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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 with and without children have answered our survey this year. We aggregated ten months of data (January - October 2022) to compare consumer behaviors across four types of households: without children, with children under 18, with children under 5, and single parents.² New questions this month also replicated those asked by [Apollo Academic Surveys](#) about nutrition and health. Interested in additional in-depth analysis? Contact cfdas@purdue.edu to learn how you can join our industry consortium.

KEY INSIGHTS FROM OCTOBER

- Food away from home (FAFH) spending declines for third month in a row.
- Food at home (FAH) spending remains high -- consistent with the past five months.
- Consumer perceptions of current food inflation track closely with gas prices.
- Our measure of national food insecurity is at its lowest point of 2022 so far.
- Households with young children and single parents face highest food insecurity rates.
- Consumers expect to pay higher prices for Thanksgiving turkey compared to 2021.
- Americans largely think eating more fruits and vegetables, more proteins, and more home cooked items would improve the health and life expectancy of the U.S. population.

SFP INDEX
69_{/100}

FOOD INSECURITY
13%

FOOD SPENDING
\$178_{/WEEK}

FOOD HAPPINESS
86%

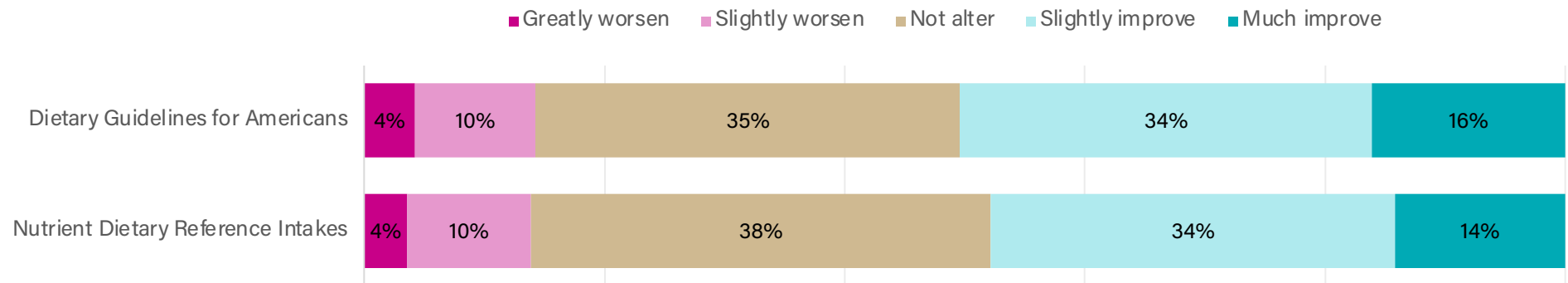
Nutrition

What do Americans think are the best approaches to nutrition?

At the beginning of October, [Apollo Academic Surveys](#), in collaboration with [William Masters](#) at Tufts University, asked leaders, fellows, and awardees of the American Society of Nutrition and the Agricultural and Applied Economics Association (i.e., the experts) about their views on nutrition. In turn, we asked a subset of their survey questions to consumers so that we could understand whether the opinions of experts have percolated through the general public. The responses from our sample of the general population are presented here.

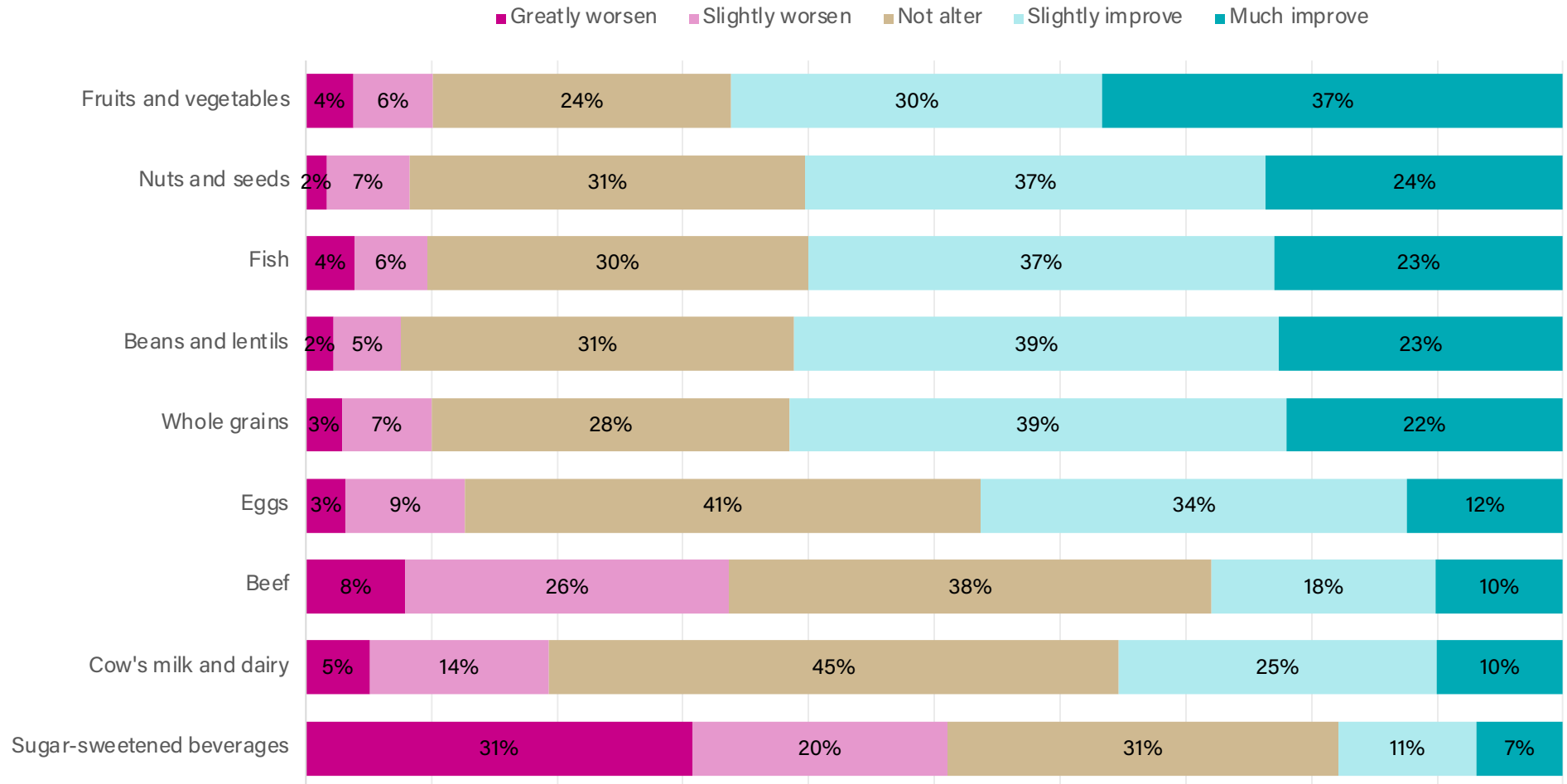
Figure 1 shows that about 50% of adults view adherence to the Dietary Guideline for Americans and the Dietary Reference Intakes for nutrition as important to improving human health. Notably, this is a much smaller share than reported by the experts. **Figure 2** further reveals that fruits and vegetables, nuts and seeds, fish, beans and lentils, and whole grains are believed to be the most important food groups for promoting better diets. These results largely align with the experts. In addition, **Figure 3** highlights the importance of proteins and the detriment of sugars in diets. Again, this breakdown is comparable to the views of experts, although there tends to be greater consensus among the experts. **Figure 4** is less clear but indicates that cooking at home is most widely viewed as a good practice for improving diets and health. There is a similar lack of agreement among the experts with respect to these practices.

Figure 1. On balance, for overall health and average life expectancy of the U.S. population, what do you expect would be the effect for most people of having a larger fraction of their overall diet that follows the _____, instead of the dietary patterns they now follow?, Oct. 2022



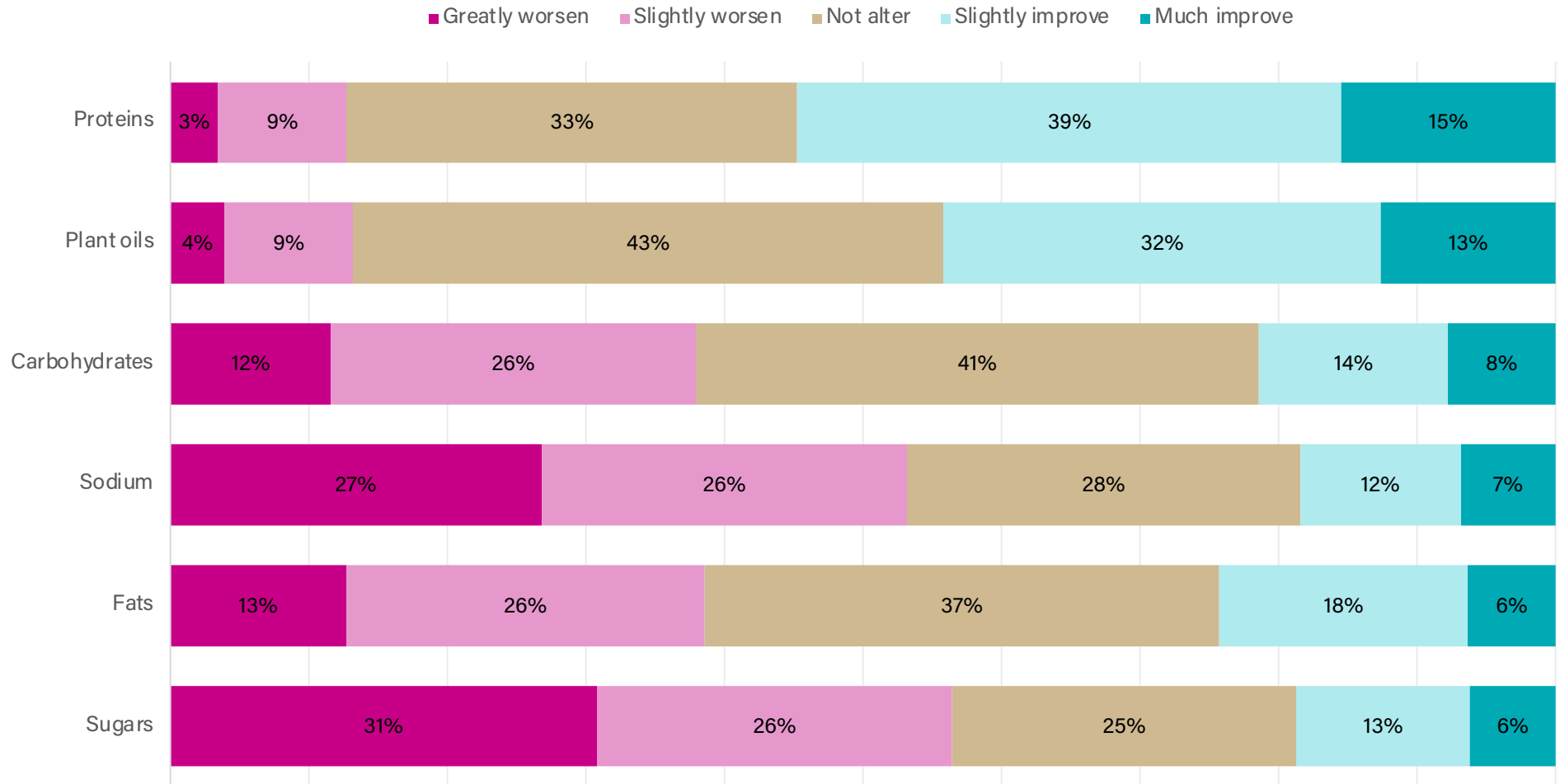
Nutrition

Figure 2. On balance, for overall health and average life expectancy of the U.S. population, what do you expect would be the effect for most people of having a larger fraction of their overall diet that includes more _____, instead of other foods in current diets?, Oct. 2022



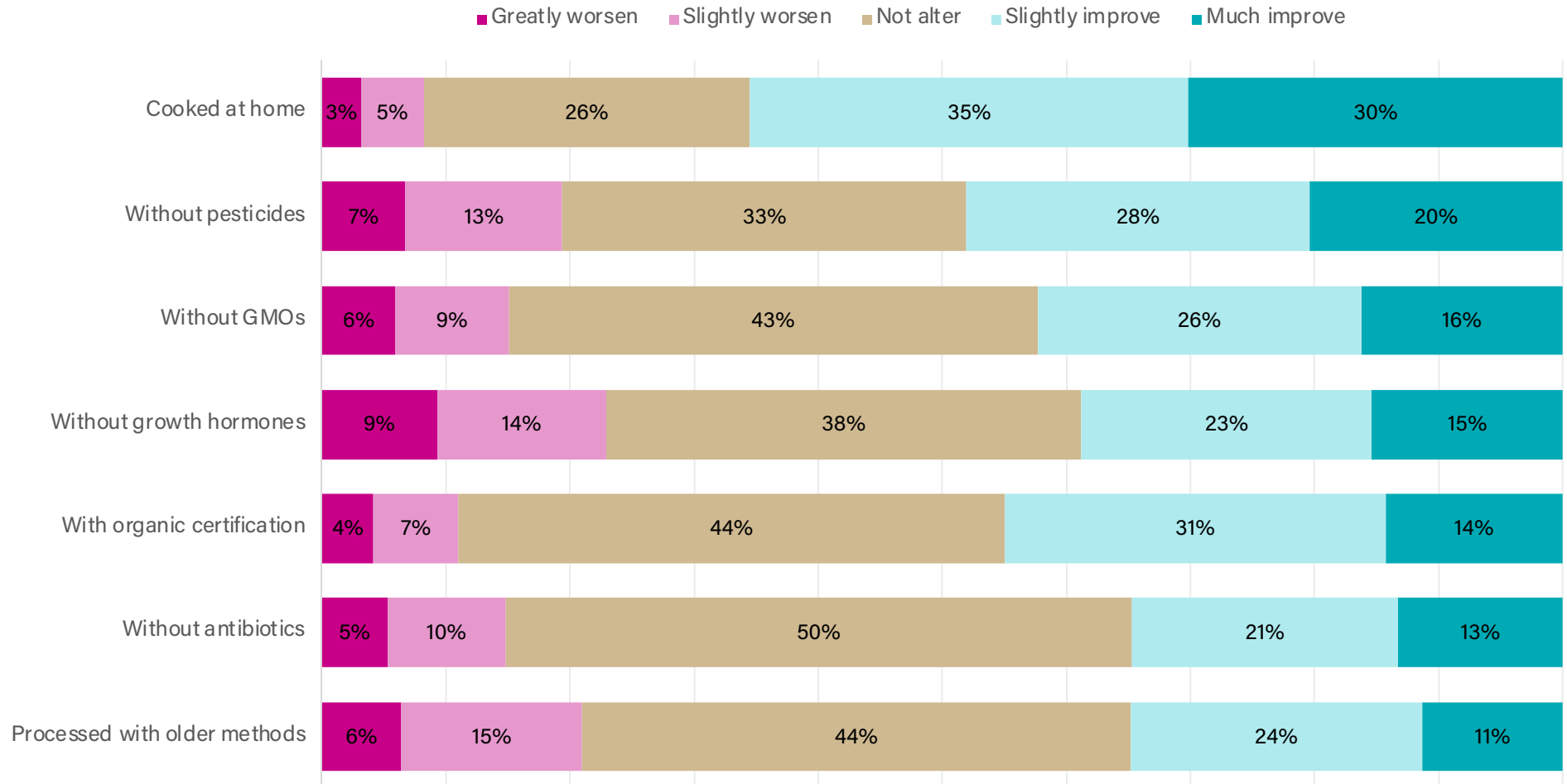
Nutrition

Figure 3. On balance, for overall health and average life expectancy of the U.S. population, what do you expect would be the effect for most people of having a larger fraction of their overall diet that includes more _____, instead of other ingredients?, Oct. 2022



Nutrition

Figure 4. On balance, for overall health and average life expectancy of the U.S. population, what do you expect would be the effect for most people of having a larger fraction of their overall diet that includes more food _____, instead of the practices now being used?, Oct. 2022



SUSTAINABLE DIETS

Is American food purchasing sustainable?

The SFP Index reveals no change in consumers' food sustainability (**Figure 5**). However, we show that consumers with children score differently on the Index compared to consumers without children (**Figure 6**). Namely, childless consumers do better on the taste, economic, and security indicators while performing worse on the environment, social, and nutrition indicators compared to parents with children under 18. Having young children and being a single parent further correlates with lower scores across all indicators relative to other parents.

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 SFP Index includes 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 CFIDAS [website](#).

Figure 5. Sustainable Food Purchasing Index, Jan. - Oct. 2022

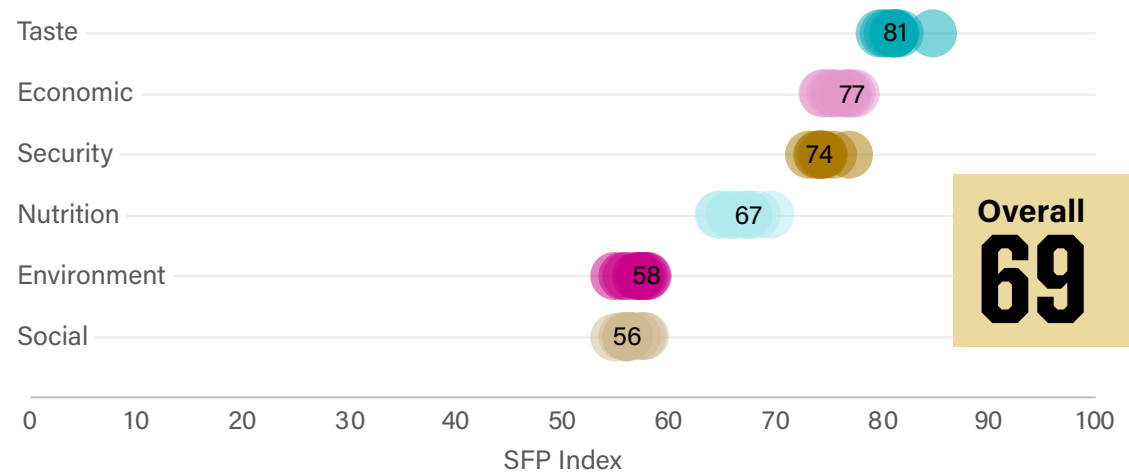
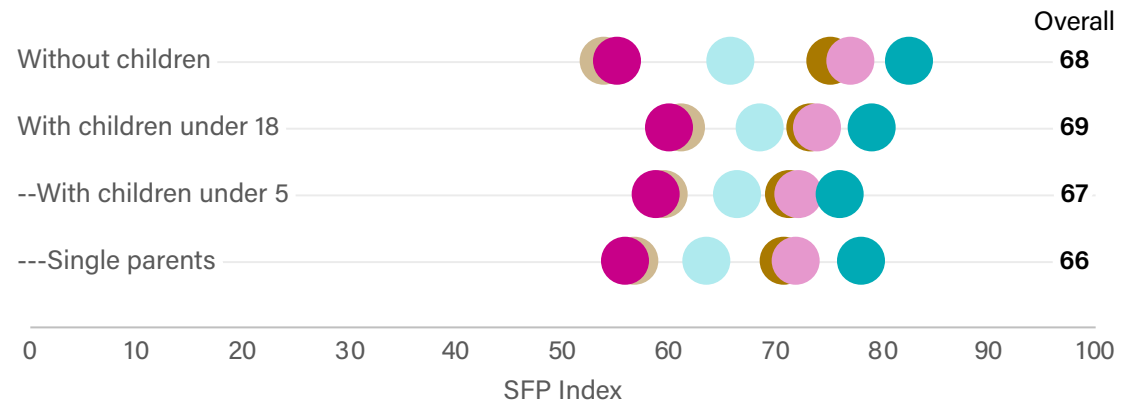


Figure 6. Sustainable Food Purchasing Index by Households with Children, Jan. - Oct. 2022

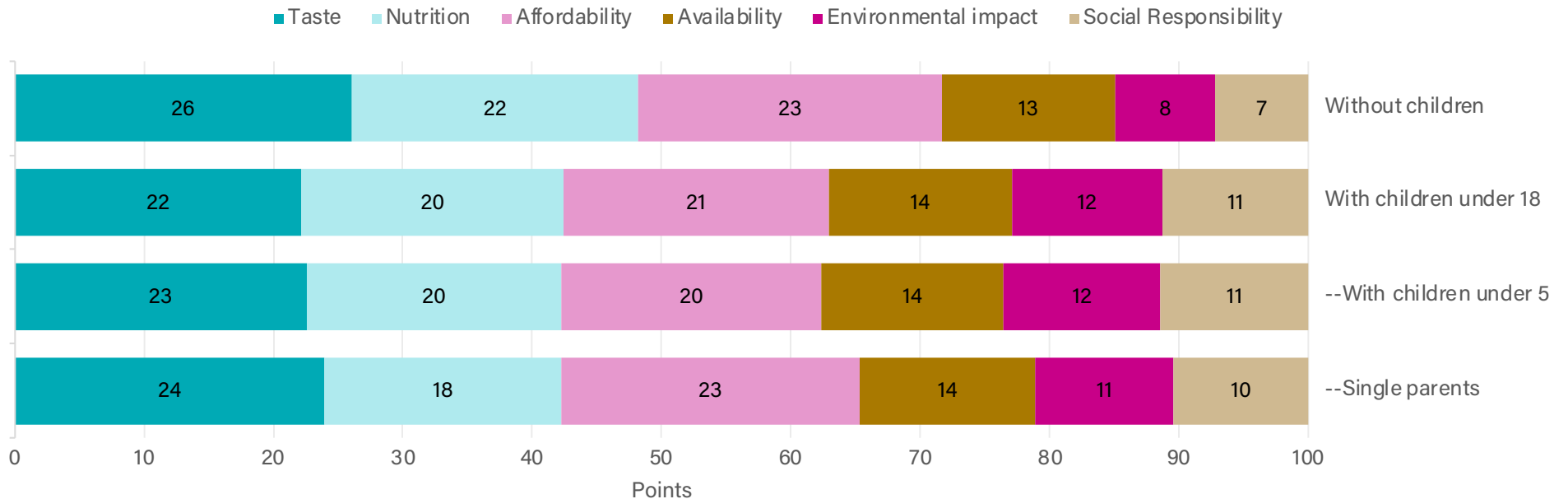


FOOD VALUES

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 7**). These attributes closely reflect the components of the SFP Index. Similar to the index, how much consumers value these sustainability components has remained relatively stable on a month to month basis. Looking closer at how these values break down across consumers with and without children, their distributions are broadly similar. On average, childless consumers favor taste, nutrition, and affordability more than other consumers, while those with children value the environmental impact and social responsibility of their food more. Of those households with children, however, single parents value taste and affordability to a greater degree while valuing nutrition less.

Figure 7. Share of 100 Points Allocated to Food Attributes by Households with Children, Jan. - Oct. 2022



FOOD EXPENDITURES

How much are Americans spending on their food?

Respondents were asked to estimate their weekly food spending (Figure 8). On average, consumers reported spending \$119/week on groceries (FAH) and \$58/week on restaurants and carryout meals (FAFH).³ FAH remains near its peak for 2022, while FAFH continues to decline. FAFH is now at its lowest level since February, suggesting that consumers are reducing discretionary food spending as prices reach new highs. We further show that consumer estimates of annual food inflation for both the past 12 months and next 12 months appear to largely correlate with gas prices (Figure 9).

In addition, Figures 10 & 11 reveal where FAH and FAFH spending occur. Consumers with children at home are more likely than others to grocery shop at superstores and convenience stores. Perhaps unsurprisingly, these consumers also spend a much smaller share on dine-in at restaurants relative to consumers without children, preferring delivery. These parents also allocate a greater share of their budget to cafeteria food.

Figure 8. Weekly Household Food Expenditures, Jan. - Oct. 2022

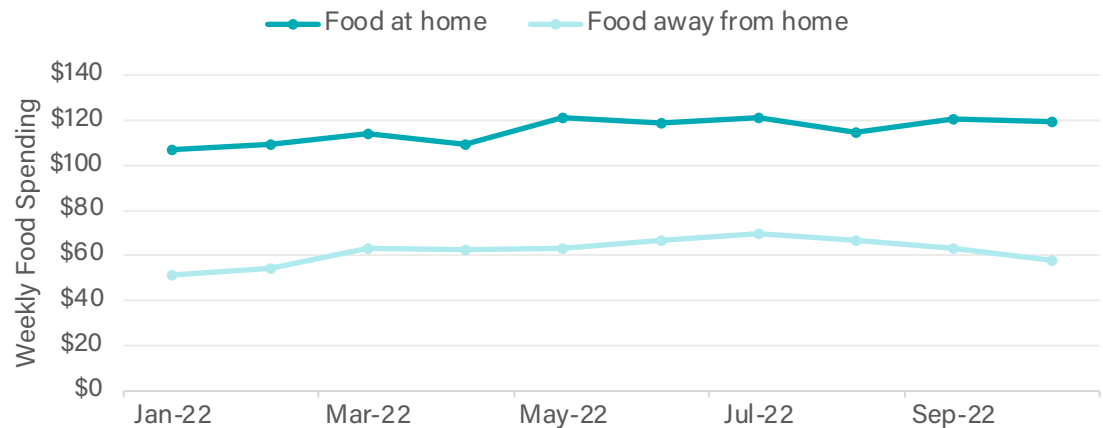
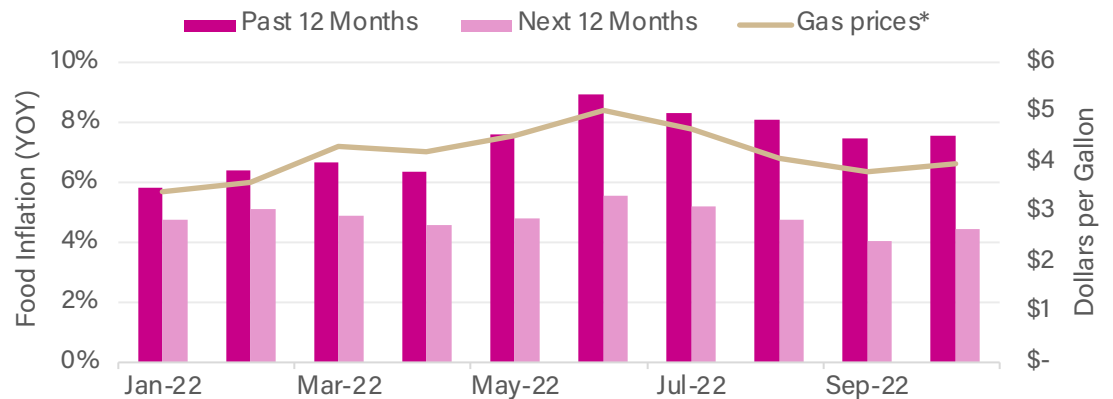


Figure 9. Consumer Estimates of Food Inflation Compared Against Gas Prices, Jan. - Oct. 2022



*Price data from the U.S. Energy Information Administration

FOOD EXPENDITURES

Figure 10. Location of Last Grocery Purchase by Households with Children, Jan. - Oct. 2022

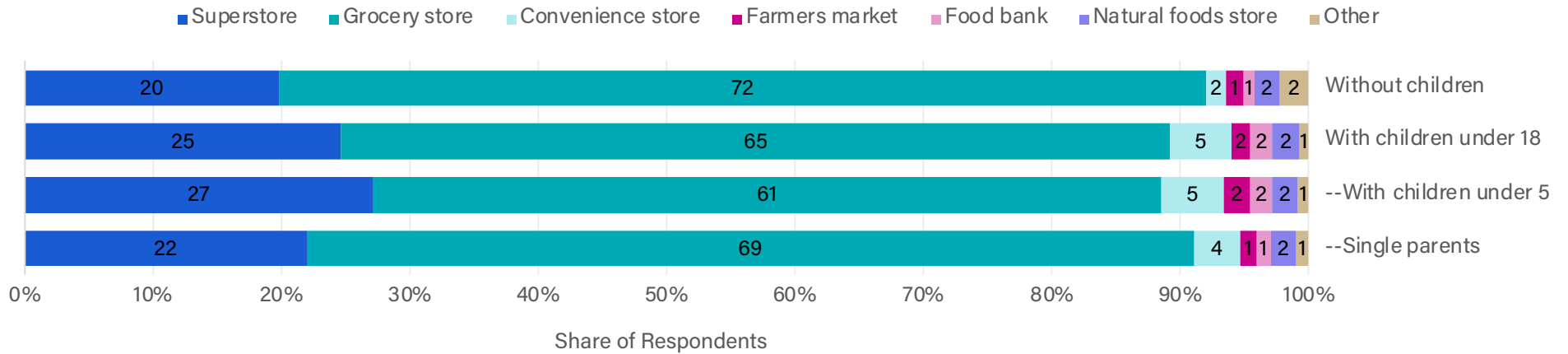
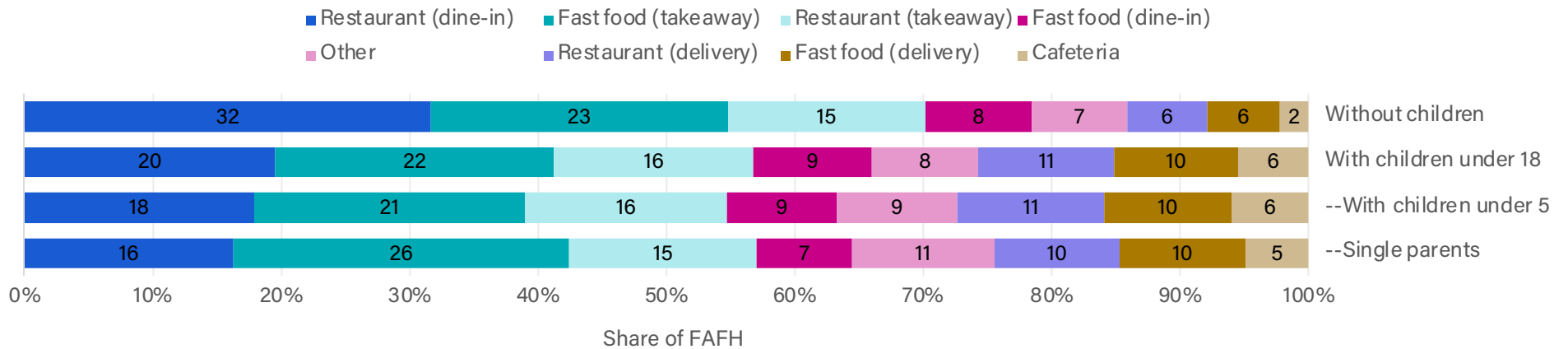


Figure 11. Location/Method of Food Away From Home (FAFH) Spending by Households with Children, Mar. - Oct. 2022



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 13%.⁴ **Figure 12** shows that this rate is steady at the national level, if not slightly lower since the beginning of the year.

However, we observe disparities in food insecurity based on whether or not a household has children (**Figure 13**). 18% of adults with children report being food insecure for at least a 30-day period compared to 14% of childless adults. This rate is higher for households with children under 5 (24%) and highest for single parent households (32%). **Figure 14** also reveals that households with children are receiving SNAP benefits at a higher rate, but this rate is lower than official government data from 2019. We see further that childless and single parent households are more likely to have been on SNAP for more than two years (**Figure 15**). Of note, it is more common for those who are elderly or live alone to receive SNAP for longer.

Figure 12. Household Food Security According to USDA Survey Module: Six-Item Short Form, Jan. - Oct. 2022

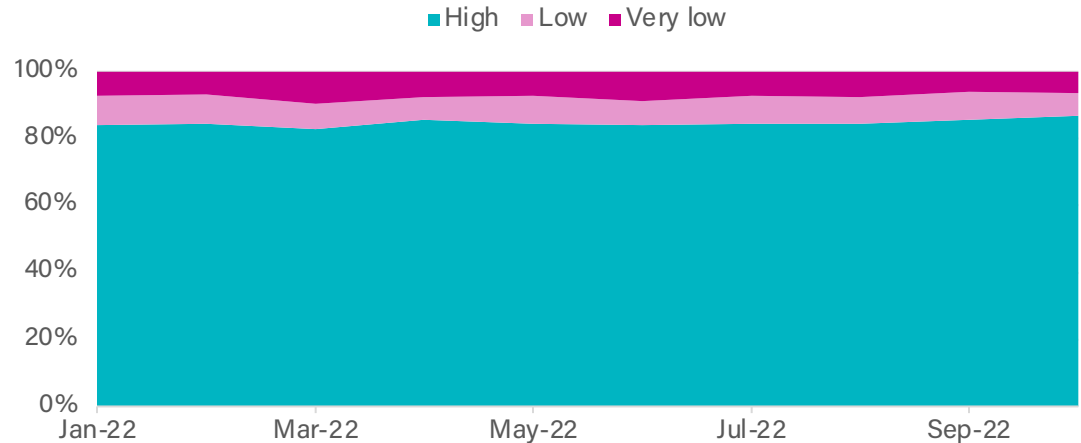
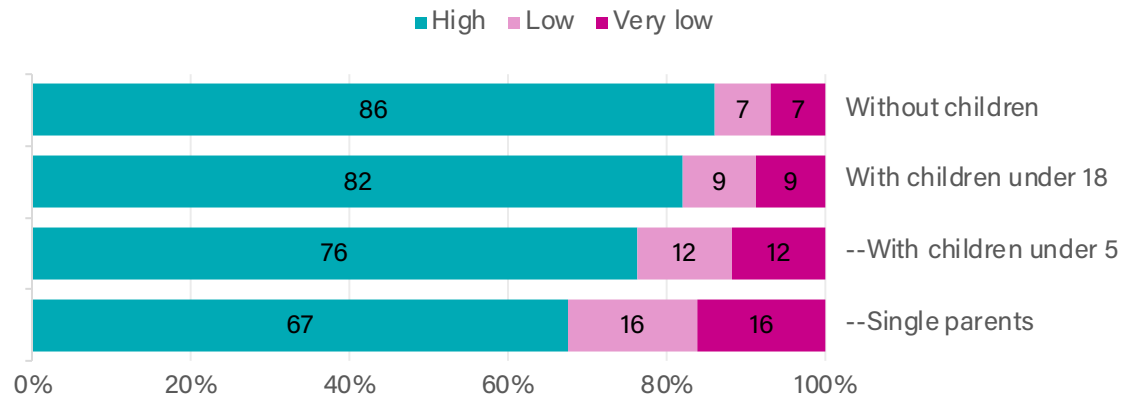
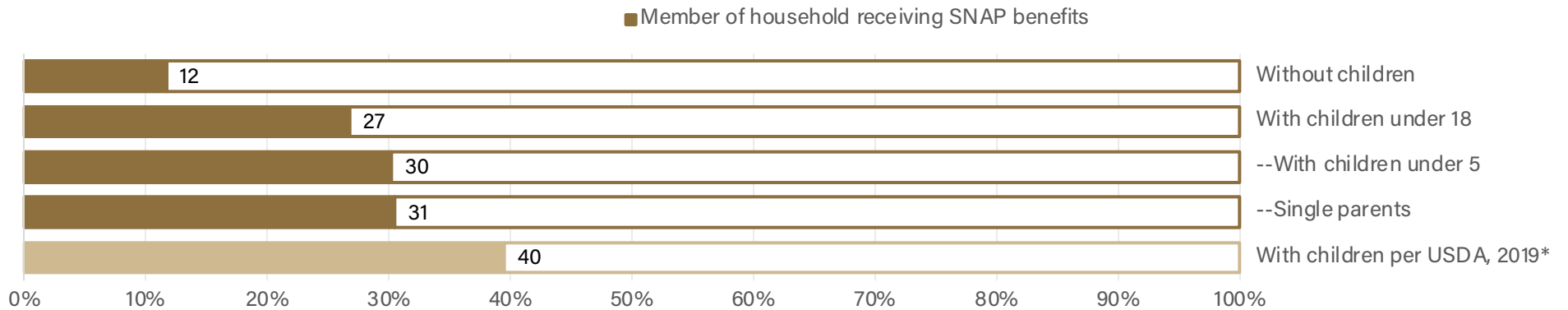


Figure 13. Household Food Security by Households with Children, Jan. - Oct. 2022



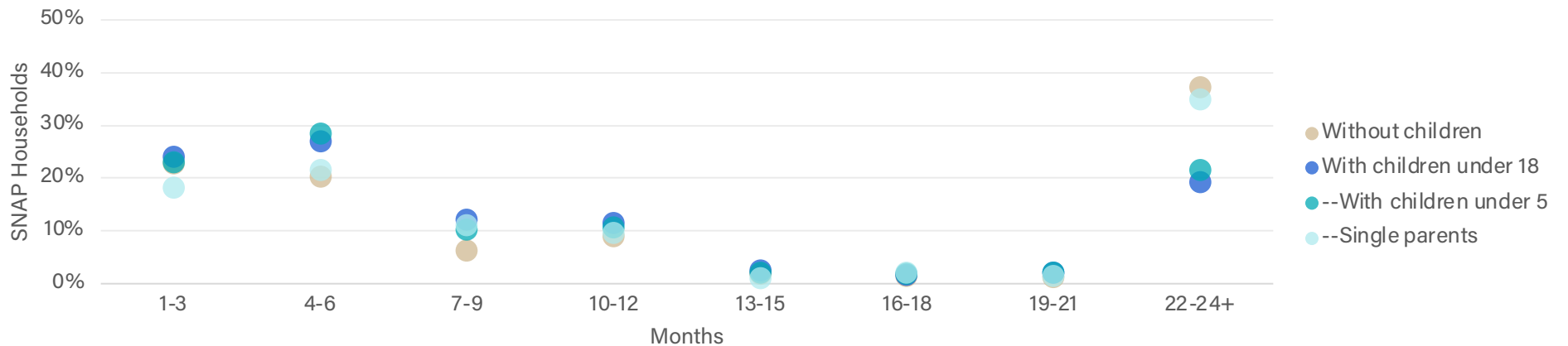
FOOD SECURITY

Figure 14. Participation in Supplemental Nutrition Assistance Program (SNAP) by Households with Children, Jan. - Oct. 2022



*USDA data from the SNAP Quality Control System

Figure 15. Length of Time Receiving SNAP Benefits by Households with Children, Jan. - Oct. 2022



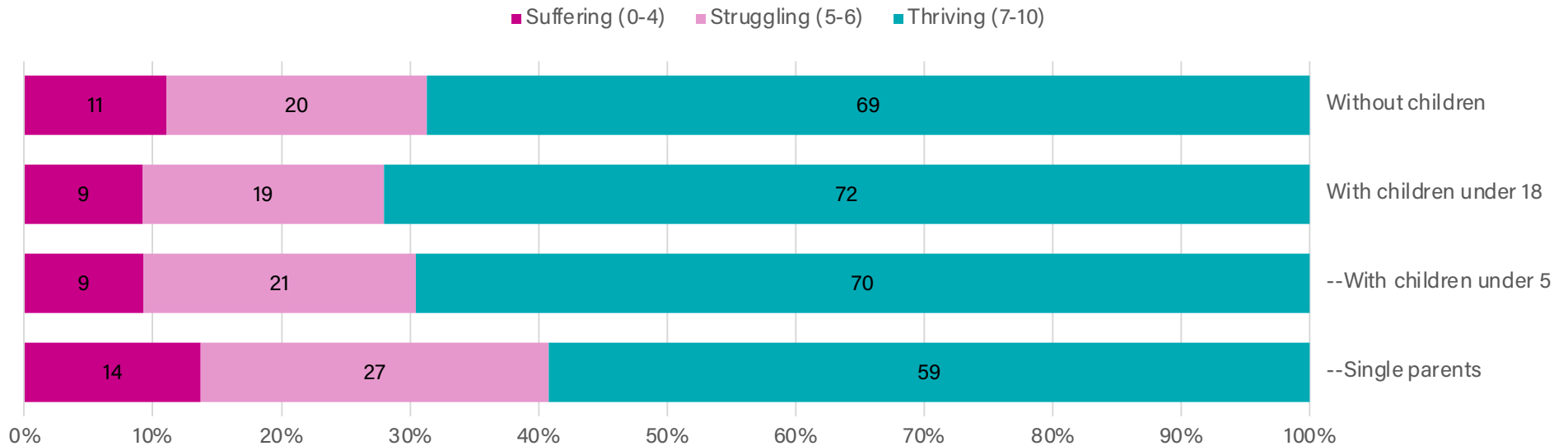
FOOD SATISFACTION

Are Americans satisfied with their diets?

Respondents were asked to score their own diet on a 0-10 scale, with top of that scale representing their ideal diet.⁵ Consumer ratings of their diet are slightly improved for those with children compared to those without children (**Figure 16**). This difference is more noticeable in **Figures 17 & 18**, where consumers living with children are 'very happy' with both their diets and lives by at least a margin of 10 points relative to childless consumers. Yet, single parents are doing much worse than both households with and without children. As reflected in the food security results as well, single parents face major socioeconomic barriers compared to two parent households, including limited time and financial resources, which commonly create hardship for these families.

Food security has correlated with **food satisfaction** in past results but, this month, we observe lower food security among households with children and higher overall diet well-being.

Figure 16. Diet Well-Being Rating by Households with Children, Jan. - Oct. 2022



FOOD SATISFACTION

Figure 17. Diet Happiness by Households with Children, Jan. - Oct. 2022

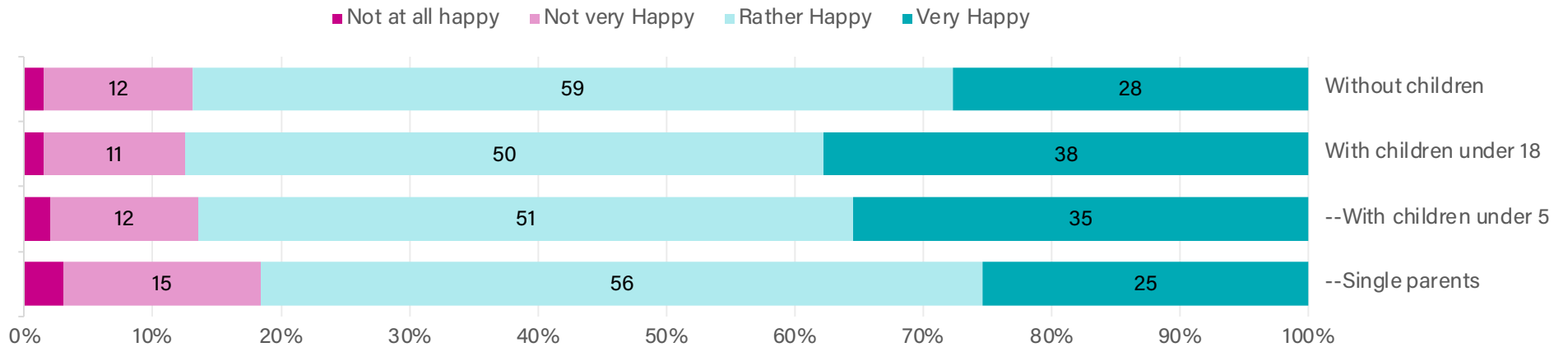
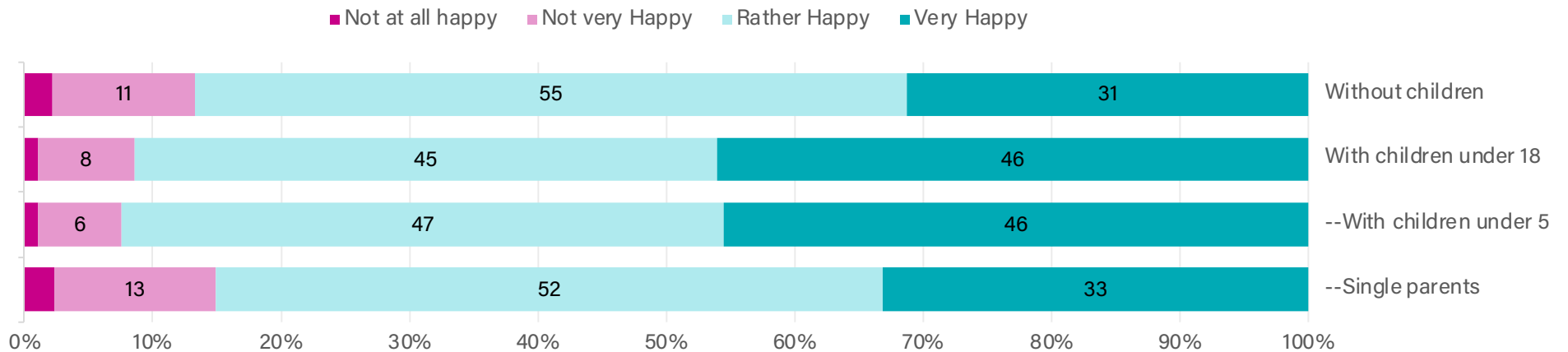


Figure 18. Life Happiness by Households with Children, Jan. - Oct. 2022



CONSUMER BEHAVIORS

How are Americans navigating their food environment?

Figures 19-20 reveal particular consumer behaviors broken down by households with children. First, parents of children under 18 grow their own food and eat a vegetarian/vegan diet at a higher rate than adults living without children. These differences further translate to other so-called “sustainable” or “ethical” behaviors (e.g., choosing local over non-local foods or choosing plant-based proteins over meat) as adults with children are more likely to “sometimes” or “often” pursue these behaviors. However, single parents are making these choices to a lesser degree. Those with children are also looking at food labels more, such as checking for natural or clean labels or checking for GMO ingredients. Consumers without children, however, are throwing away less food past the use-by date.

Figure 22 further shows consumer expectations for Thanksgiving this year. There is wide agreement that turkey will be more expensive, which is all but guaranteed according to official price forecasts. But, when it comes to travel distance, gathering size, and turkey weight, consumers will largely not be going bigger this year.

Figure 19. Share of Adults who Food Garden by Households with Children, May - Oct. 2022

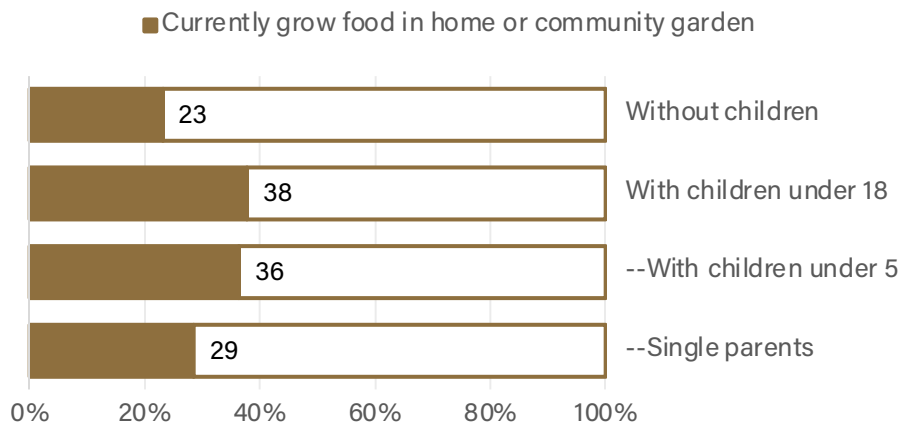
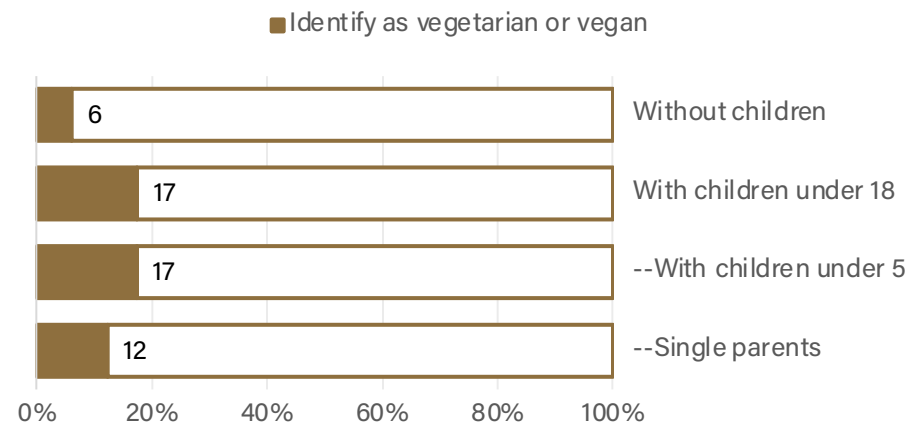


Figure 20. Share of Adults who Identify as Vegetarian/Vegan by Households with Children, Jan. - Oct. 2022



CONSUMER BEHAVIORS

Figure 21. Consumer Shopping and Eating Habits by Households with Children, Jan. - Oct. 2022

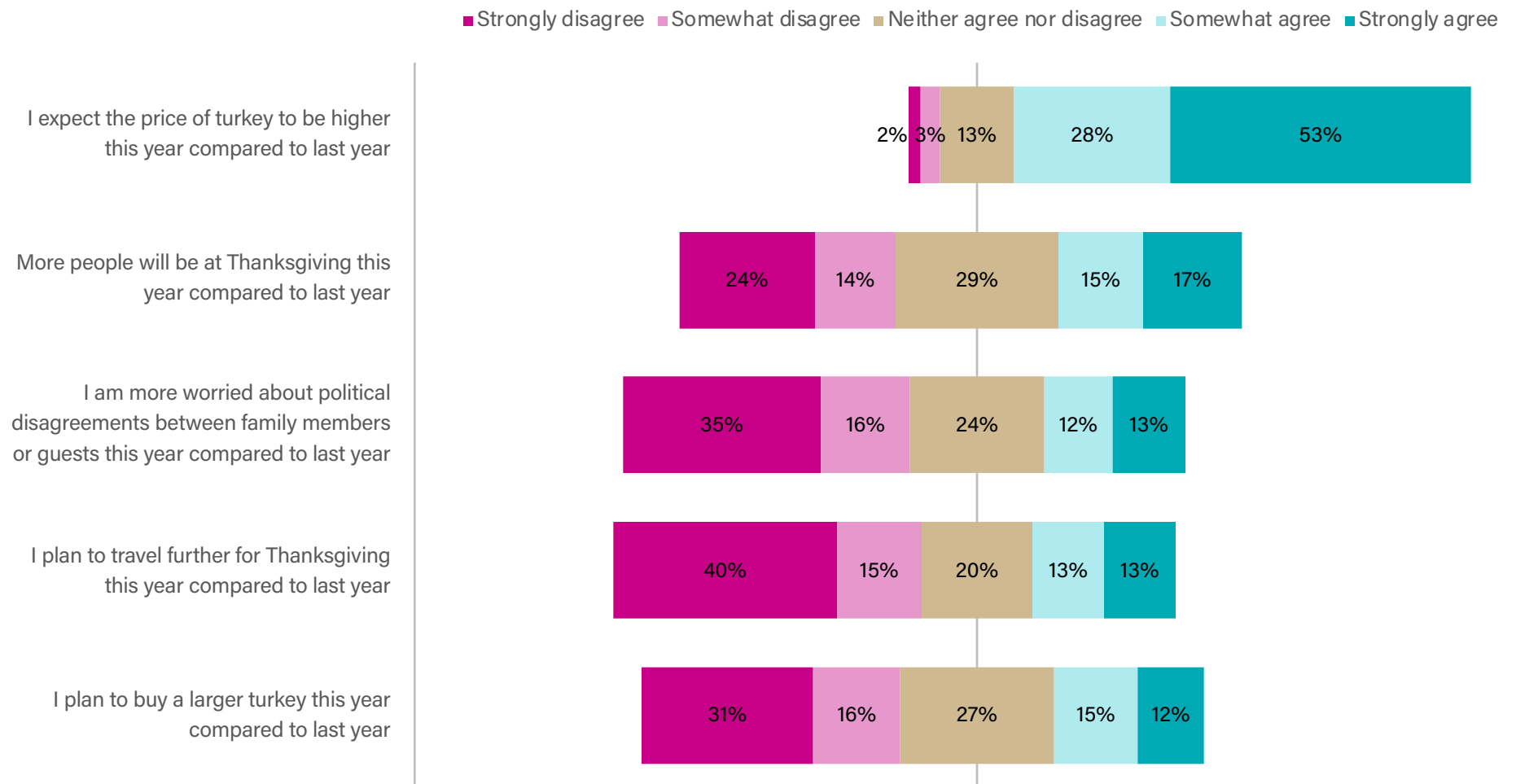
	Without children	With children under 18	--With children under 5	--Single parents	Mean Score	
Chose generic foods over brand name foods	3.3	3.5	3.5	3.4		
Chose local foods over non-local foods	3.0	3.4	3.4	3.1		
Chose wild-caught fish over farm-raised fish	2.8	3.2	3.2	2.9		
Chose grass-fed beef over conventional beef	2.7	3.3	3.3	3.0		
Chose cage-free eggs over conventional eggs	2.6	3.2	3.2	2.9		
Chose organic foods over non-organic foods	2.5	3.2	3.2	2.8		
Chose plant-based proteins over animal proteins	2.3	3.0	3.0	2.8		
Checked the use-by/sell-by date at the store	4.0	4.1	4.0	3.9		
Checked the nutrition label before buying new foods	3.4	3.6	3.5	3.3		
Checked for natural or clean labels	2.8	3.4	3.5	3.2		
Checked where my food originated	2.8	3.3	3.2	3.0		
Checked for food recalls	2.7	3.3	3.3	3.2		
Checked for GMO ingredients	2.6	3.2	3.2	2.9		
Checked how my food was produced	2.6	3.3	3.2	2.9		
Took steps to reduce food waste at home	3.8	3.7	3.6	3.6		
Recycled food packaging	3.5	3.6	3.5	3.4		
Threw away food past the use-by date	3.1	3.6	3.6	3.5		
Composted food scraps	2.2	2.9	2.9	2.5		
Ate fruits and vegetables without washing them	2.1	2.7	2.6	2.5		
Ate rare or undercooked meat	1.8	2.5	2.5	2.2		
Ate raw dough or batter	1.7	2.5	2.6	2.2		

Mean Score

5	Always
4	Often
3	Sometimes
2	Rarely
1	Never

CONSUMER BEHAVIORS

Figure 22. Consumers' Plans/Expectations for Thanksgiving, Oct. 2022

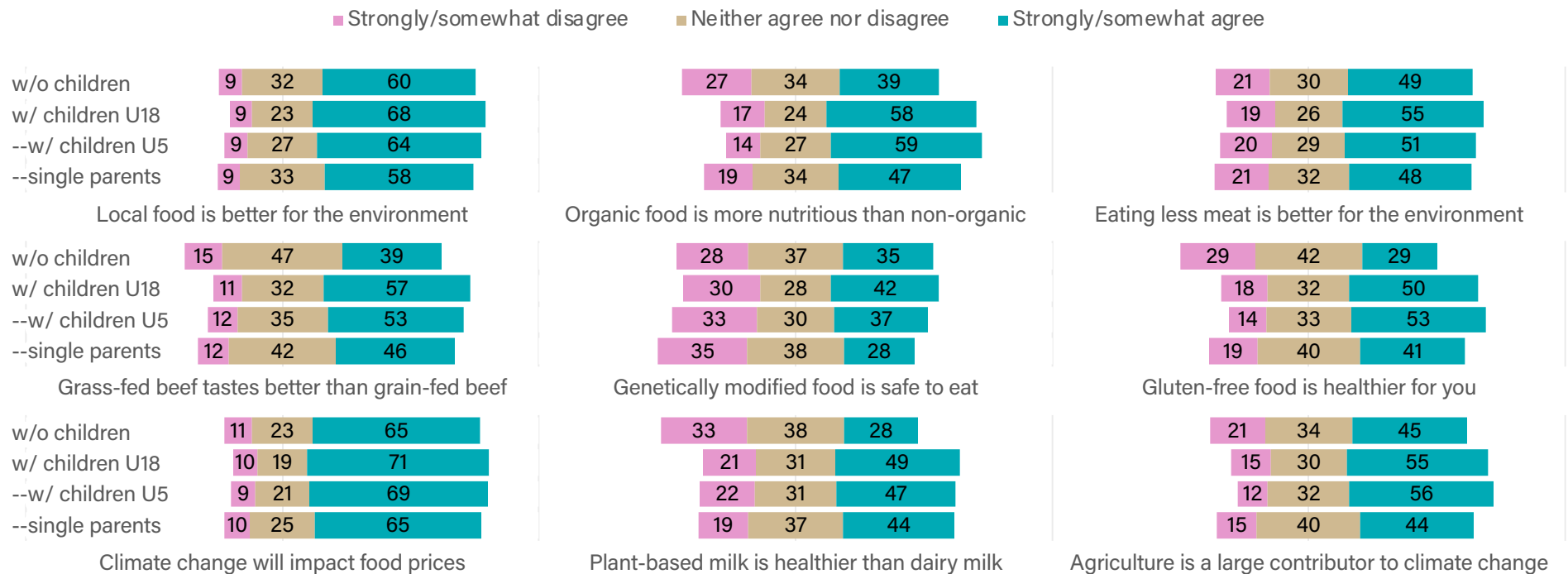


CONSUMER BELIEFS

What do Americans believe about their food and food system?

We observe some differences in the food beliefs of consumers depending on whether or not they have children (**Figure 23**). Interestingly, health-related claims like organic food is more nutritious, plant-based milk is healthier, or gluten-free food is healthier are much more likely to be supported by consumers with children at home. These parents also tend to agree with environment-related claims more often. These beliefs, however, do not appear to be motivated by better information, as a statement like local food is better for the environment is largely unfounded while the idea that eating less meat is better for the environment has significant scientific grounding.

Figure 23. Consumer Agreement with Claims about Food and Nutrition by Households with Children, Mar. - Oct. 2022



ENDNOTES

1 Data were collected from an online panel maintained by the firm Dynata over a two-day period from October 17-19, 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 49% of September’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: without children (n=8,631), with children under 18 (n=3,848), with children under 5 (n=1,217), single parents (n=1,311). Note that the “with children under 5” and “single parents” categories are both contained within the “with children under 18” category.

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.