



Volume 1, Issue 2: February 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 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 The U.S. food system continues to confront challenges brought on by COVID-19, climate change, and economic volatility, while international crises have generated new uncertainty for producers and consumers alike. We seek to better understand this food environment and help businesses navigate supply chains. Current data on the activities affected by recent events are essential to tracking changes, appropriately responding, and developing actionable policies. Consumer Food Insights 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.**

KEY INSIGHTS FROM FEBRUARY

Sustainable Food Purchasing (SFP) Index was stable, rising just 1 point from last month.

Weekly food spending increased by 3.2% as spending on food away from the home grew by 5.5%.

Food inflation expectations among consumers are on the rise, increasing to an anticipated 4.4% annual rate.

In response to inflation, 24% of respondents sought out more sales and discounts; 31% have not changed their behavior.

67% of respondents have not seen the “Bioengineered” label that is now mandatory on genetically engineered food products.

18% of respondents purchased their last groceries online compared to 21% last month.

25% of respondents—the same as last month—were still unable to find specific foods at the grocery store.

SFP INDEX

68_{/100}

FOOD INSECURITY

16%

FOOD SPENDING

\$164_{/WEEK}

FOOD HAPPINESS

87%

If you are interested in more analysis or adding specific questions to the survey, consider joining our Consumer Food Insights industry consortium. Contact cfdas@purdue.edu to learn about membership opportunities or to be added to our mailing list.

SUSTAINABLE DIETS

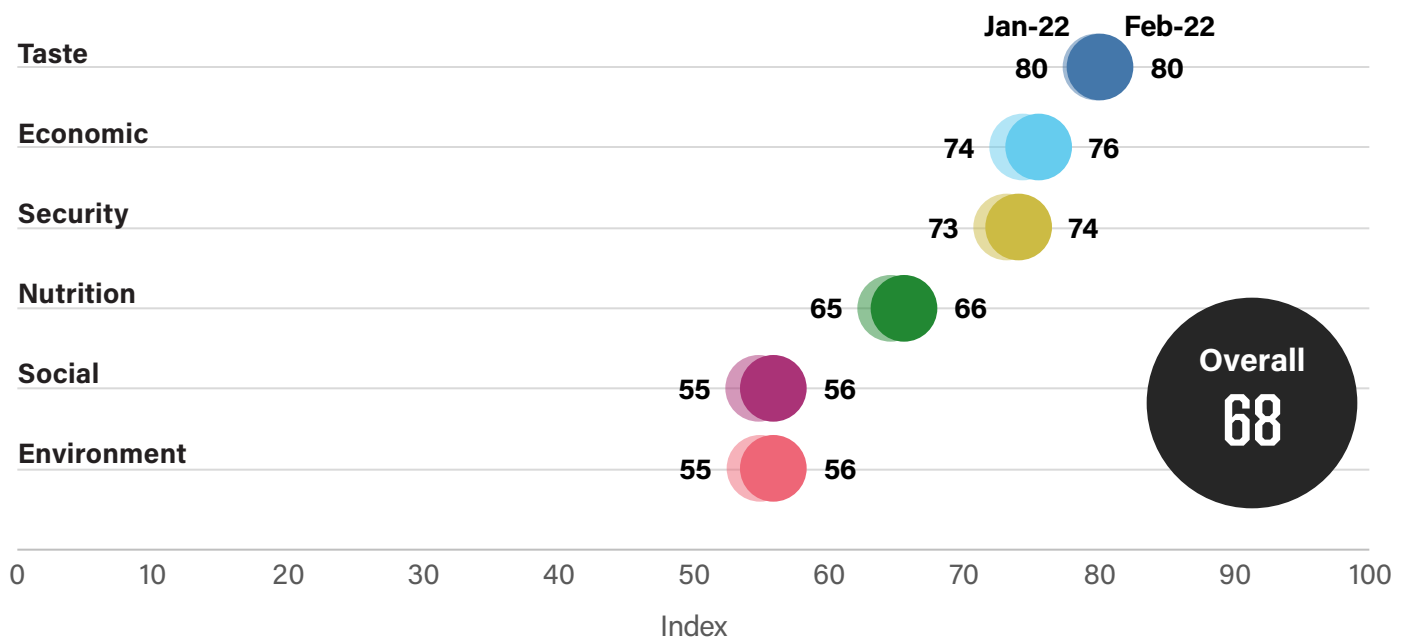
Is American food purchasing sustainable?

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](#). 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](#).

SFP Index scores remain effectively unchanged this month compared to last month (**Figure 1**). The *taste* indicator continues to far outperform the *social* and *environment* indicators. Similarly, the *economic* and *security* indicators reveal that consumers largely have the option to buy a range of food that is affordable, safe, and desirable. While there appears to be about a 1 point shift in the positive direction across these indicators, small fluctuations can be expected from month to month. Subsequent surveys will reveal whether this change is part of a trend in which food purchasing in the country is increasingly sustainable or whether we are observing variation among the respondents who were sampled.

This month, the overall score on the SFP Index was 1 point higher than last month.

Figure 1. Sustainable Food Purchasing Index

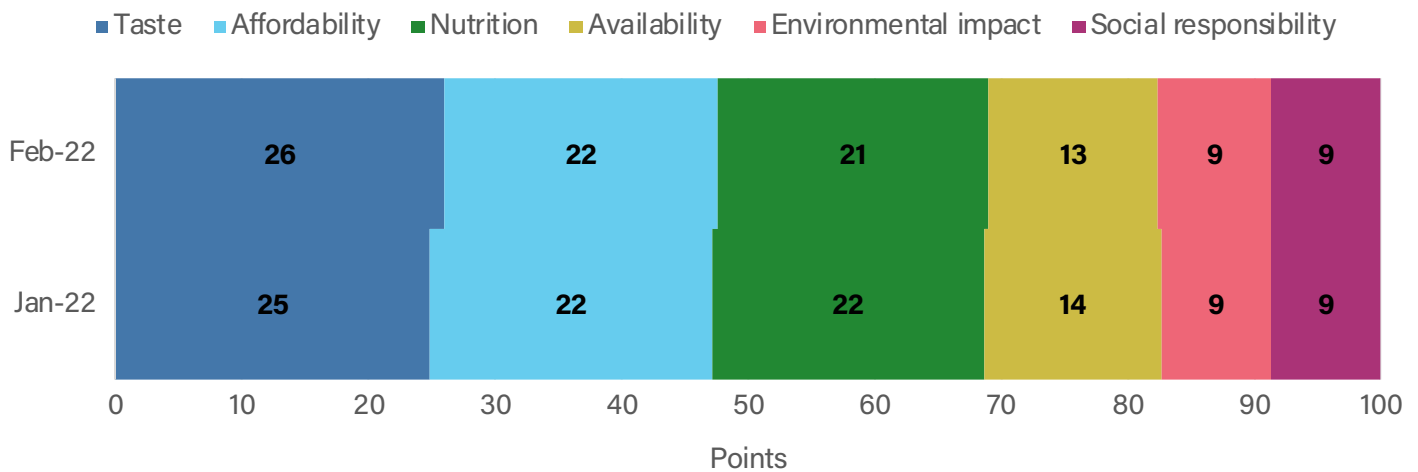


FOOD VALUES

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 (**Figure 2**). These different attributes closely reflect the six components of the SFP Index. Similar to the Index, we observed little to no month-over-month change in how much respondents valued these attributes. Consumers evidently most value the *taste* of their food while least valuing the *environmental impact* and *social responsibility* of their food. Respondents also continued to value *nutrition* moderately high while this category scores comparatively lower on the SFP Index.

Figure 2. Share of 100 Points Allocated to Food Attributes



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 EXPENDITURES

How much are Americans spending on food?

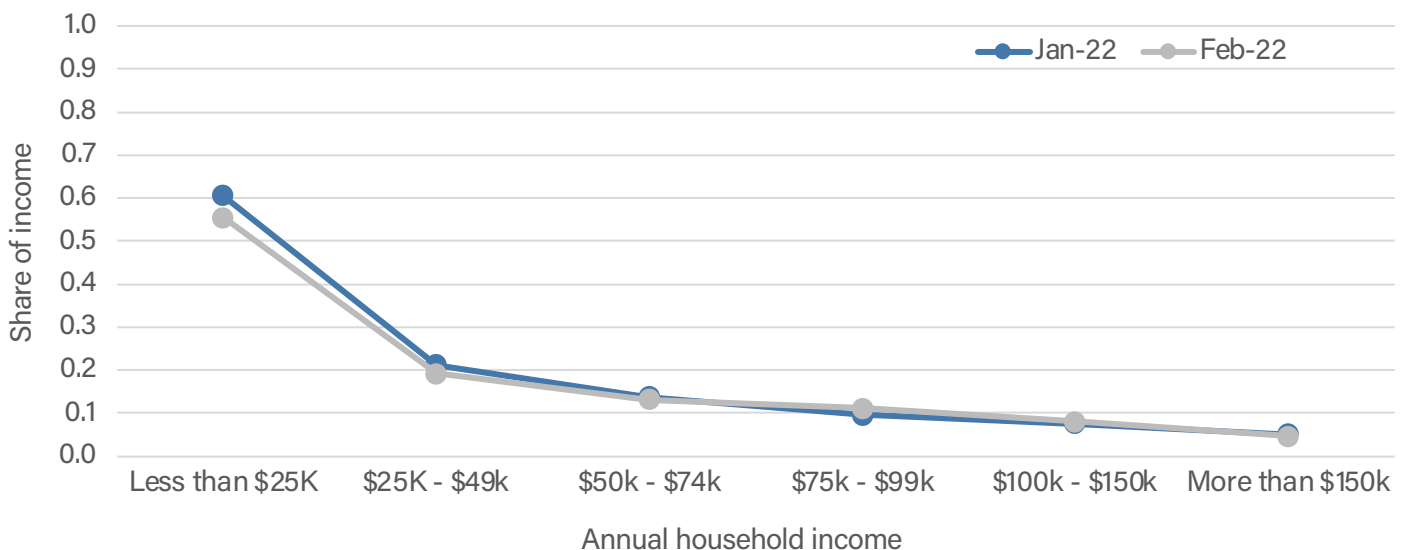
Respondents were asked to estimate their weekly food spending (**Figure 3**). On average, consumers reported spending about \$109/week on at the grocery store (FAH) and about \$54/week on restaurants and other carryout meals (FAFH). In February, FAH is about 2% higher than last month while FAFH is nearly 6% higher than last month. As expected, total food spending as a share of household income falls as income increases (**Figure 4**).

Additionally, respondents were asked to estimate inflation of food prices at the grocery store over the last year and predict its rate over the next year. On average, respondents estimated that food prices have increased by more than 5% compared to February 2021 and predicted food prices will be more than 4% higher at this time next February (**Figure 5**). Both of these responses are marginally higher than the estimate and prediction given on last month's survey.

Figure 3. Weekly Household Food Expenditures

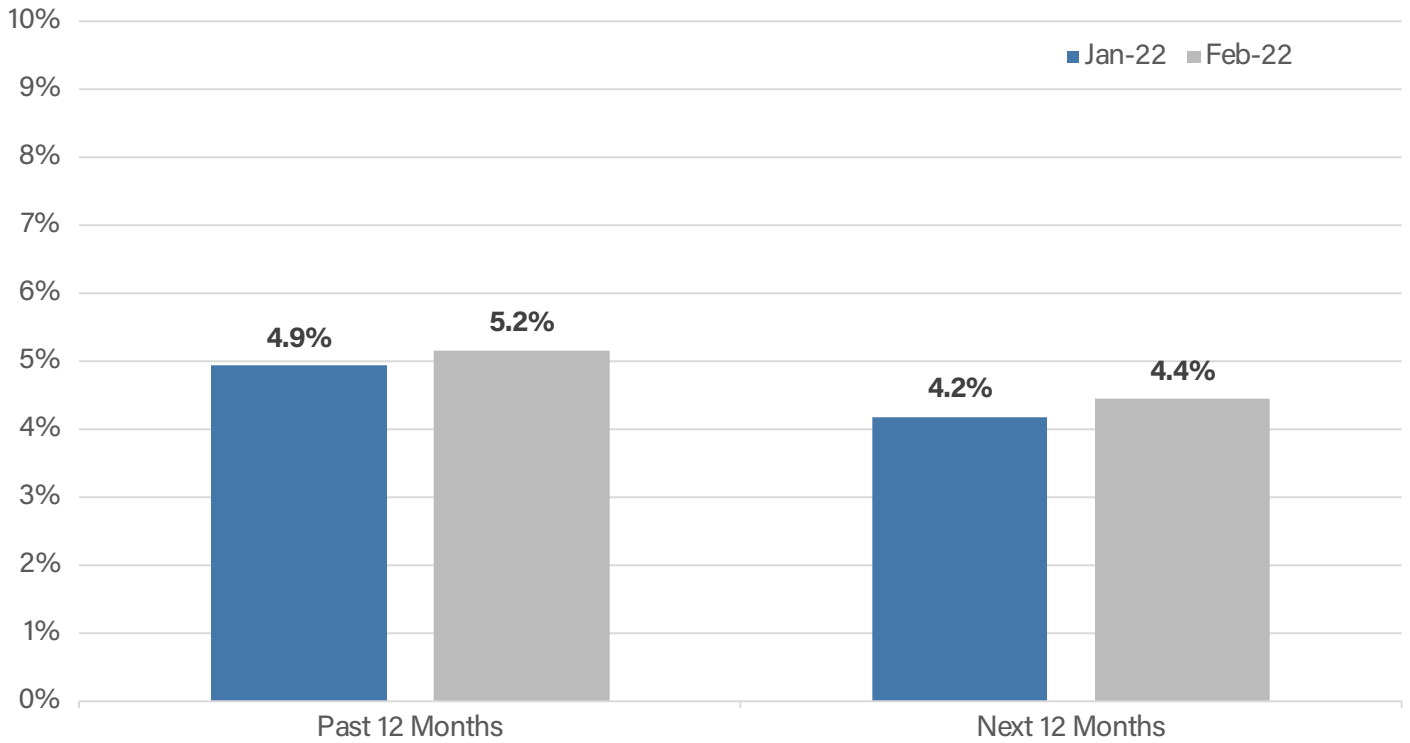
	Food at home (FAH) ²	Food away from home (FAFH) ³	Total
Jan. 2022	\$106.83	\$51.59	\$158.42
Feb. 2022	\$109.11	\$54.41	\$163.52
Change	+2.1%	+5.5%	+3.2%

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



FOOD EXPENDITURES

Figure 5. Consumer Expectations of Annual Food Price Inflation



FOOD SECURITY

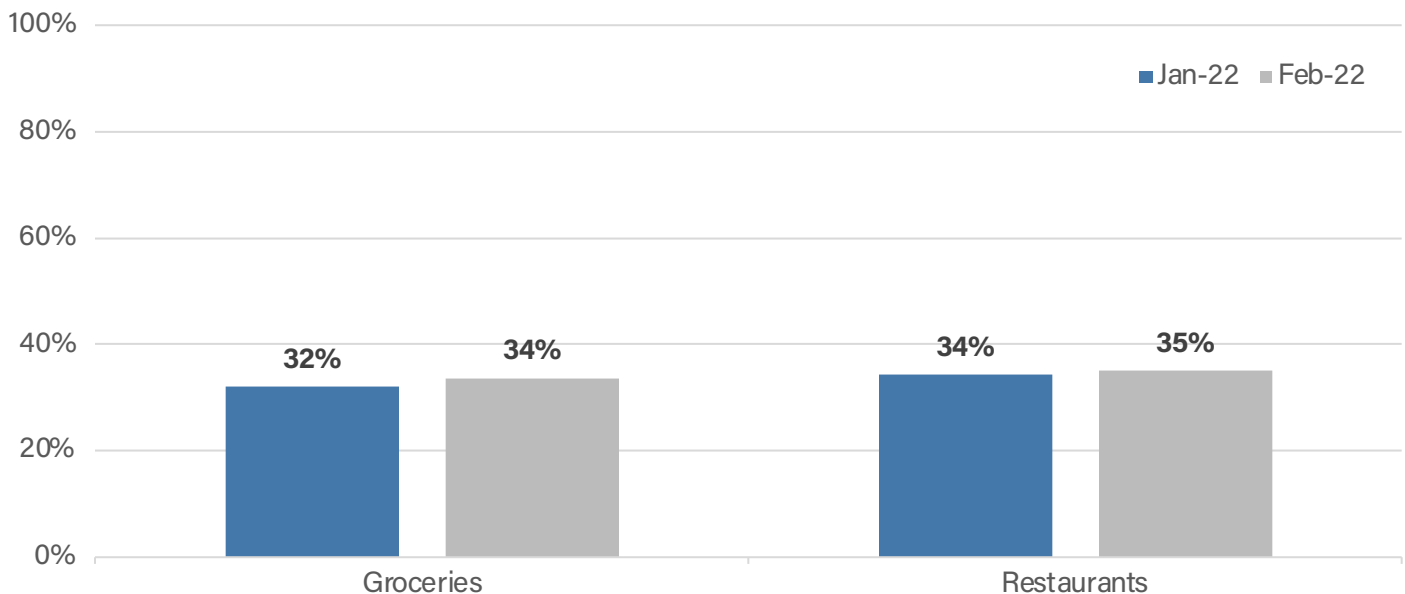
Are Americans having trouble buying food?

Based on responses to six standardized questions about food bought and eaten in the last 30 days, about 16% of respondent households were classified as food insecure (**Figure 6**). This rate remains unchanged from January. Although, it appears that a few households have moved from very low food security status up to low food security status. The share of households that are waiting on their next payment (i.e., paycheck, government benefit, or other sources of income) to purchase food at the grocery store or restaurants also proved stable compared to last month but is potentially moving in a positive direction (**Figure 7**).

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

	Food secure		Food insecure	
	High ⁴	Low ⁵	Very low ⁶	Total
Jan. 2022	84.2%	8.5%	7.3%	15.8%
Feb. 2022	84.2%	9.1%	6.7%	15.8%
Change	±0%	+0.6%	-0.6%	±0%

Figure 7. Share of Households Waiting on Next Payment to Buy Food

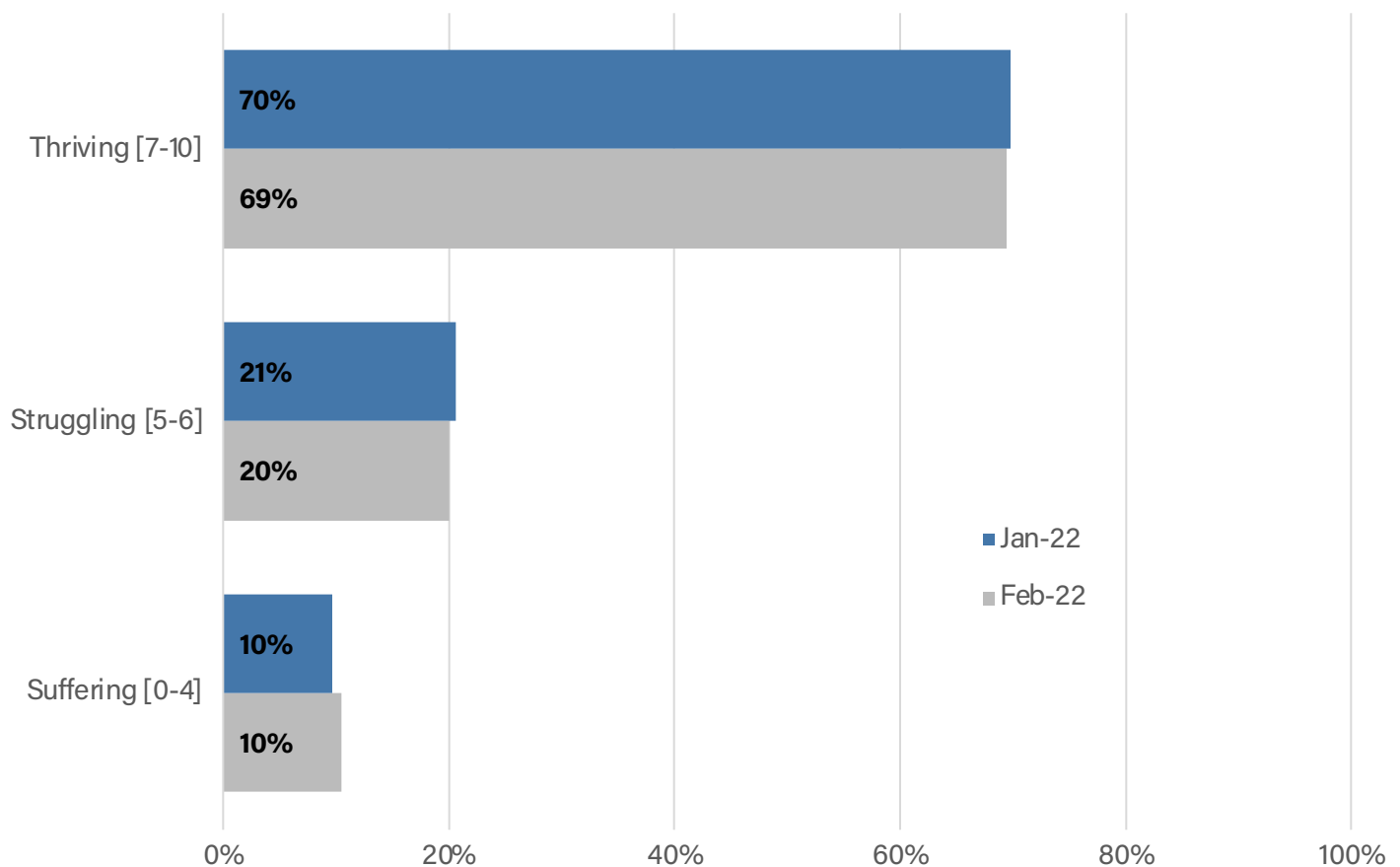


FOOD SATISFACTION

Are Americans satisfied with their diets?

Respondents were asked to rate their current diet on a 0-10 scale, with top of the scale representing the ideal diet.⁷ These results closely reflected those responses collected last month (**Figure 8**). About 70% of respondents gave their diet a top 7-10 rating—described as *thriving*—while only 10% of respondents selected a low 0-4 rating—categorized as *suffering*. A large share of respondents also reported being rather happy (55%) and very happy (32%) with their diet (**Figure 9**), which is similar to the proportion who said they are rather happy (51%) and very happy (37%) with their lives (**Figure 10**).

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. Thinking about the food you bought and ate over the LAST 30 DAYS, on which step of the ladder would you say you feel you stand at this time?

FOOD SATISFACTION

Figure 9. Diet Happiness over the Last 30 Days

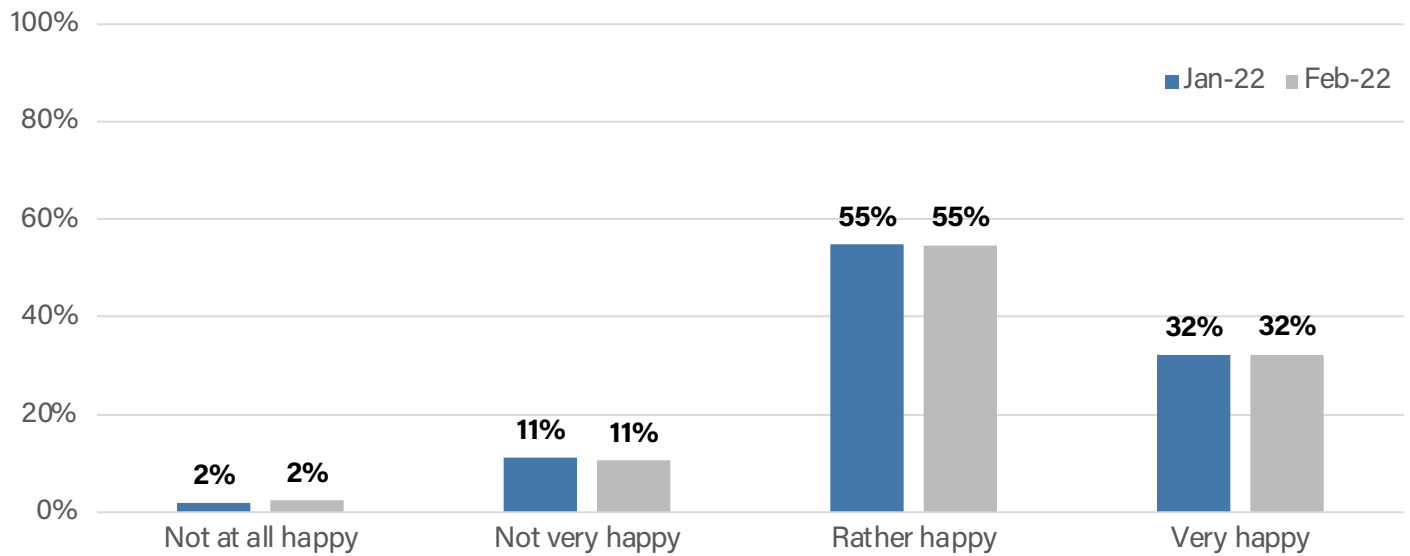
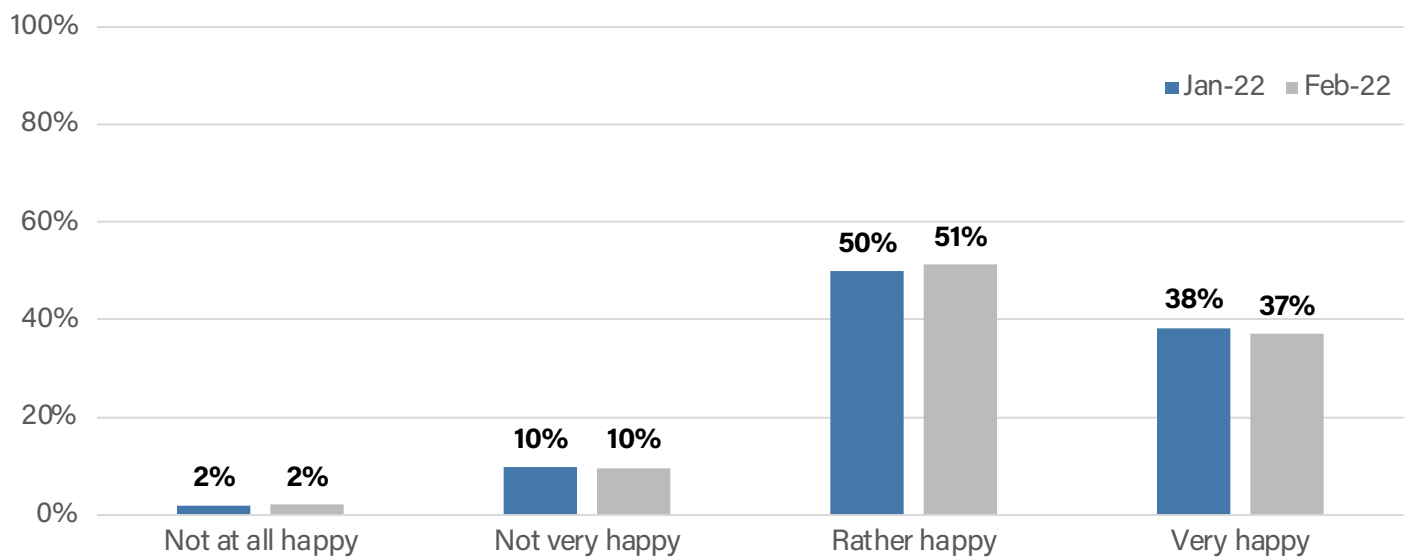


Figure 10. Life Happiness over the Last 30 Days



CONSUMER BEHAVIORS

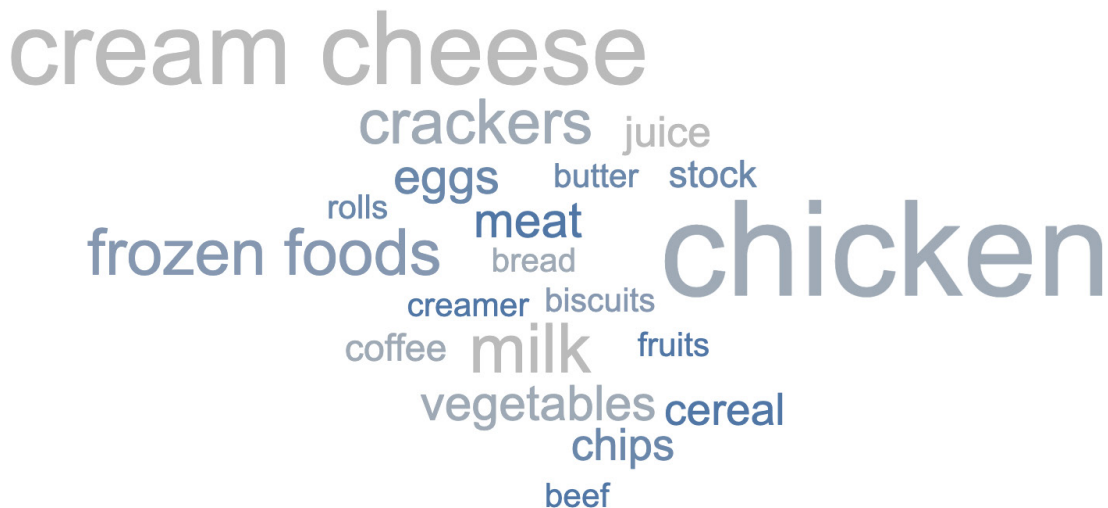
How are Americans navigating their food environment?

When asked whether they were limiting their intake of any food items, 16% of respondents answered “yes,” commonly specifying sugar and sugar-sweetened beverages (**Figure 11**). Additionally, 25% of respondents were unable to find a specific food item at the store, most commonly listing chicken and cream cheese (**Figure 12**). Compared to last month, checking expiration dates and trying to reduce food waste continued to be the most widely practiced behaviors surveyed (**Figure 13**). While buying many 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) are not definitively popular nor unpopular, more consumers reported pursuing these behaviors this month. Notably, choosing plant-based proteins over animals proteins remains about as unpopular as eating unwashed fruits and vegetables.

Figure 11. Food Items that Consumers Report Limiting in Their Diet

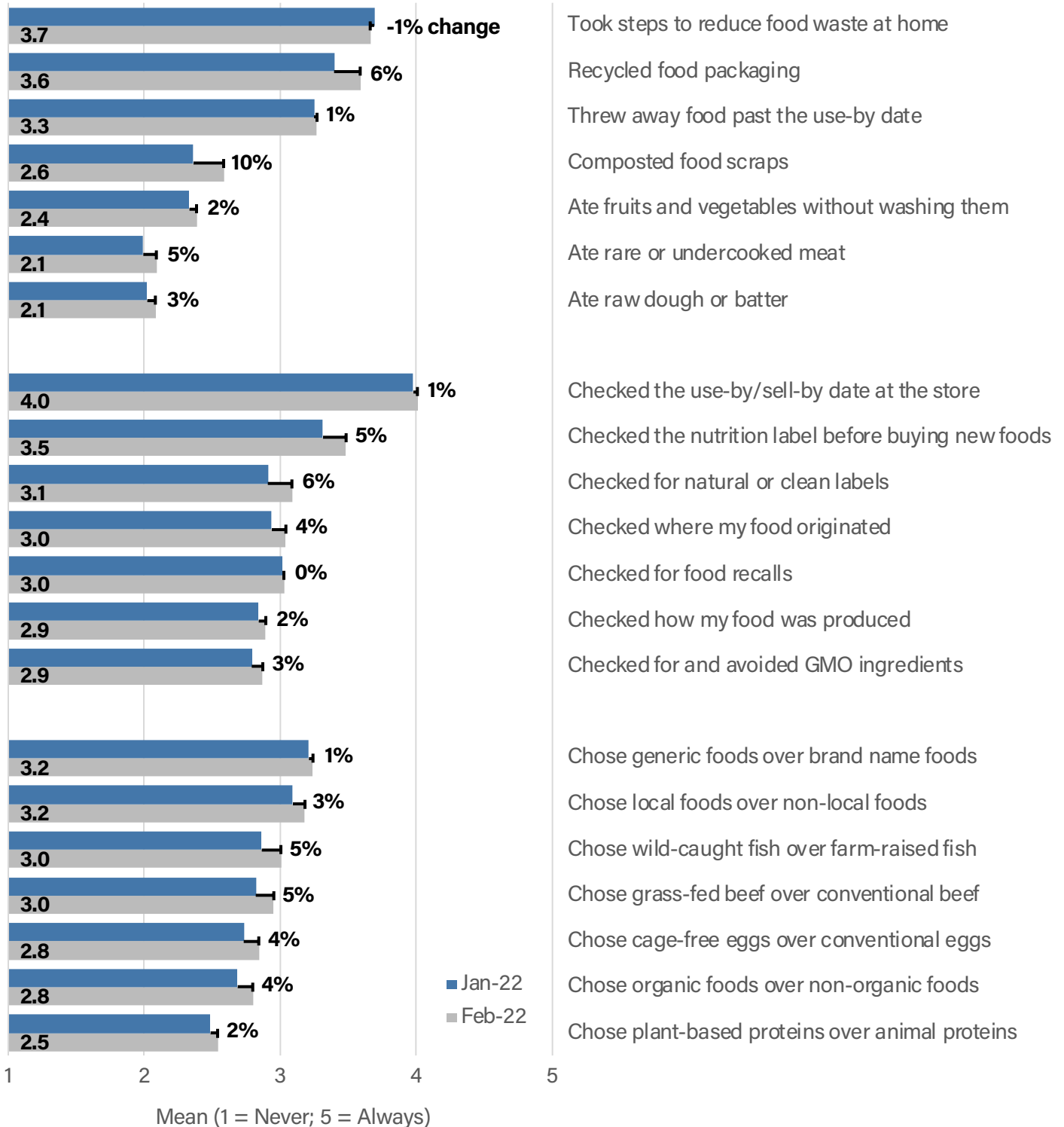


Figure 12. Food Items that Consumers Report Being Out-of-Stock



CONSUMER BEHAVIORS

Figure 13. Consumer Shopping and Eating Habits During the Last 30 Days

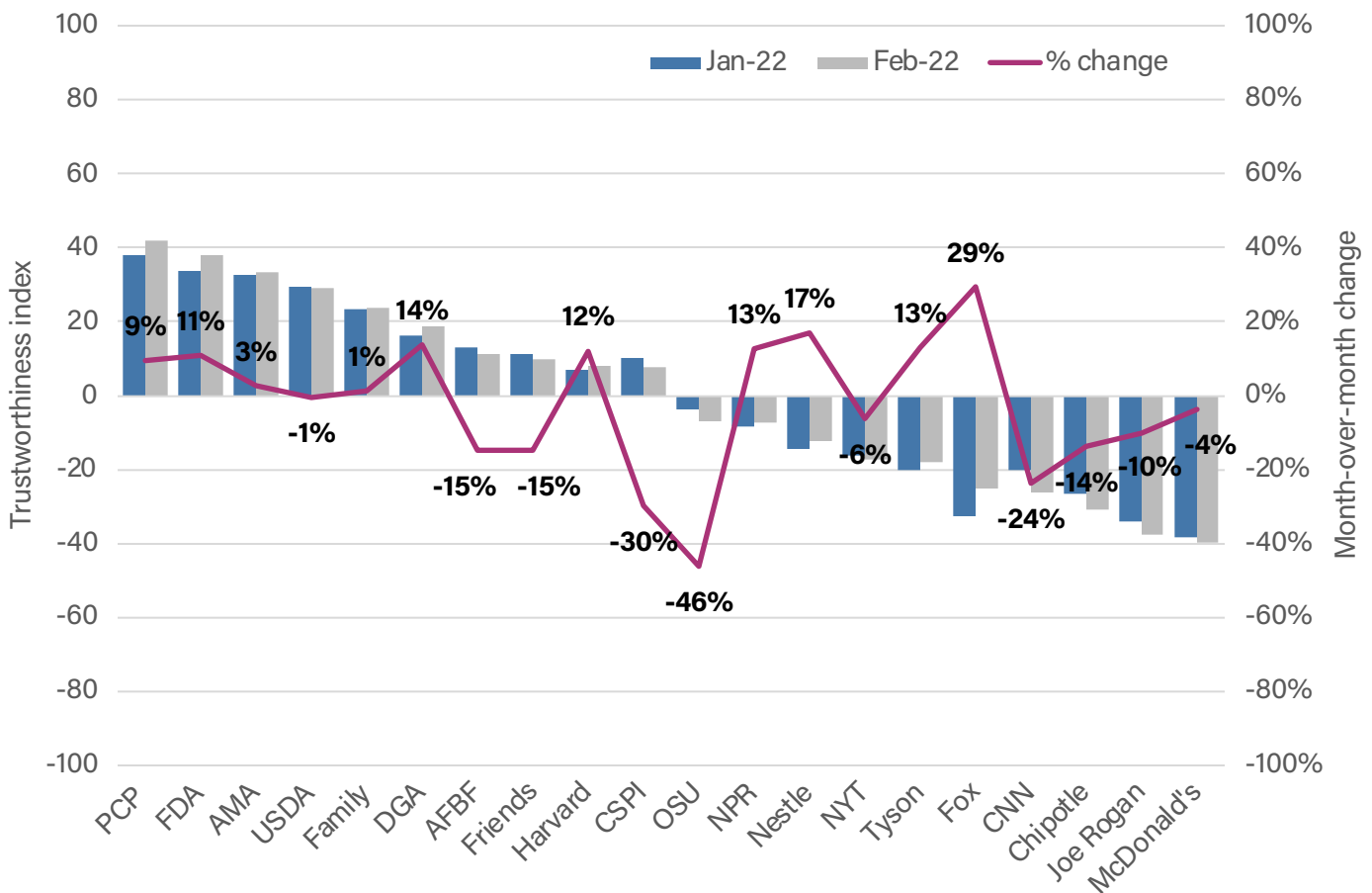


CONSUMER TRUST

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

On issues of healthy and sustainable food, government agencies—i.e., the Department of Agriculture (USDA) and the Food and Drug Administration (FDA)—and medical professionals—i.e., primary care physicians (PCP) and the American Medical Association (AMA)—remain the most trusted sources of information (**Figure 14**). McDonald’s, Chipotle, and Joe Rogan remain the least trusted sources. While Fox News still ranks very low as a trustworthy source of information, the news organization notably moved up past Chipotle and CNN on the Index. Overall trust in food-related information sources also proved to be stable as a majority of respondents (67%) felt they could at least somewhat trust their usual sources of information (**Figure 15**).

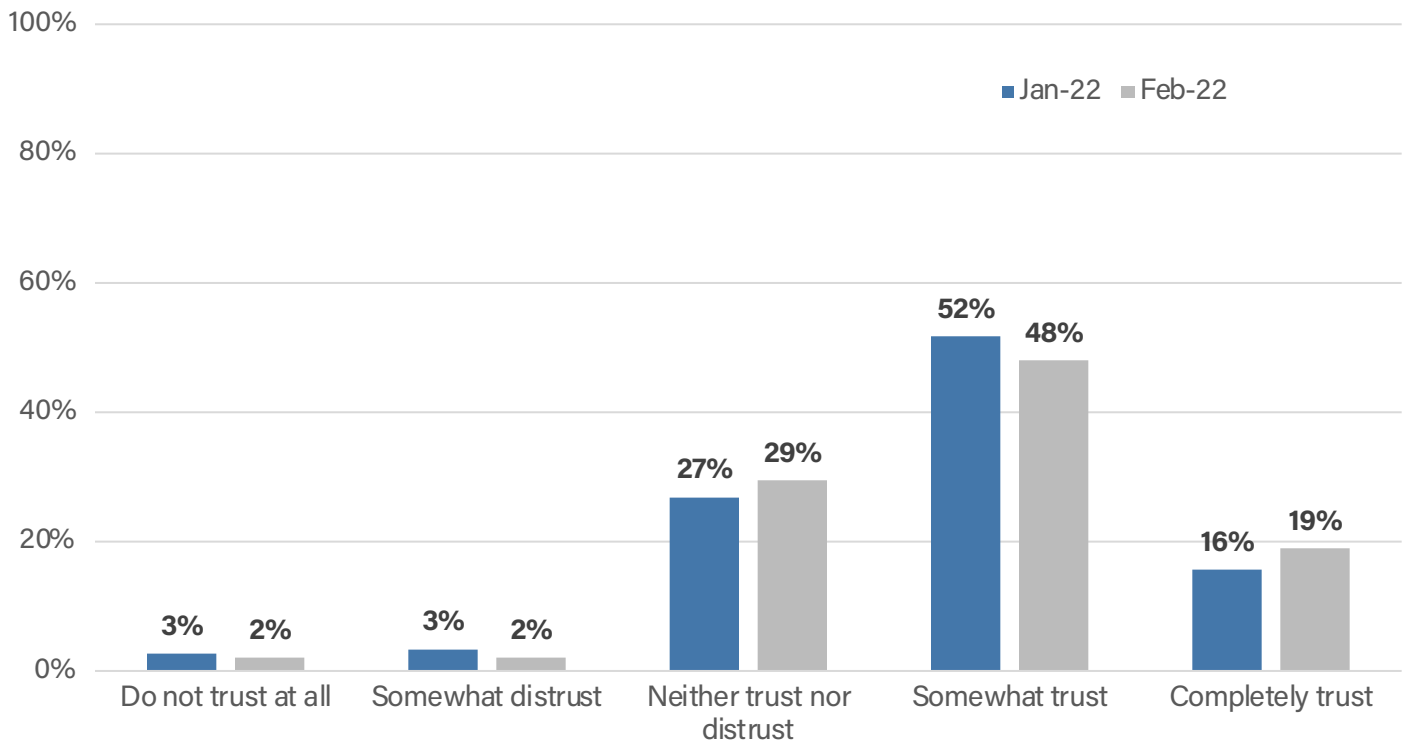
Figure 14. Trustworthiness Index of Food-related Information Sources



Question: 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.

CONSUMER TRUST

Figure 15. Overall Trust in Food-related Information Sources



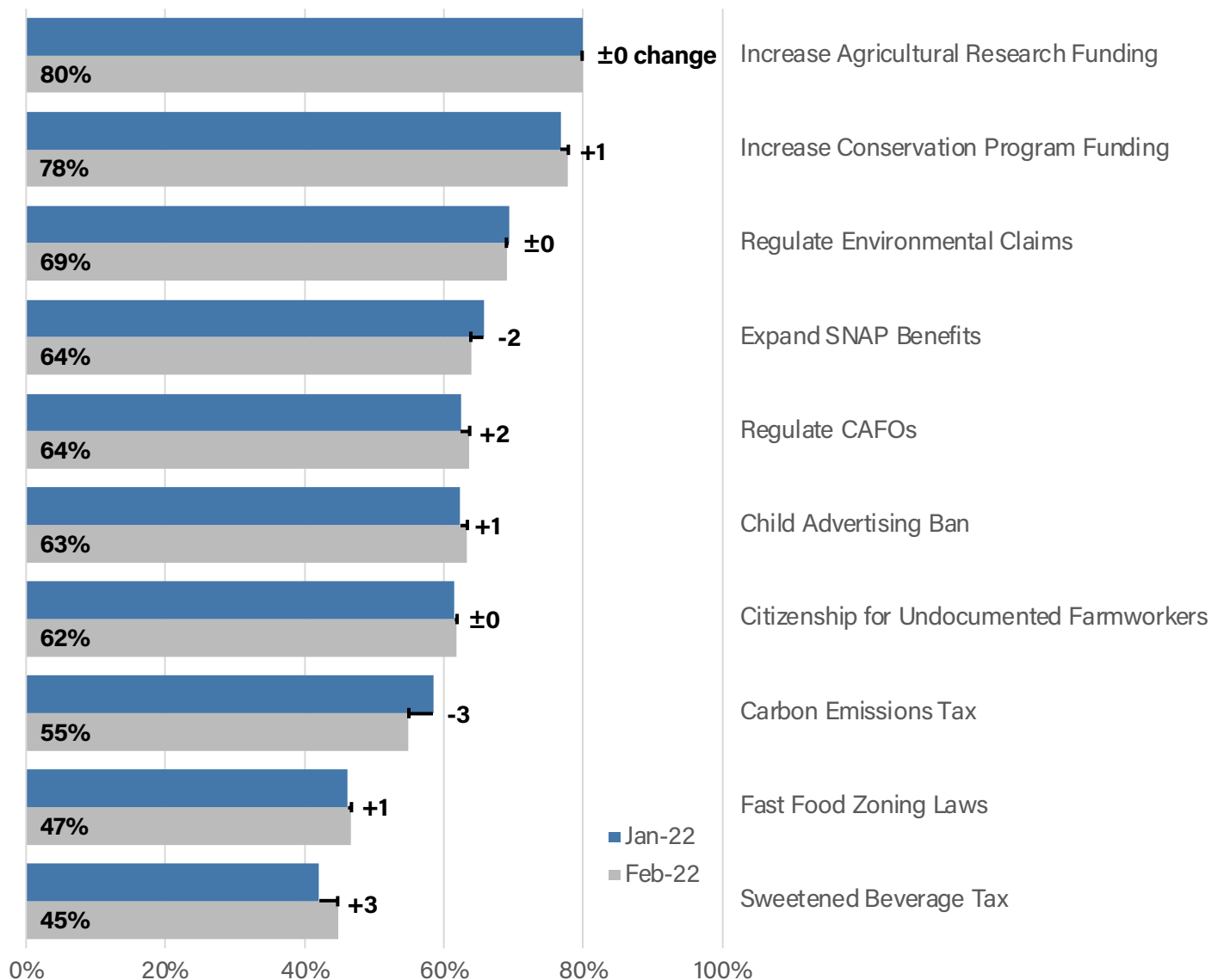
Question: Thinking about where you usually get your information on food and nutrition, how much do you trust these sources overall?

FOOD POLICY

Where do Americans stand on food policy?

Increases in agricultural research funding and conservation program funding continue to share large support, while zoning regulations restricting where fast food restaurants can be located and a 25% tax on beverages with added sugar are both unpopular policies (**Figure 16**). Compared to last month, there has been no significant change in support for any of these policies. These results thus demonstrate that a stable majority supports policy action on issues like expanding SNAP benefits and citizenship for undocumented farmworkers. See **Figure 17** on the next page for more details on the exact policy wording found in the survey questionnaire.

Figure 16. Support for Food and Agriculture Policies



FOOD POLICY

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

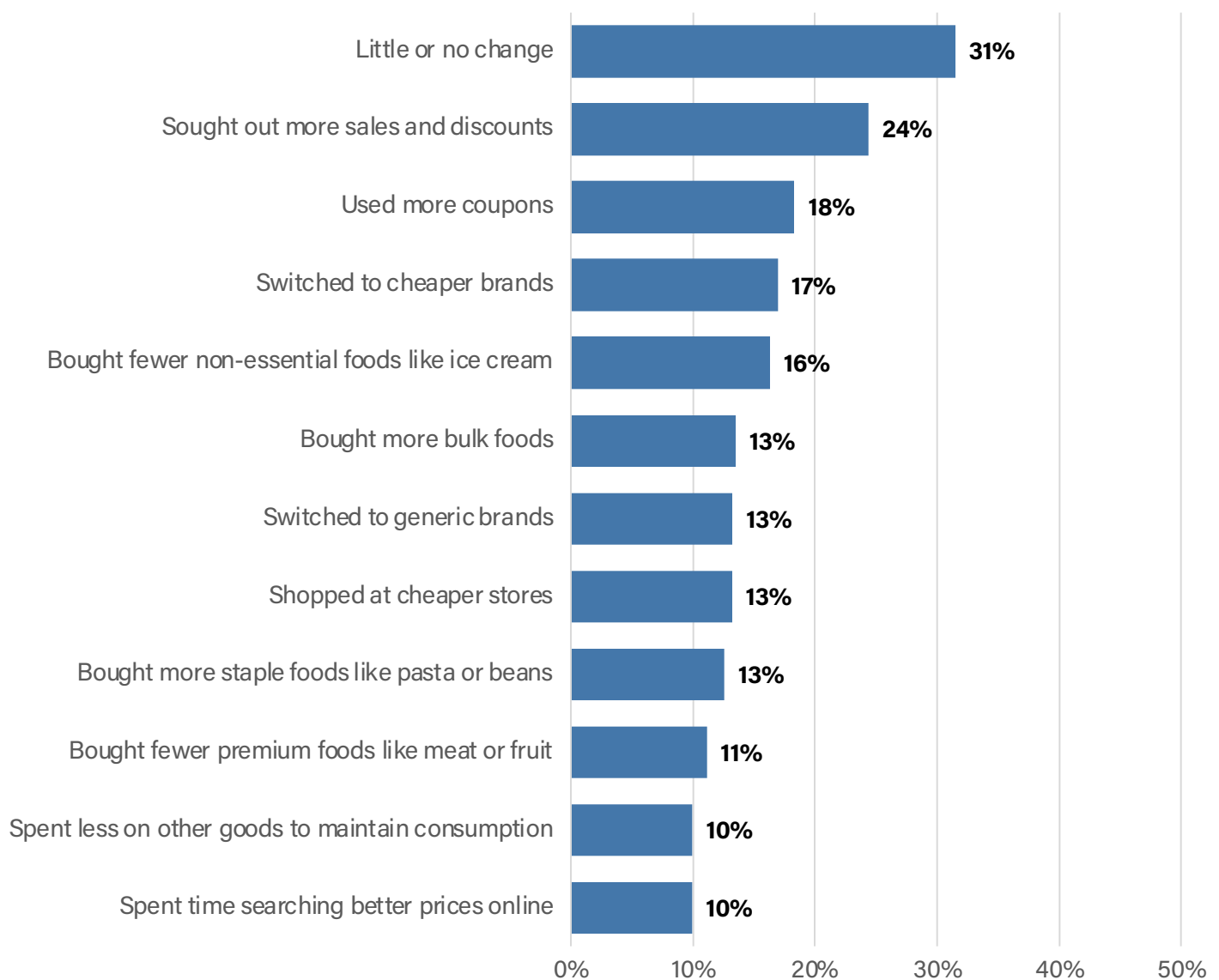
Place moratorium on new and expanding CAFOs, phase out the largest CAFOs, and pay farmers to transition out of operating CAFOs.

AD HOC QUESTIONS

How is inflation impacting American shoppers?

A plurality of respondents (31%) report little or no change to their shopping habits as food prices have risen by 10% over the last two years, yet many consumers are searching for better prices in response to this inflation (**Figure 18**). About a quarter of respondents said they have sought out more sales and discounts while using more coupons (18%) and buying cheaper brands (17%) were also top changes. Consumers also appear more willing to buy fewer non-essential foods like ice cream (16%) rather than buy fewer premium foods like meat (11%).

Figure 18. Changes to Grocery Shopping in Response to Food Price Inflation



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

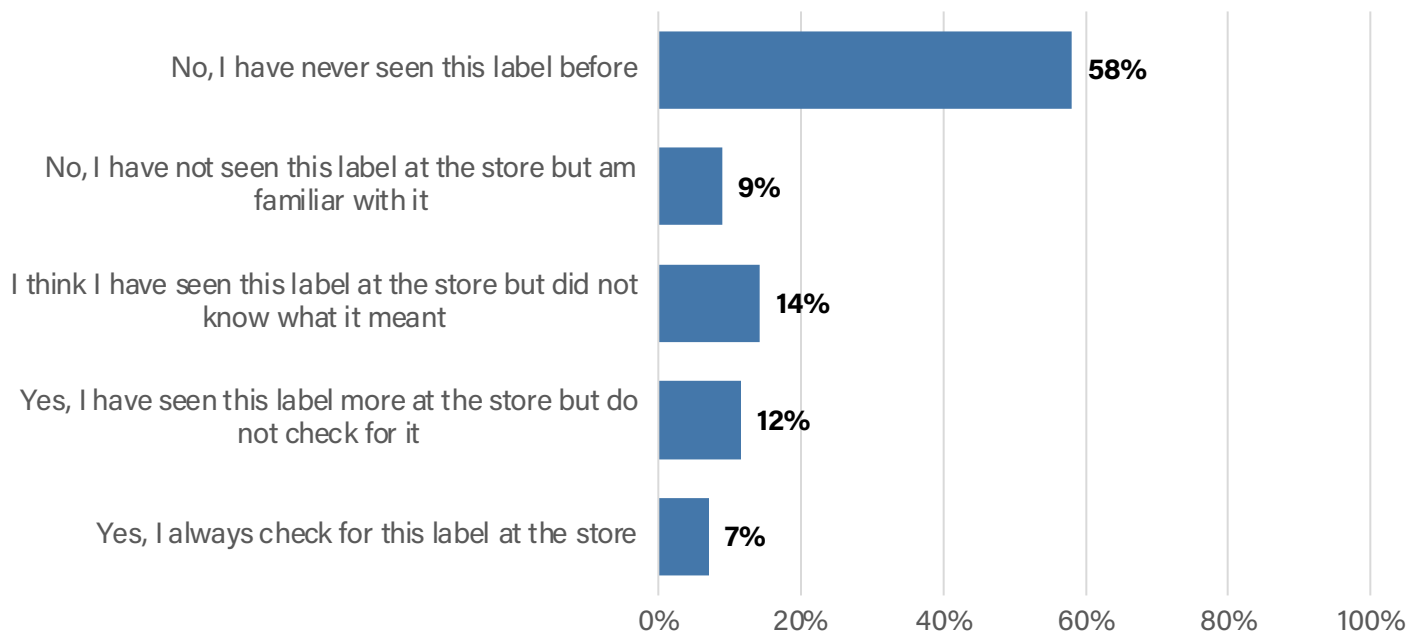
AD HOC QUESTIONS

Are Americans aware of new GMO labeling?

As of January 1st, certain foods that are genetically modified in a way that is not possible through conventional breeding are required to be labeled with the text “bioengineered” or “contains a bioengineered ingredient.” Companies are also allowed to use designated USDA labels (see right) or include a QR code with more information about the food item. However, 67% of respondents said that they have not seen any form of this label at the store (**Figure 19**). Only 19% of respondents were confident that they had seen this label on food products at the store, including 7% of respondents who said they always check for this label at the store.



Figure 19. Consumer Sightings of “Bioengineered” Label on Food Products



Consumer Food Insights is publicly released on the second Wednesday of every month. Please join our mailing list for updates and a copy of this report delivered directly to your inbox. Send an email to cfdas@purdue.edu with “SUBSCRIBE” in the subject line and your preferred contact information in the body. If you would like more information on how to join our consortium of supporters, send a brief note describing your data interests, needs, or objectives, and we will follow up to schedule a brief consultation meeting.

ENDNOTES

1 Data were collected from an online panel maintained by the firm Dynata over a four-day period from February 21-24, 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 21% of January’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 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.

3 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.

5 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.

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

7 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.