses changed in the past 12 months for you and your household?, May 2024



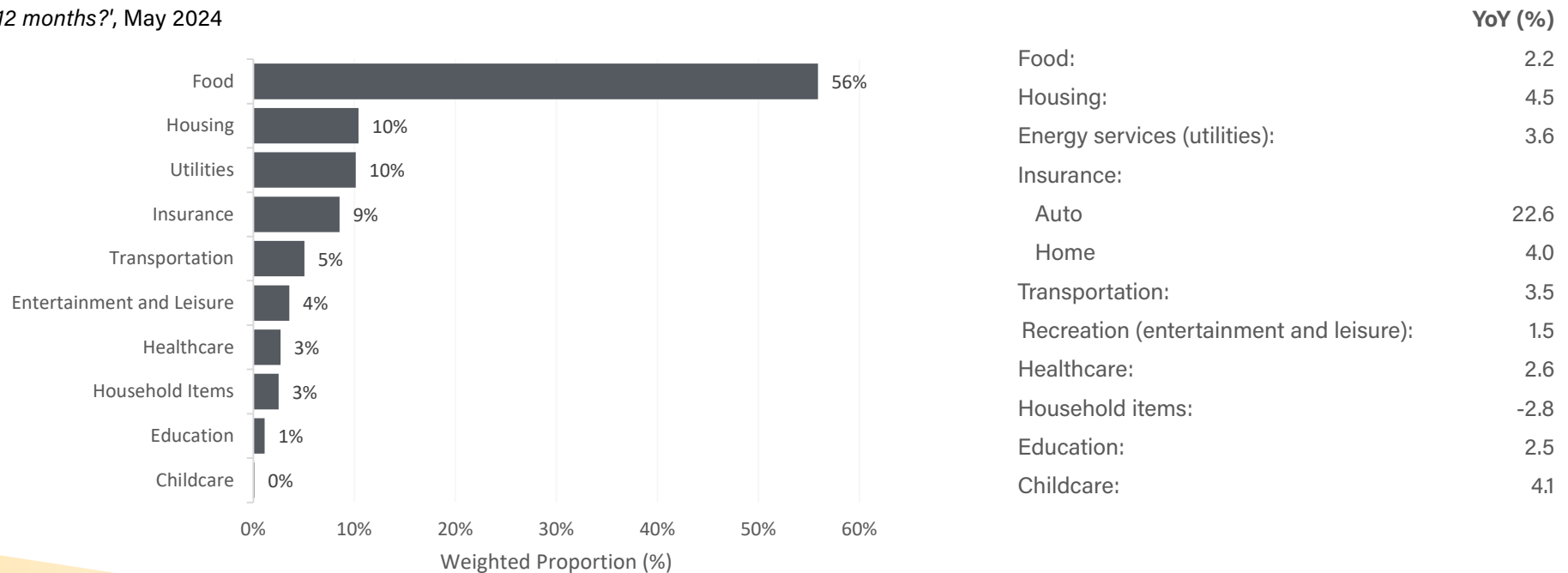
\*The above summary excludes "does not apply" responses to get the response distributions for households that the expense category applies to.

# FOOD PRICE EXPERIENCES

## How have prices of goods and services changed and how do they compare to perceptions of food prices?

When asked which expense category experienced the largest price increase over the past year, the majority of respondents (56%) selected 'food,' while the next most common responses, 'housing' and 'utilities,' were only selected by 10% of consumers (**Figure 2**). The values on the right summarize the CPI measures of year-over-year price changes from April 2023 to April 2024 for the same goods and services. Despite sharp increases in food prices in 2022 and 2023, food prices rose just 2.2% over the last 12 months. This is comparatively lower than the price changes for other goods and services, such as housing, auto insurance and childcare, which saw increases of 4.5%, 22.6% and 4.1%, respectively. However, persistent high levels of annual food inflation in 2022 and 2023, which peaked at 11.4% in August 2022, are likely influencing consumer sentiment toward and experiences with recent food prices.

**Figure 2.** 'For which of the following expenses have prices increased the most in the past 12 months?', May 2024



Source: [CPI Supplemental Files](#), U.S. Bureau of Labor Statistics (2024)

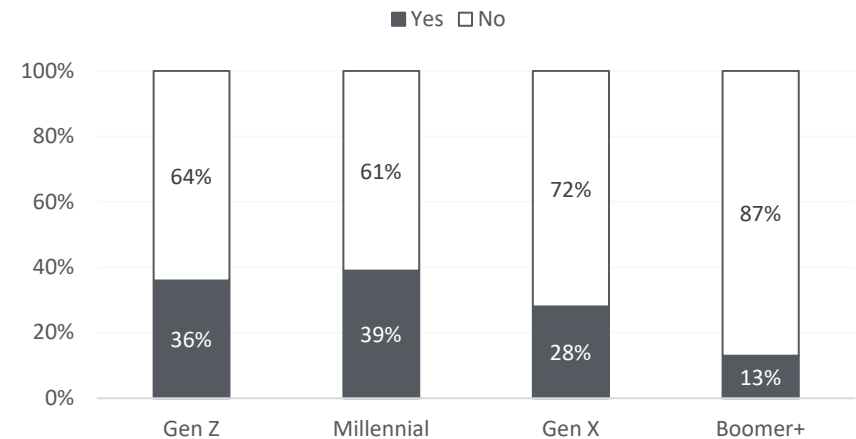
# FOOD PRICE EXPERIENCES

## How are higher food prices changing American spending behaviors?

**Figure 3** reveals the share of consumers in each generation group who relied on savings or borrowed money to purchase food over the past year. We observe a decline in the proportion of consumers who needed to boost their purchasing using these sources as age increases. Around 13% of consumers in the Boomer+ age group supplemented their spending compared to almost 40% of Millennials. However, these differences are likely attributed to life stage differences rather than true generational differences. For example, this distribution is strongly correlated with whether or not children are present in the household. More young adults share homes with child dependents (54% of Millennials) compared to older adults (5% of Boomer+), which can place more financial pressure on a household given the cost of raising children.

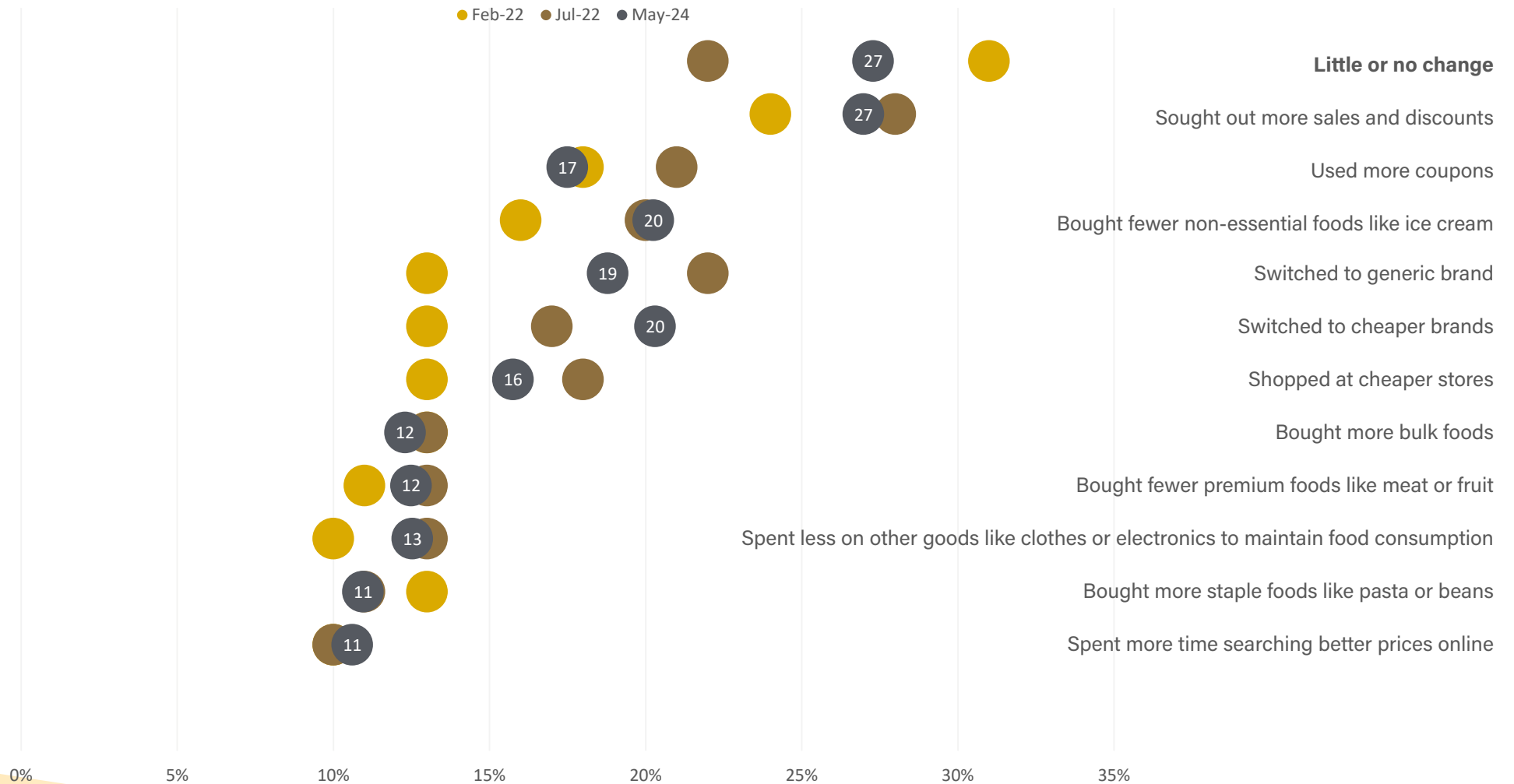
In **Figure 4** we revisit a question asked in the February 2022 and July 2022 CFI survey to see how consumers have changed their grocery shopping habits in response to food price inflation. Interestingly, we do not see any substantial differences in May 2024. Around 27% of Americans made little or no change to their shopping. However, 27% report seeking out sales and discounts, comparable to the 28% observed back in July 2022. The number of consumers switching to cheaper brands is also higher than it was in 2022. **Figure 5** further breaks down these changes by generational cohorts for May 2024. We see a substantial difference in the share of Boomer+ consumers making little to no changes to their grocery shopping compared to the other groups. Notably, we observe more Millennial consumers increasing their bulk and staple food purchases in response to rising food prices. Observe that the results here are for changes to previous shopping habits, so differences between groups do not necessarily mean a group participates in the behavior more. Rather, it reflects how the shopping habits for the group have changed from a year ago.

**Figure 3.** 'Have you or has anyone in your household had to draw from savings or borrow money to purchase food in the past 12 months?', May 2024



# FOOD PRICE EXPERIENCES

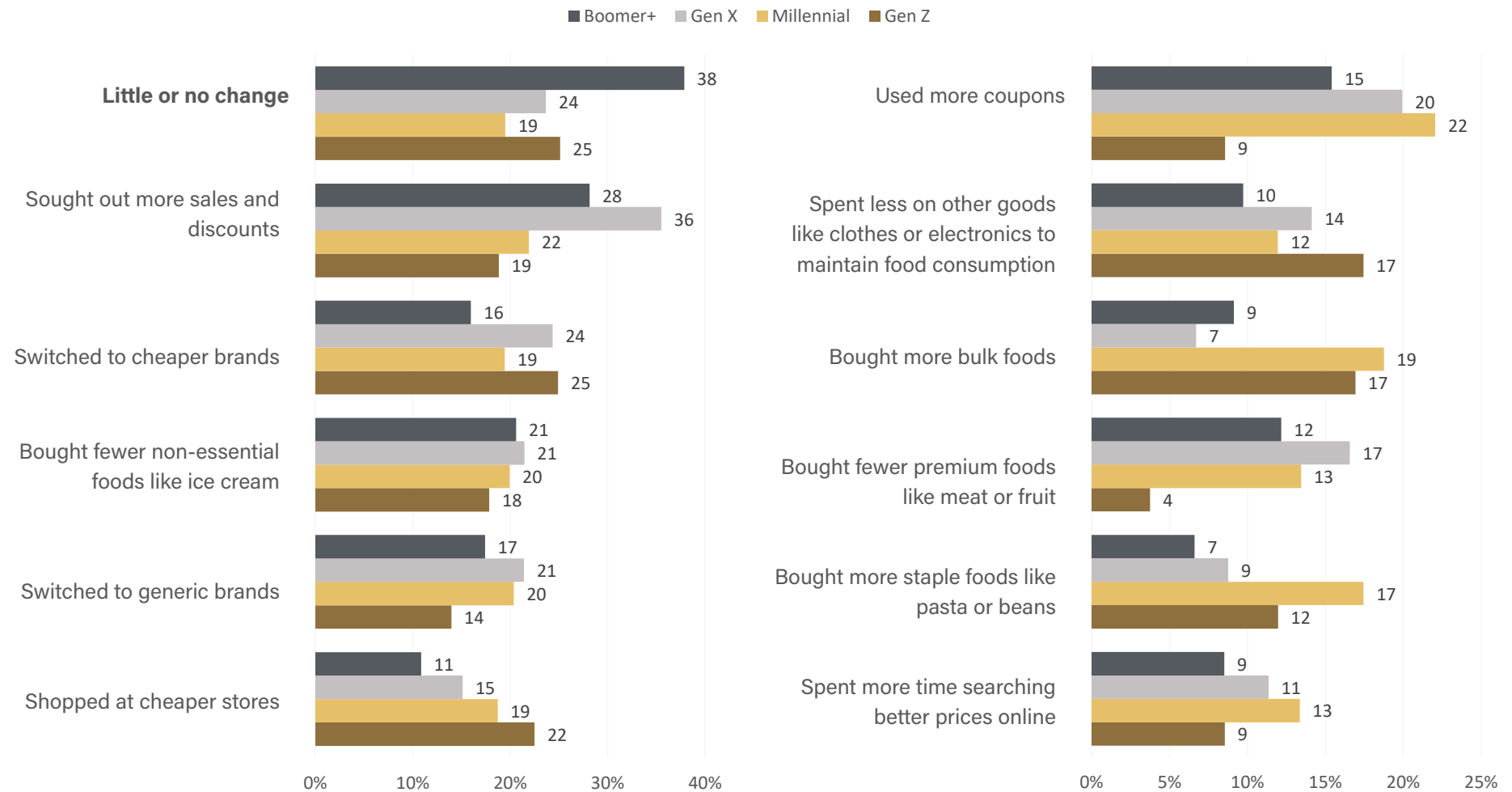
Figure 4. Changes to Grocery Shopping in Response to Food Price Inflation, Feb. 2022, Jul. 2022 & May 2024



\*Percentages add over 100% because respondents were allowed to choose up to three options.

# FOOD PRICE EXPERIENCES

Figure 5. Changes to Grocery Shopping in Response to Food Price Inflation by Generational Cohort, May 2024





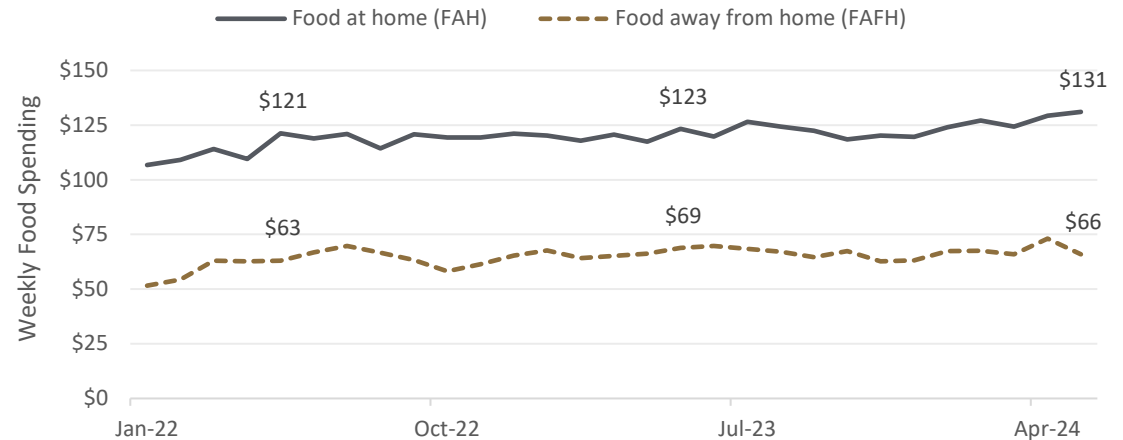
# FOOD EXPENDITURES

## How much are American households spending on their food?

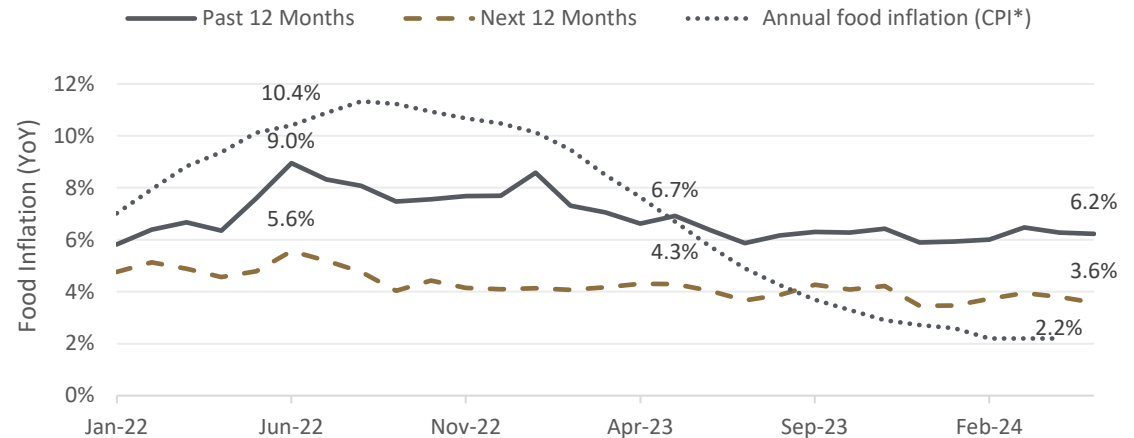
Each month, consumers report their household's weekly spending on food from the last 30 days (**Figure 6**). On average, consumers reported spending about \$131/week on groceries (FAH) and \$66/week on restaurants and other carryout (FAFH)<sup>4</sup>. Total weekly food spending is up 7% from May 2022 and up 2.6% from May of last year.

The consumer estimate of annual food inflation decreased slightly from April to May and now sits at 6.2%, meaning consumers estimate food prices have risen 6.2% over the last 12 months (**Figure 7**). The expected level of food inflation over the next 12 months also decreased slightly to 3.6%. The government CPI measure of food inflation remained unchanged at 2.2% for the third month in a row. Food prices are now increasing at a more stable rate than has been observed over the past two years. If the CPI remains stable, it will be interesting to see if consumers' perceptions of inflation approach the CPI estimate in the coming months.

**Figure 6.** Weekly Household Food Expenditures, Jan. 2022 - May 2024



**Figure 7.** Consumer Estimates of Food Inflation Compared to Gov. Estimate, Jan. 2022 - May 2024



\*The Consumer Price Index (CPI) is a measure of inflation computed by the U.S. Bureau of Labor Statistics.

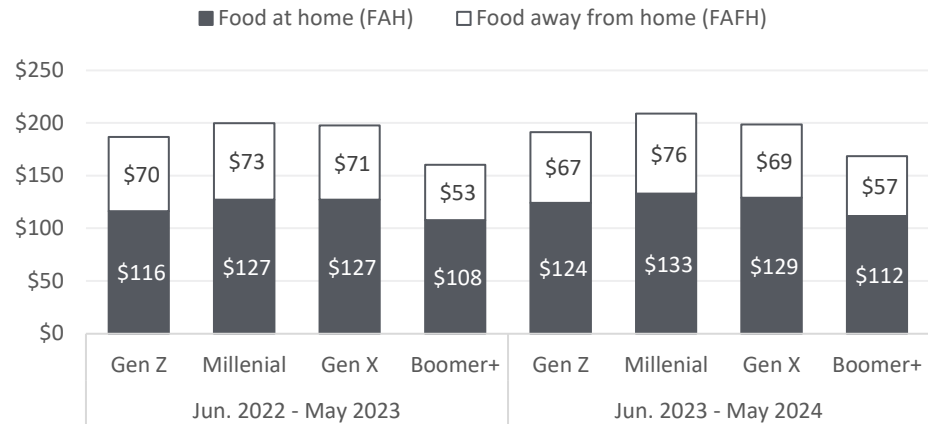
# FOOD EXPENDITURES

## How much are American households spending on their food?

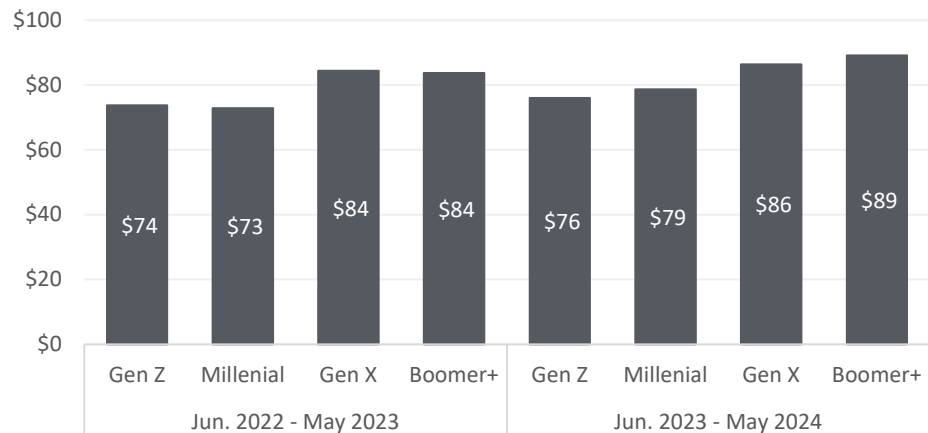
**Figure 8** illustrates differences in average weekly food spending between generational groups. Those in the Millennial group report the highest average weekly food spending while Boomer+ consumers report the lowest average weekly food spending.

Further exploring the data, we see that life stage and household size are likely driving the differences we observe. In particular, those in the young and middle-aged adult groups are more likely to share a household with others (children, siblings, etc.), while older adults, specifically those in the Boomer+ group, tend to only share their household with one other individual or live on their own. When factoring in household size, the average food spending per individual is higher among households with older consumers in the later stages of life relative to households with younger adults (**Figure 9**).

**Figure 8.** Weekly Household Food Expenditures by Generational Cohort, Jun. 2022 - May 2024



**Figure 9.** Weekly Household Food Expenditure Per Person by Generational Cohort, Jun. 2022 - May 2024



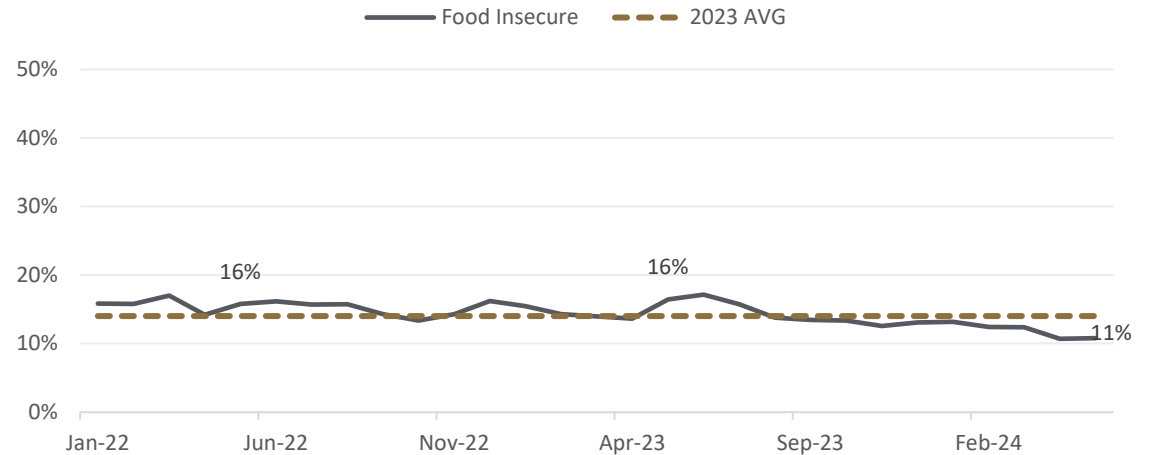
# FOOD SECURITY

## Which Americans are having trouble buying food for their families?

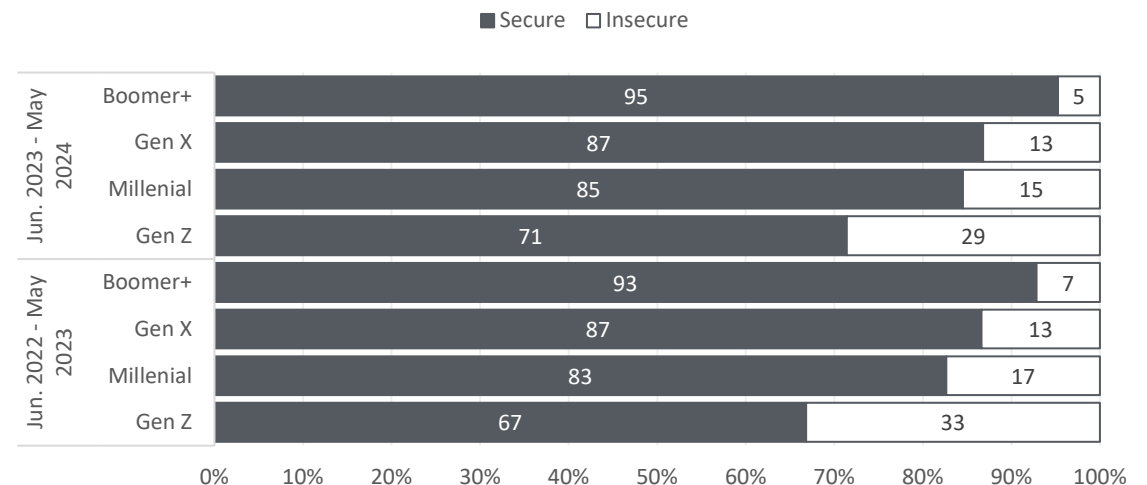
Based on a set of six standard questions about food purchased and eaten in the past 30 days, we estimate national food insecurity to be about 11%, unchanged from April 2024 (**Figure 10**).<sup>5</sup> Food insecurity rates have remained below the 2023 average food insecurity rate since September of 2023.

**Figure 11** shows significant differences in the rates of food insecurity between different age groups. There is an obvious correlation between age and food insecurity, with around one-third of the youngest generation (Gen Z) reporting 'low' or 'very low' food security compared to only around 7% of the oldest generation (Boomer+) reporting the same. Income is a big determinant in a household's ability to purchase quality foods. Given that income tends to rise with age, it is not entirely surprising to see that food insecurity is higher among younger individuals.

**Figure 10.** Rate of Household Food Insecurity in the Last 30 Days, Jan. 2022 - May. 2024



**Figure 11.** Rate of Household Food Insecurity in the Last 30 Days by Generational Cohort, Jun. 2022 - May. 2024

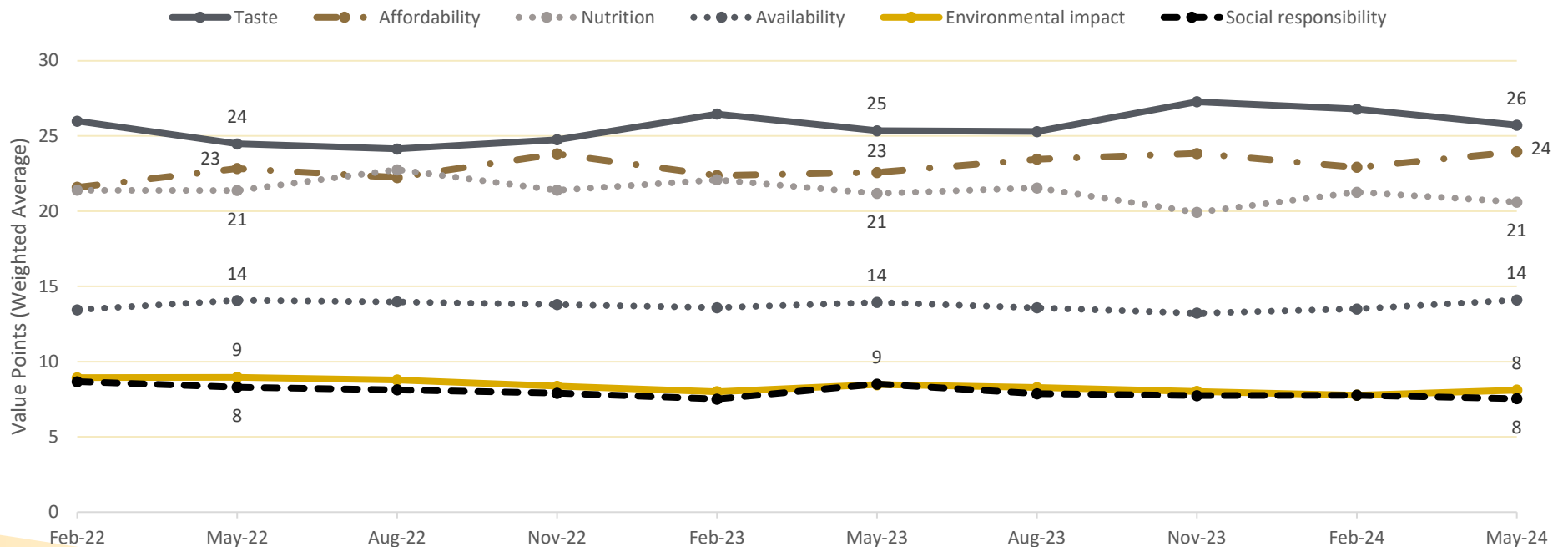


# FOOD VALUES

## What attributes do Americans most value when purchasing food?

Respondents were asked to allocate 100 points to six food attributes based on their importance when grocery shopping. **Figure 12** plots the results over the last 29 months of data collection. Taste, affordability and nutrition remain the top attributes consumers value when making decisions at the grocery store, while environmental impact and social responsibility remain the least valued attributes when deciding which foods to buy. The attributes consumers consider important when deciding which foods to buy at the grocery store have proven to be fairly inelastic, meaning the average consumer tends to weigh their food purchasing decisions in the same way, even though the grocery environment may be changing (e.g., price changes).

**Figure 12.** Share of 100 Points Allocated to Food Attributes, Jan. 2022 - May 2024

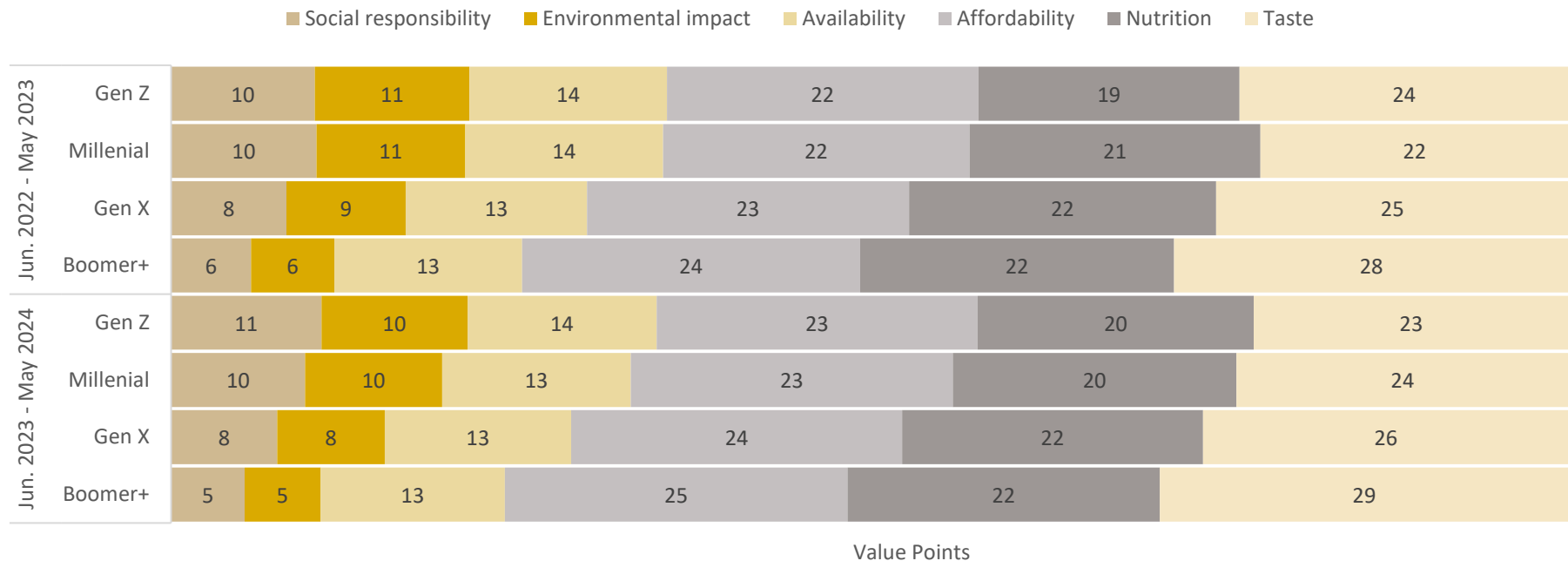


# FOOD VALUES

## What attributes do Americans most value when purchasing food?

**Figure 13** further disaggregates food values by generational cohorts. Specifically, we compare the past 12 months of data (Jun. 2023 - May 2024) with data from the same time period the year prior. Younger generations tend to value the environmental and social impact of their food more than older generations who tend care more about taste. We do not observe any substantial differences over time, though we see a slight increase in the average points allocated to 'affordability' for all groups and a slight decrease in the average points allocated toward 'environmental impact' for all groups.

**Figure 13.** Share of 100 Points Allocated to Food Attributes, Jan. 2022 - May 2024



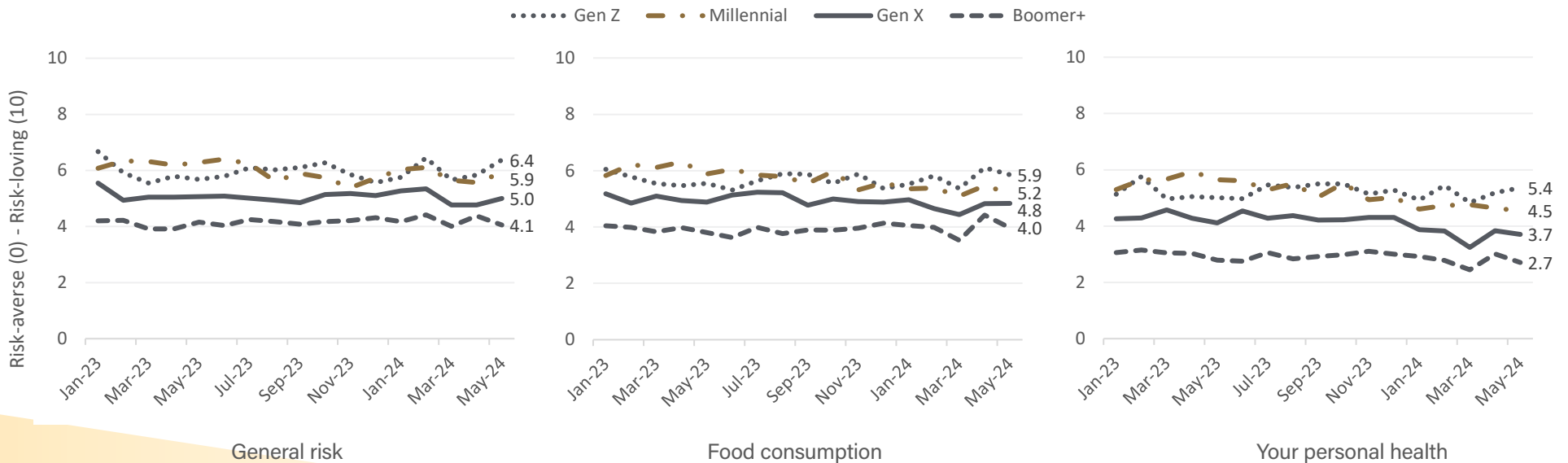
# CONSUMER BEHAVIORS

## How are Americans navigating their food environment?

Consumers describe their willingness to take risks on a 0 (risk-averse) to 10 (fully prepared to take risks) scale (**Figure 14**). Concerning general risk, Gen Z consumers (6.4) are more willing to take risks than Boomer+ consumers (4.1). Gen X and Boomer+ consumers consistently report lower average risk-taking attitudes compared to younger Millennials and Gen Z consumers.

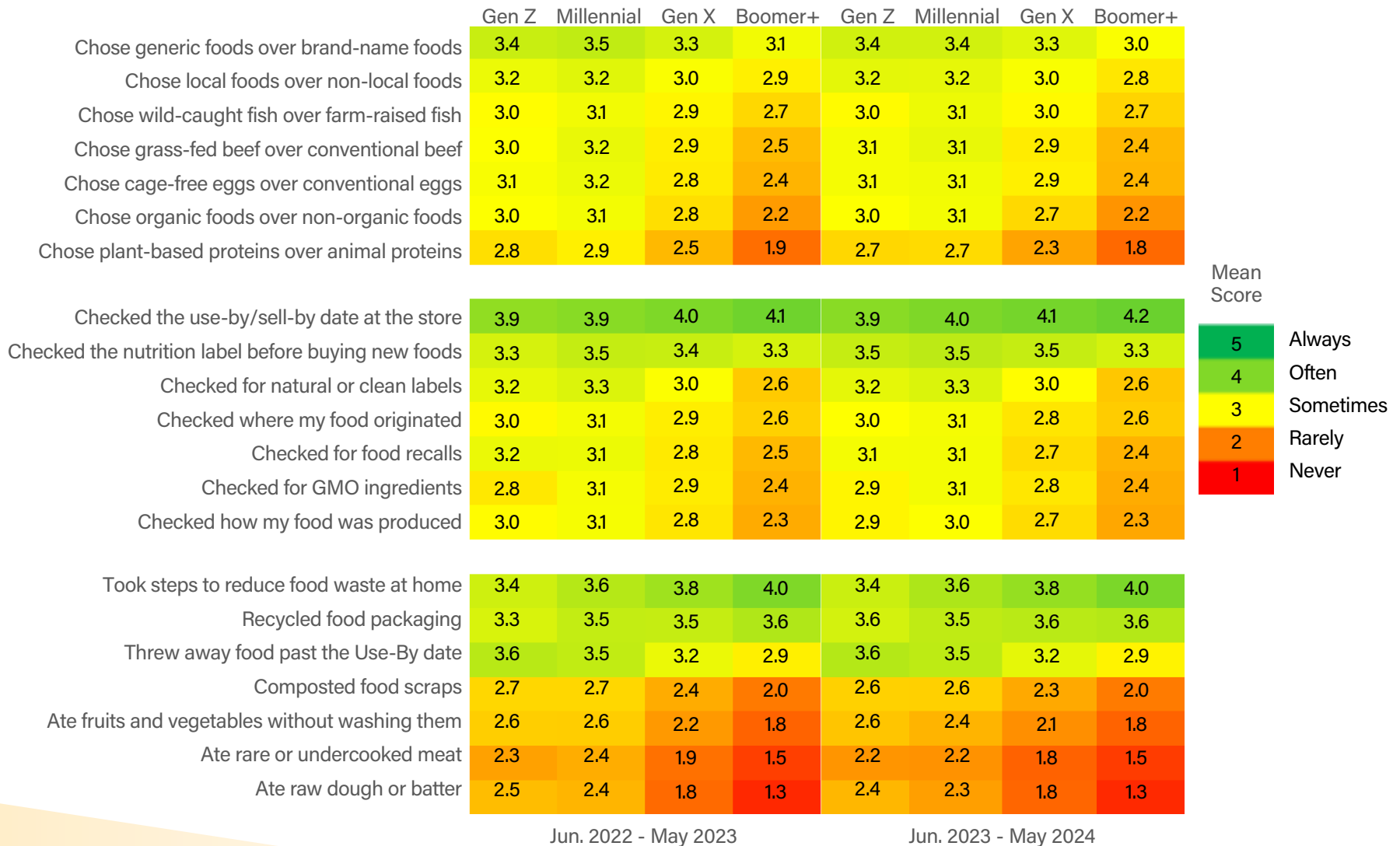
Interestingly, age appears to be negatively correlated with the frequency that consumers choose non-conventional food items (**Figure 15**). Younger generations (Millennials and Gen Z) report choosing wild-caught fish, grass-fed beef, plant-based proteins, cage-free eggs and organic foods more frequently than older generations. Given that many of these non-conventional foods are marketed as environmentally or socially responsible, it is not too surprising to see younger generations, who report valuing these traits more, choosing these foods more often. On average, consumers rarely take part in risky food consumption, such as eating raw dough, unwashed produce or rare meat. However, in line with reported risk attitudes, older adults partake in these risky food behaviors much less frequently.

**Figure 14.** Self-Reported Attitudes Toward Risk by Generational Cohort, Jan. 2023 - May 2024



# CONSUMER BEHAVIORS

Figure 15. Frequency of Consumer Shopping and Eating Habits, Jan. 2022 - May. 2024



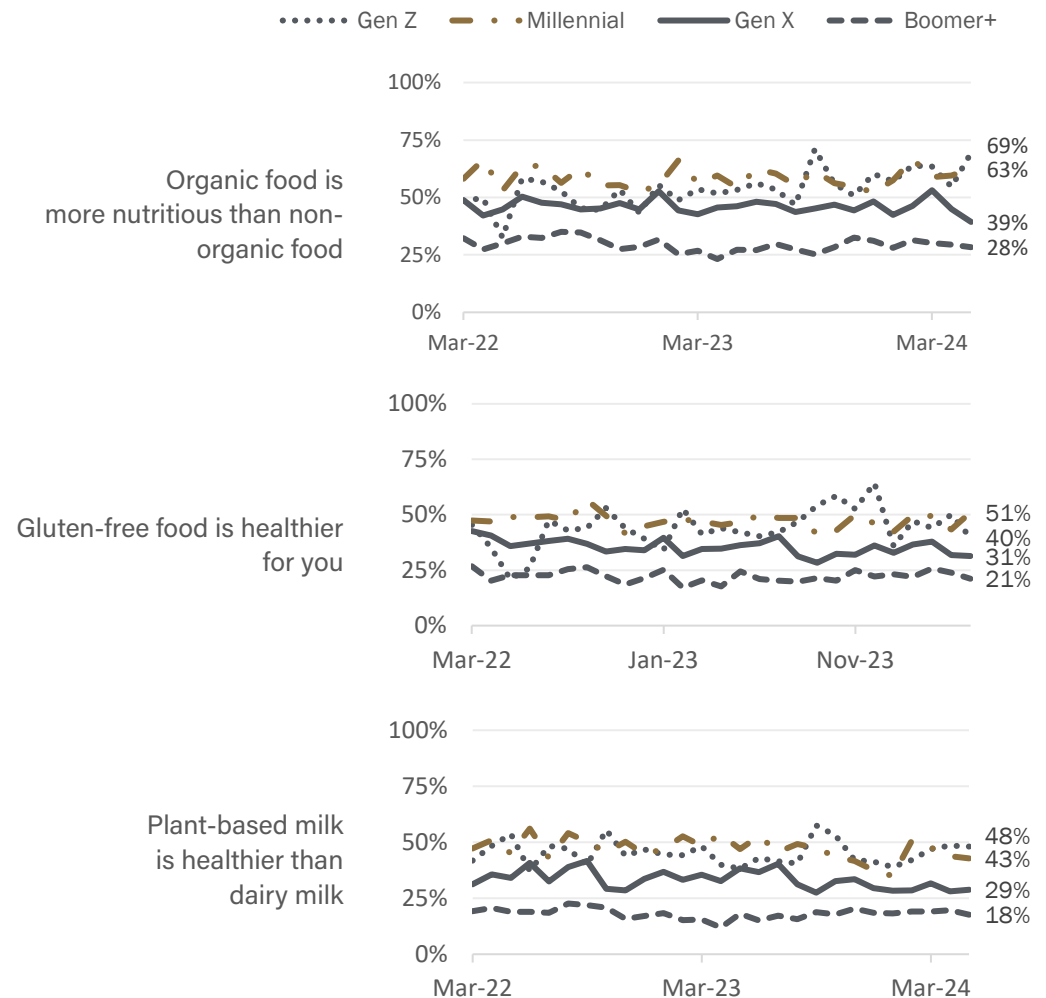
# CONSUMER BELIEFS

## What do Americans believe about their food and food system?

We observe differences in the beliefs that consumers from different age groups have about their food (**Figure 16**). Some of the largest differences relate to health claims. Over 40% of Gen Z consumers believe (1) organic food is more nutritious than non-organic food, (2) gluten-free food is healthier and (3) plant-based milk is healthier than dairy milk, while a substantially smaller percentage of Boomer+ consumers (less than 30%) agree with the same claims. These differing beliefs about non-conventional foods are also reflected in the frequency at which people choose them (see previous page).

The groups who are more likely to 'somewhat agree' or 'strongly agree' with health claims regarding organic and plant-based foods also report a higher average frequency of choosing these foods in the last 30 days (see Consumer Behaviors section).

**Figure 16.** Share of Consumers who 'Somewhat Agree' or 'Strongly Agree' with Claims about Food and Nutrition by Generational Cohort, Mar. 2022 - May 2024





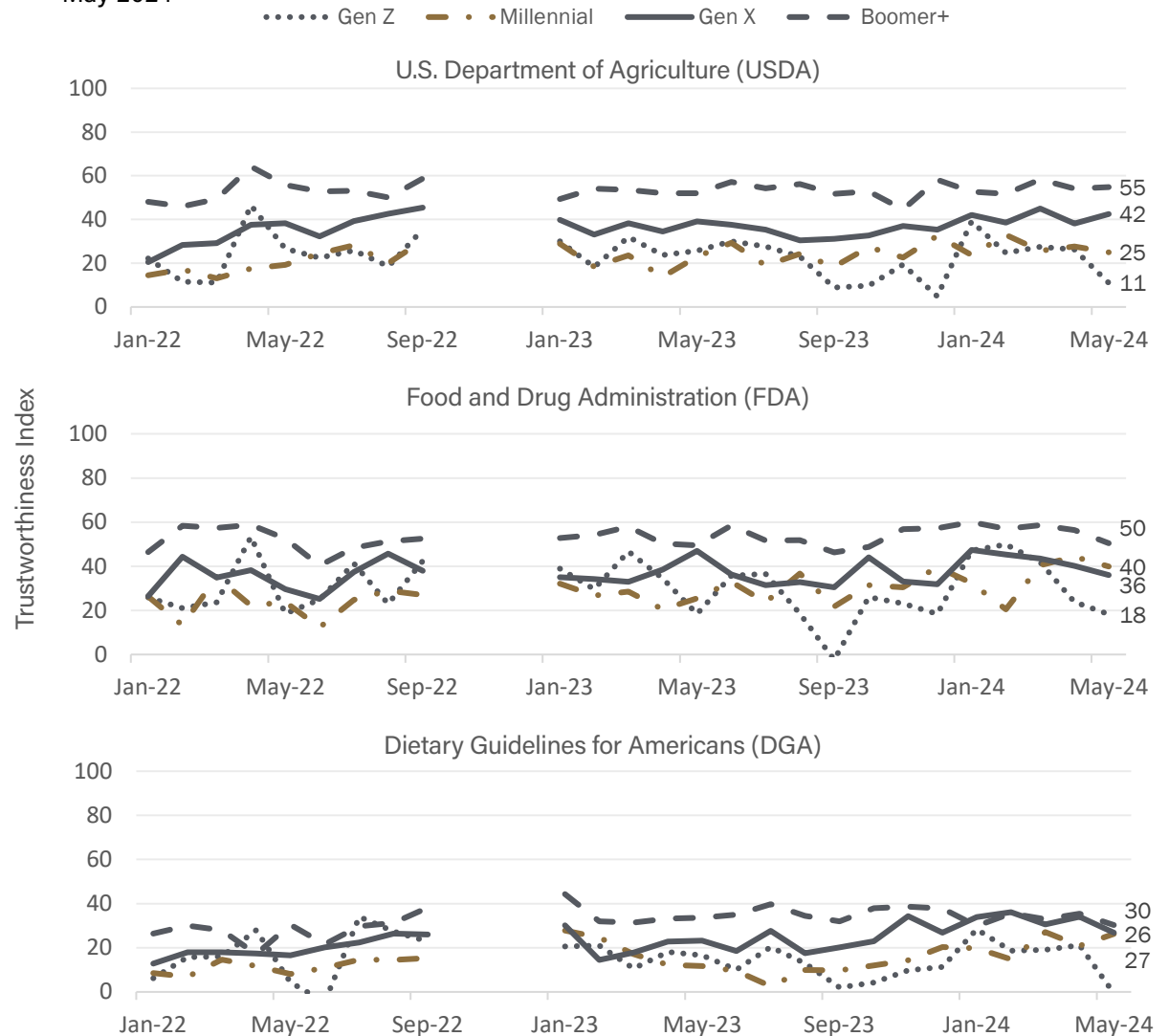
# CONSUMER TRUST

## Who do Americans trust on topics of food?

Respondents select their most trusted and least trusted sources of information about healthy and sustainable food, which are scored on a Trust Index from -100 (least trusted) to 100 (most trusted). **Figure 17** summarizes the five most and least trusted sources when aggregating all months of trust data was collected.<sup>6</sup>

Focusing on the USDA, FDA and DGA, three government organizations or initiatives tasked with supporting America's food system, we see that all three are trusted to some degree by most consumers. We see that each government entity or initiative is trusted the most by older generations of consumers, while younger Gen Z consumers as a whole are slightly less trusting and have a more neutral view of the USDA, FDA and DGA. As we approach the presidential election this Fall, we will monitor this trust index for the entire sample to see how the time series for these government entities changes, if at all, during a busy time in the political world.

**Figure 17.** Trust Index of Food-Related Information Sources by Generational Cohort, Jan. 2022 - May 2024



# ENDNOTES

**1** Data were collected from an online panel maintained by the company Dynata over a four-day period from May 20-23, 2024. The eligible population included U.S. adults ages 18+. A weighting method called iterative proportional fitting (or raking) was applied to ensure a demographically balanced sample by age, sex, race, census region, income, and SNAP participation. Population proportions have been updated to reflect the most recent complete year of ACS Census data (2022). Every respondent from the previous month was re-contacted and asked to take the survey again. Data collection for every survey begins on the third Monday of each month, unless otherwise dictated by holidays or extenuating circumstances. This report is released on the second Wednesday of the following month.

**2** Sample size Jan. 2022 - May 2024: Gen Z (n=3,158); Millennials (n=9,156); Gen X (n=9,578); Boomer+ (n=14,292)  
Sample size Jun. 2022 - May 2023: Gen Z (n=1,411); Millennials (n=3,394); Gen X (n=3,523); Boomer+ (n=6,587)  
Sample size Jun. 2023 - May 2024: Gen Z (n=1,347); Millennials (n=4,101); Gen X (n=4,490); Boomer+ (n=5,093)

**3** Numbers in the upper right-hand corner of each box track the unit change in the statistic from the previous month or quarter, dependent on data collection frequency. Currently, data for the 'Food Satisfaction', 'Food Values', and 'Sustainable Diets' sections are collected quarterly. For example, a "+2" in the food insecurity box would indicate an increase in the food insecurity rate of 2 percentage-points (e.g., 12% last month to 14% this month).

**4** Food at home (FAH) refers to food sales meant for home or off-site consumption and the value of donations and non-market acquisitions, which is acquired from outlets such as grocery stores, convenience stores, direct sales, etc. Food away from home (FAFH) refers to food sales meant for immediate consumption, federal food programs, and food furnished as an ancillary activity, which is acquired from outlets such as restaurants, bars, schools, etc.

**5** High or marginal food security (i.e., food secure): 0-1 reported indications of food-access problems; little indication of change in diet or food intake. Respondents who reported an U.S. Census Region above 185% of the Federal poverty line were also screened as having high food security. This determination was made according to research by [Ahn et al. \(2020\)](#), which shows that using a modified income-based screening procedure for internet surveys better approximates government estimates of food insecurity. Low food

# ENDNOTES

security (i.e., food insecure): 2-4 reported indications of reduced quality, variety, or desirability of diet; little indication of reduced food intake. Very low food security (i.e., food insecure): 5-6 reported indications of disrupted eating patterns, changes in diet, and reduced food intake.

6 Trust questions were not fielded in the Consumer Food Insights survey from October 2022 - December 2022.