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CONSUMER FOOD INSIGHTS

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INTRODUCTION

Consumer Food Insights is a monthly survey of more than 1,200 Americans from across the country produced and run by the Center for Food Demand Analysis and Sustainability (CFDAS) at Purdue University to track trends and changes in consumer food demand and food sustainability behaviors.¹ Visit purdue.ag/CFDAS for more details.

In this issue, we look closer at how respondents of different age cohorts have answered our survey. We aggregated six months of data (January - June 2022) to compare consumer behaviors across four groups based on their birth year: Gen Z (after 1996), Millennials (1981-1996), Gen X (1965-1980), and Boomers+ (before 1965).² New questions this month also ask consumers about their satisfaction with areas of American life and their views on threats to global food security. Interested in additional in-depth analysis? Contact cfdas@purdue.edu to learn how you can join our industry consortium.

KEY INSIGHTS FROM JUNE

- Sustainable Food Purchasing (SFP) Index reached its highest score yet.
- Weekly food spending remains more than 15% higher than in January.
- Consumer food demand is more price sensitive than in previous months.
- Consumer expectations for food price inflation continue to rise gradually.
- Food insecurity is highest among the youngest Americans (Gen Z).
- The oldest Americans (Boomers+) are most likely to be happy with their diets.
- Most Americans who garden do so to reduce food costs or have better tasting food.
- Most consumers are worried about the impacts of the Russia-Ukraine war on food supplies.

SFP INDEX
70_{/100}

FOOD INSECURITY
16%

FOOD SPENDING
\$186_{/WEEK}

FOOD HAPPINESS
88%

SUSTAINABLE DIETS

Is American food purchasing sustainable?

The SFP Index has risen to its highest score since January but remains broadly consistent (**Figure 1**). We see further that consumers in the Boomers+ cohort score much higher on the Taste, Economic, and Security indicators compared to other groups (**Figure 2**). However, their Social and Environment scores are just as low if not lower than the younger cohorts. The youngest consumers (Gen Z) have the worst overall score, but the second youngest group (Millennials), perform the best on the Environment, Social, and Nutrition indicators.

The **Sustainable Food Purchasing (SFP) Index** is a self-reported measure of food purchasing designed to assess how well consumer shopping habits align with healthy diets from sustainable food systems, as described by the [EAT-Lancet Commission on Food, Planet, Health](#). A top score of 100 reflects consumer food purchasing that aligns with a set of key recommendations for better nurturing human health and supporting environmental sustainability. The overall SFP Index comprises of six components—Nutrition, Environment, Social, Economic, Security, and Taste—correlating with the different strategies for achieving food systems transformation. More information on these components and the SFP scoring procedure is described on the CFDAS [website](#).

Figure 1. Sustainable Food Purchasing Index, January - June 2022

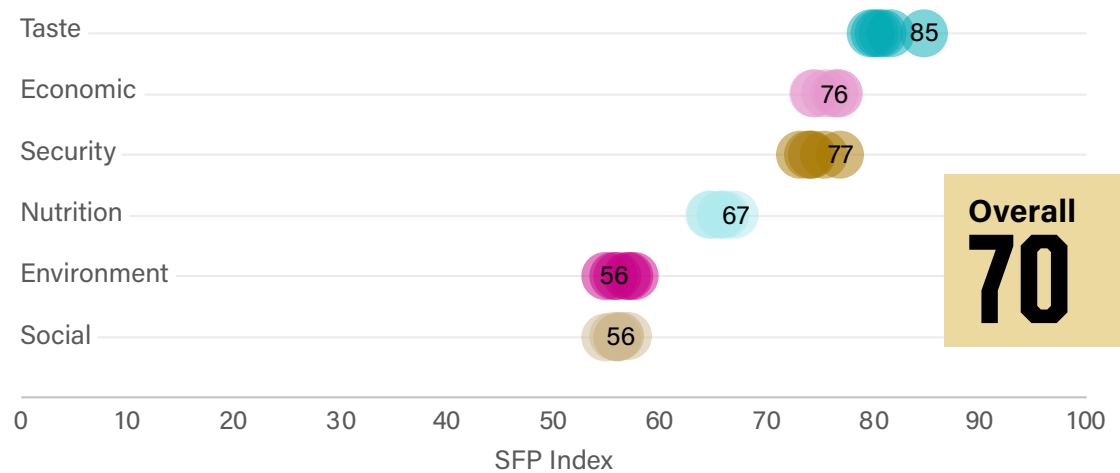
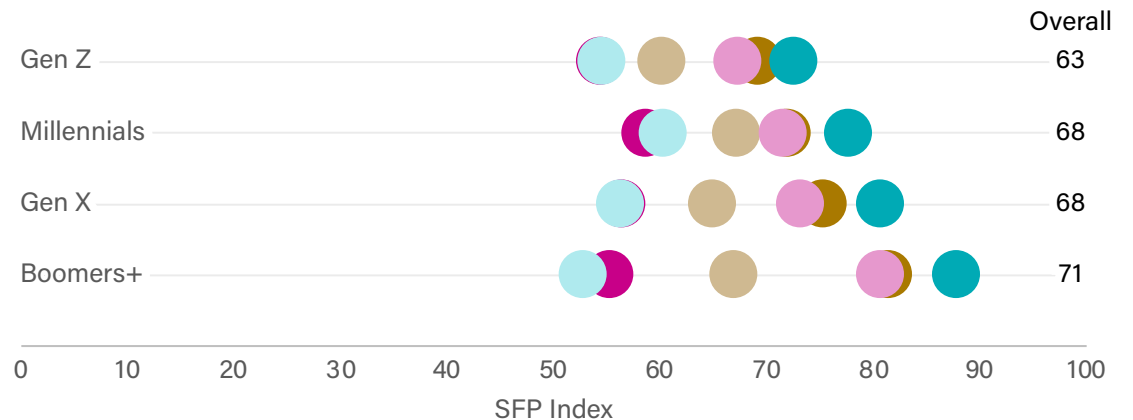


Figure 2. Sustainable Food Purchasing Index by Age Cohort, January - June 2022

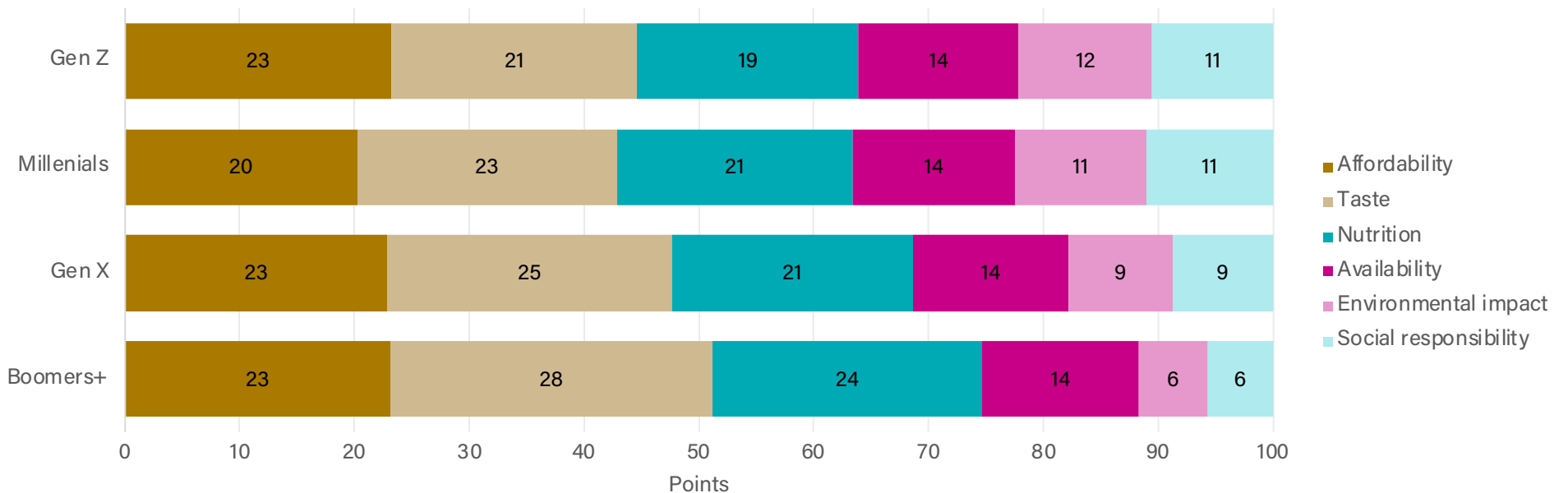


FOOD VALUES

What attributes do Americans most value when purchasing food?

Respondents were asked to allocate 100 points to six different attributes based on their importance when shopping for food (**Figure 3**). These attributes closely reflect the components of the SFP Index. Similar to the Index, how much consumers value these sustainability components has remained stable from month to month. Looking closer at how these food values break down across age groups, their distributions diverge. On average, older consumers value the taste of their food more, and younger consumers value the environmental impact and social responsibility of their food more. The oldest age group (Boomers+) also value nutrition by five more points than the youngest group (Gen Z), while the values assigned to affordability and availability are generally comparable across generations.

Figure 3. Share of 100 Points Allocated to Food Attributes by Age Cohort, January - June 2022



FOOD EXPENDITURES

How much are Americans spending on their food?

Respondents were asked to estimate their weekly food spending (Figure 4). On average, consumers reported spending \$119/week on groceries (FAH) and \$67/week on restaurants and carryout meals (FAFH).³ Steady or falling FAH expenditures in the face of high inflation may indicate consumers are adjusting their purchasing in response to higher prices. Consumers estimates of annual food price inflation for both the past 12 months and next 12 months also continue to increase (Figure 5).

We further estimate consumer demand to be more price sensitive (Figure 6). When we asked whether people would purchase a basket of brand name groceries costing \$100 or generic groceries costing \$85, 60% chose generic compared to 65% when the price of the generic groceries was \$70. Moreover, Figure 7 shows consumer households making less than \$50,000 annually are spending the greatest share of their income on food compared to previous months. Of note, we omit food assistance dollars in these calculations.

Figure 4. Weekly Household Food Expenditures, January - June 2022

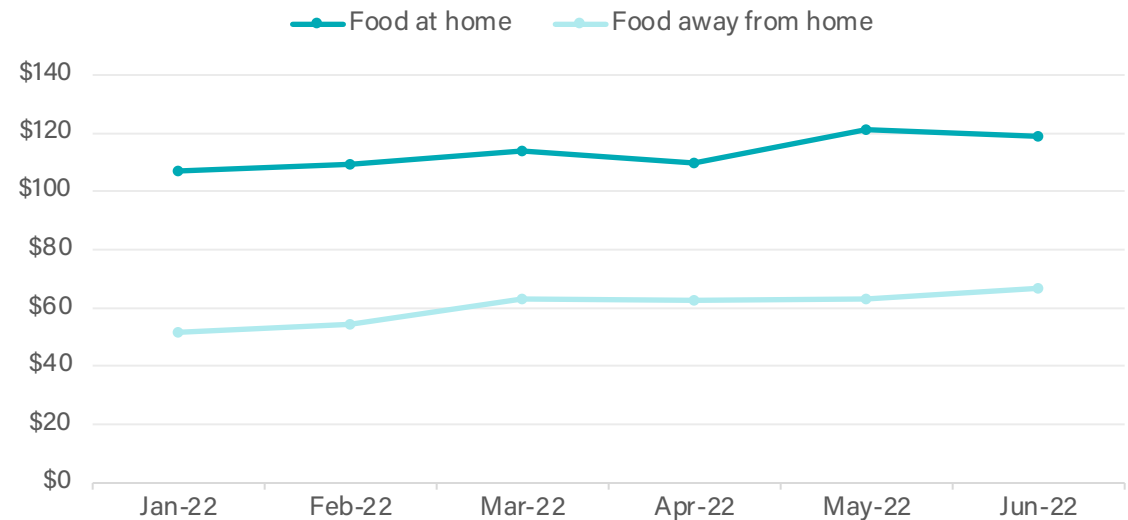
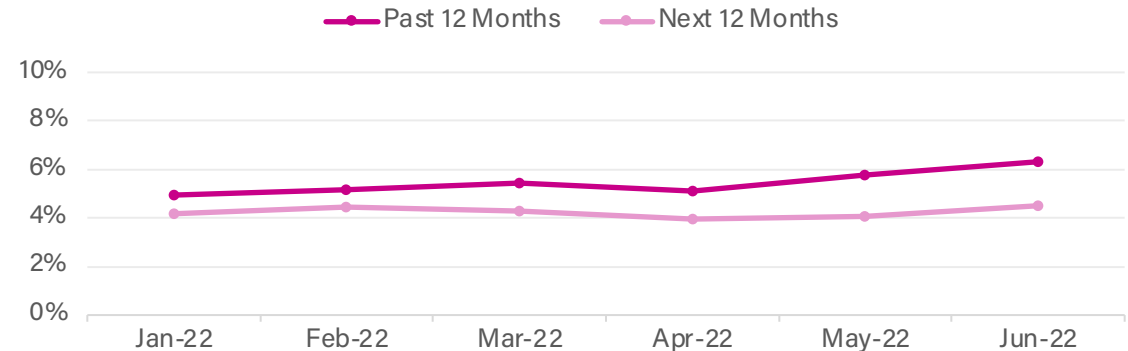


Figure 5. Consumer Estimates of Food Price Inflation January - June 2022



FOOD EXPENDITURES

Figure 6. Choice of Equivalent Brand Name or Generic Groceries at Two Different Price Points, May - June 2022

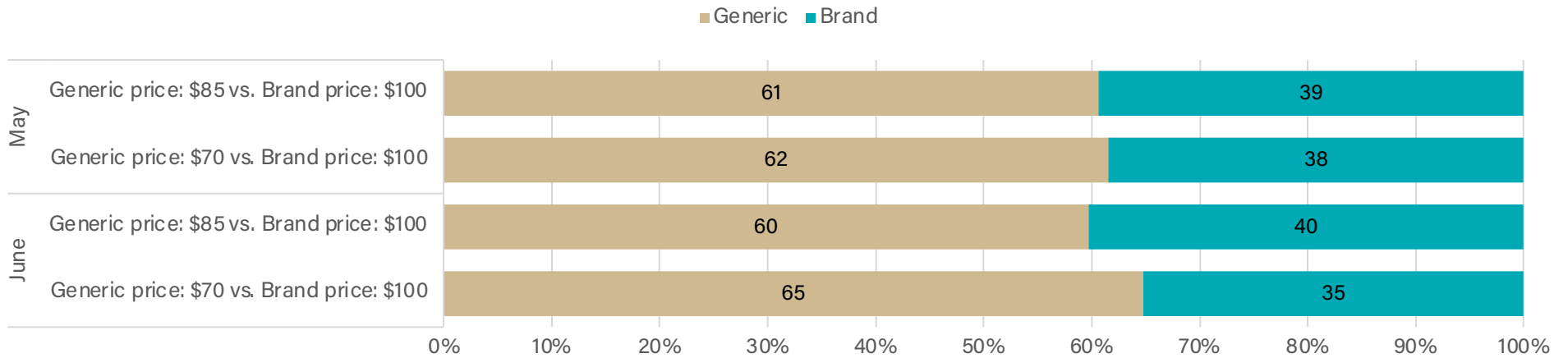
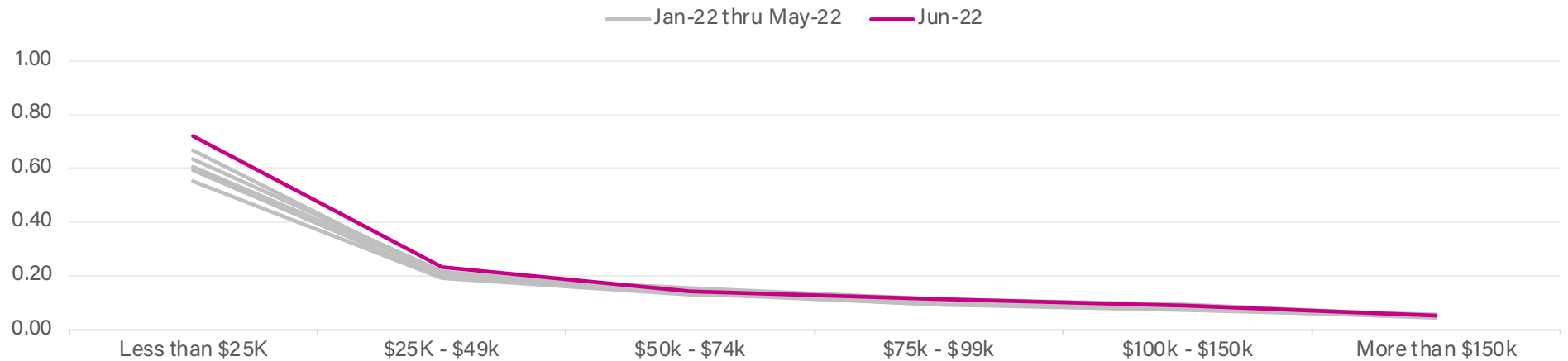


Figure 7. Total Food Expenditures as a Share of Income by Annual Household Income, January - June 2022



FOOD SECURITY

Are Americans having trouble buying food for their families?

Based on responses to six standardized questions about food bought and eaten in the last 30 days, we estimate the national rate of food insecurity to be 16%.⁴ **Figure 8** shows this rate remains steady compared to previous months, and around 14-16% of the country can be considered food insecure in any given month. However, significant disparities exist between age groups (**Figure 9**). Since January, over 30% of Gen Z adults have experienced or are experiencing food insecurity compared to about 17-19% of Millennial and Gen X adults and just 7% of Boomers+. Although Gen Z reports lower incomes on average, which can show up in the food security calculations, this disparity is concerning at a time when food inflation is outpacing salary growth.

About **30% of Gen Z households** also report getting free groceries from a food pantry, church, or other charity in the last 30 days compared to only **8% of Boomer+ households**.

Figure 8. Household Food Security According to USDA Survey Module: Six-Item Short Form, January - June 2022

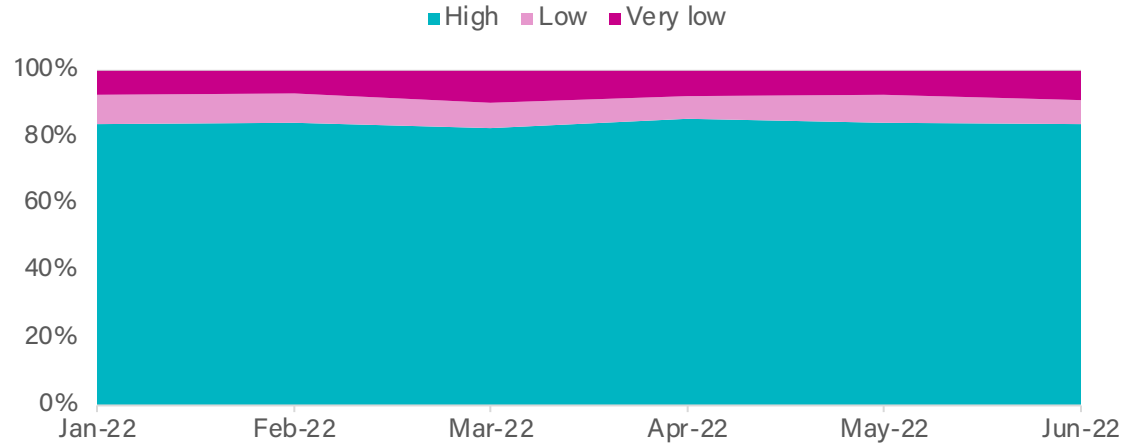
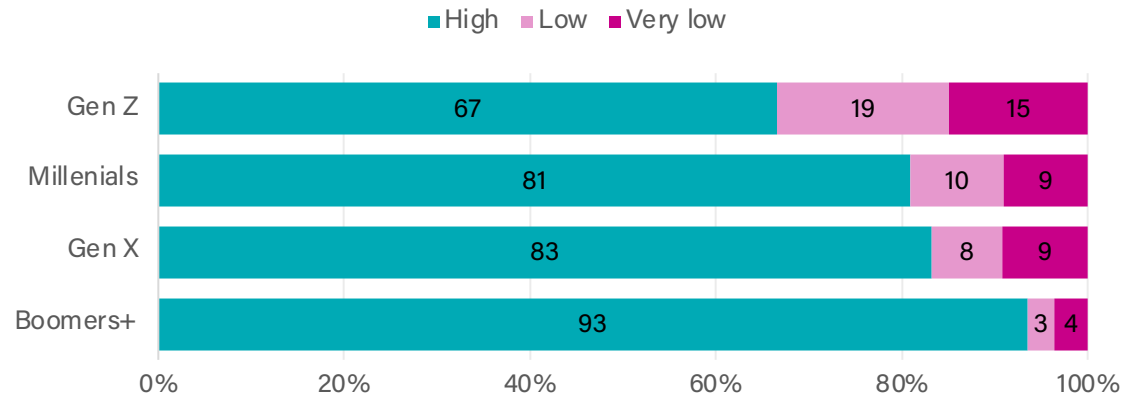


Figure 9. Household Food Security by Age Cohort, January - June 2022



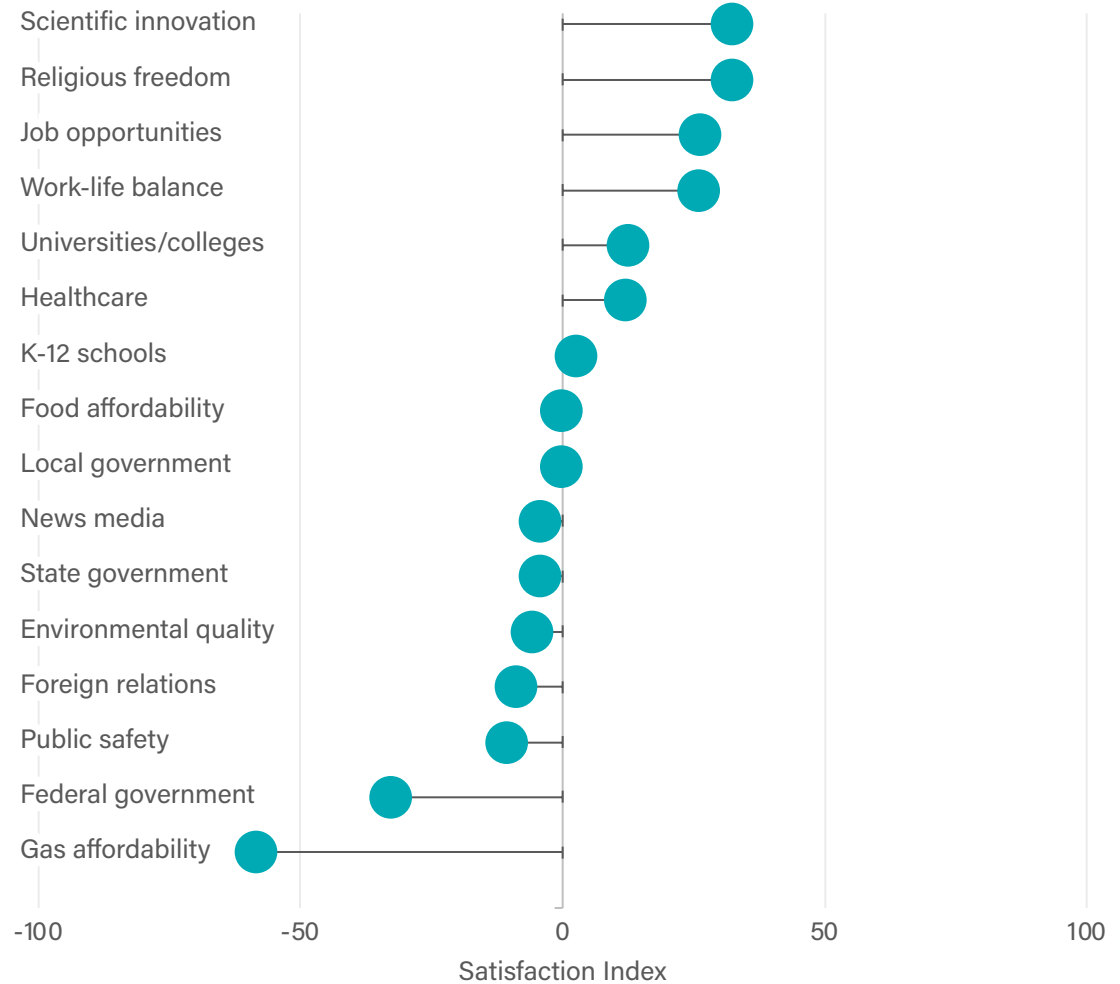
FOOD SATISFACTION

How satisfied are Americans with their food compared to other aspects of their lives?

We asked survey respondents to select three areas of American life with which they are most satisfied and most dissatisfied and scored these picks on a satisfaction index. Scientific innovation, religious freedom, and job opportunities received the three highest ratings while gas affordability was by far the area of greatest dissatisfaction, followed by the federal government and public safety (**Figure 10**). Of note, food affordability lands in the middle of the pack with a neutral score of 0.

Survey respondents were also asked to score their own diet on a 0-10 scale, with top of the well-being scale representing their ideal diet.⁵ 76% of adults in the Boomers+ cohort rated their diet as a 7 or above compared to 55% of Gen Z adults and about 68% of Millennial and Gen X adults (**Figure 11**). Similarly, **Figure 12** shows the oldest age group is most likely to be happy with their diets. However, while Gen Z, Millennials, and Gen X have similar rates of general happiness with their diets, Millennials report being “very happy” at a much higher rate.

Figure 10. American Life Satisfaction Index, June 2022



FOOD SATISFACTION

Figure 11. Diet Well-Being Rating by Age Cohort, January - June 2022

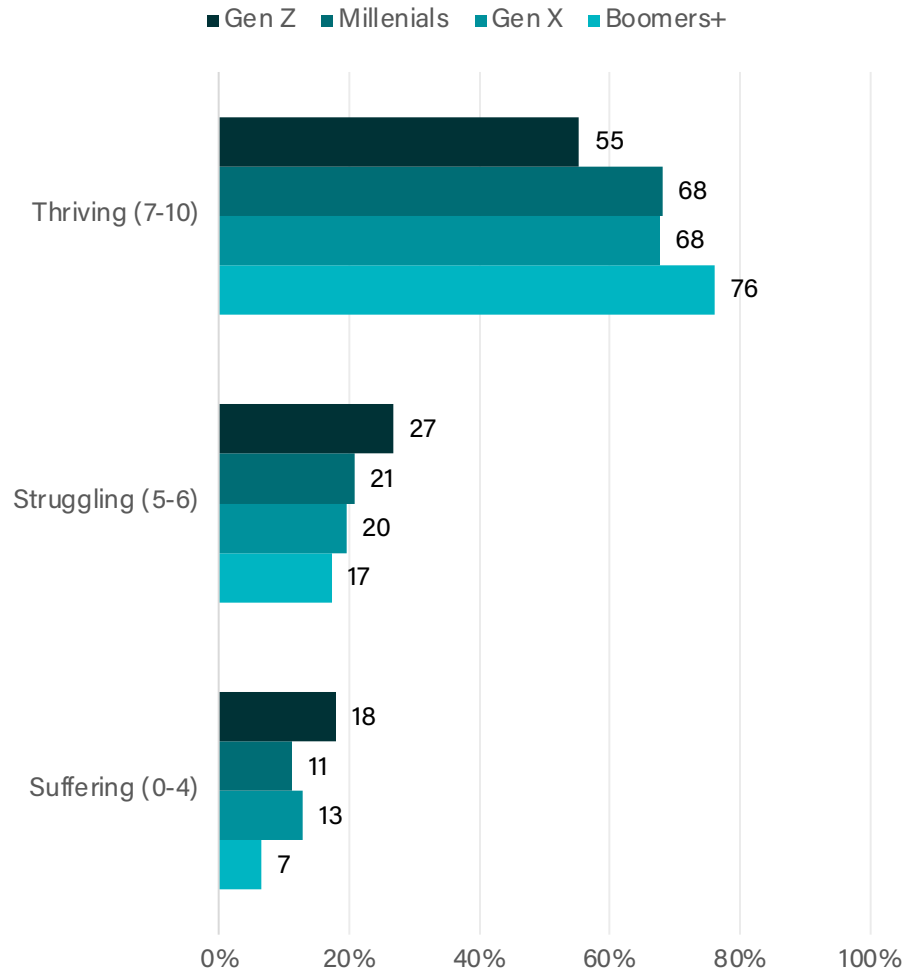
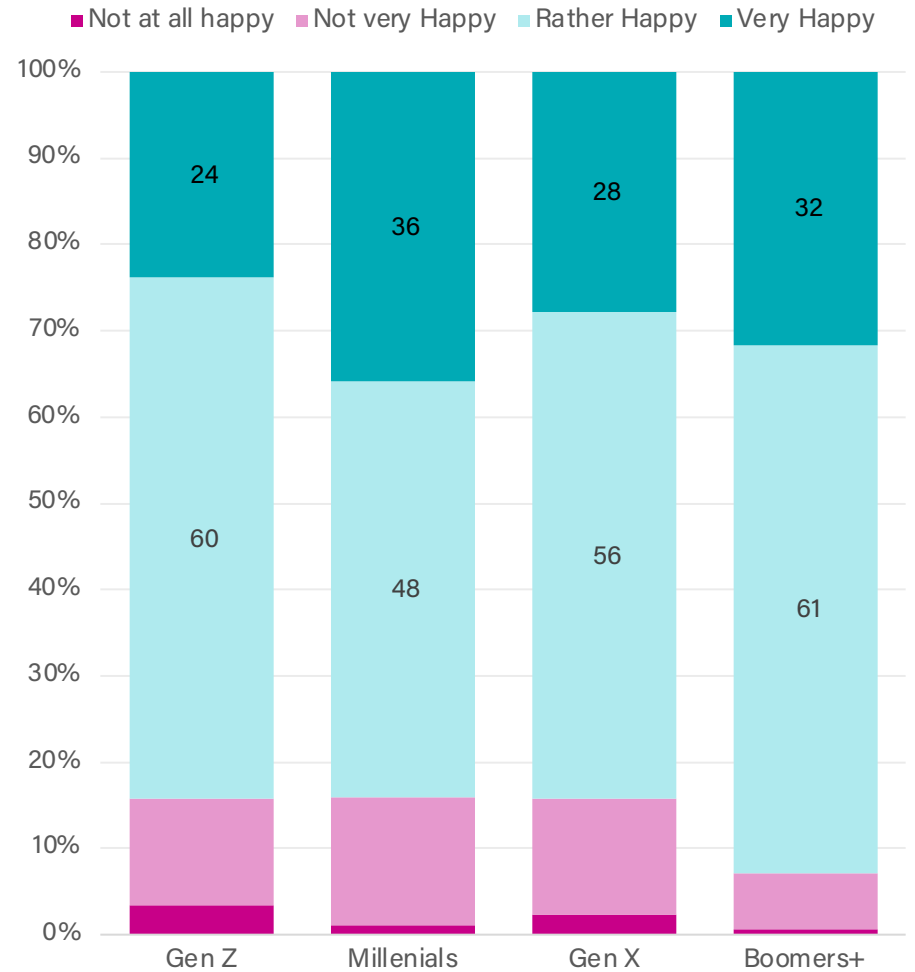


Figure 12. Diet Happiness by Age Cohort, January - June 2022



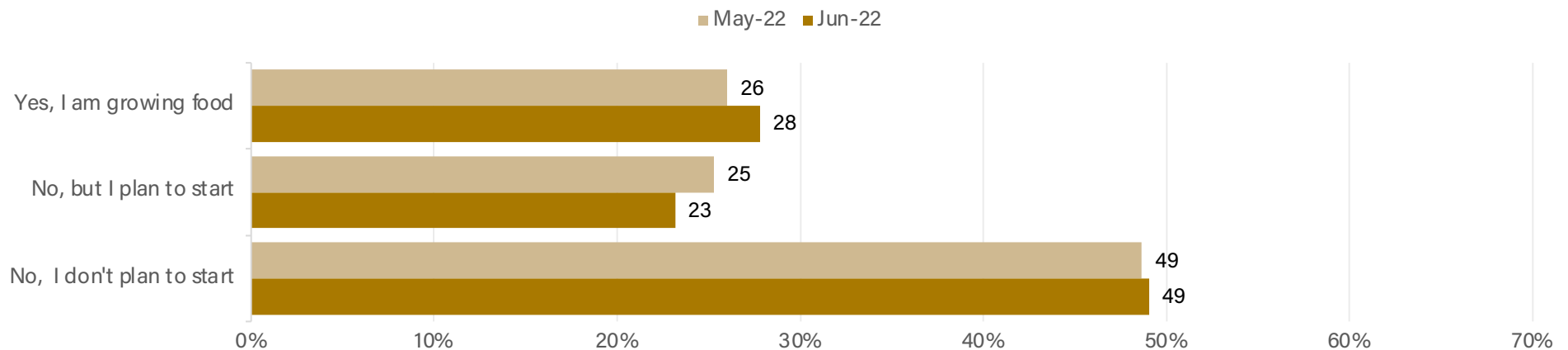
CONSUMER BEHAVIORS

How are Americans navigating their food environment?

Last month, we began tracking the share of people who say they currently have a food garden. This month, we see a small share of people who were planning to garden have started (**Figure 13**). In addition, the top reasons people report gardening are to reduce food costs and to have better tasting or fresher food (**Figure 14**). We also show that most gardeners are tending less than 20 plants and a plurality tend less than 10 plants (**Figure 15**). However, the top reason people report not gardening is due to lack of space (**Figure 16**), which suggests people think gardening is space intensive and/or there is a demand for accessible community space for growing food.

Figure 17 shows specific consumer food habits broken down by age cohort. Notably, we observe the two younger generations (Gen Z & Millennials) more often choosing food purchasing that is typically promoted as more ethical or sustainable (i.e., local foods, wild-caught fish, grass-fed beef, cage-free eggs, and organic foods). Similarly, Boomers+ are checking food labeling like GMO ingredients and place of origin much less often than these two younger groups. We see age play out in food waste too, as adults in the Gen Z cohort are more likely to take steps to reduce food and less likely to throw away food past the use-by date compared to Gen X and Boomers+.

Figure 13. Share of Adults Food Gardening, May - June 2022



CONSUMER BEHAVIORS

Figure 14. Reasons that People Food Garden, June 2022

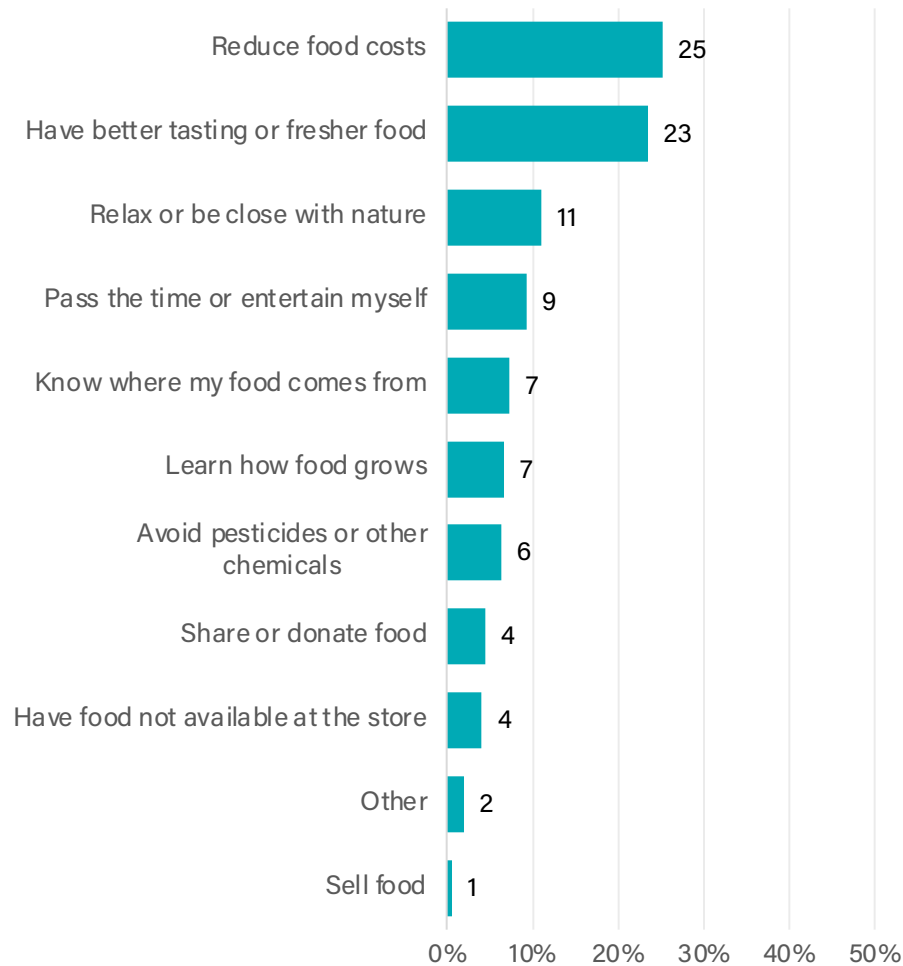


Figure 15. # of Plants in People's Food Gardens, June 2022

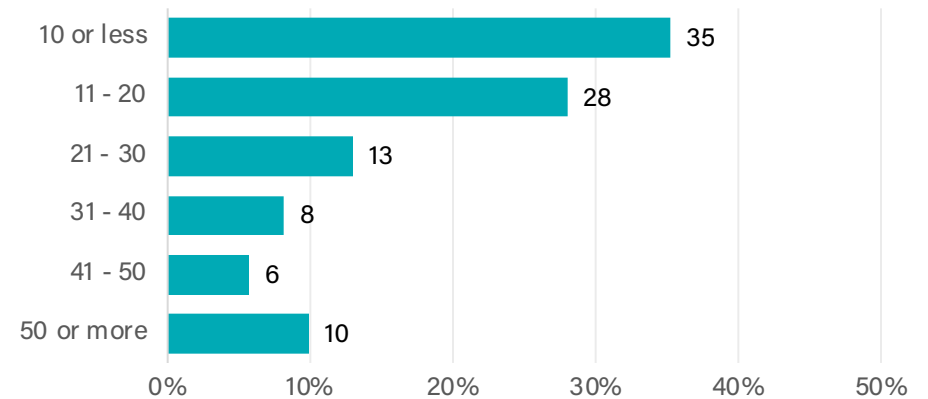
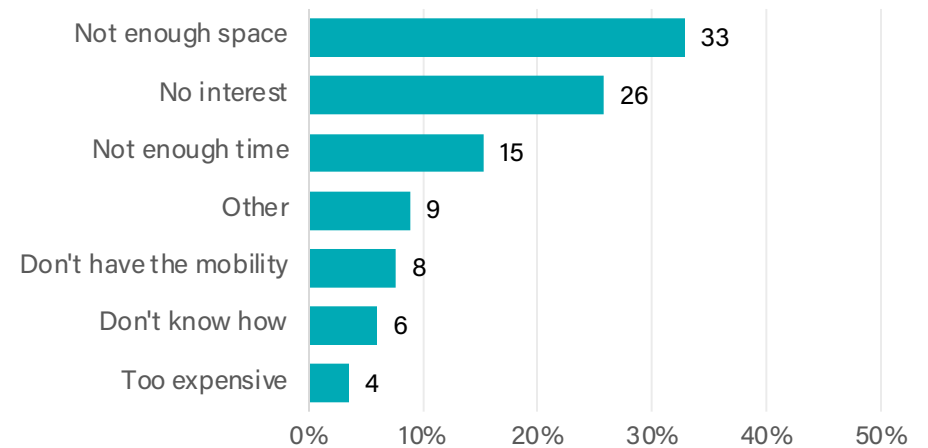


Figure 16. Reasons that People Don't Food Garden, June 2022



CONSUMER BEHAVIORS

Figure 17. Consumer Shopping and Eating Habits by Age Cohort, January - June 2022

	Gen Z	Millennials	Gen X	Boomers+	Mean Score	
Chose generic foods over brand name foods	3.6	3.5	3.4	3.1		
Chose local foods over non-local foods	3.2	3.3	3.1	2.9		
Chose wild-caught fish over farm-raised fish	3.2	3.3	2.9	2.5		
Chose grass-fed beef over conventional beef	3.2	3.2	3.0	2.7		
Chose cage-free eggs over conventional eggs	3.2	3.2	2.8	2.3		
Chose organic foods over non-organic foods	3.1	3.0	2.6	2.0		
Chose plant-based proteins over animal proteins	3.0	3.2	2.8	2.3		
Checked the use-by/sell-by date at the store	3.9	4.0	4.0	4.1		
Checked the nutrition label before buying new foods	3.4	3.6	3.4	3.4		
Checked for natural or clean labels	3.2	3.4	3.1	2.6		
Checked where my food originated	3.2	3.3	2.9	2.6		
Checked for food recalls	3.1	3.2	2.9	2.7		
Checked how my food was produced	3.1	3.2	2.9	2.4		
Checked for GMO ingredients	2.9	3.2	2.9	2.4		
Took steps to reduce food waste at home	3.7	3.5	3.3	2.9		
Recycled food packaging	3.3	3.4	3.5	3.5		
Threw away food past the use-by date	3.3	3.7	3.8	3.9		
Composted food scraps	2.9	2.8	2.5	1.9		
Ate fruits and vegetables without washing them	2.7	2.7	2.4	1.9		
Ate rare or undercooked meat	2.6	2.6	2.0	1.4		
Ate raw dough or batter	2.3	2.5	2.0	1.5		

Mean Score

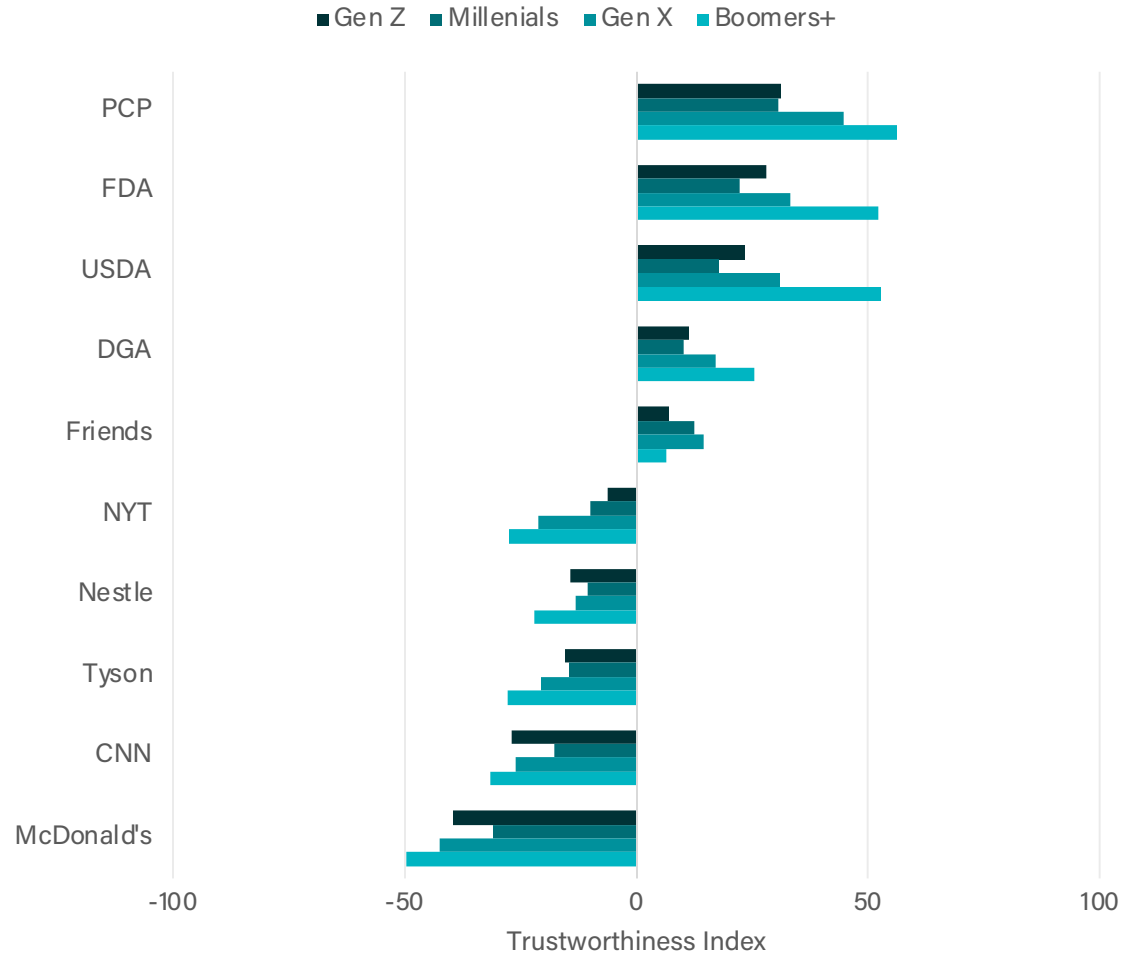
5	Always
4	Often
3	Sometimes
2	Rarely
1	Never

CONSUMER TRUST

Who do Americans trust to inform them about healthy and sustainable food?

We asked survey respondents to select their five most trusted and five least trust sources of food-related information and scored these sources on a trustworthiness index. When we disaggregate this index by age group, significant differences in trust emerge (**Figure 18**). Specifically, older consumers (Gen X & Boomers+) trust primary care physicians (PCP), Department of Agriculture (USDA), and Food and Drug Administration (FDA) much more than younger consumers (Gen Z & Millennials). The Boomers+ cohort also most distrusts both news media, such as the New York Times (NYT) and CNN, and food companies, such as McDonald's, while Millennials generally least distrust these entities.

Figure 18. Trustworthiness Index of Food-related Information Sources by Age Cohort, January - June 2022



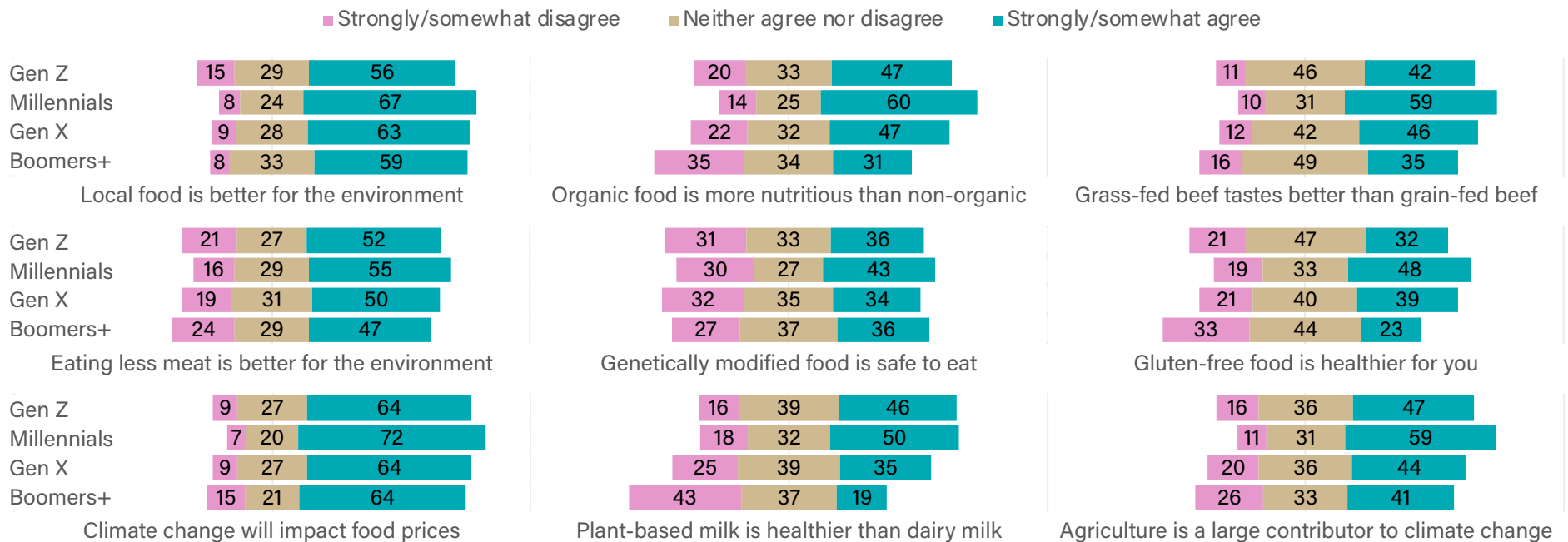
Trust in the Food and Drug Administration (FDA) dropped over 20% again from last month, which corresponds with the agency continuing to be in the news for a number of controversial decisions.

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 19**). Some of the largest differences relate to health claims. Millennials are most likely to agree that (1) organic food is more nutritious than non-organic, (2) gluten-free food is healthier for you, and (3) plant-based milk is healthier than dairy milk, while Boomers+ are most likely to disagree. Millennials are also the only group from which a majority agrees that agriculture is a large contributor to climate change. However, majorities from every group agree that climate change will impact food prices. Agreement is more muddled across ages on whether genetically modified food is safe, despite leading scientific bodies concluding GMOs are no riskier than foods produced through conventional breeding.

Figure 19. Consumer Agreement with Claims about Food and Nutrition by Age Cohort, March - June 2022



FOOD POLICY

Where do Americans stand on food policy?

Most of the surveyed policies remain widely popular, but certain policy preferences correlate with age demographics (**Figure 20**). For example, the oldest consumers (Boomers+) are much less likely to favor some taxes, such as a fee on carbon emissions, and regulations, such as stricter zoning for fast food establishments. They are also more conservative with regards to spending on programs like SNAP but have the highest support for increasing funding to agricultural research and conservation programs. The youngest group (Gen Z) tends to be fairly progressive, for example supporting citizenship for undocumented farmworkers at the highest rate, although Millennials and Gen X show just as much support, if not more, for policies like regulating confined animal feeding operations and taxing sugar-sweetened beverages. Thus, support for many of these food policies does not track perfectly onto the age cohort of the consumer.

Policy Questions:

Increase agricultural research funding to develop crops more resistant to heat, drought, and flooding through plant breeding and biotechnologies.

Increase conservation program funding to pay farmers and ranchers to adopt climate-smart practices and help improve environmental outcomes.

Impose new regulations on the environmental claims food companies can make about their products, such as claims about water, soil, and air pollution.

Permanently extend and expand pandemic-related changes to SNAP that increase benefits and lower barriers to participation.

Prohibit marketing on TV, via online video streams, etc. of unhealthy food and beverage products such as junk foods and sodas to children.

Place moratorium on new and expanding CAFOs, phase out the largest CAFOs, and pay farmers to transition out of operating CAFOs.

Enable undocumented farmworkers and their immediate family members to obtain lawful immigration status and a pathway to citizenship.

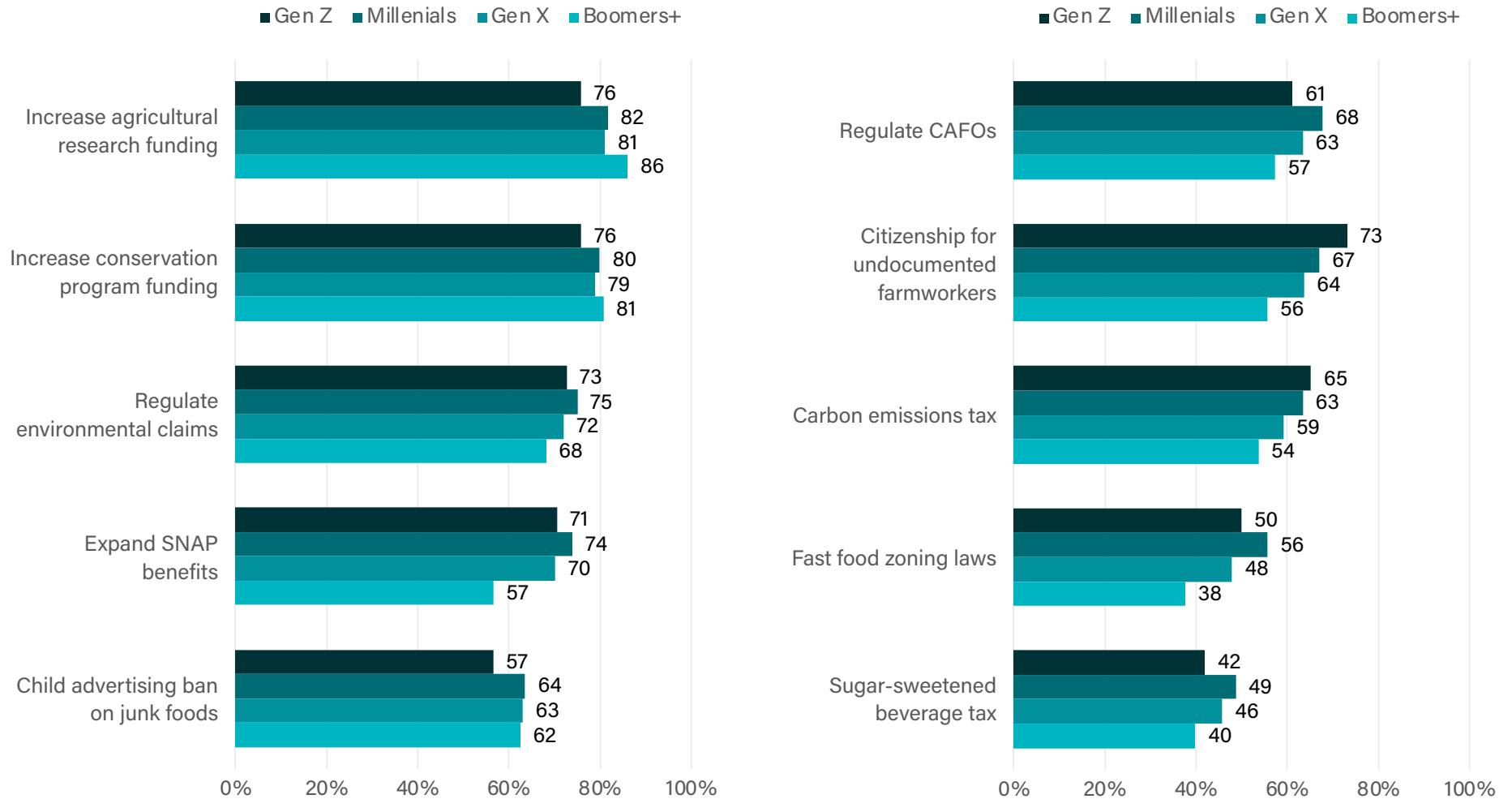
Impose a fee on all food producers according to the carbon footprint of their products unless they take clear action to reduce their greenhouse gas emissions.

Implement zoning regulations to restrict the number of fast food outlets and drive-through facilities near schools, parks, hospitals, and other public areas.

Increase the prices of drinks with added sugar by 25%. Examples of affected beverages include carbonated soft drinks (soda), sports drinks, and energy drinks.

FOOD POLICY

Figure 20. Favorable Support for Food and Agriculture Policies by Age Cohort, January - June 2022



AD HOC QUESTIONS

Are Americans feeling the effects of global food supply disruptions abroad?

A large majority of Americans are worried about the effects of the Russia-Ukraine war on global food supplies (**Figure 21**). A majority also reports observing food price or availability impacts as a result of the war (**Figure 22**). Though Americans will tend to report being worried when asked their feelings on any major problem, these results show a significant share of consumers are engaged with the effects of the war in Europe.

Notably, only a quarter of Americans say resolving the Russia-Ukraine war should be a policy priority for protecting global food security (**Figure 23**). A majority think the U.S. should focus on increasing its agricultural production, followed by improving supply chain resilience. Addressing trade relations, COVID-19 disruptions, and carbon emissions are all at the bottom of the priority list. If you would like to know how American consumers are reacting to other food system events, you can send suggestions to us at cfdas@purdue.edu.

Figure 21. Worried about Russia-Ukraine War Affecting Global Food Supplies?, June 2022

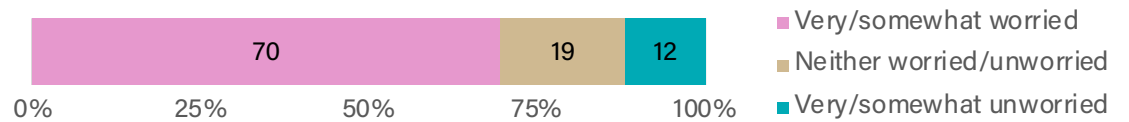
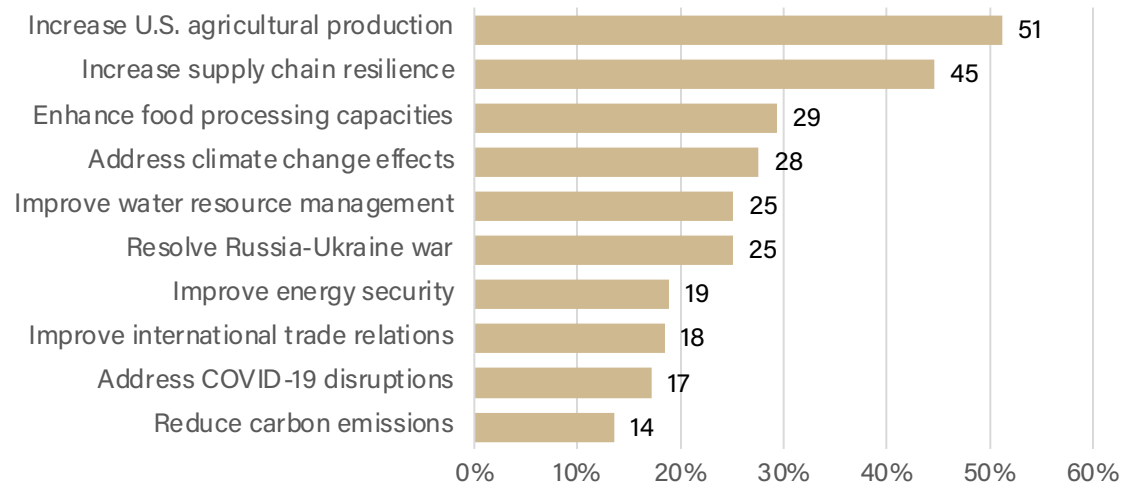


Figure 22. Has Russia-Ukraine War Impacted the Price or Availability of your Food?, June 2022



Figure 23. Policy Areas the U.S. Should Prioritize to Ensure Global Food Security, June 2022



*Results total over 100% because respondents could choose up to 3 options.

ENDNOTES

1 Data were collected from an online panel maintained by the firm Dynata over a two-day period from June 20-21, 2022. 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. Every respondent from the previous month was re-contacted and asked to take the survey again. About 31% of May’s sample participated this month, thus the rest of the sample was filled in with a new pool of respondents. Data collection for every survey begins on the third Monday of each month, unless otherwise dictated by holidays or extenuating circumstances.

2 Sample sizes: Gen Z (n=450), Millennials (n=1,964), Gen X (n=1,894), and Boomers+ (n=3,211).

3 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.

4 High or marginal food security (i.e., food secure): 0-1 reported indications of food-access problems; little or no indication of change in diet or food intake. Respondents who reported an annual household income 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 demonstrates that using a modified income-based screening procedure for internet surveys better approximates the government estimates of food insecurity. Low food security (i.e., food insecure): 2-4 reported indications of reduced quality, variety, or desirability of diet; little or no indication of reduced food intake. Low food security (i.e., food insecure): 2-4 reported indications of reduced quality, variety, or desirability of diet; little or no indication of reduced food intake.

5 This scale is based on the [Cantril Scale](#) used in Gallup’s World Poll to assess well-being and happiness around the world. Thus, we use the same validated conceptual labels—thriving, struggling, and suffering—to group responses.