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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 male and female respondents with differing marital status have answered our survey this year. We aggregated nine months of data (Jan. - Sept. 2022) to compare consumer behaviors across four groups: single males, married males, single females, and married females.² New questions this month also asked about the consumer understanding of “regenerative” food and agriculture and about seafood consumption. Interested in additional in-depth analysis? Contact cfdas@purdue.edu to learn how you can join our industry consortium.

KEY INSIGHTS FROM SEPTEMBER

- Food spending remains near its 2022 peak.
- Food inflation expectations continue to decline, suggesting consumer optimism.
- Women face higher food insecurity than men, but married women are fairing much better.
- Food satisfaction is highest among married men and lowest among unmarried women.
- Consumers disagree over the meaning of “regenerative” in regards to food and agriculture.
- Consumers eat less seafood than recommended by the Dietary Guidelines for Americans.
- Food sustainability behaviors differ relatively little between men and women.
- Women and unmarried people broadly express more progressive food politics.

SFP INDEX

69_{/100}

FOOD INSECURITY

14%

FOOD SPENDING

\$184_{/WEEK}

FOOD HAPPINESS

86%

SUSTAINABLE DIETS

Is American food purchasing sustainable?

The SFP Index remains insensitive to rising food prices (**Figure 1**). In addition, **Figure 2** shows that married consumers score higher on the overall index compared to unmarried consumers, and women score higher than men. Across the SFP sub-indicators, marriage boosts all six scores. However, married men receive a larger boost than women relative to their single counterparts, specifically along the taste, economic, and security indicators. Single and married women outpace men in the social, environment, 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, Jan. - Sept. 2022

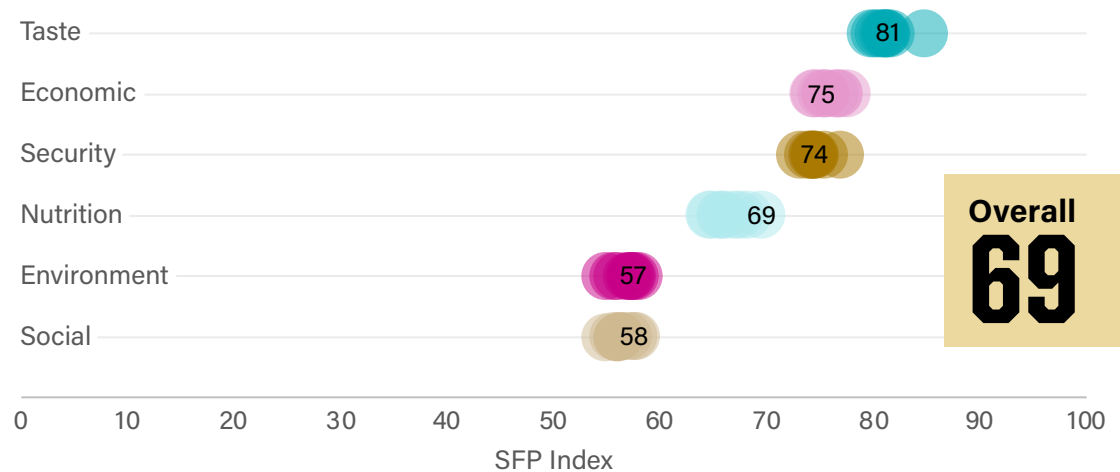


Figure 2. Sustainable Food Purchasing Index by Sex and Marital Status, Jan. - Sept. 2022



SUSTAINABLE DIETS

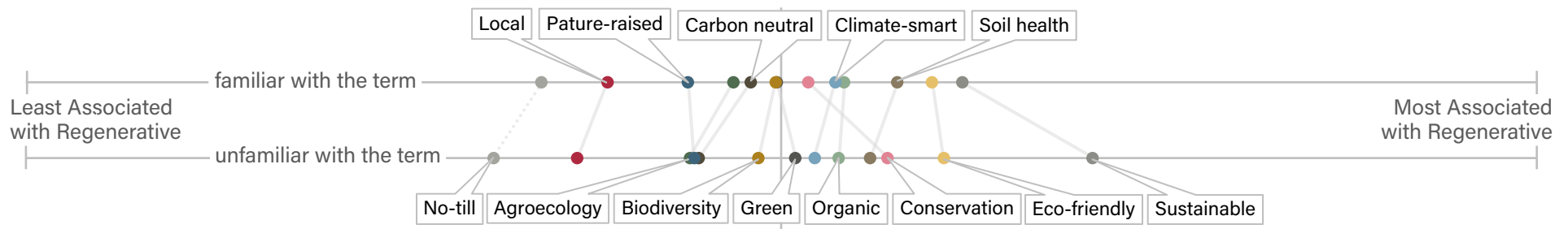
What does “regenerative” mean to consumers?

“Regenerative” is increasingly referenced in mainstream agri-food settings to describe an alternative way of producing food, but its exact meaning is often ambiguous. This month, we find that only **38% of consumers report knowing what “regenerative” means in the context of food and agriculture**. The most common words used to describe “regenerative” by these consumers are displayed in **Figure 3**. Additionally, all survey respondents were presented 13 terms over a series of questions and asked to identify the terms that they most and least associate with “regenerative”—a methodology known as best-worst scaling. After normalizing these responses on a -1 to 1 scale, we found that people most associate “regenerative” with “sustainable” and least associate it with “no-till” (**Figure 4**). Yet, most surveyed terms score close to 0, particularly among those who report familiarity with the term, indicating that there lacks a clear consumer consensus on how to conceptualize “regenerative.”

Figure 3. Consumer Descriptions of “Regenerative” in the Context of Food and Agriculture, Sept. 2022



Figure 4. Best-Worst Scale of Food and Agriculture Terms Associated With “Regenerative” Based on Self-reported Familiarity with the Term, Sept. 2022

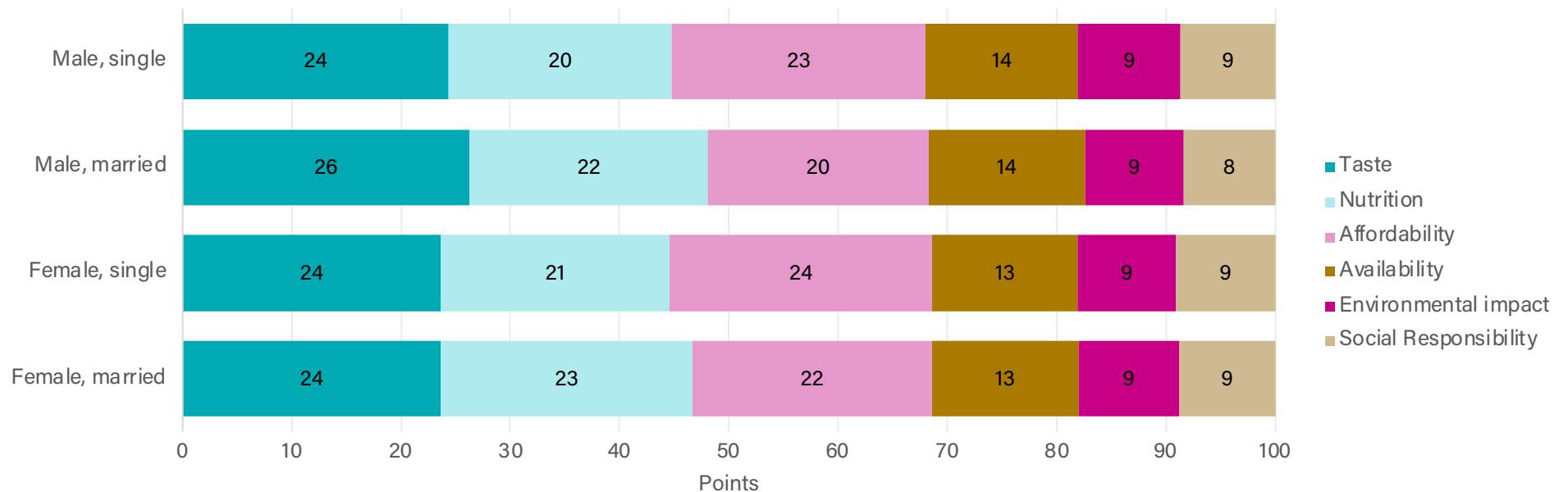


FOOD VALUES

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 5**). 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 food values break down across sex and marital status, their distributions diverge slightly. On average, unmarried consumers value the affordability of their food more than married consumers. As a result, married consumers value nutrition more than their unmarried counterparts. Taste is also valued most by married men, while availability, environmental impact, and social responsibility are nearly undifferentiated across groups.

Figure 5. Share of 100 Points Allocated to Food Attributes by Sex and Marital Status, Jan. - Sept. 2022



FOOD EXPENDITURES

How much are Americans spending on their food?

Respondents were asked to estimate their weekly food spending (Figure 6). On average, consumers reported spending \$121/week on groceries (FAH) and \$63/week on restaurants and carryout meals (FAFH).³ FAH remains near its peak for 2022, while FAFH has declined for the second straight month. However, FAFH is still at its pre-summer levels, suggesting that consumers may just be going out less as the seasons change. Consumer estimates of annual food inflation for both the past 12 months and next 12 months have also continued their four month decline (Figure 7).

Figure 8 shows who is doing the FAH purchasing. It is likely that some consumers are over estimating their shopping percentage since married men and women cannot collectively do more than 100% of the shopping for their households. Figure 9 shows further where FAFH purchasing occurs. Married consumers commit more of their spending to dine-in at restaurants, while single consumers spend a larger share on food delivery services.

Figure 6. Weekly Household Food Expenditures, Jan. - Sept. 2022

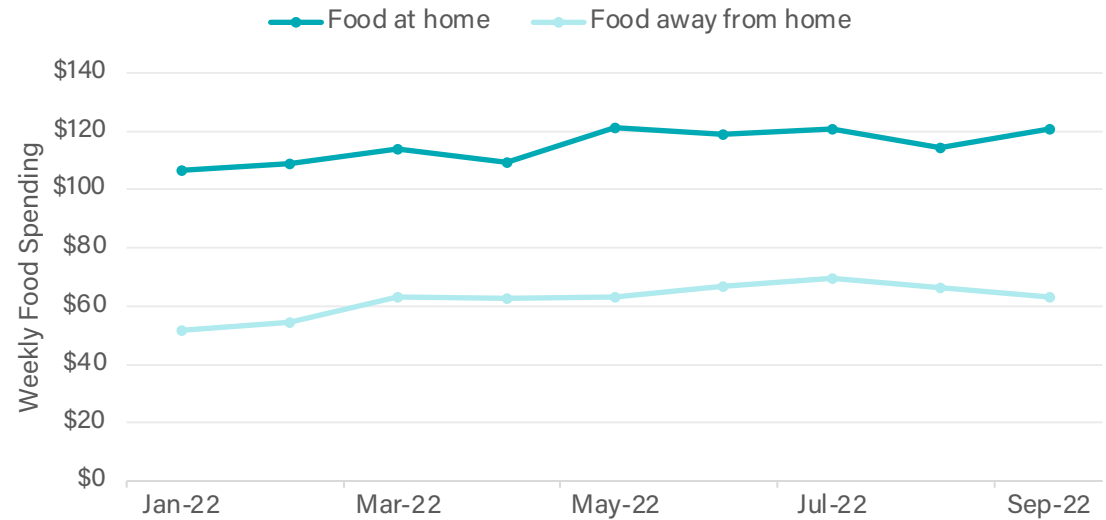
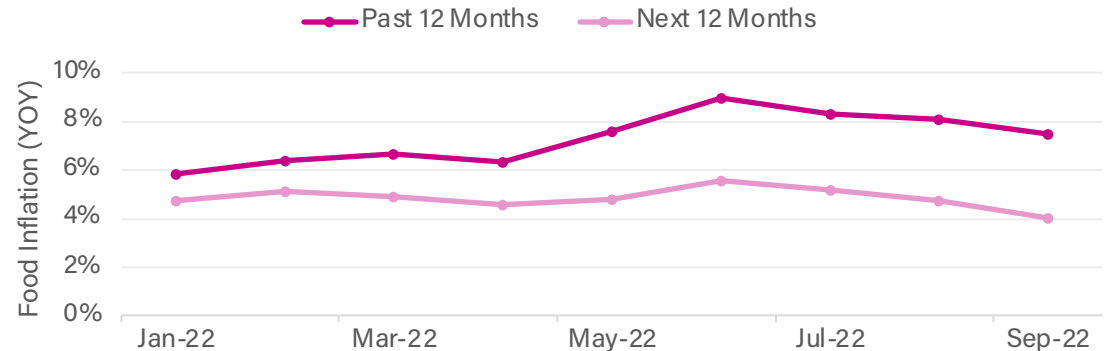


Figure 7. Consumer Estimates of Food Price Inflation, Jan. - Sept. 2022



FOOD EXPENDITURES

Figure 8. Percent (%) of Food Shopping for Household by Sex and Marital Status, Jan. - Sept. 2022

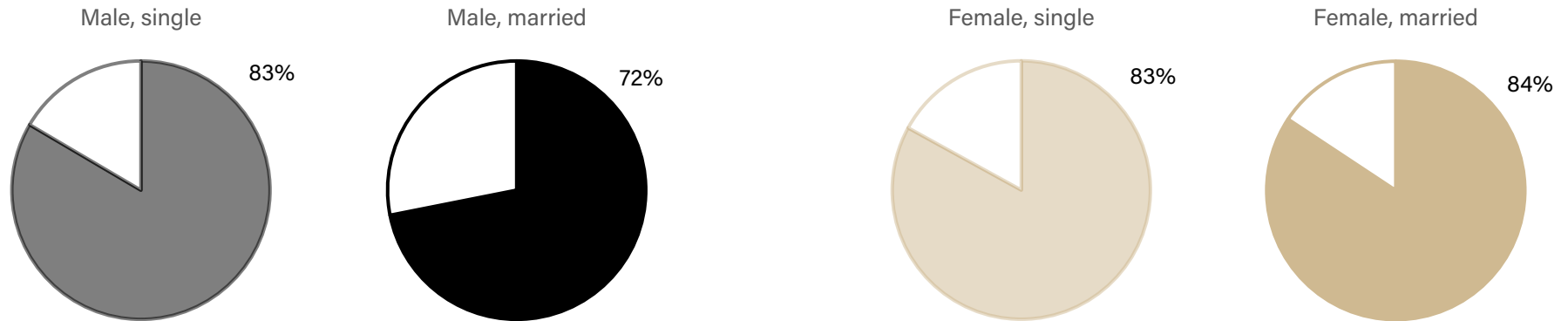
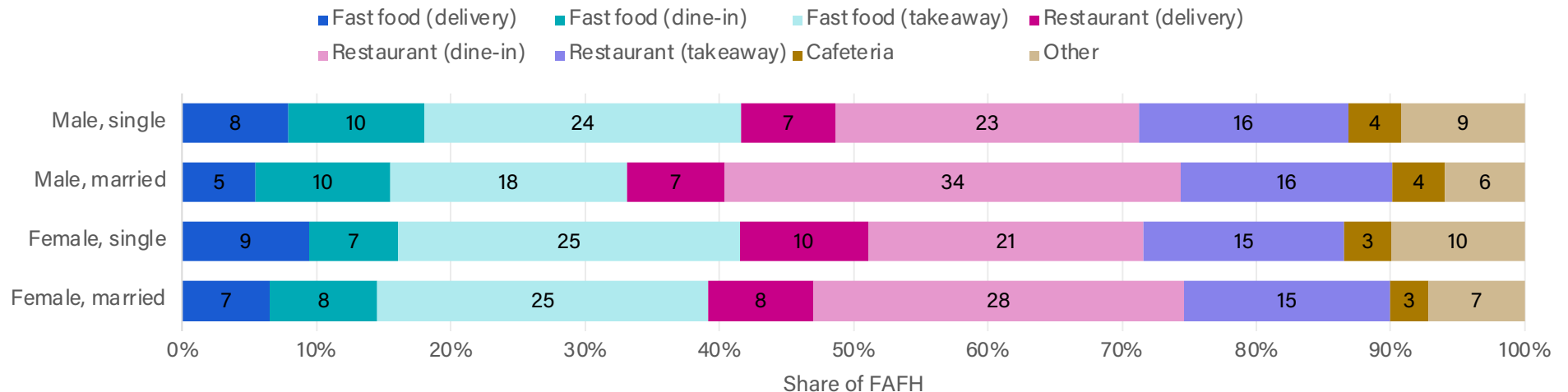


Figure 9. Percent (%) of Food Away From Home (FAFH) by Location/Method and Sex and Marital Status, Mar. - Sept. 2022



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 14%.⁴ **Figure 10** shows that this rate remains steady at the national level. However, we observe stark disparities in food security based on whether a person is married or not and whether a person is male or female (**Figure 11**). This year, 21% of women report being food insecure for at least a 30-day period, and that rate increases to 28% for unmarried women. Comparatively, about 10% of men have reported food insecurity, but that rate is halved to 5% for married men. Historically, single women have been considered a more vulnerable group and commonly receive more food aid.

22% of single women report receiving SNAP benefits at some point this year compared to **19%** of single men, **13%** of married men, and **15%** of married women

Figure 10. Household Food Security According to USDA Survey Module: Six-Item Short Form, Jan. - Sept. 2022

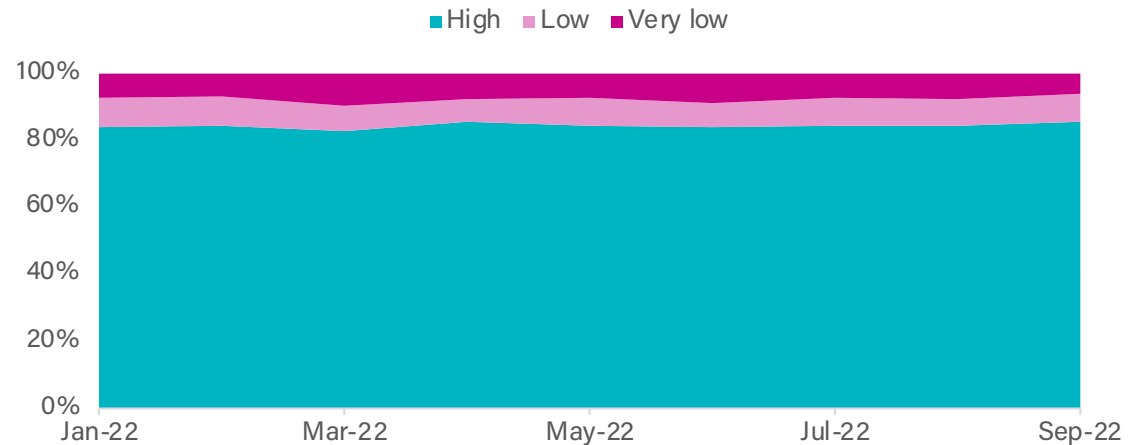
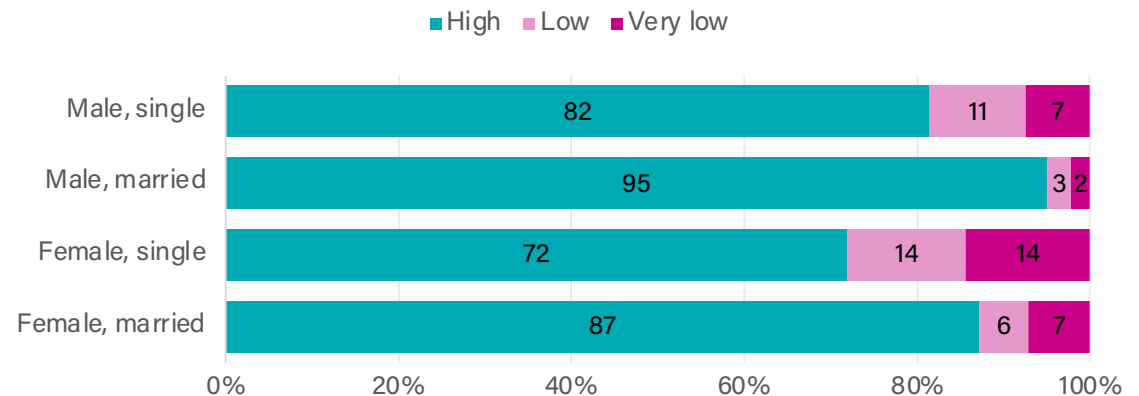


Figure 11. Household Food Security by Sex and Marital Status, Jan. - Sept. 2022



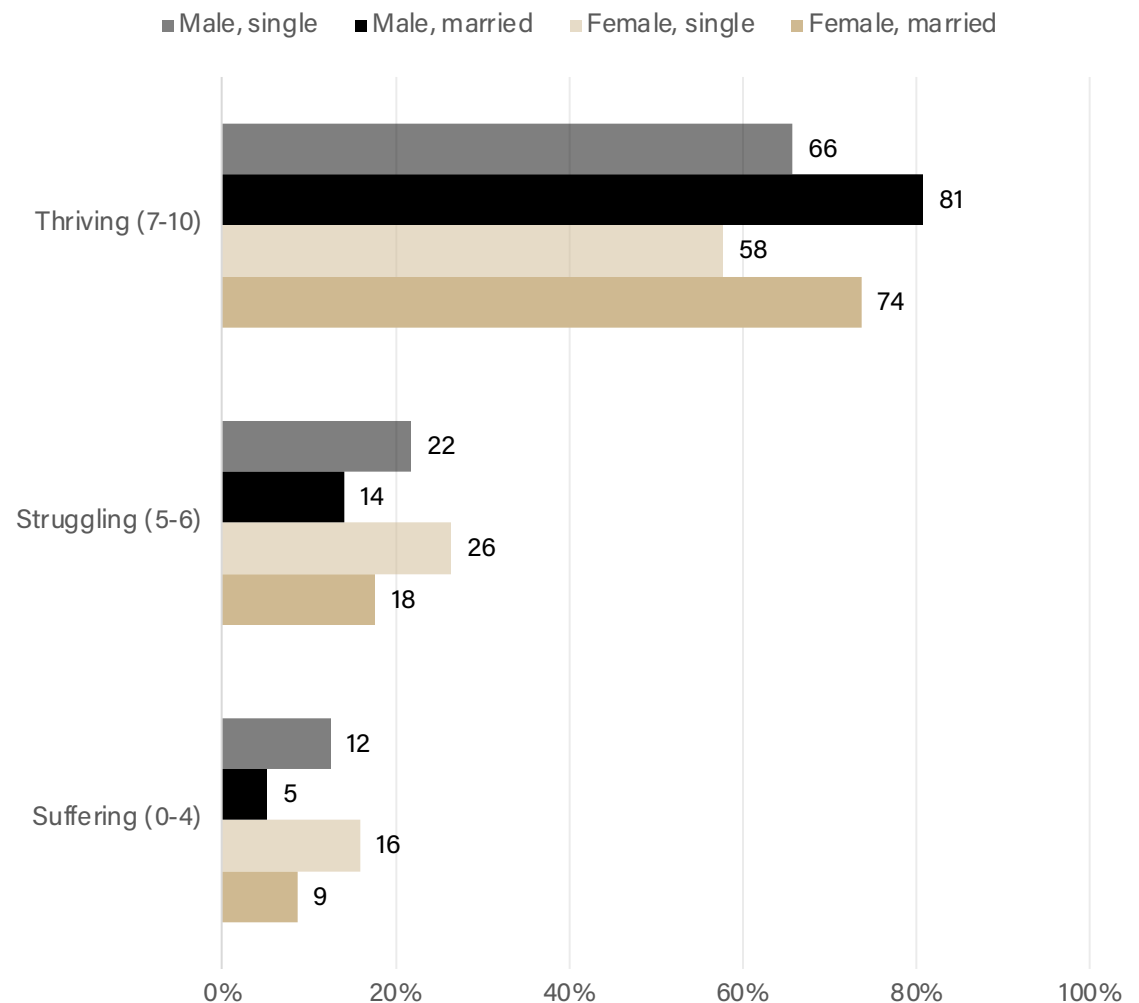
FOOD SATISFACTION

Are Americans satisfied with their diets?

Respondents were asked to score their own diet on a 0-10 scale, with top of the well-being scale representing their ideal diet.⁵ Consumer ratings of their food consumption are worse for both women and unmarried respondents (**Figure 12**). The most noticeable difference across groups is the 23-point gap between married men and single women who are thriving. Similarly, **Figures 13 & 14** show that nearly half of married men are very happy with both their diets and lives, while unmarried women, as well as unmarried men, report the lowest rates of happiness. As mentioned in our discussion of food insecurity above, these results broadly align with structural factors that have historically favored both married couples and men in the U.S., namely more economic security.

Overall, rates of **food happiness** and **life happiness** continue to mirror each other, which begs the question of how great of an impact one factor might have on the other.

Figure 12. Diet Well-Being Rating by Sex and Marital Status, Jan. - Sept. 2022



FOOD SATISFACTION

Figure 13. Diet Happiness by Sex and Marital Status, Jan. - Sept. 2022

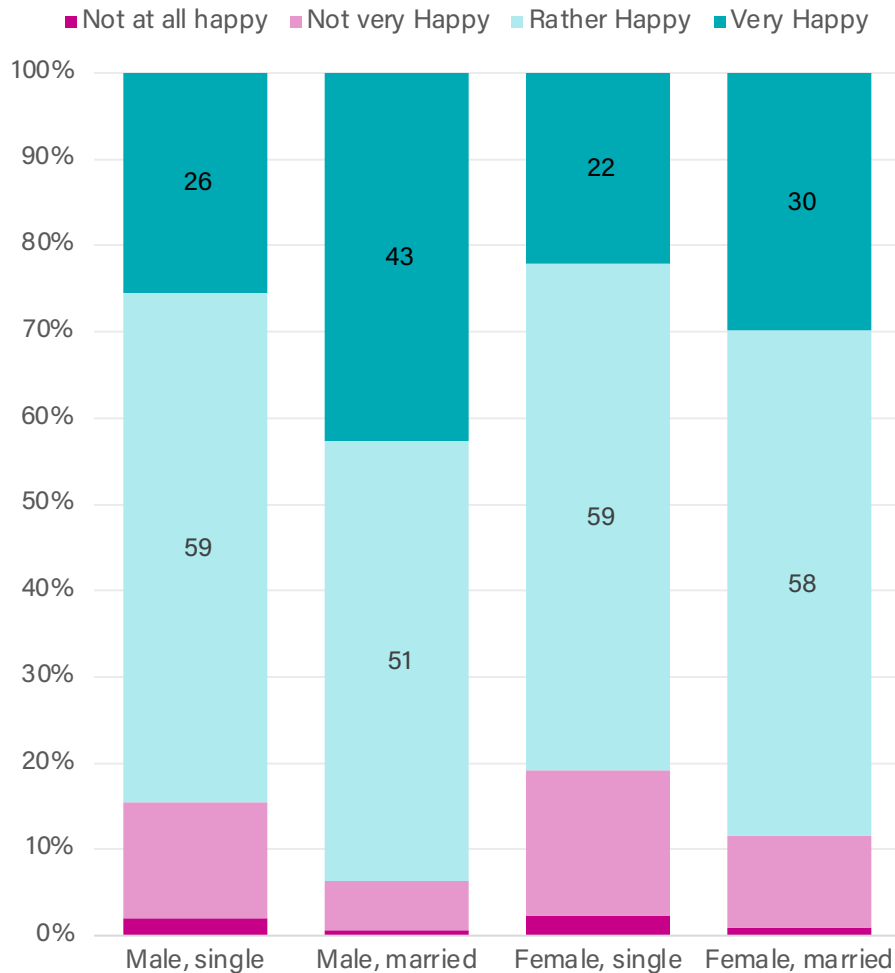
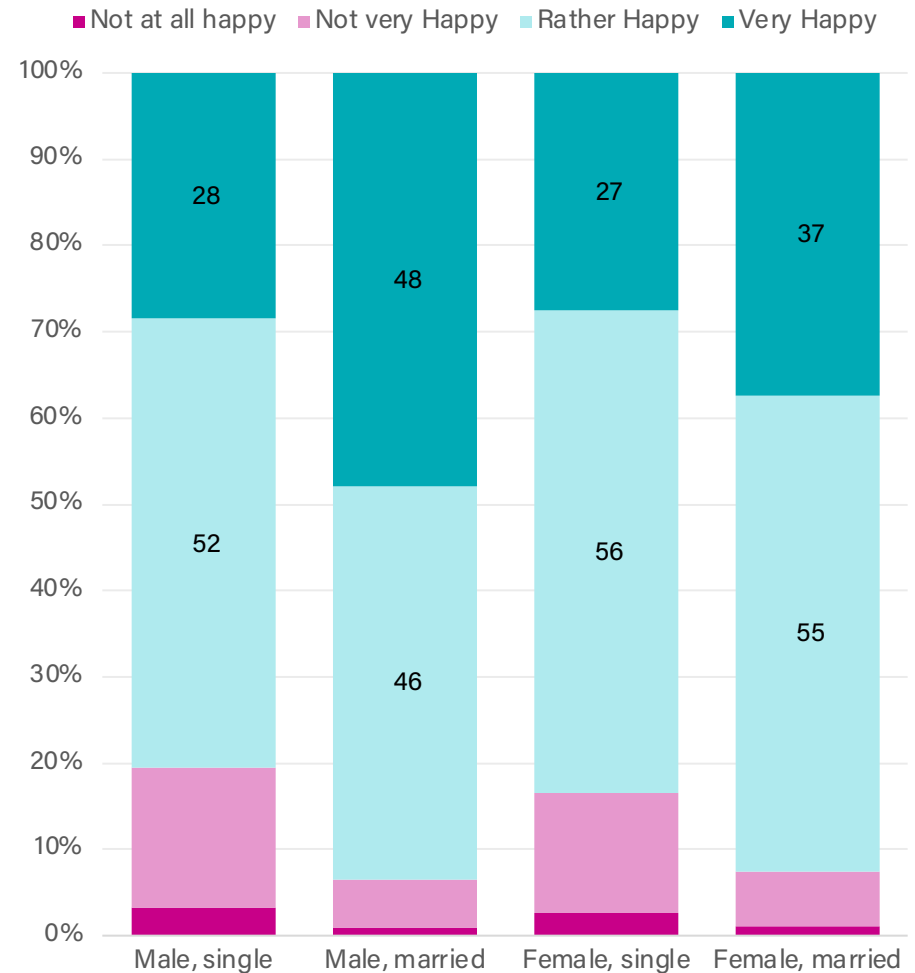


Figure 14. Life Happiness by Sex and Marital Status, Jan. - Sept. 2022



CONSUMER BEHAVIORS

How are Americans navigating their food environment?

The Dietary Guidelines for Americans recommends eating at least one serving of seafood per week (or four servings per month) for most adults. A majority of consumers are likely not meeting this recommendation. Only 27% of people are eating fish at least four times/month and 10% are eating shellfish at least 4 times/month (**Figures 15 & 16**). However, since 44% are eating fish 1-3 times/month and 34% are eating shellfish 1-3 times/month, about another third of Americans could be meeting this recommendation.

Figure 17 further reveals particular consumer food habits broken down by sex and marital status. Notably, married consumers tend to increase some behaviors like checking food labels, reducing food waste, and recycling. The selection of foods that are typically promoted as more ethical or sustainable (i.e., local foods, wild-caught fish, grass-fed beef, cage-free eggs, and organic foods) is not strongly correlated with one group over others, although married consumers slightly prefer these food choices. Women also report eating rare/undercooked meat and unwashed fruits/vegetables moderately less than men, yet this greater preference for food safety is not reflected in their likelihood of eating raw dough/batter.

Figure 15. Share of Adults Consuming Fish Monthly, Sept. 2022

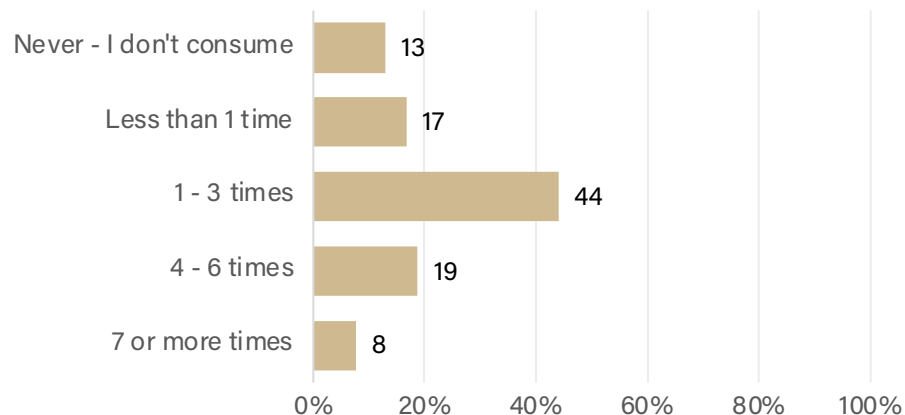
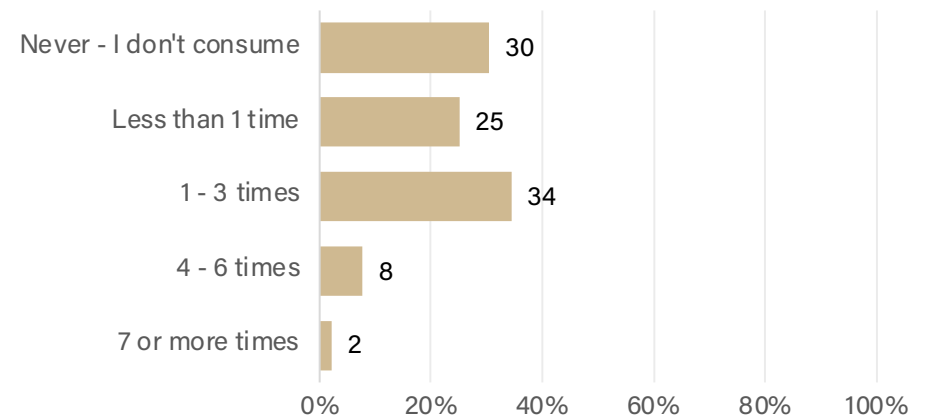


Figure 16. Share of Adults Consuming Shellfish Monthly, Sept. 2022



CONSUMER BEHAVIORS

Figure 17. Consumer Shopping and Eating Habits by Sex and Marital Status, Jan. - Sept. 2022

	Male, Single	Male, Married	Female, Single	Female, Married	
Chose generic foods over brand name foods	3.3	3.3	3.4	3.3	
Chose local foods over non-local foods	3.0	3.2	3.1	3.2	
Chose wild-caught fish over farm-raised fish	2.9	3.1	2.8	3.0	
Chose grass-fed beef over conventional beef	2.9	3.0	2.8	2.9	
Chose cage-free eggs over conventional eggs	2.7	2.8	2.8	2.9	
Chose organic foods over non-organic foods	2.7	2.8	2.6	2.8	
Chose plant-based proteins over animal proteins	2.6	2.5	2.5	2.5	
Checked the use-by/sell-by date at the store	3.8	4.1	4.0	4.1	Mean Score
Checked the nutrition label before buying new foods	3.3	3.5	3.3	3.6	5 Always
Checked for natural or clean labels	2.9	3.0	3.0	3.1	4 Often
Checked for food recalls	2.7	3.0	3.0	3.0	3 Sometimes
Checked where my food originated	2.9	3.1	2.8	3.0	2 Rarely
Checked for GMO ingredients	2.7	2.8	2.8	3.0	1 Never
Checked how my food was produced	2.8	2.9	2.7	2.9	
Took steps to reduce food waste at home	3.6	3.8	3.7	3.8	
Recycled food packaging	3.3	3.7	3.4	3.6	
Threw away food past the use-by date	3.1	3.3	3.4	3.2	
Composted food scraps	2.4	2.6	2.3	2.4	
Ate fruits and vegetables without washing them	2.4	2.4	2.3	2.2	
Ate raw dough or batter	2.0	2.0	2.0	2.0	
Ate rare or undercooked meat	2.1	2.2	1.8	1.9	

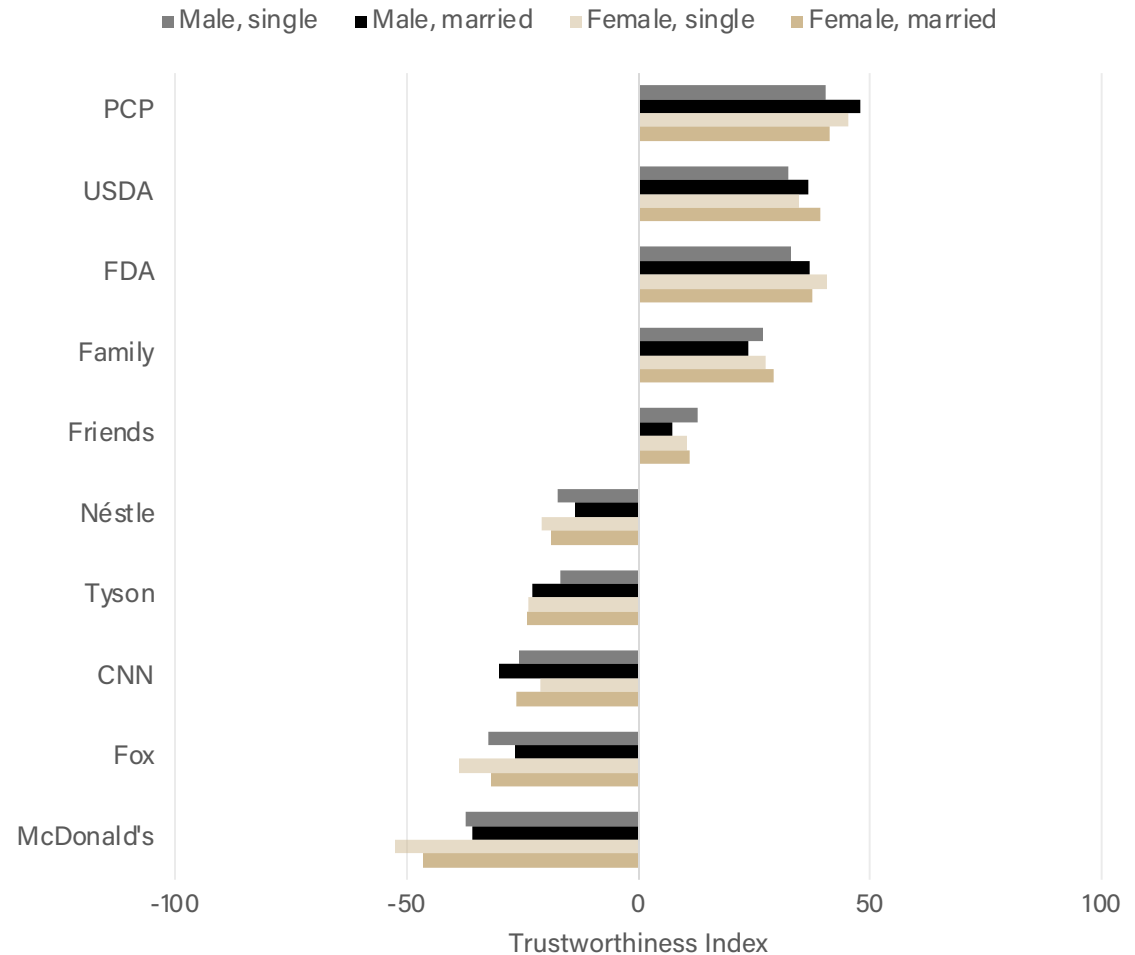
CONSUMER TRUST

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 sex and marital status, some differences in trust emerge (**Figure 18**). Though some of these differences are not readily apparent, women clearly distrust McDonald's and other food companies like Tyson and Nestle more than men. Women also distrust Fox News more, while men distrust CNN more. Married men trust their doctors more than other groups, and married women trust their family members more than other groups. Furthermore, women express slightly more trust for government agencies (FDA/USDA) than men.

Overall distrust in companies like **McDonald's**, **Chipotle**, **Tyson**, and **Nestle** is up by at least 25% since January, which could be a byproduct of consumers paying higher food prices.

Figure 18. Trustworthiness Index of Food-related Information Sources by Sex and Marital Status, Jan. - Sept. 2022

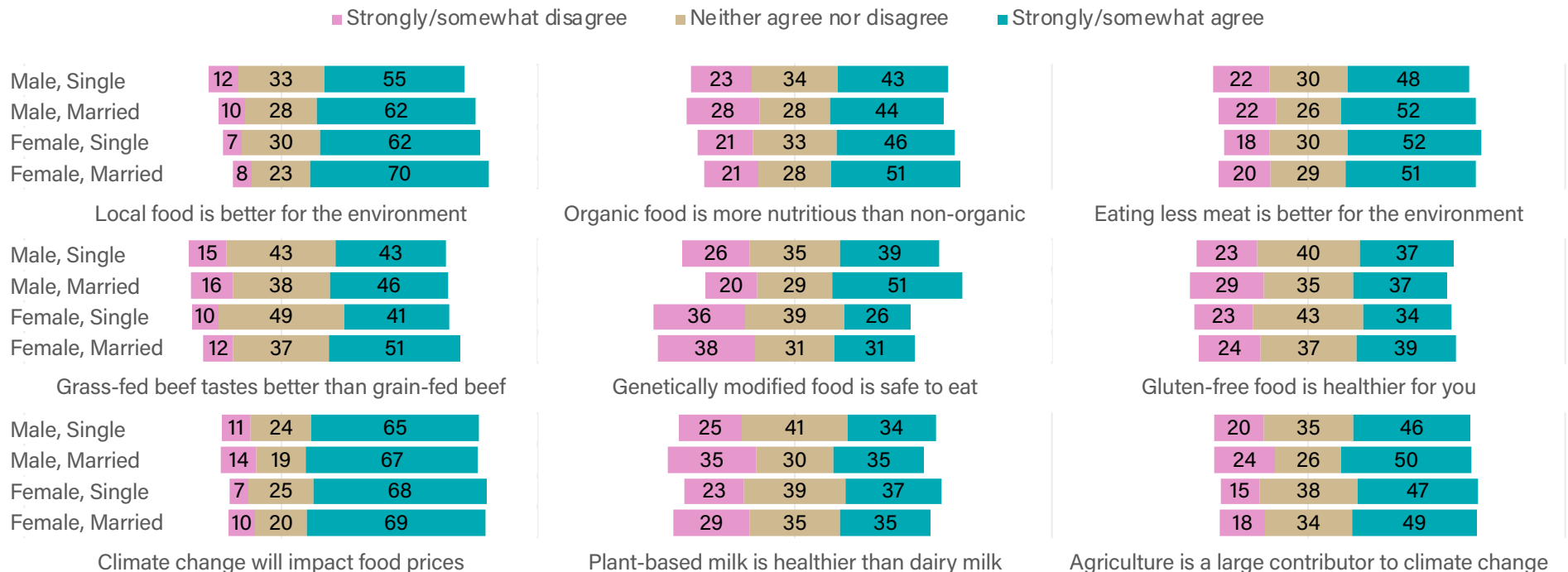


CONSUMER BELIEFS

What do Americans believe about their food and food system?

We observe some differences in the beliefs that consumers of differing sex and marital status have about their food, but these differences are comparatively smaller than previous demographic analyses (**Figure 19**). The most striking result is the fact that married men agree that GMO food is safe to eat by 12-25 points more than other groups. Additionally, unmarried people consistently report neither agreeing nor disagreeing with these claims at a higher rate than married people. We observe few other gendered differences in beliefs, although women are slightly more inclined to agree local food is better for the environment and organic food is more nutritious.

Figure 19. Consumer Agreement with Claims about Food and Nutrition by Sex and Marital Status, Mar. - Sept. 2022



FOOD POLICY

Where do Americans stand on food policy?

Americans remain broadly supportive of most surveyed policies. Our analysis this month, however, reveals some differences in support for these policies based on the sex and marital status of survey respondents (**Figure 20**). Unmarried people appear to be more progressive in their politics as they support policies like regulating environmental claims on food packaging, granting citizenship for undocumented farmworkers, and imposing fees on carbon emissions at higher rates than married people. Notably, we observed in previous analyses that older Americans, who we would expect to be married at higher rates, are also more likely to be conservative. Similarly, women favor many of these same policies more than men. These differences in support still largely fit within a 10-point range, but the greatest differences are generally between married men and unmarried women.

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.

Increase annual funding and technical support for beginning, socially disadvantaged, and veteran farmers and ranchers.

Increase annual funding and technical support for agricultural producers, meaning all farmers and ranchers who apply.

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.

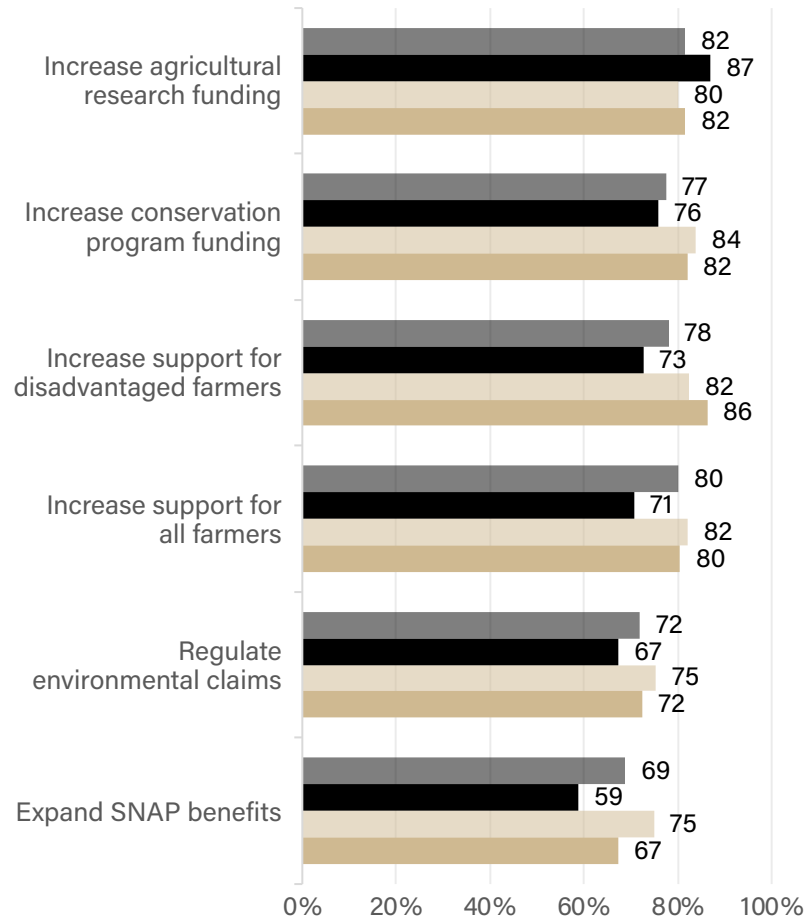
Implement zoning regulations to restrict the number of fast food outlets and drive-through facilities near schools, parks, hospitals, and other public areas.

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

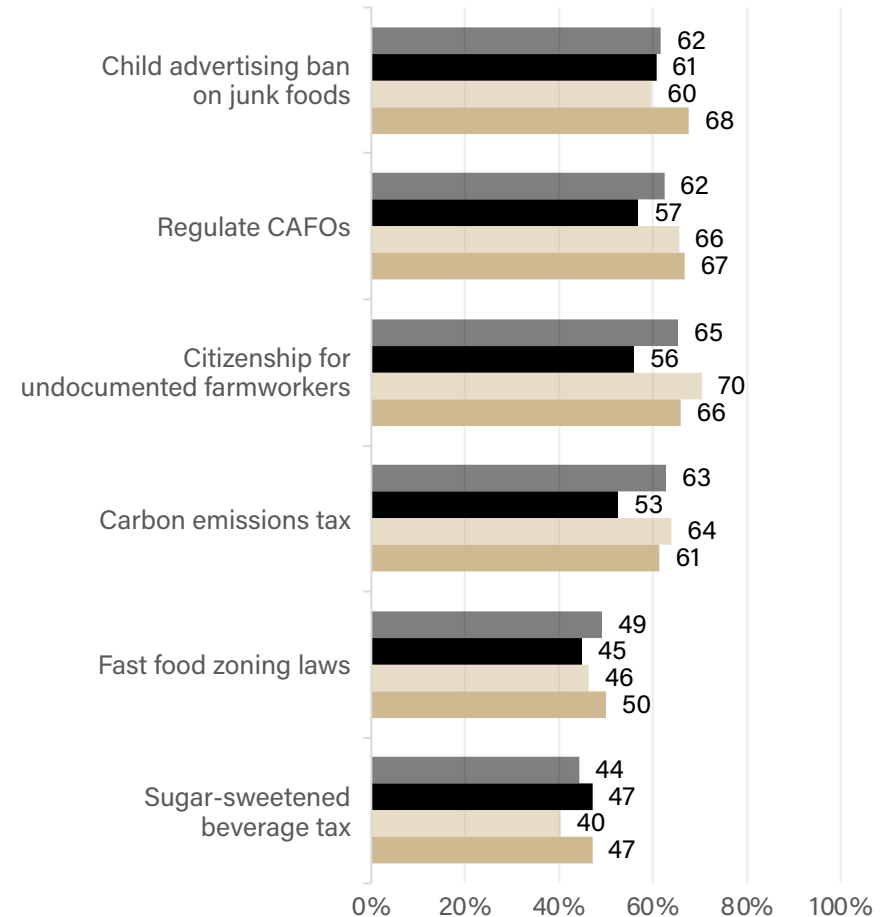
FOOD POLICY

Figure 20. Favorable Support for Food and Agriculture Policies by Sex and Marital Status, Jan. - Sept. 2022

■ Male, single ■ Male, married ■ Female, single ■ Female, married



■ Male, single ■ Male, married ■ Female, single ■ Female, married



ENDNOTES

1 Data were collected from an online panel maintained by the firm Dynata over a two-day period from September 19-21, 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 42% of August’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: single male (n=2,887), married male (n=4,114), single female (n=3,022), married female (n=).

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.