



Volume 1, Issue 1: January 2022

Consumer Food Insights

Center for Food Demand Analysis and Sustainability (CFDAS)

College of Agriculture, Purdue University

Jayson L. Lusk and Sam Polzin



INTRODUCTION

Consumer Food Insights is a monthly survey of more than 1,200 Americans from across the country, which is produced and run by the Center for Food Demand Analysis and Sustainability at Purdue University to track trends and changes in consumer food demand and food sustainability behaviors.¹ As the food system in the United States continues to confront challenges brought on by COVID-19, climate change, and economic volatility, it is essential to have current data on the activities affected by these events and to know how these data are changing over time to respond and develop actionable policies. We seek to better understand this national food environment and help businesses navigate supply chains, thus the Consumer Food Insights report reveals where, how, and what food U.S. consumers bought and ate, with a focus on the implications for food systems at the national scale (visit purdue.ag/CFDAS for more details).

SUSTAINABLE FOOD
PURCHASING INDEX

67 /100

KEY INSIGHTS FROM JANUARY

- **32%** of respondents are waiting for their next paycheck to buy groceries again
- **25%** of respondents were unable to find a specific food product at the grocery store
- **21%** of respondents purchased their last groceries online
- **46%** of respondents ate home-cooked meals 4-6 times per week
- **11%** of respondents identified as a vegetarian or vegan
- **51%** of respondents blamed COVID-related shutdowns for the rise in meat prices

See also...

- **pg. 3** for more on the new Sustainable Food Purchasing (SFP) Index
- **pg. 5** for more on household food spending and inflation
- **pg. 8** for more on consumer satisfaction with their diets
- **pg. 11** for more on consumer trust in food-related information

FOOD INSECURITY

16%

of respondents face
food insecurity

FOOD SPENDING

\$158

per week at grocery
stores & restaurants

FOOD HAPPINESS

87%

of respondents are
happy with their diet

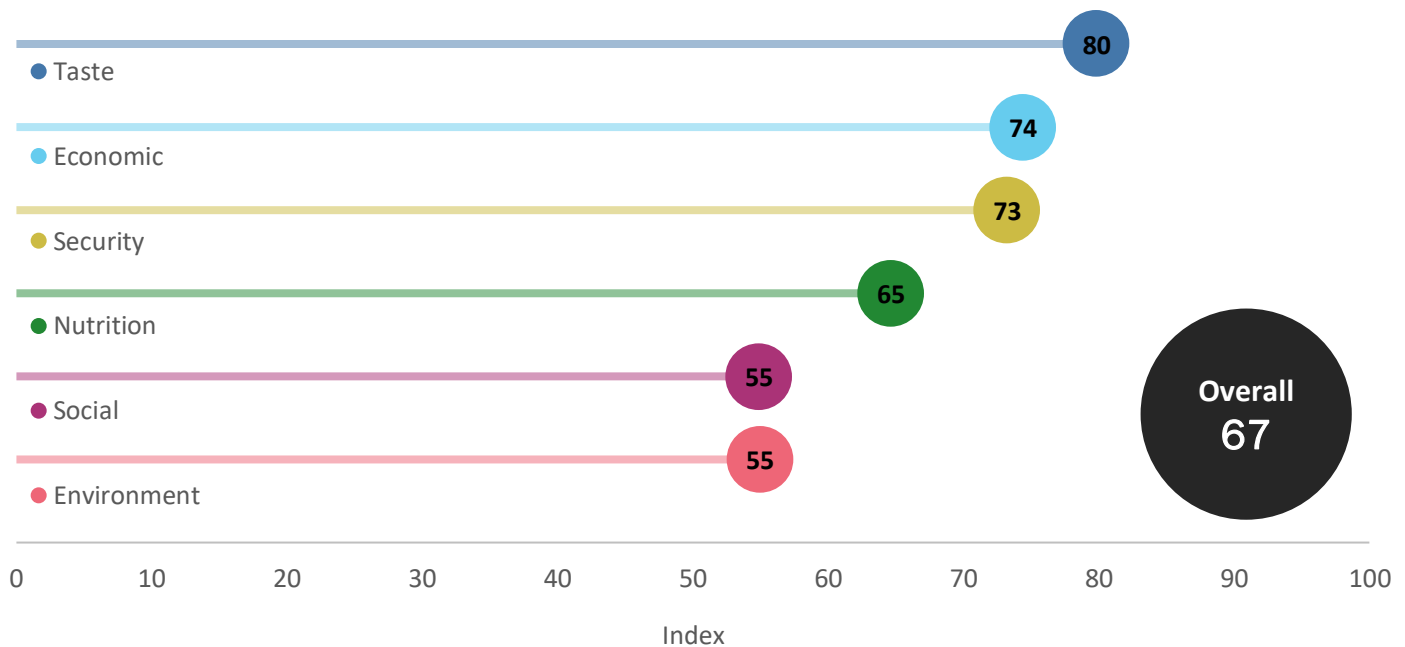
SUSTAINABLE DIETS

Is American food purchasing sustainable?

The Sustainable Food Purchasing (SFP) Index is a self-reported measure of food purchasing designed to assess how well consumer shopping habits correspond with healthy diets from sustainable food systems, as described by the [EAT-Lancet Commission on Food, Planet, Health](#).

The SFP scores range from 0 to 100. A top SFP score of 100 reflects that consumer food purchasing aligns with a set of key recommendations for healthy diets from sustainable food systems. The overall SFP Index comprises of six components—Nutrition, Environment, Social, Economic, Security, Taste—correlating with the different strategies for achieving food system transformation. Consumers answer three questions for each component on a five-point scale, with the top of the scale (5) being most consistent with sustainability. More information on these components and the SFP scoring procedure is described on the [CFDAS](#) website.

Figure 1. Sustainable Food Purchasing Index



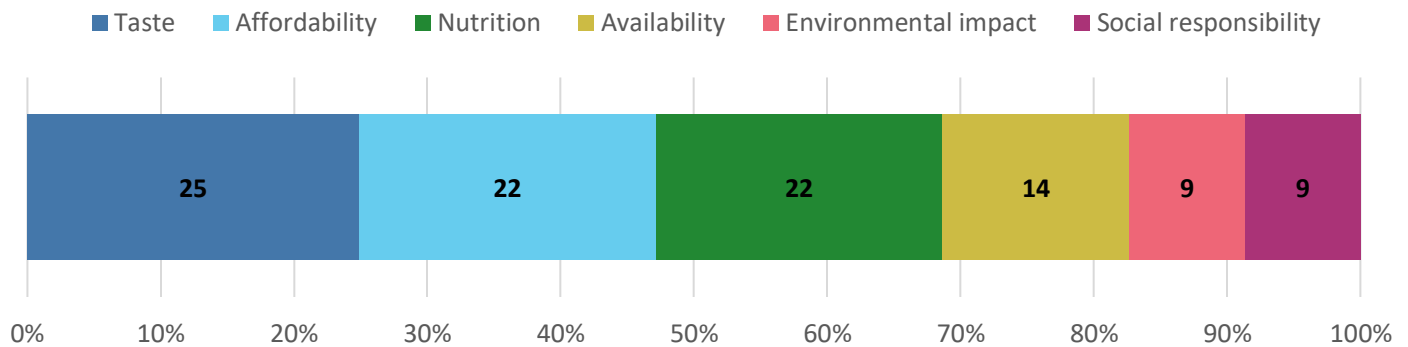
Respondents scored highest on the *taste* indicator (80) while scoring lowest on the *social* and *environment* indicators (55). These scores demonstrate that consumers are largely buying foods that meet their taste needs, such as food that makes them feel good or is visually appealing. However, consumers are buying fewer foods that are good for the environment or society, such as food that is produced with a lower land, water, and greenhouse gas footprint or produced humanely for both animals and workers. Because the SFP Index is designed to track changes in behaviors, subsequent surveys will reveal whether consumers are increasingly or decreasing aligning their food purchasing with areas like environmental or social well-being.

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 purchasing food. These different attributes closely reflect the six components of the SFP Index. Respondents most valued *taste*, which reflects the high *taste* score on the SFP Index. Respondents also least valued *environmental impact* and *social responsibility*, which similarly tracks with the lower *environment* and *social* scores on the SFP Index. However, *nutrition* appears to be valued moderately high by respondents while it scores comparatively lower on the SFP Index.

Figure 2. Average Share of Points Allocated to



Nutrition

Amount and type of fat, protein, vitamins, etc. are healthy and nourishing

Environmental impact

Production and consumption improve rather than damage environment

Social responsibility

Farmers, processors, retailers, workers, animals and consumers all benefit

Affordability

Food prices are reasonable, fit within your budget, and allow you lots of choices

Availability

Enough safe and desirable food is easy to find and physically accessible

Taste

Flavor and texture in your mouth are pleasing and high quality

FOOD EXPEDITURES

How much are Americans spending on food?

Respondents were asked to estimate their weekly food spending (**Figure 3**). On average, consumers reported spending about \$107/week on groceries (FAH) and about \$52/week on restaurants and other carryout meals (FAFH). These expenses are about 12-13% higher than the food spending data issued by the Bureau of Labor (BLS) for 2020. As expected, total spending on food as a share of respondents' household income falls as income increases (**Figure 4**).

Additionally, respondents were asked to estimate food price inflation over the last year and predict its rate over the next year, and consumers appear to not anticipate food price inflation to slow by much through the beginning of 2023. On average, respondents estimated that food prices have increased by nearly 5% compared to January 2021 and predicted that food prices will be around 4% higher at this time next January (**Figure 5**).

Figure 3. Weekly Household Food Expenditures

	Food at home (FAH) ⁱⁱ	Food away from home (FAFH) ⁱⁱⁱ
2020 (year) [*]	\$95.04	\$45.67
Jan. 2022	\$106.83	\$51.59

^{*}Data collected from the USDL Bureau of Labor Statistics: "[Consumer Expenditures – 2020](#)"

Figure 4. Total Food Expenditures as a Share of Income by Annual Household Income

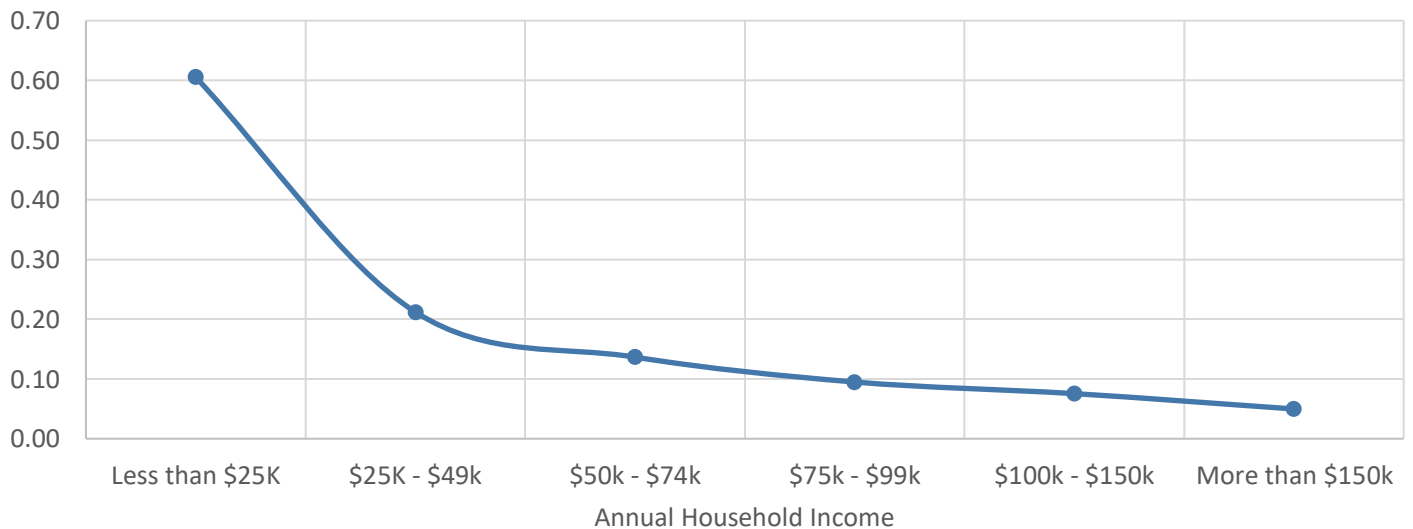
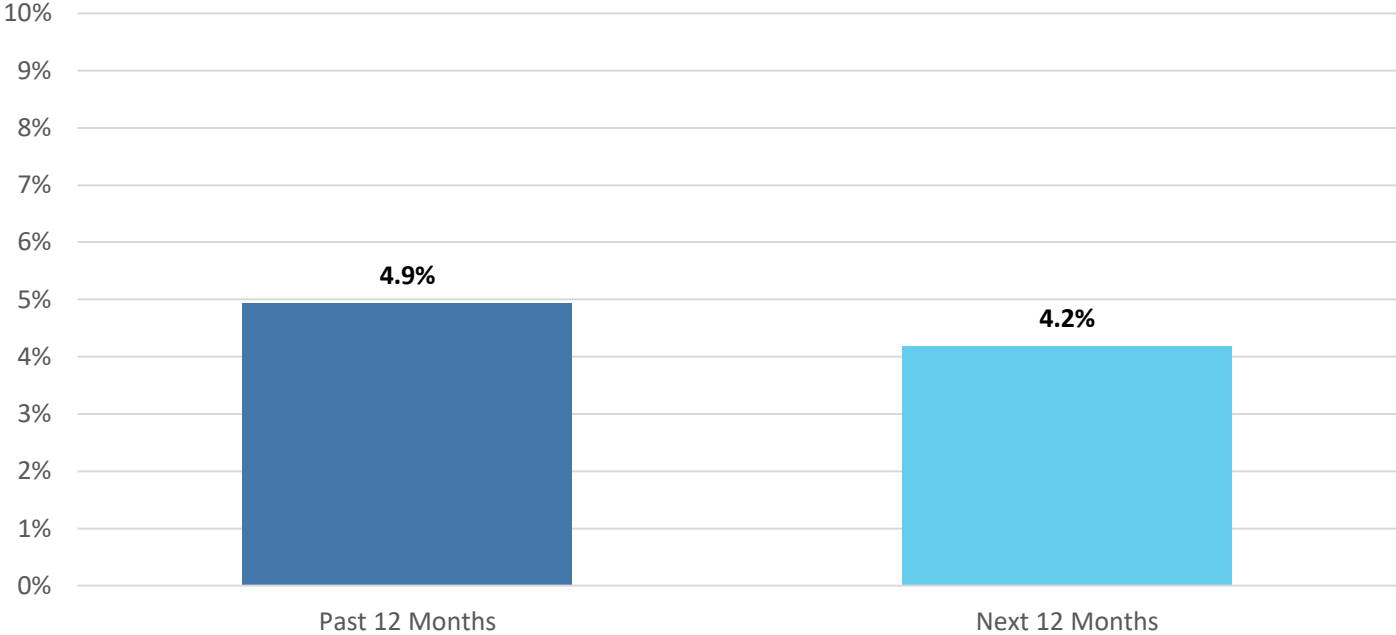


Figure 5. Consumer Estimates of Food Price Inflation



FOOD SECURITY

Are Americans having trouble buying food?

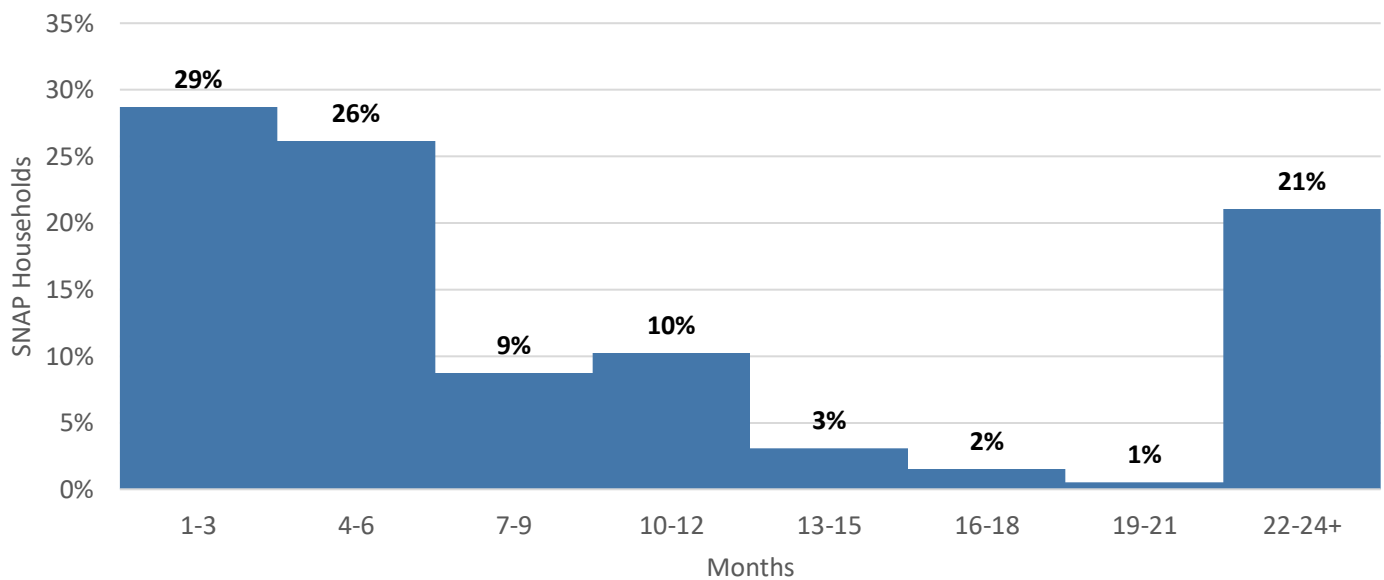
Based on their responses to six standardized questions about food eaten in the last 30 days, 15.8% of respondent households were classified as food insecure (**Figure 6**). This rate is 5.3% higher than the annual rate reported by the Department of Agriculture (USDA) for 2020. The rate of very low food security among respondents is responsible for a majority of this difference and is 3.4% higher than the rate reported by the USDA. Additionally, respondents who reported that their household currently receives SNAP benefits were asked how long they been relying on the program. The results show that a majority (55%) of households have been receiving benefits for less than six months (**Figure 7**).

Figure 6. Household Food Security According to USDA Survey Module: Six-Item Short Form

Food security level	Food secure		Food insecure	
	High ^{iv}	Low ^v	Very low ^{vi}	Total
2020 (year)*	89.5%	6.6%	3.9%	10.5%
Jan. 2022	84.2%	8.5%	7.3%	15.8%

*Data collected from the USDA Economic Research Service: [“Household Food Security in the United States in 2020”](#)

Figure 7. Length of Time Receiving SNAP Benefits

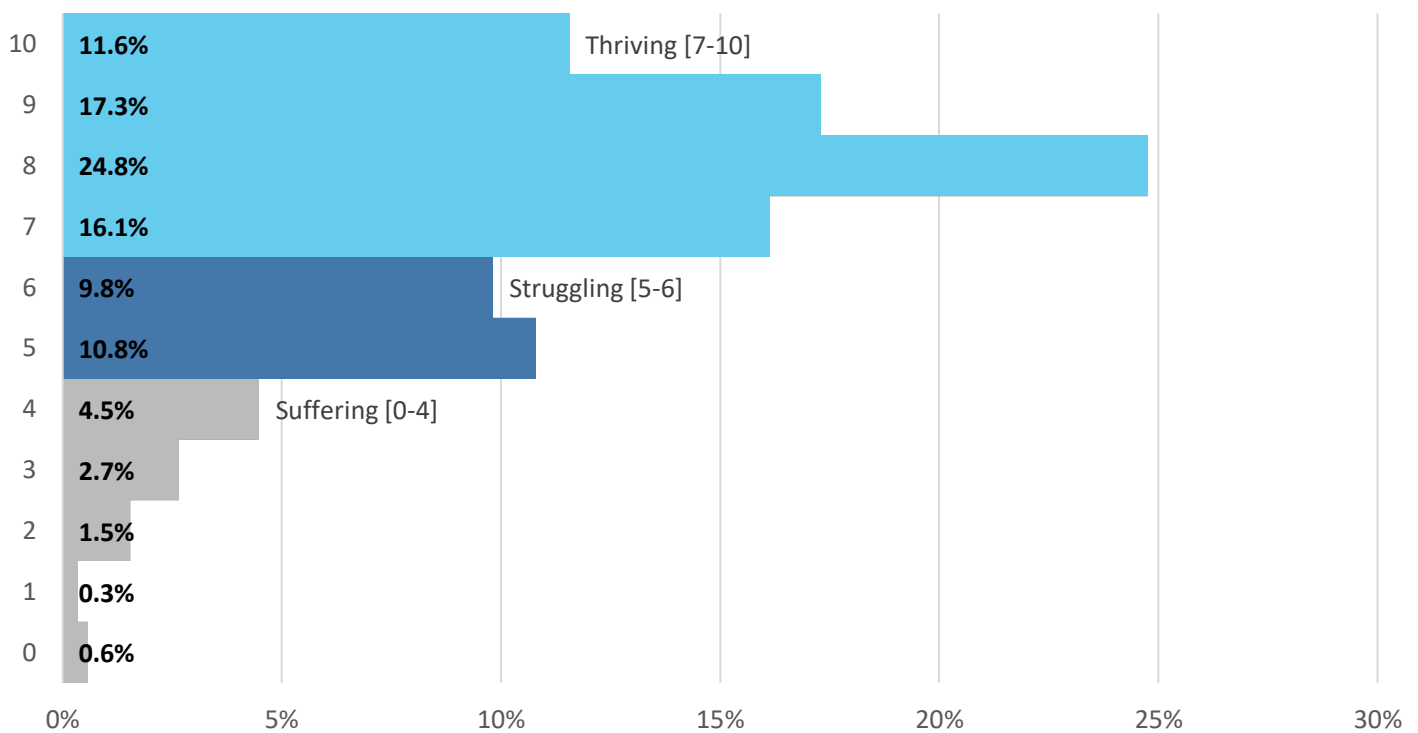


FOOD SATISFACTION

Are Americans satisfied with their diets?

Respondents were asked to compare their diet to the best possible diet on a 0-10 scale.^{vii} A plurality of respondents (24.8%) rated their diet as an 8 (**Figure 8**). A large majority of respondents (70%) can be classified as *thriving*, while a small minority of respondents (10%) can be classified as *suffering*. When these ratings are disaggregated according to food security status, 72% of food secure respondents proved to be *thriving* based on their evaluation of their diet well-being while only 52% of food insecure respondents could be considered *thriving* (**Figure 9**). A large share of respondents also reported being *rather happy* (55%) and *very happy* (32%) with their diet (**Figure 10**), which is similar to the proportion who said they are *rather happy* (50%) and *very happy* (38%) with their lives (**Figure 11**).

Figure 8. Diet Evaluation Well-Being Rating over the Last 30 Days



Question: Imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible diet for you and the bottom of the ladder represents the worst possible diet for you. Thinking about the food you bought and ate over the LAST 30 DAYS, on which step of the ladder would you say you personally feel you stand at this time?

Figure 9. Diet Evaluation Well-Being Rating according to Food Security Status

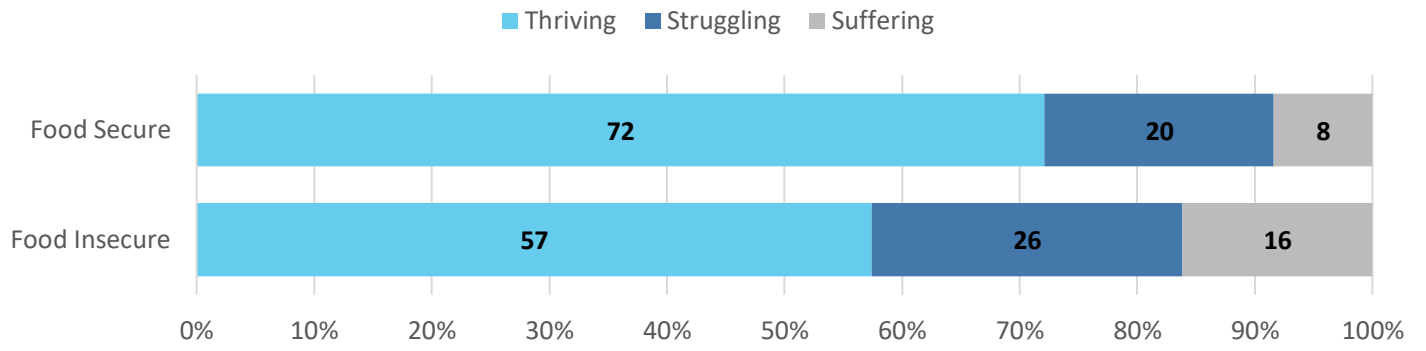


Figure 10. Diet Happiness over the Last 30 Days

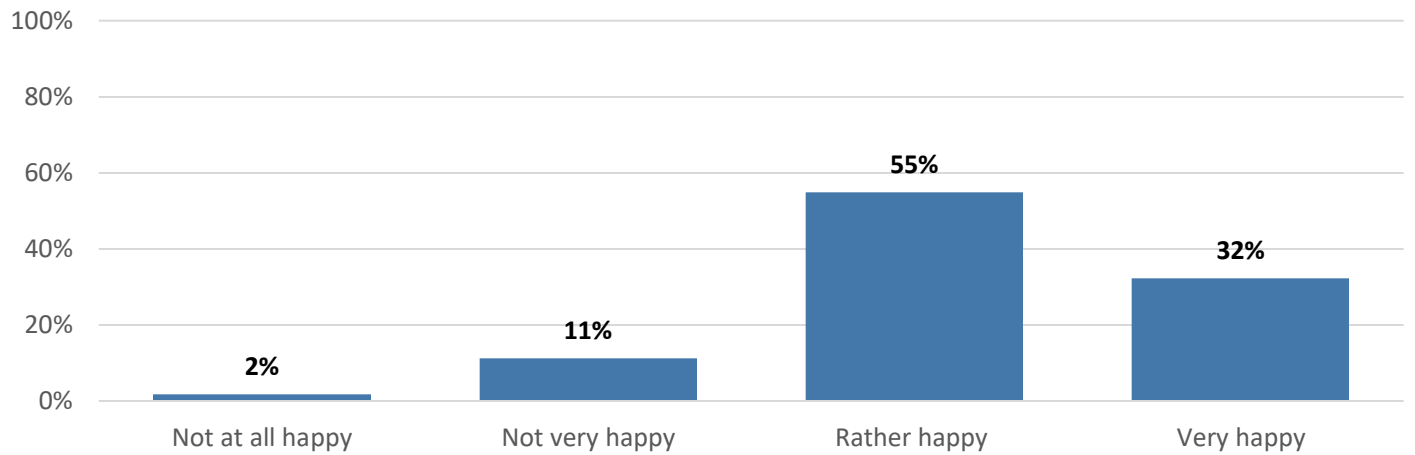
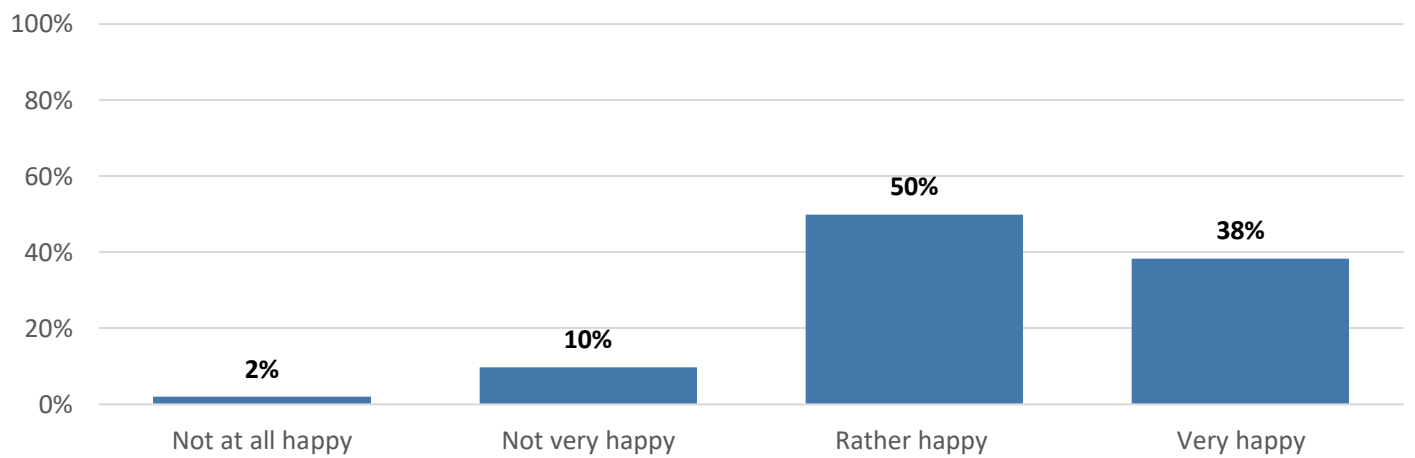


Figure 11. Life Happiness over the Last 30 days

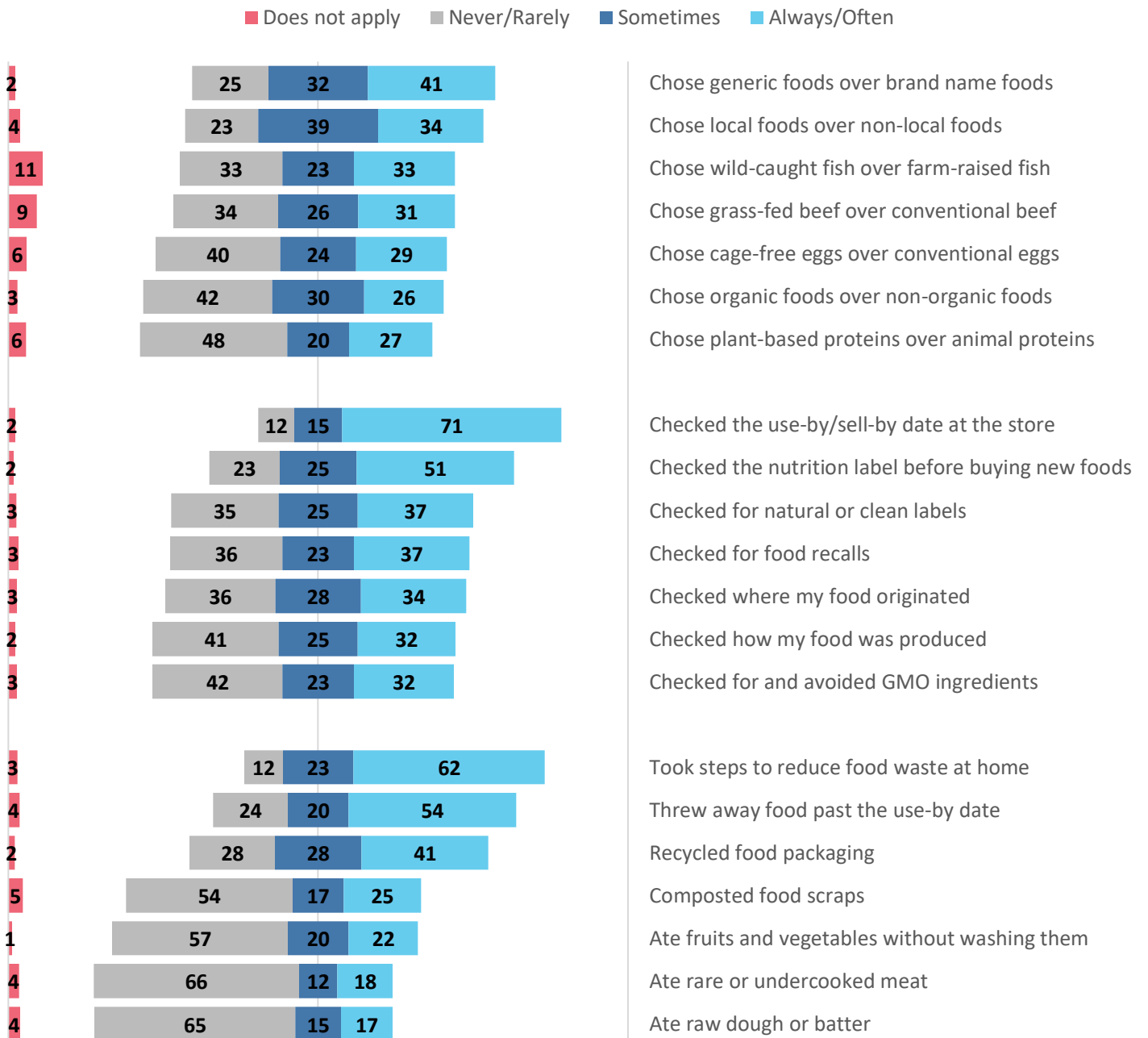


CONSUMER BEHAVIORS

How are Americans navigating their food environment?

A minority of respondents said they always or often select foods that are commonly promoted as more ethical or sustainable (i.e., local foods, wild-caught fish, grass-fed beef, cage-free eggs, organic foods, and plant-based proteins). A majority of respondents report always or often checking the use-by/sell-by dates or the nutrition labels before buying new foods. Notably, 62% said they always or often took steps to reduce food waste at home, while 54% still reported throwing away food past the use-by date. A majority of respondents also agree that they never or rarely practice unsafe food consumption (i.e., eating unwashed fruits or vegetables, rare meat, or raw dough).

Figure 12. Consumer Shopping and Eating Habits During the Last 30 Days

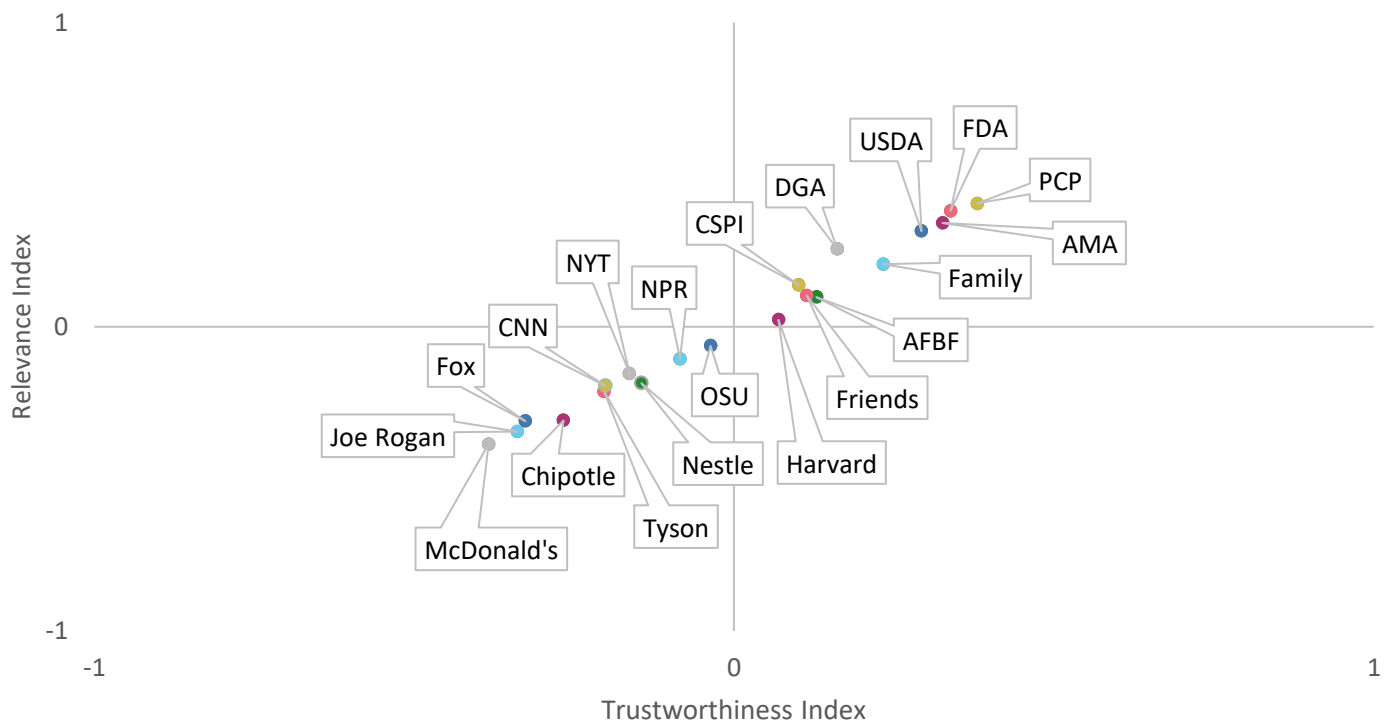


CONSUMER TRUST

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

The sources of information that respondents most trust on issues of healthy, sustainable food are also the sources to which respondents pay the most attention (**Figure 13**). Government agencies like the Department of Agriculture (USDA) and Food and Drug Administration (FDA) and medical professional like primary care physicians (PCP) and American Medical Association (AMA) scored highest on trustworthiness and relevance. Corporations like McDonald's and Chipotle and conservative news sources like Fox News and Joe Rogan scored lowest on trustworthiness and relevance. Additionally, across demographic categories like sex, age, income, political party, and education, party affiliation demonstrated the largest gap in overall trust in food-related information sources (**Figure 14**).

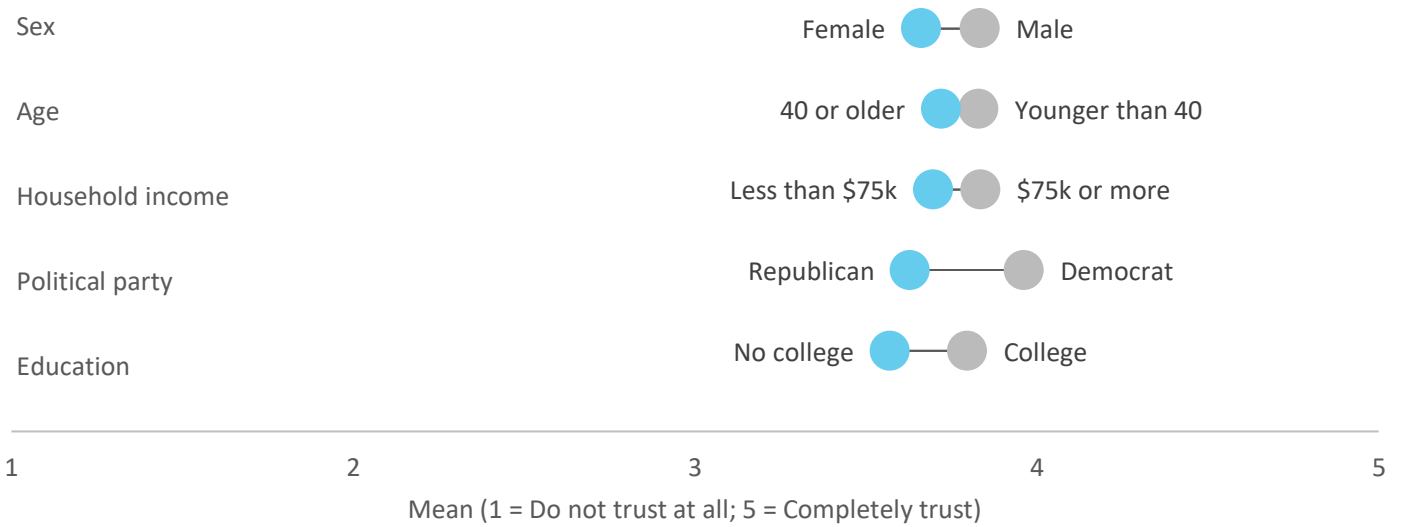
Figure 13. Trustworthiness and Relevance Index of Food-Related Information Sources



Question 1: How much do you trust information about healthy and sustainable food from the following sources? Select the 5 most trusted sources and 5 least trusted sources.

Question 2: How much do you pay attention to information about healthy and sustainable food from the following sources? Select the 5 most relevant sources and 5 least relevant sources.

Figure 14. Overall Trust in Food-related Information Sources by Demographic Category



Question: Thinking about where you usually get your information on food and nutrition, how much do you trust these sources overall?

FOOD POLICY

Where do Americans stand on the issues?

Increases in agricultural research funding and conservation program funding share large support among both Democrat and Republican respondents (**Figure 16**). In contrast, zoning regulations restricting where fast food restaurants can be located and a 25% tax on beverages with added sugar are the only two policies that a majority of respondents oppose (**Figure 15**). Compared to Republicans, Democrat respondents favor every policy by at least 13 points, but expanding SNAP benefits has the largest gap in favorable support between Democrats and Republicans. See **Figure 17** on the next page for more details on the exact policies posed to respondents.

Figure 15. Support for Food and Agriculture Policies

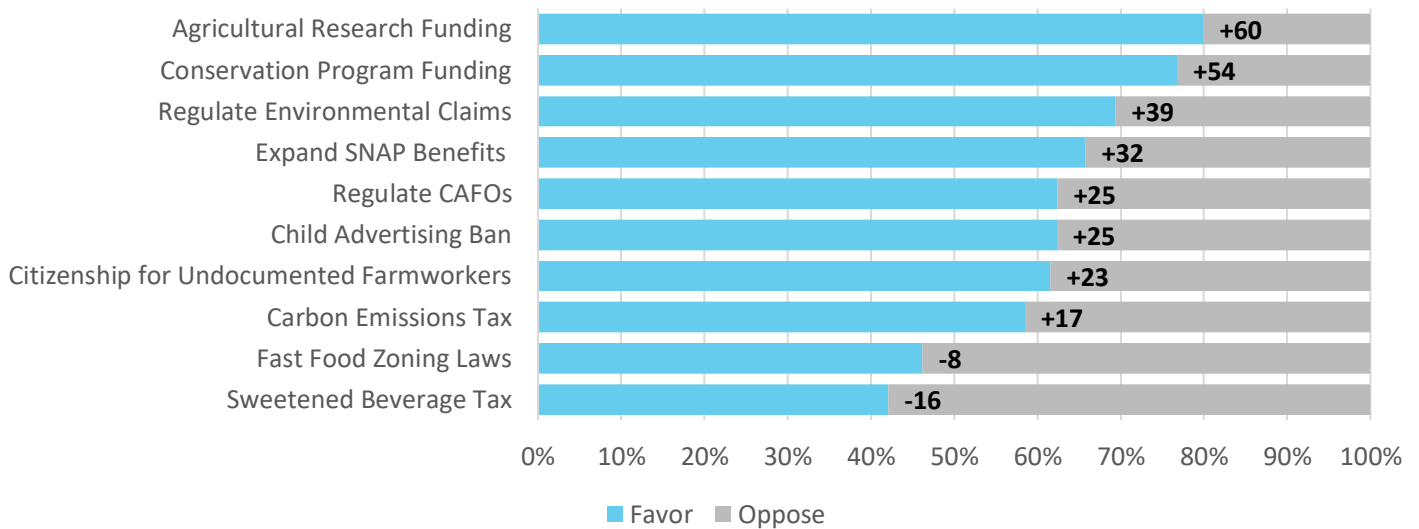


Figure 16. Favorable Support for Food and Agriculture Policies by Political Party Identification

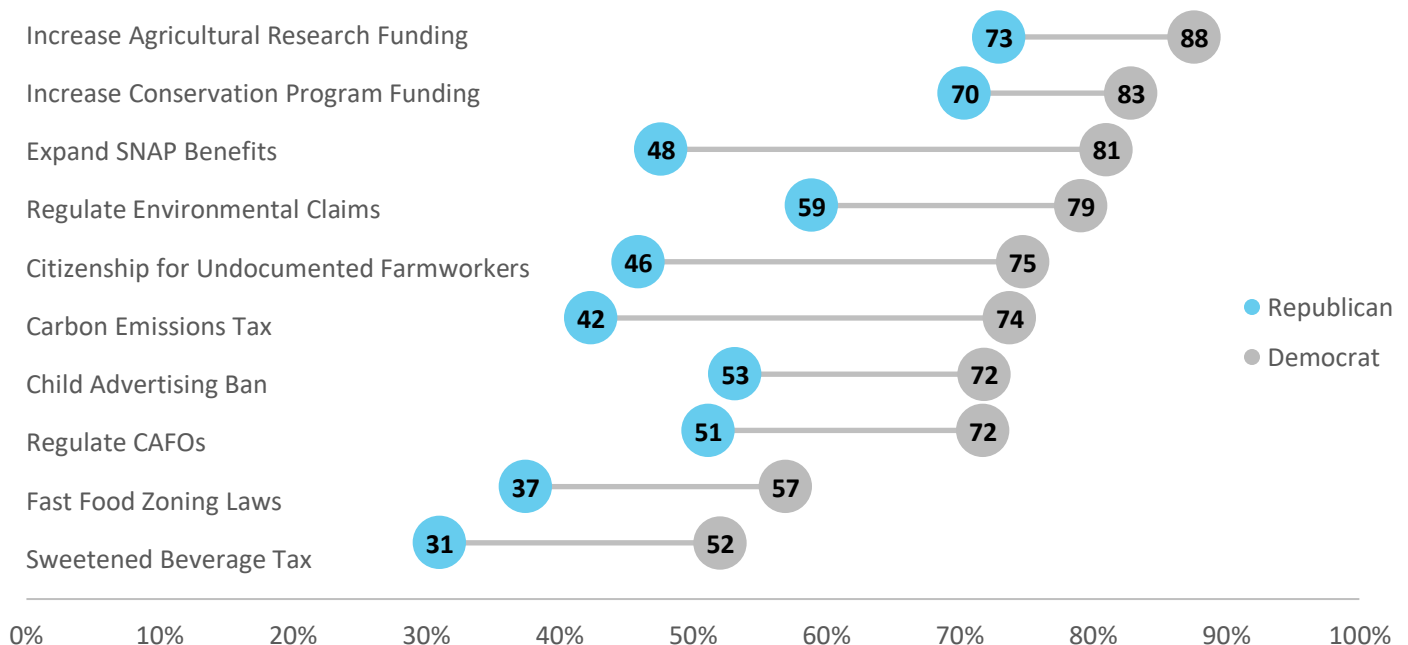


Figure 17. List of Food and Agriculture Policies Asked of Respondents

Agricultural Research Funding

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

Conservation Programs Funding

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

Citizenship for Undocumented Farmworkers

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

Carbon Emissions Tax

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.

Expand Supplemental Nutrition Assistance Program

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

Sweetened Beverages Tax

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

Child Advertising Ban

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

Regulate Environmental Claims

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

Fast Food Zoning Laws

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

Regulate Confined Animal Feeding Operations

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

Data Quality Check

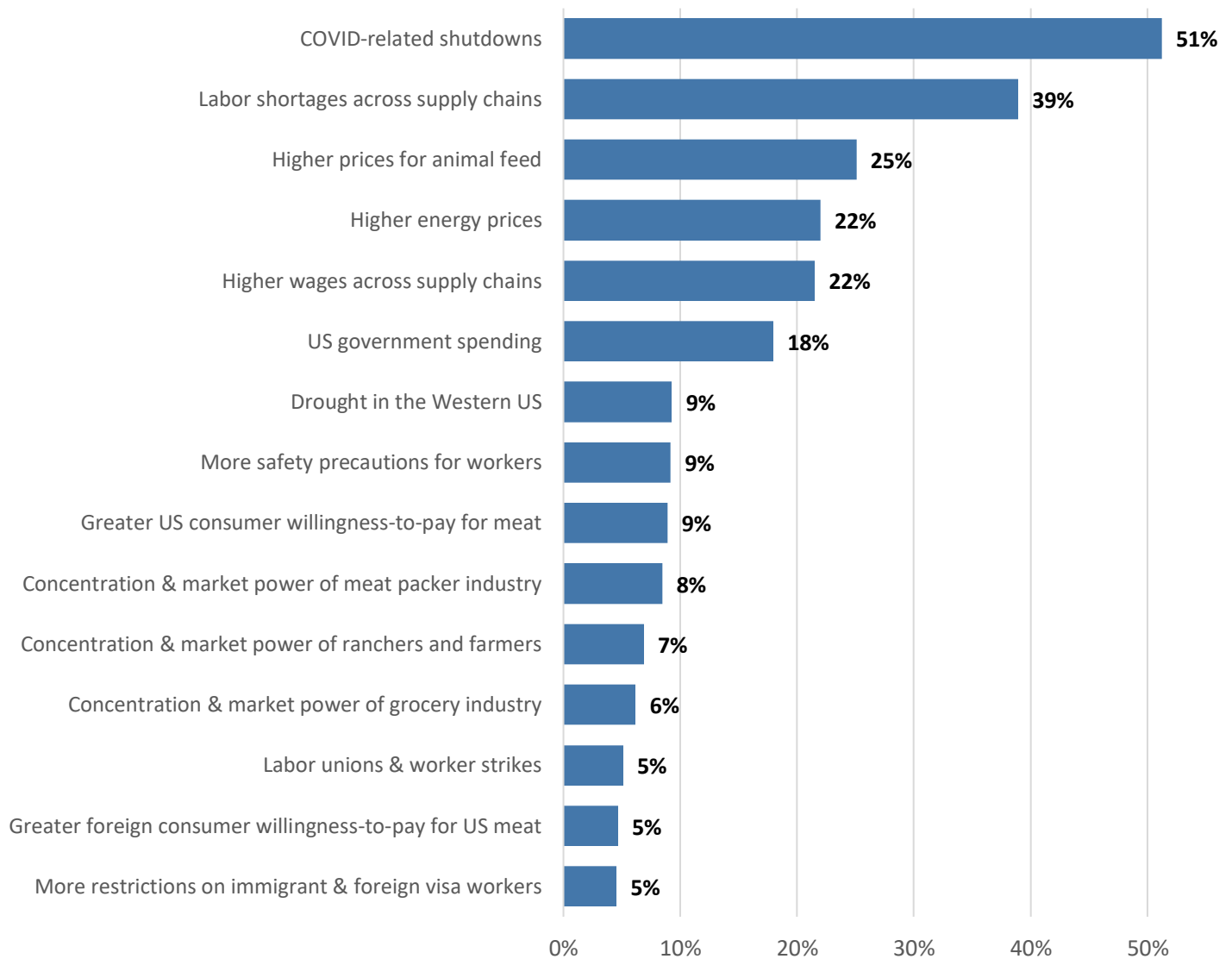
Please select Favor to demonstrate that you are reading each question. Thank you again for helping us ensure that we are collecting quality data.

AD HOC QUESTION

Why are retail meat prices rising?

A majority of respondents (51%) blamed COVID-related shutdowns for the dramatic increase in meat prices over the last year, but the top five causes also included labor shortages across supply chains, higher prices for animal feed, higher energy prices, and higher wages across supply chains (**Figure 18**). Of note, market concentration in the meat packing industry has received national media attention in recent months, as the Biden administration argues that consolidation is partly to blame for climbing grocery prices, yet a relatively small percentage of respondents attributed the high prices they are seeing at the store to this market power.

Figure 18. Causes of Meat Price Inflation as Chosen by Respondents*



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

ENDNOTES

ⁱ The market research firm Dynata conducted the survey data collection online over a 3-day period from January 18-20, 2022. The eligible population included U.S. adults ages 18+. A combination of quotas and survey weights were used to ensure a demographically balanced sample by age, gender, race, census region, income, and SNAP participation. In subsequent surveys, every respondent from the previous month will be recontacted. Assuming a retention rate of <30%, the rest of the sample will be filled in with a new pool of respondents. Data collection for every survey will begin on the third Monday of the month, unless otherwise dictated by holidays or extenuating circumstances.

ⁱⁱ Food at home (FAH) refers to sales of food 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.

ⁱⁱⁱ Food away from home (FAFH) refers to sales of food 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.

^{iv} 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 demonstrated that using a modified income-based screening procedure for internet surveys better approximates the government estimates of food insecurity.

^v 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.

^{vi} Very low food security (i.e., food insecure): 5-6 reported indications of disrupted eating patterns, changes in diet, and reduced food intake.

^{vii} 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.