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# CONSUMER FOOD INSIGHTS

*Center for Food Demand Analysis and Sustainability  
College of Agriculture, Purdue University  
Jayson L. Lusk and Sam Polzin*

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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.<sup>1</sup> Visit [purdue.ag/CFDAS](http://purdue.ag/CFDAS) for more details.

In this issue, we look closer at how respondents living in rural vs. urban geographies have answered our survey. We aggregated four months of data (January - April) and applied the 2010 Rural-Urban Commuting Area (RUCA) Codes to respondents' ZIP codes to classify rural (n=698) and urban (n=4,269) households. New questions this month also ask consumers whether they are concerned about recent bird flu outbreaks on U.S. poultry farms (see Ad Hoc Questions). Interested in additional in-depth analysis? Contact [cfdas@purdue.edu](mailto:cfdas@purdue.edu) to learn how you can join our industry consortium.

## KEY INSIGHTS FROM MARCH

- Sustainable Food Purchasing (SFP) Index has risen two points since January.
- Reported food spending is about 9% higher than in January.
- Consumer food demand remains price insensitive at present.
- 60% of consumers are concerned about the impact of bird flu on food prices.
- Food insecurity among rural households is around 23% for this year.
- Rural consumers are less happy than urban consumers with their diets.
- Urban consumers are more likely to reduce meat consumption for environmental reasons.
- Overall trust in food-related information is comparable between urban and rural consumers.

SFP INDEX

**69**<sub>/100</sub>

FOOD INSECURITY

**14%**

FOOD SPENDING

**\$172**<sub>/WEEK</sub>

FOOD HAPPINESS

**86%**

# SUSTAINABLE DIETS

## Is American food purchasing sustainable?

The SFP Index remains relatively stable, although every sub-score has risen by several points since we began collecting data this January (Figure 1). Caution should be taken in over-interpreting small changes because of sampling error, but the fact that the ongoing market volatility has not caused our measures to fall or vary widely helps show that the sustainability indicators are fairly insensitive to the economic events of the last four months.

We see further that people who live in urban ZIP codes score slightly higher across all dimensions of the SFP Index compared to people living in rural areas (Figure 2). The largest indicator gaps are on Security, Nutrition, and Environment (>3 points), while the smallest gap is on Taste (<1 point). Some of these urban-rural differences are also evident in subsequent survey sections.

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](#).

Figure 1. Sustainable Food Purchasing Index, January & April 2022

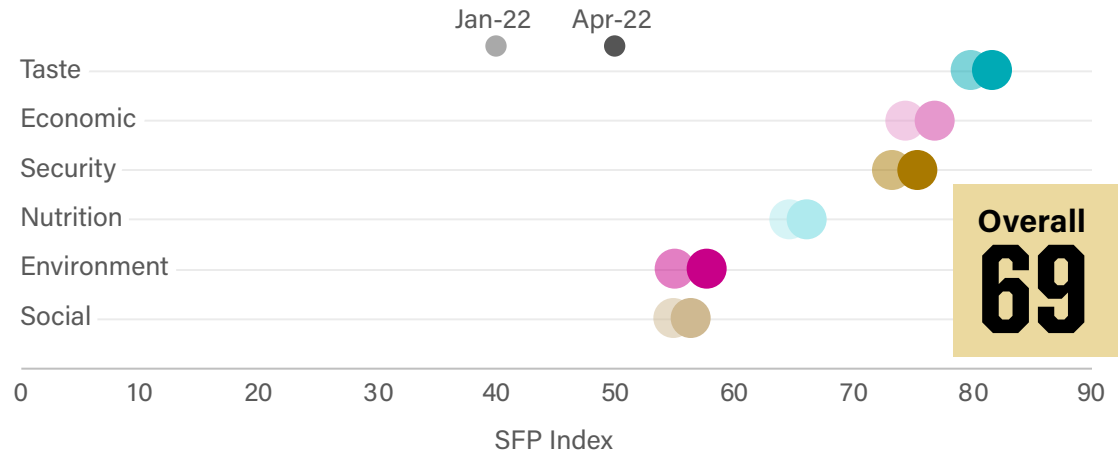
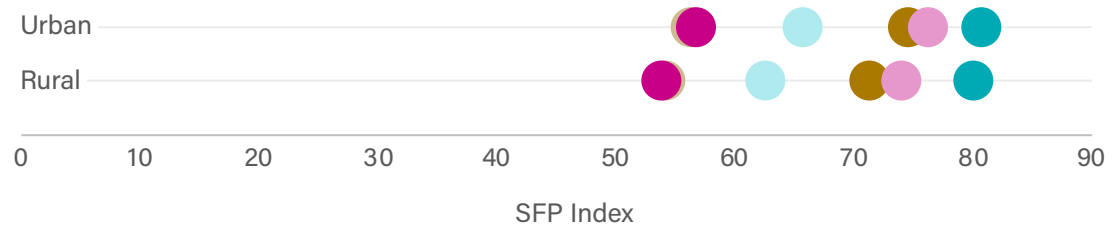


Figure 2. Sustainable Food Purchasing Index by Geography, January - April 2022

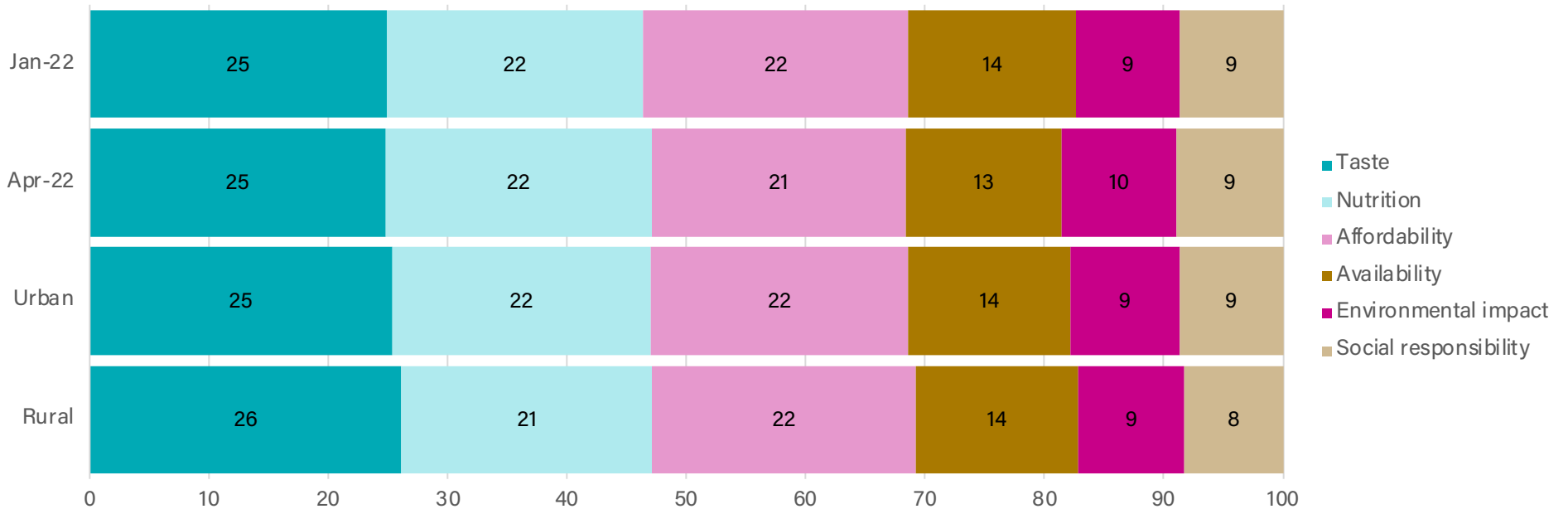


# FOOD VALUES

## 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. When we look a little closer at how these values break down across urban and rural households, their distributions also remain consistent. Urban and rural Americans similarly prioritize the taste of their food and comparatively attribute less value to the environmental impact and social sustainability of their food. While their “food values” are quite similar, the SFP Index shows that urban consumers are better realizing these values than rural consumers.

**Figure 3.** Share of 100 Points Allocated to Food Attributes by Month and Geography, January - April 2022



# FOOD EXPENDITURES

## How much are Americans spending on their food?

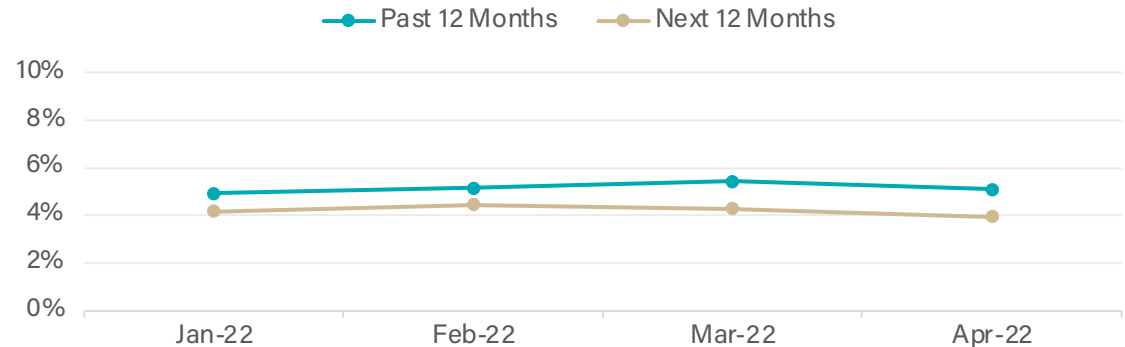
Respondents were asked to estimate their weekly food spending (**Figure 4**). On average, consumers reported spending \$110/week at the grocery store (FAH) and \$63/week on restaurants and carryout meals (FAFH). While FAFH spending jumped from February to March, there was a slight decline from March to April. FAH spending in April fell back to February levels. Total food spending has declined compared to March but remains about 9% higher relative to January. Consumer expectations for food price inflation also remain unchanged (**Figure 5**).

Of note, food spending among rural households appears to more dependent on their paychecks (**Figure 6**). Although urban and rural households spend similar shares of their income on food, an increase likelihood of living paycheck to paycheck aligns with higher risks of food insecurity reflected in our survey measures. Rural consumers are also spending a greater share of their FAFH spending on fast food while urban consumers are using food delivery services more often (**Figure 7**).

**Figure 4.** Weekly Household Food Expenditures, January - April 2022

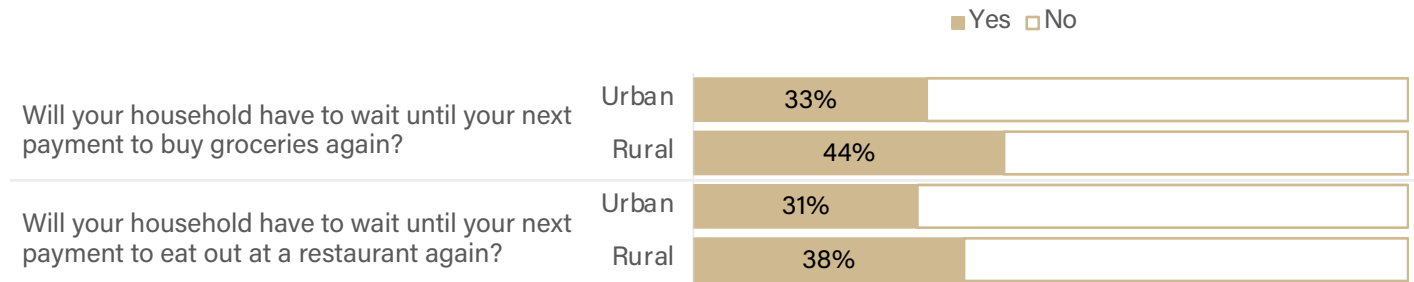
	Food at home (FAH) <sup>2</sup>	Food away from home (FAFH) <sup>3</sup>	Total
Jan. 2022	\$106.83	\$51.59	\$158.42
Feb. 2022	\$109.11	\$54.41	\$163.52
Mar. 2022	\$114.06	\$63.02	\$177.08
Apr. 2022	\$109.50	\$62.71	\$172.20
Change (MoM)	-4.0%	-0.5%	-2.8%

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



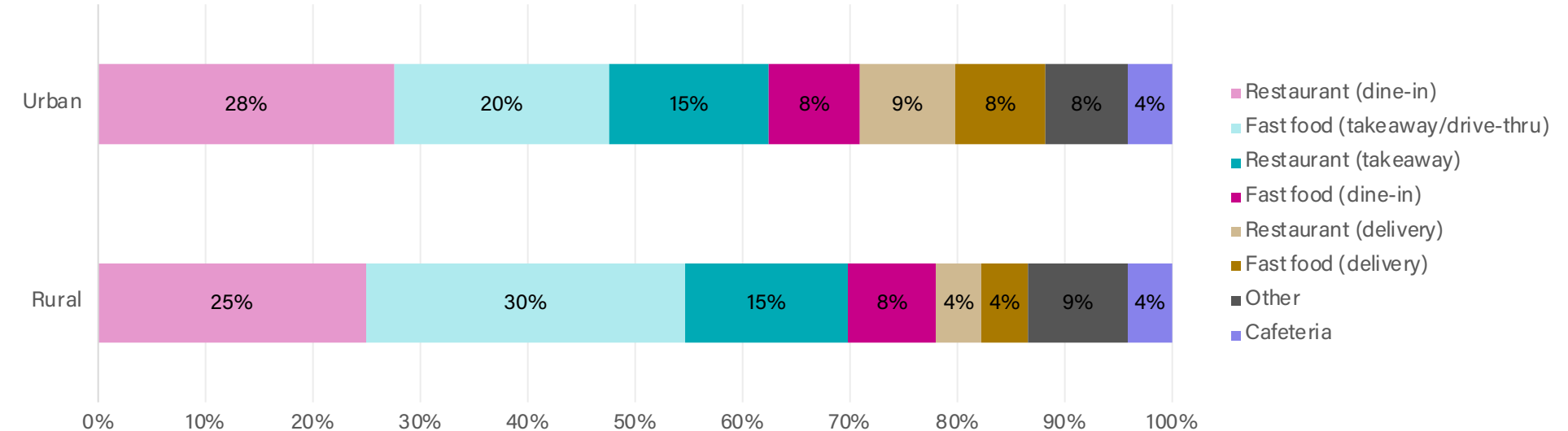
# FOOD EXPENDITURES

**Figure 6.** Share of Households Waiting on their Next Payment to Buy Food by Geography, January - April 2022



Rural consumers report eating out about **1 less time per week** than urban consumers (2 vs. 3 meals).

**Figure 7.** Food Away From Home (FAFH) Spending Disaggregated by Location/Method and Geography, March - April 2022



# FOOD SECURITY

## Are Americans having trouble buying food for their families?

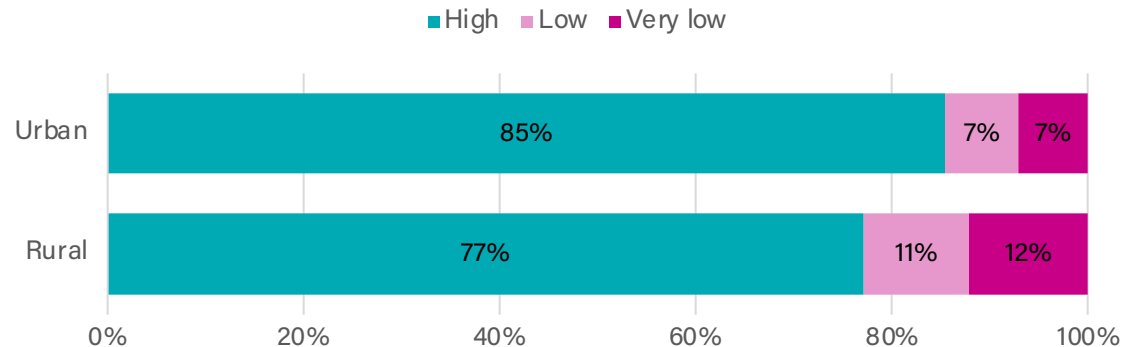
Based on responses to six standardized questions about food bought and eaten in the last 30 days, we estimate the national rate of food insecurity to be 14% (**Figure 8**). This rate is at its lowest since we began collecting data this January but is still within a relatively small margin of previous months. However, when this rate is disaggregated by geography, we show that rural households are facing much more food insecurity compared to urban households (**Figure 9**). While rural Americans are reporting higher rates of disrupted eating patterns and reduced food intake, they make up a much smaller portion of the national population, meaning their vulnerability can often be obscured when the aggregate rate is reported.

**27% of rural households** have been unable to find a specific food product at the store compared to **21% of urban households**.

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

	Food secure		Food insecure	
	High <sup>4</sup>	Low <sup>5</sup>	Very low <sup>6</sup>	Total
Jan. 2022	84.2%	8.5%	7.3%	15.8%
Feb. 2022	84.2%	9.1%	6.7%	15.8%
Mar. 2022	83.0%	7.3%	9.7%	17.0%
Apr. 2022	85.8%	6.7%	7.5%	14.2%
Change (MoM)	+2.8%	-0.6%	-2.2%	-2.8%

**Figure 9.** Household Food Security by Geography, January - April 2022





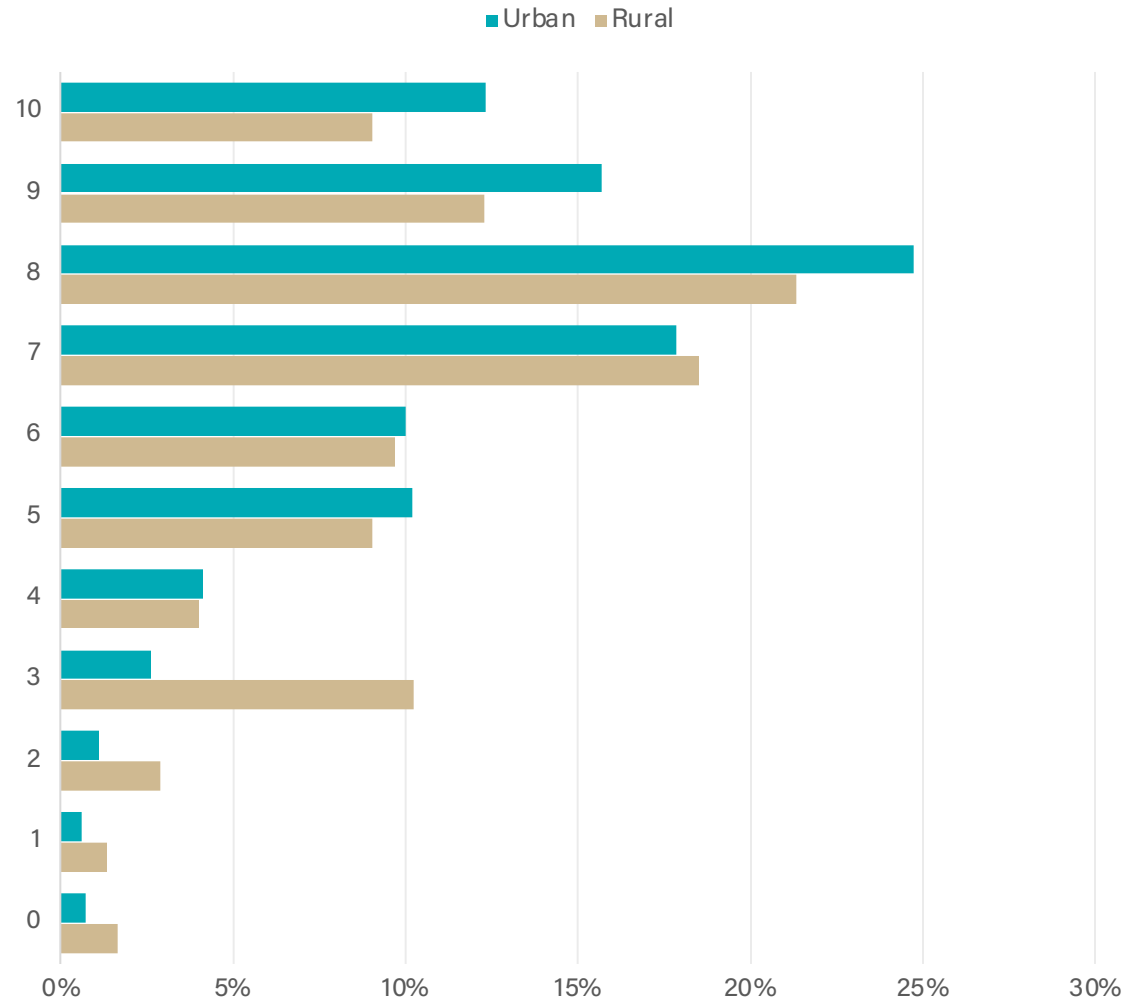
# FOOD SATISFACTION

## Are Americans satisfied with their diets?

We asked survey respondents to rate their diet on a 0-10 scale, with top of the scale representing their ideal diet.<sup>7</sup> 71% of people living in urban ZIP codes rated their diet as a 7 or above compared to 61% of people in rural areas (**Figure 10**). Similarly, **Figures 11** and **12** show that urban consumers are more likely than rural consumers to be happy with both their diets and lives. Considering other measures like the SFP Index and food insecurity, this geographic disparity is not entirely surprising but demand further testing to determine a possible causal variable. Our survey results also show that these indicators have not changed since January, suggesting that current inflationary pressures on the food system have yet to impact how American consumers perceive the quality of their diet.

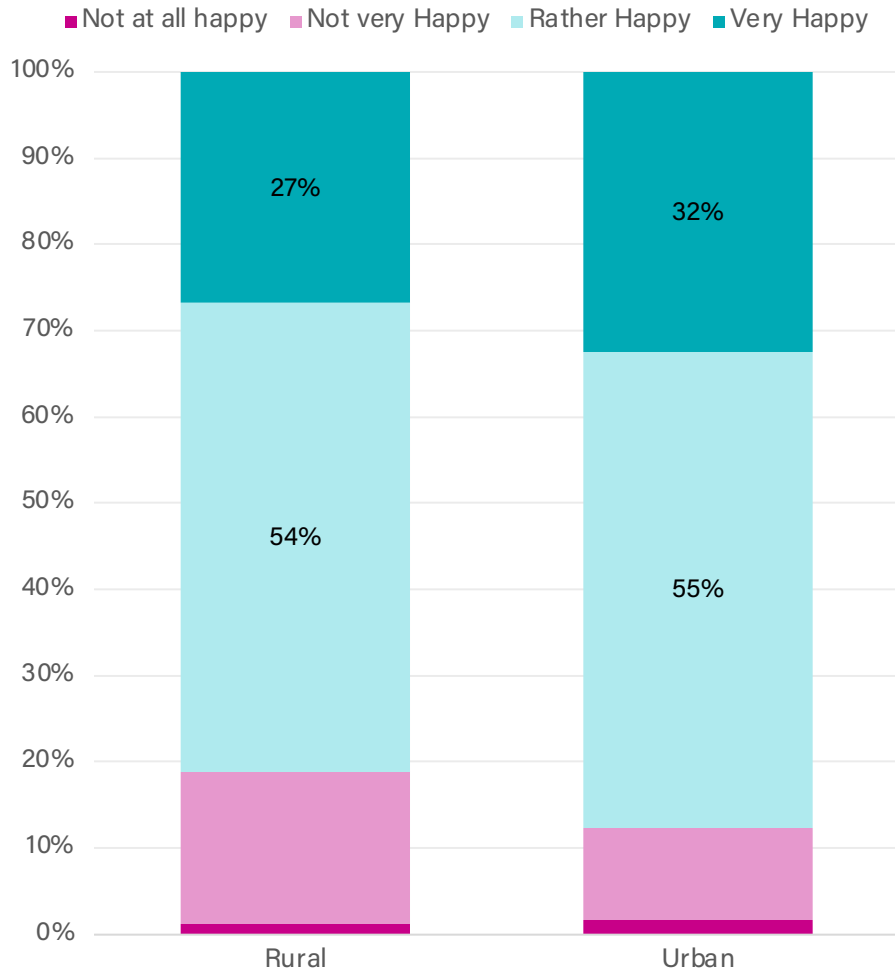
A majority of people are **happy with their diet**, but does **living in a city** make someone more happy with their diet? Other factors are likely at play.

**Figure 10.** Diet Evaluation Well-Being Rating by Geography, January - April 2022

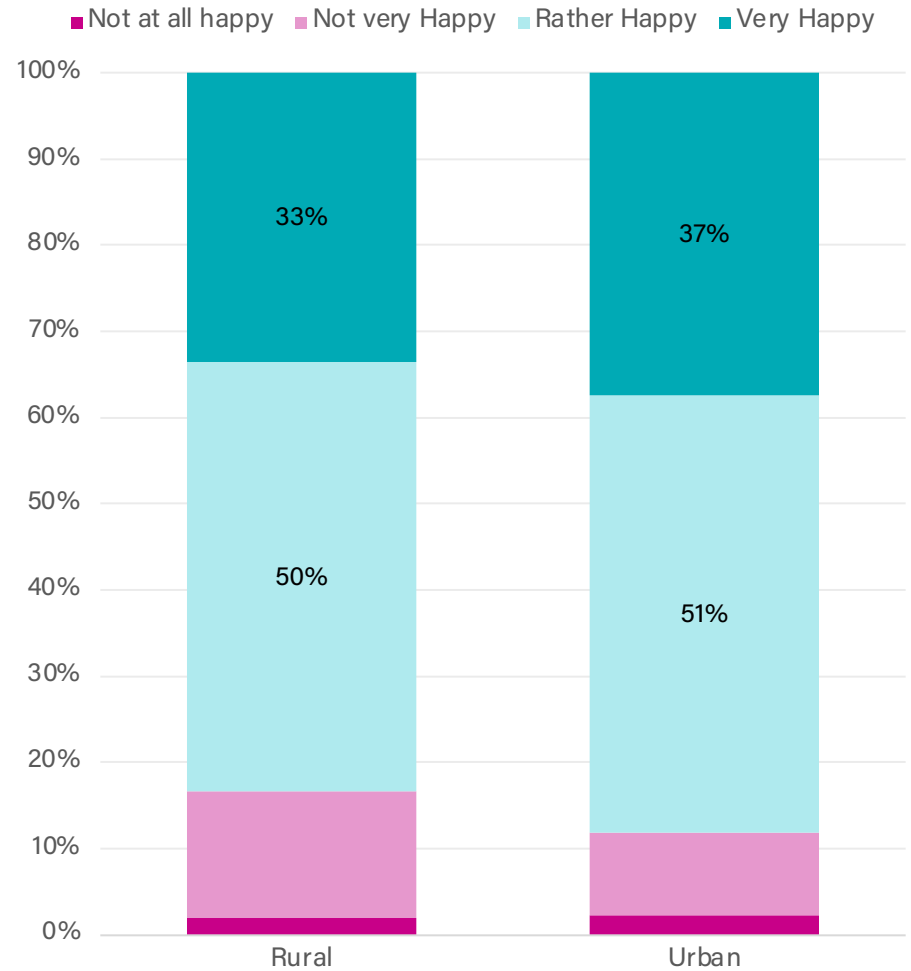


# FOOD SATISFACTION

**Figure 11.** Diet Happiness by Geography, January - April 2022



**Figure 12.** Life Happiness by Geography, January - April 2022



# CONSUMER BEHAVIORS

## How are Americans navigating their food environment?

On average, only minor differences separate the shopping and eating habits of rural and urban consumers (**Figure 13**). For example, Americans who live in urban ZIP codes are more likely to recycle packaging or buy plant-based proteins. Urbanites also appear slightly more concerned with the contents and origin of their food. However, Americans in cities or small towns are about as likely to buy grass-fed beef, compost food scraps, or check the sell-by date on their food, among many other behaviors. While much may divide rural and urban Americans in other spheres of life, it appears that they each navigate their food system in a similar manner.

Urban consumers are more likely to **buy plant-based protein over animal protein**, which aligns with the belief that **eating less meat is better for the environment** (see pg. 13).

**Figure 13.** Consumer Shopping and Eating Habits by Geography, January - April 2022

	Rural	Urban	
Chose generic foods over brand name foods	3.4	3.3	
Chose local foods over non-local foods	3.2	3.1	
Chose wild-caught fish over farm-raised fish	2.9	3.0	
Chose grass-fed beef over conventional beef	2.9	2.9	
Chose cage-free eggs over conventional eggs	2.7	2.8	
Chose organic foods over non-organic foods	2.7	2.8	
Chose plant-based proteins over animal proteins	2.3	2.6	
Checked the use-by/sell-by date at the store	3.9	4.0	<b>Mean Score</b> 5 Always 4 Often 3 Sometimes 2 Rarely 1 Never
Checked the nutrition label before buying new foods	3.3	3.5	
Checked for natural or clean labels	2.9	3.0	
Checked where my food originated	2.8	3.0	
Checked for food recalls	2.8	3.0	
Checked how my food was produced	2.8	2.9	
Checked for GMO ingredients	2.7	2.9	
Took steps to reduce food waste at home	3.8	3.7	
Recycled food packaging	3.2	3.6	
Threw away food past the use-by date	3.2	3.3	
Composted food scraps	2.5	2.5	
Ate fruits and vegetables without washing them	2.4	2.4	
Ate rare or undercooked meat	2.0	2.1	
Ate raw dough or batter	2.0	2.0	

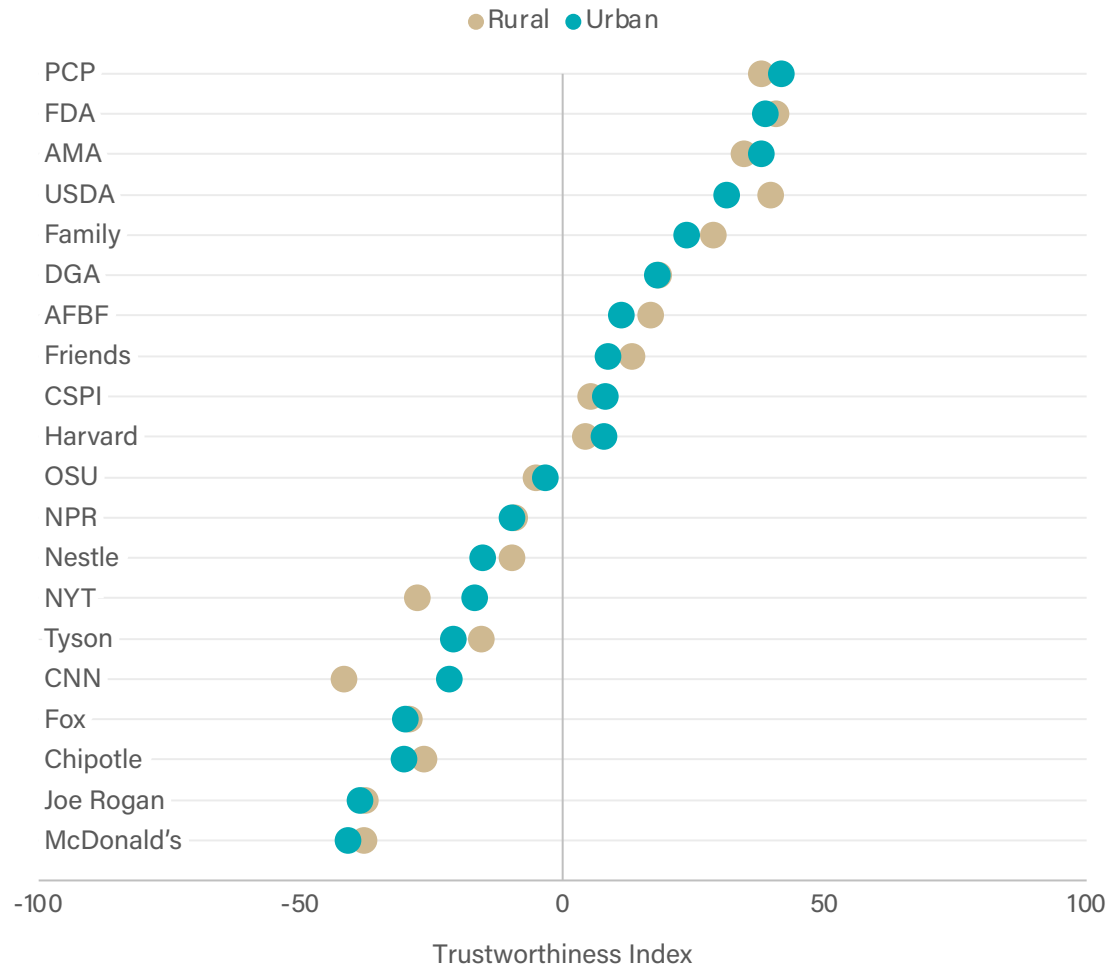
# CONSUMER TRUST

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

We asked respondents to select the five most trusted and least trust sources of food-related information. Overall trends in public trust largely hold when disaggregated by geography, but the degree of trust can vary (**Figure 14**). The U.S. Department of Agriculture (USDA) and American Farm Bureau Federation (AFBF) score higher among rural than urban Americans. Rural Americans also distrust the New York Times (NYT) and CNN much more, while urban Americans demonstrate slightly more distrust for food companies like Nestle and Tyson. Though national discourse may suggest otherwise, most rural and urban Americans prove to be on a similar page with regards to which institutions they can trust to get food-related information.

Across geography, some news sources—e.g., the **NYT** and **CNN**—appear much more polarizing than others—e.g., **NPR** and **Fox**.

**Figure 14.** Trustworthiness Index of Food-related Information Sources by Geography, January - April 2022

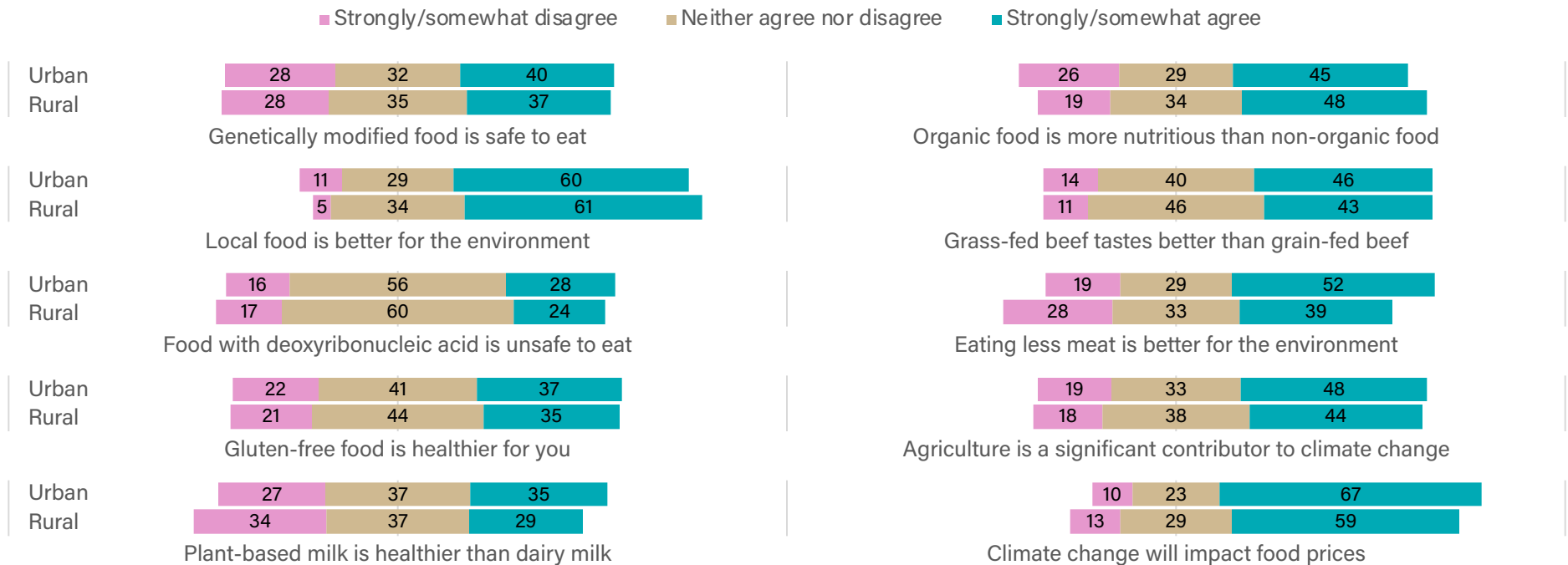


# CONSUMER BELIEFS

## What do Americans believe about their food and food system?

A sizeable majority of Americans agree that agriculture is a significant contributor to climate change, yet urban Americans are much more likely to agree that eating less meat is better for the environment than rural Americans (**Figure 15**). Urban and rural agreement similarly diverges over whether plant-based milk is healthier than dairy milk as urban consumers agree with this claim at a higher rate than rural consumers. Our results also reveal that across nearly every claim about the food and nutrition, rural respondents were more likely to say they “neither agree nor disagree” rather than picking a side.

**Figure 15.** Consumer Agreement with Claims about Food and Nutrition by Geography, March - April 2022

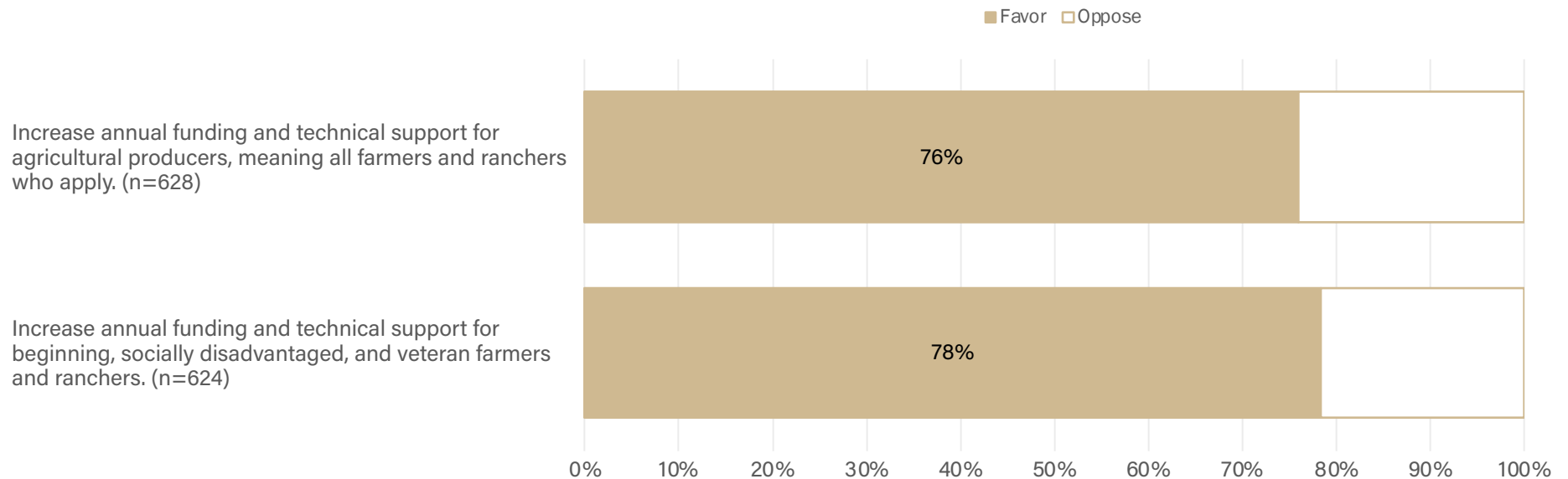


# FOOD POLICY

## Where do Americans stand on food policy?

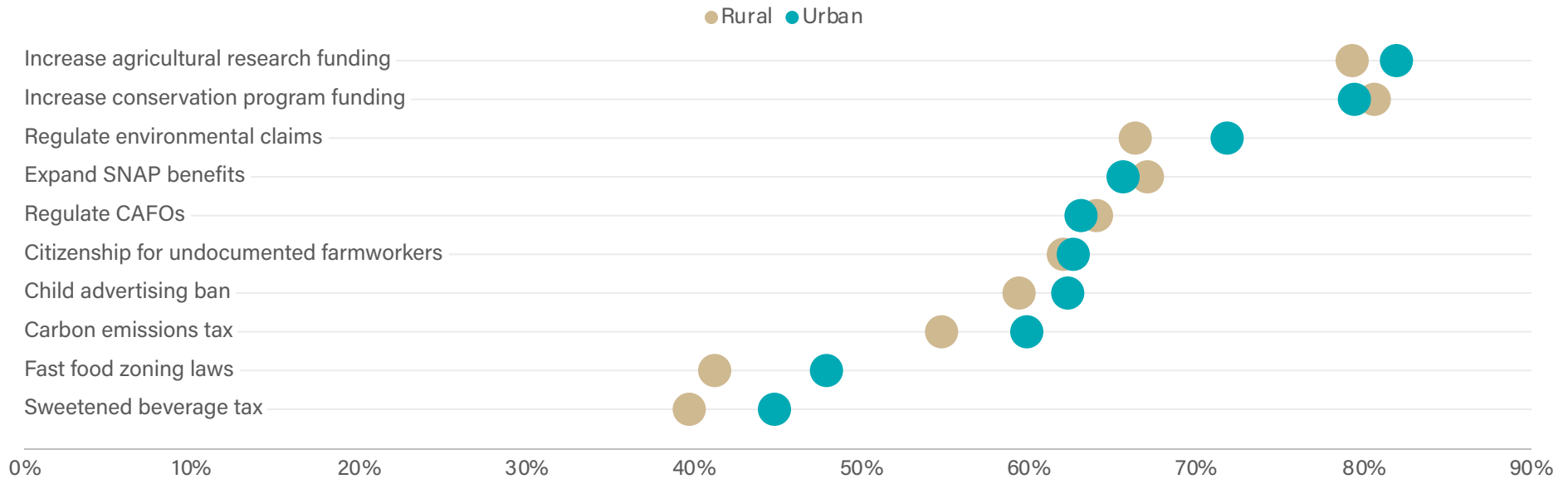
Support for farmers proves high, which is consistent with historic public opinion trends. This month, we asked half of respondents if they support increased government funding for all farmers who apply and asked the other half of respondents if they support increased government funding specifically for beginning, socially disadvantaged, and veteran farmers (**Figure 16**). Regardless of how funding is distributed, around 3/4 of Americans favor this farm policy. **Figure 17** reveals that support for other policies can correlate with urban-rural geography. Rural Americans are generally more conservative with regards to policies that regulate or tax the food system. For example, regulating the ability of food companies to make environmental claims about their products and taxing the carbon emissions of food producers is about 5 points more popular among people living in cities.

**Figure 16.** Favorable Support for Increasing Government Funding to Farmers, April 2022



# FOOD POLICY

Figure 17. Favorable Support for Food and Agriculture Policies by Geography, January - April 2022

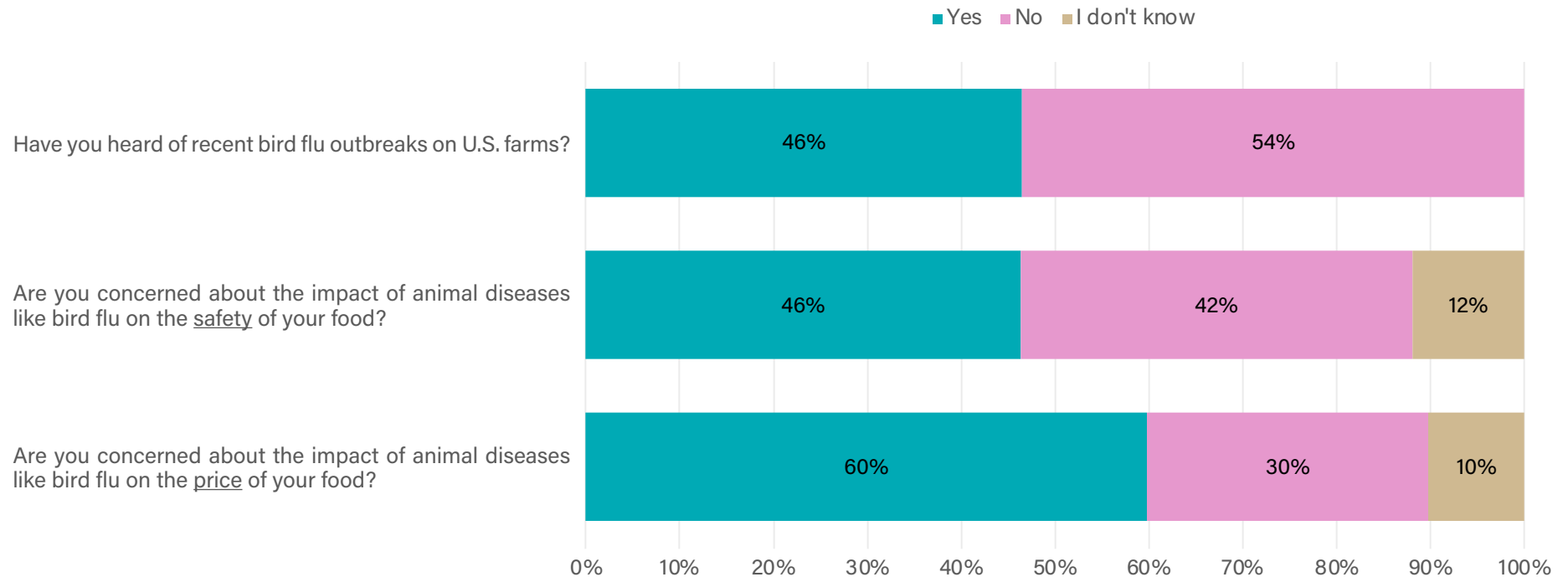


- Increase agricultural research funding** to develop crops more resistant to heat, drought, and flooding through plant breeding and biotechnologies.
- Increase conservation program funding** to pay farmers and ranchers to adopt climate-smart practices and help improve environmental outcomes.
- Impose 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.
- 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.
- Prohibit marketing on TV, via online video streams, etc. of unhealthy food** and beverage products such as junk foods and sodas to children.
- 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.

# AD HOC QUESTIONS

This month, given recent news about bird flu spreading across U.S. farms, we asked survey respondents about their awareness of the issue (**Figure 18**). 46% report they have heard of these outbreaks. We were also interested in general concern about animal diseases like bird flu. 46% of consumers say they are concerned about the impact of animal disease on the safety of their food, while 60% express concern about the impact on prices. Given the current high price environment, these results align with the expectation that consumers would be more concerned with food prices than safety. Of note, [USDA experts](#) suggest risks of getting bird flu from eating poultry or eggs is extremely low, particularly if properly cooked.

**Figure 18.** Consumer Awareness and Concern about Bird Flu, April 2022





# ENDNOTES

**1** Data were collected from an online panel maintained by the firm Dynata over a two-day period from April 19-20, 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 22% of March’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.