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

In this issue, we look closer at how respondents of different racial and ethnic groups have answered our survey. We aggregated five months of data (January - May) to compare consumer behaviors across four groups: White (n=3,731), Black (n=697), Asian (n=376), and Hispanic (n=783).<sup>2</sup> New questions this month also ask consumers about their opinions on the use of agricultural fertilizers and whether they currently garden. 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 MAY

- Sustainable Food Purchasing (SFP) Index shows no major movement.
- White consumers score higher on the SFP Index relative to other groups.
- Reported total food spending increased 7% from last month.
- Consumer food demand remains price insensitive at present.
- Black and Hispanic food insecurity is more than double that of White and Asian households.
- Asian Americans are more satisfied with their diets compared to other groups.
- 26% of consumers are currently growing their own food in a garden.
- 55% of consumers think farmers should replace synthetic fertilizers with organic fertilizers.

SFP INDEX  
**68**<sub>/100</sub>

FOOD INSECURITY  
**16%**

FOOD SPENDING  
**\$184**<sub>/WEEK</sub>

FOOD HAPPINESS  
**87%**

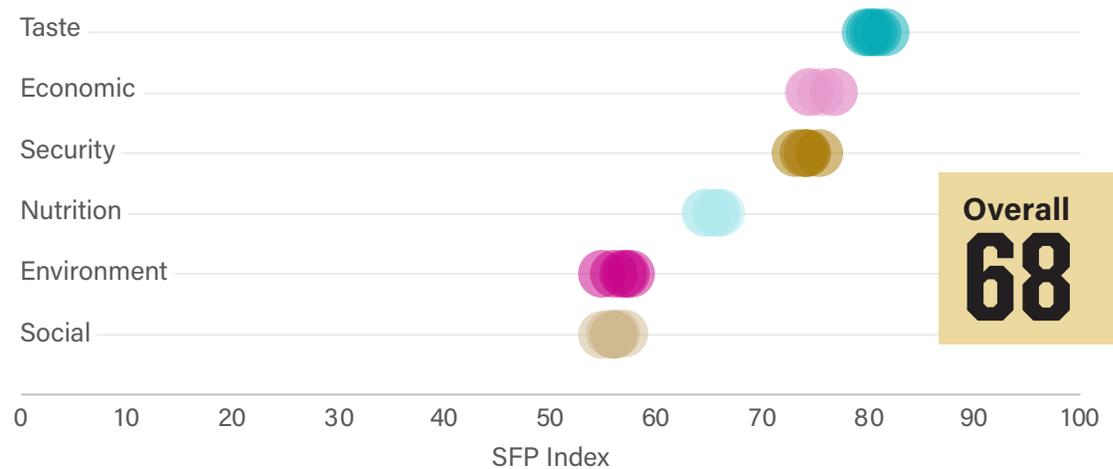
# SUSTAINABLE DIETS

## Is American food purchasing sustainable?

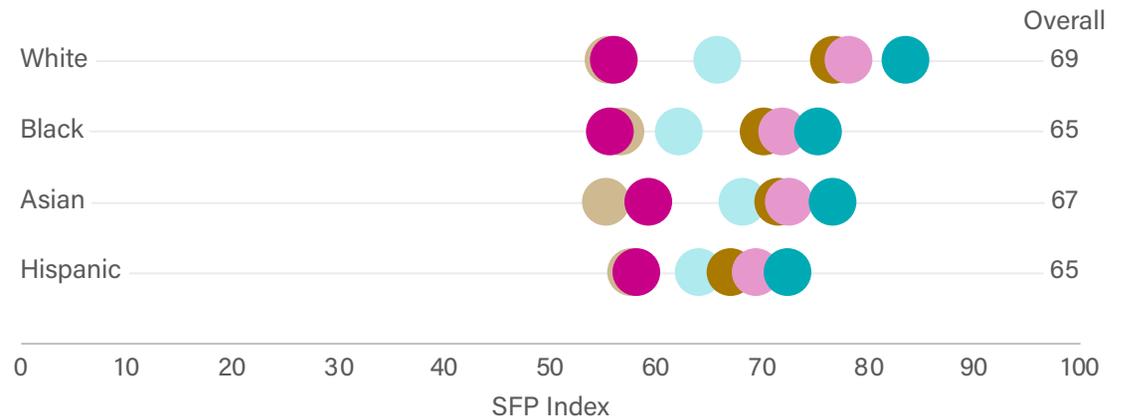
The SFP Index remains consistent since the start of the year (**Figure 1**). We see further that White consumers score significantly higher on the Taste, Economic, and Security indicators compared to other groups (**Figure 2**). However, Asian adults score highest on the Nutrition indicator, and there is relatively little difference in how each group performs on the Environment and Social indicators. Comparable differences between racial and ethnic groups are also evident in subsequent areas like food security and food satisfaction.

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, January - May 2022



**Figure 2.** Sustainable Food Purchasing Index by Race & Ethnicity, January - May 2022

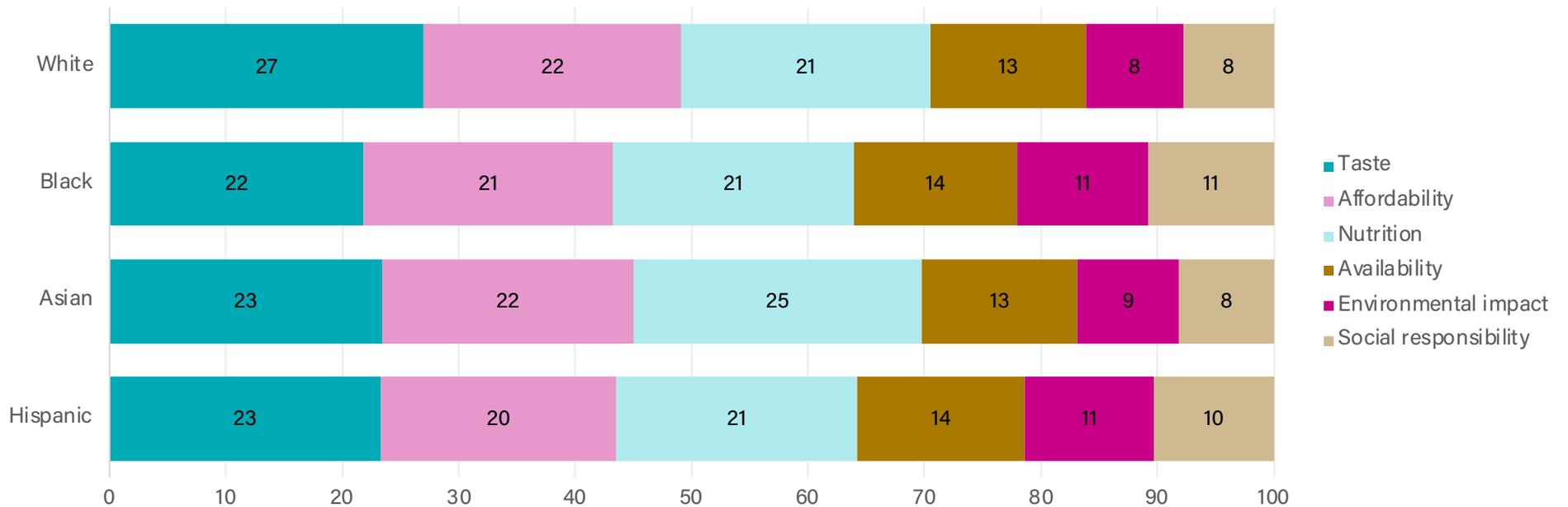


# FOOD VALUES

## 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 racial and ethnic groups, their distributions diverge. On average, White consumers value the taste of their food more than any other group, and Asian consumers value the nutritional content most. Black and Hispanic adults are also slightly more concerned with the environmental impact and social responsibility of their food compared to White and Asian adults.

**Figure 3.** Share of 100 Points Allocated to Food Attributes by Race, January - May 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 \$121/week on groceries (FAH) and \$63/week on restaurants and carryout meals (FAFH).<sup>3</sup> Rising FAH expenditures prove consistent with high inflation pressures and consumers being relatively insensitive to price changes. Consumer estimates of annual food price inflation have also increased (Figure 5).

We further estimate that total annual food spending across racial and ethnic groups rises similarly as incomes rise (Figure 6). However, Figure 7 shows that Black households making less than \$25,000 annually, followed by Hispanic households, spend a greater share of their income on food compared to the similar White and Asian households. This difference dramatically narrows for households making between \$25,000-\$49,000 and disappears for households making more than \$75,000. Of note, we omit food assistance dollars in our calculations, which could explain some of this difference.

Figure 4. Weekly Household Food Expenditures, January - May 2022

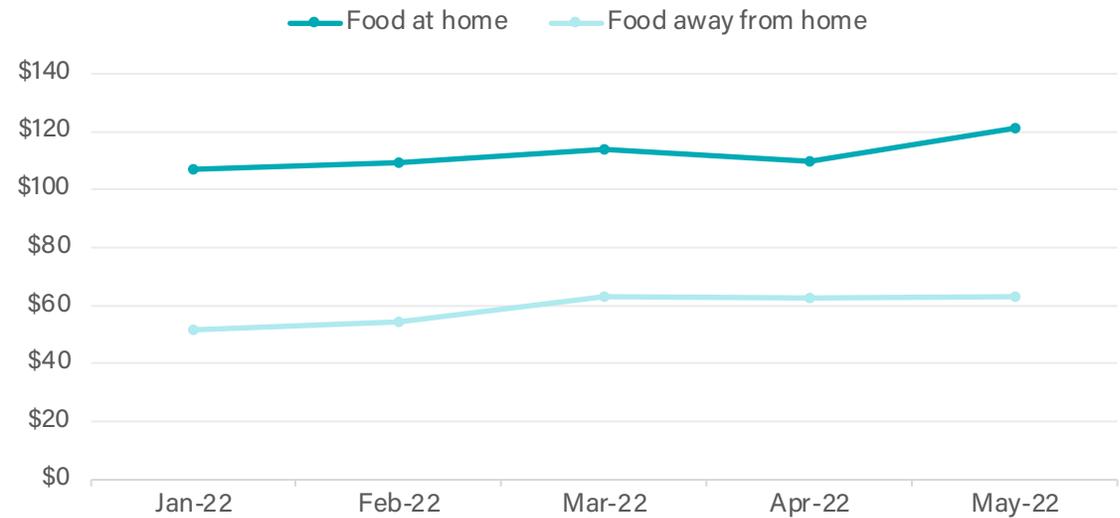
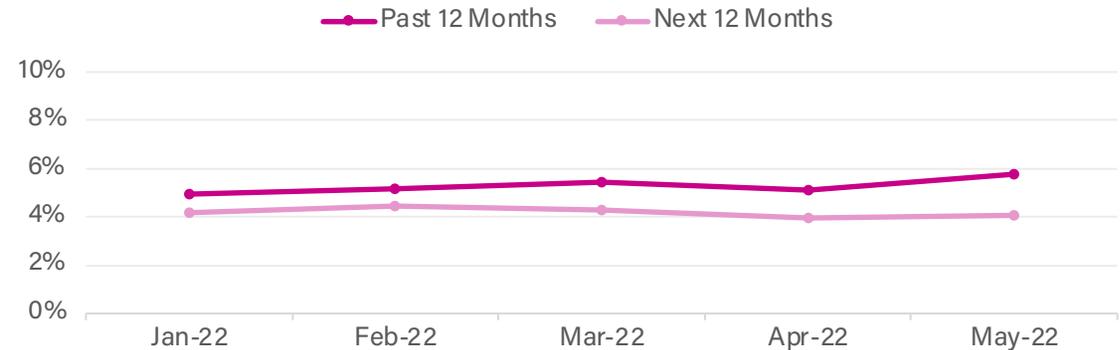
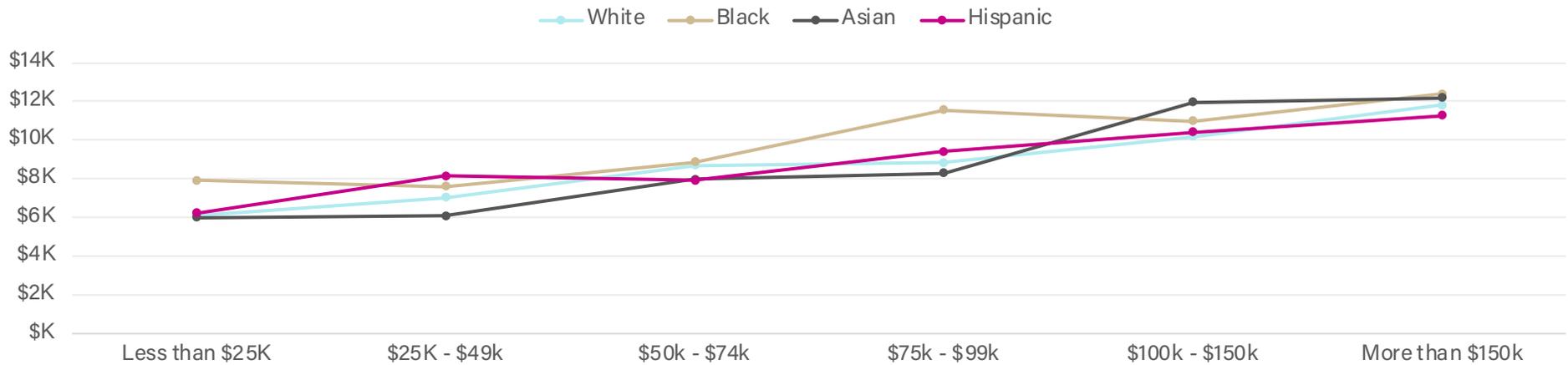


Figure 5. Consumer Estimates of Food Price Inflation January - May 2022

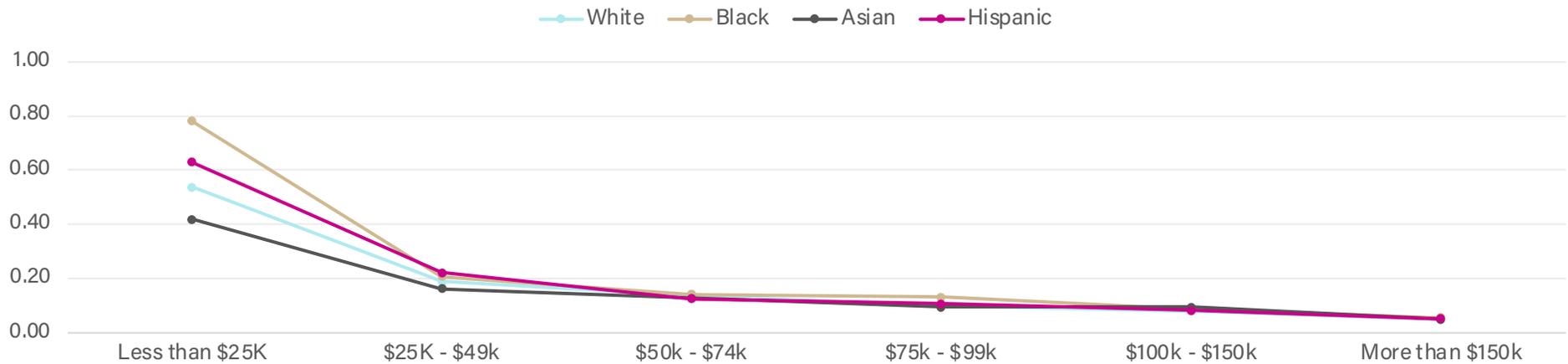


# FOOD EXPENDITURES

**Figure 6.** Total Annual Food Expenditures by Annual Household Income and Race & Ethnicity, January - April 2022



**Figure 7.** Total Food Expenditures as a Share of Income by Annual Household Income and Race & Ethnicity, January - May 2022



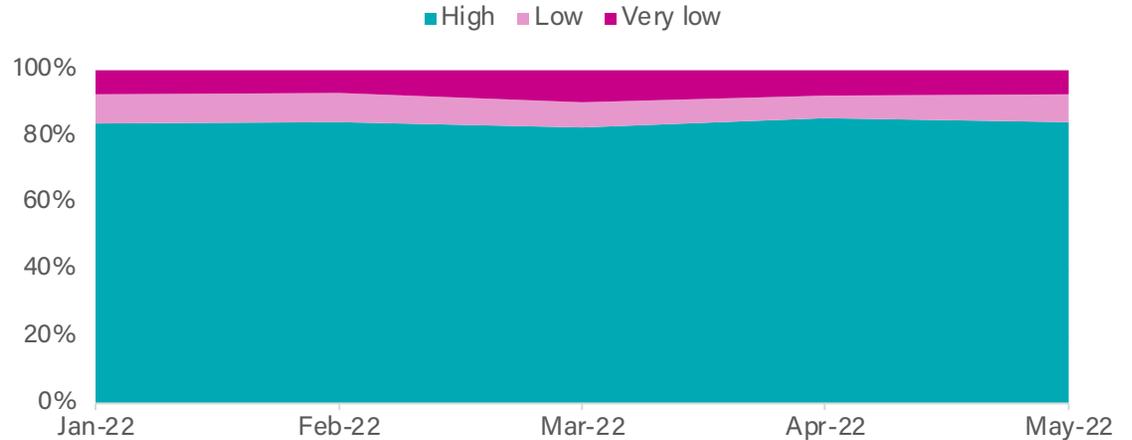
# FOOD SECURITY

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

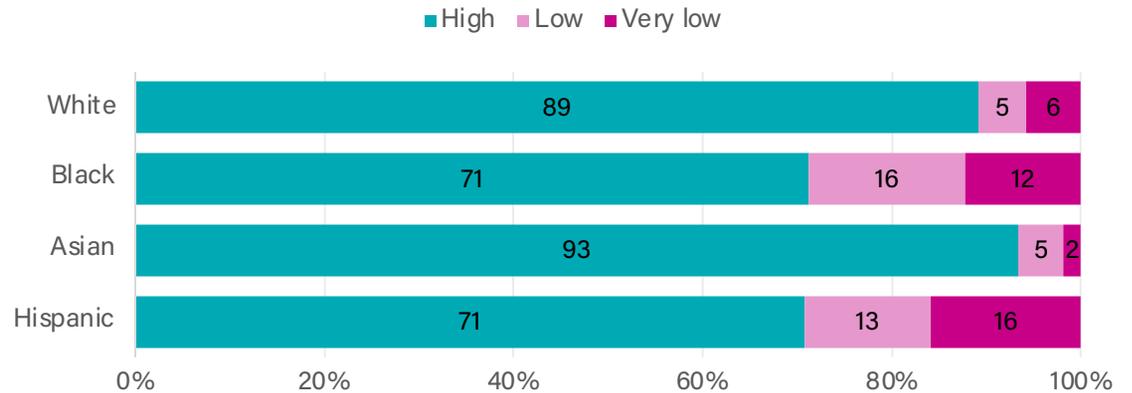
Based on responses to six standardized questions about food bought and eaten in the last 30 days, we estimate the national rate of food insecurity to be 16%.<sup>4</sup> **Figure 8** indicates that this rate is fairly steady on a monthly basis, and around 14-16% of the country can be considered food insecure in any given month. However, significant disparities exist between racial and ethnic groups (**Figure 9**). Since January, nearly 30% of Black and Hispanic households have experienced or are experiencing food insecurity compared to about 11% and 7% of White and Asian households, respectively. As the country faces the prospect of worsening economic conditions, the insecurity facing these two minority groups is alarming.

Around **50% of Black and Hispanic households** report waiting on their next paycheck or government payment to buy groceries or eat out.

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



**Figure 9.** Household Food Security by Race & Ethnicity, January - May 2022



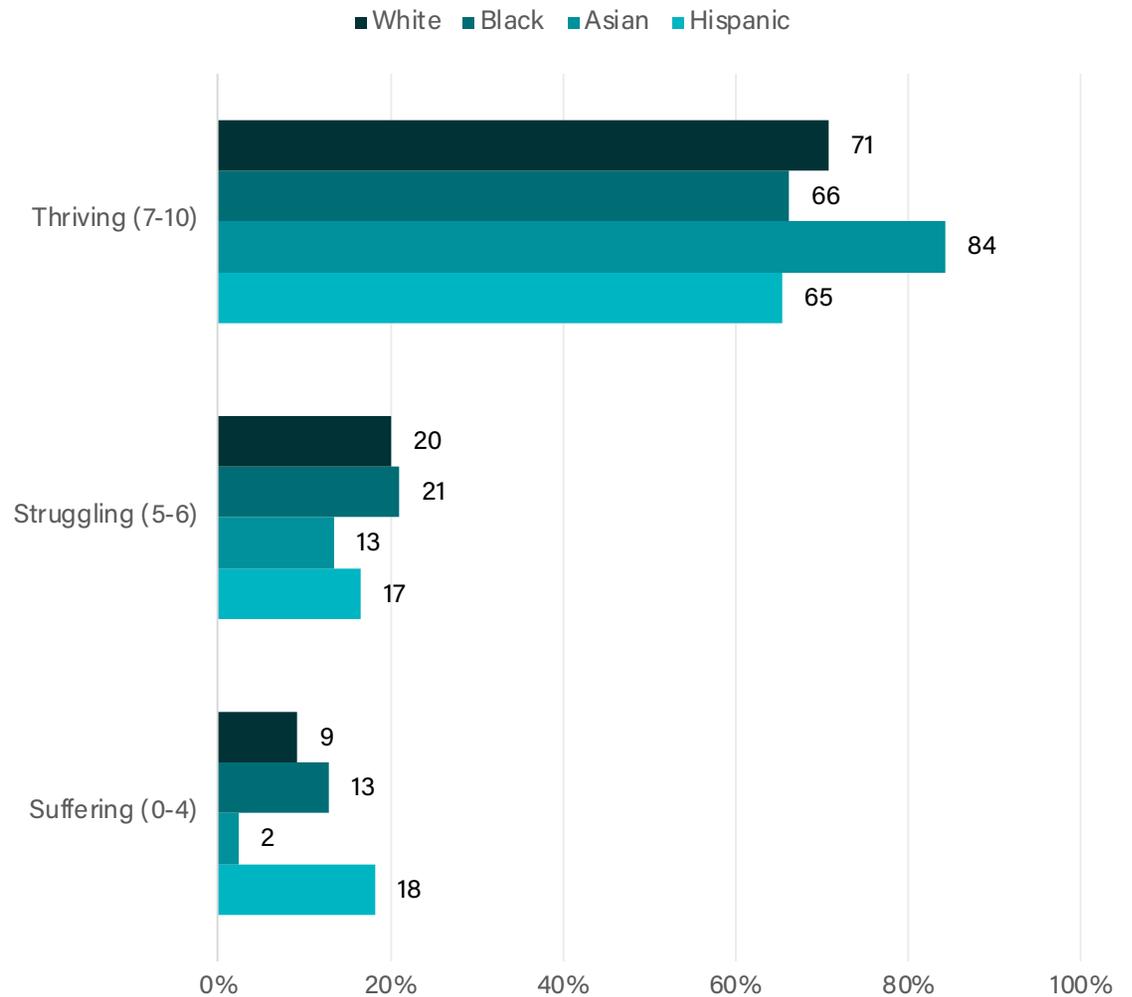
# FOOD SATISFACTION

## Are Americans satisfied with their diets?

We asked survey respondents to rate their own diet on a 0-10 scale, with top of the scale representing their ideal diet.<sup>5</sup> 84% of Asian adults rated their diet as a 7 or above compared to 71% of White adults and about 65% of Black and Hispanic adults (**Figure 10**). Similarly, **Figure 11** shows Asian adults are most likely to be happy with their diets, followed by White, Black, then Hispanic adults. However, Asian, White, and Black adults are all equally likely to be happy with their lives while nearly 10% more Hispanic adults are not happy with their lives (**Figure 12**). Our monthly data further shows that rates of satisfaction and happiness have held constant since the beginning of the year, indicating that these racial and ethnic disparities are not likely a new phenomenon.

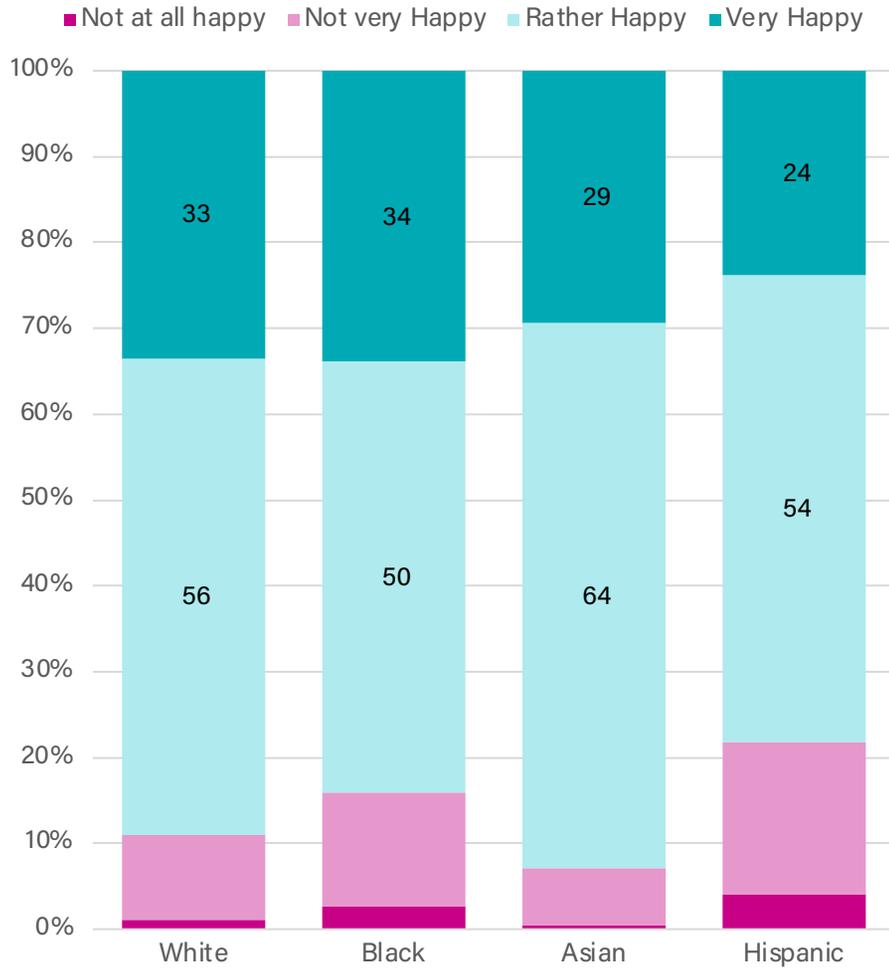
Americans largely appear to be **optimistic about their diets and lives**, but we will watch to see if economic shocks change consumer well-being in the coming months.

**Figure 10.** Diet Well-Being Rating by Race & Ethnicity, January - May 2022

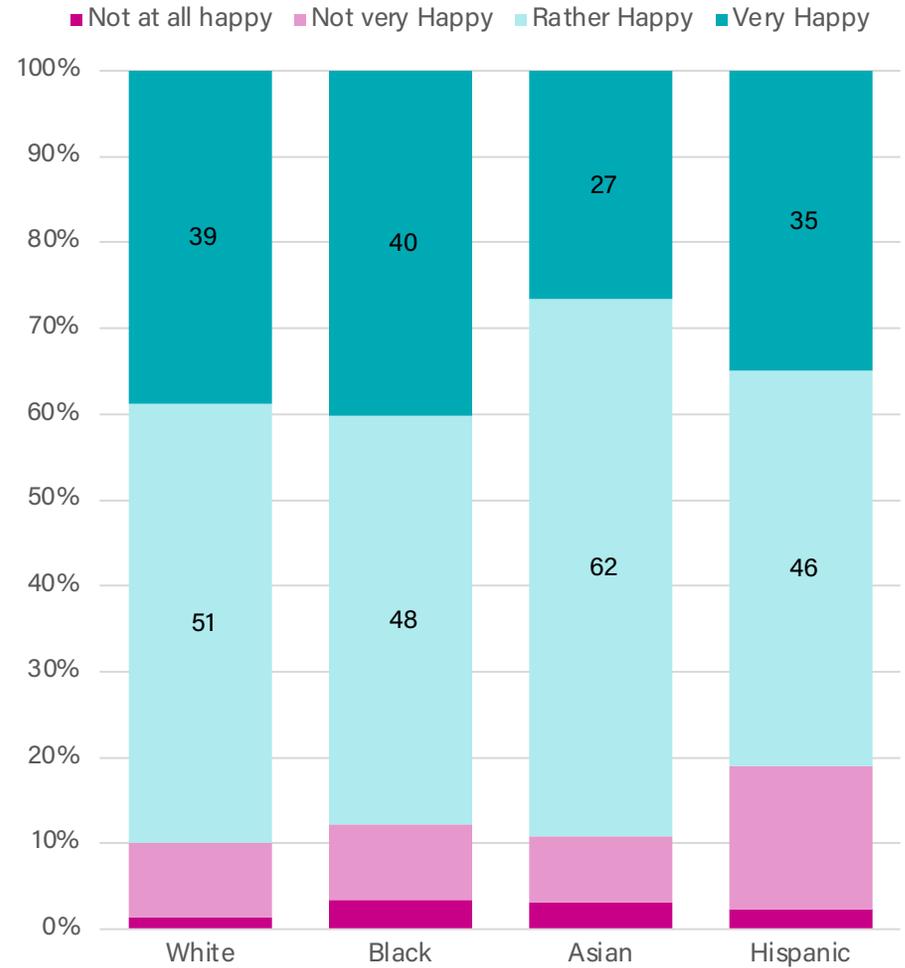


# FOOD SATISFACTION

**Figure 11.** Diet Happiness by Race & Ethnicity, January - May 2022



**Figure 12.** Life Happiness by Race & Ethnicity, January - May 2022



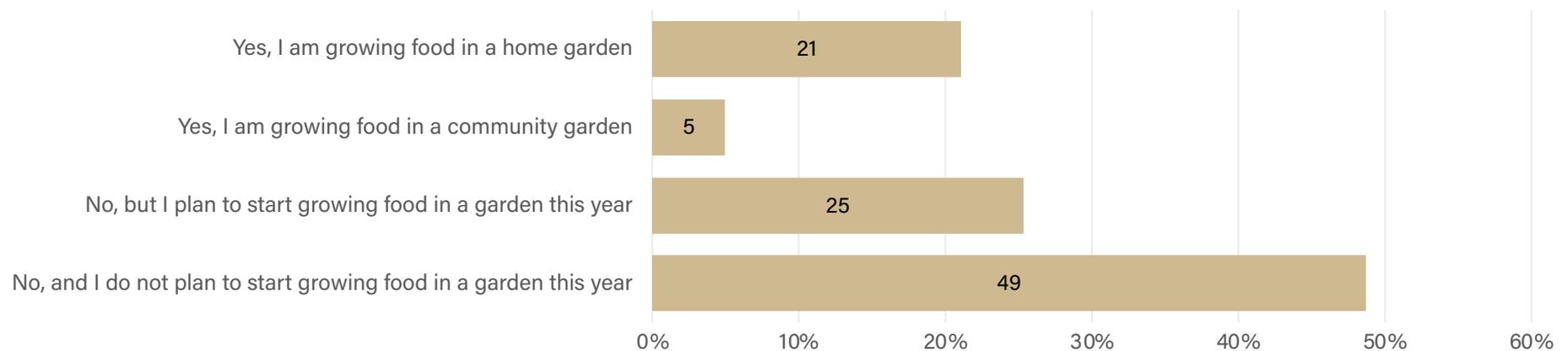
# CONSUMER BEHAVIORS

## How are Americans navigating their food environment?

Recent news has suggested that gardening is on the rise due to higher food prices. In response, we began tracking the share of people who say they currently have a food garden. While we do not have historical data against which to compare, we see that about a quarter of Americans are growing food in a garden and another quarter plan to begin growing food this year (**Figure 13**). In the coming months, we plan to dig deeper into the gardening habits of Americans.

**Figure 14** shows additional consumer food habits broken down by racial and ethnic group. Notably, regarding food purchasing that is typically promoted as more ethical or sustainable (i.e., local foods, wild-caught fish, grass-fed beef, cage-free eggs, and organic foods), White adults generally choose these foods less often than other groups. Black Americans also check food labeling like GMO ingredients and place of origin more often than other groups. However, safe food preparation in the home as recommended by the CDC appears to be less of a priority for Black and Hispanic adults as these groups report eating unwashed fruits or vegetables and under- or uncooked meat or dough at higher rates than White and Asian adults.

**Figure 13.** Share of Adults Food Gardening, May 2022



# CONSUMER BEHAVIORS

Figure 14. Consumer Shopping and Eating Habits by Race & Ethnicity, January - May 2022

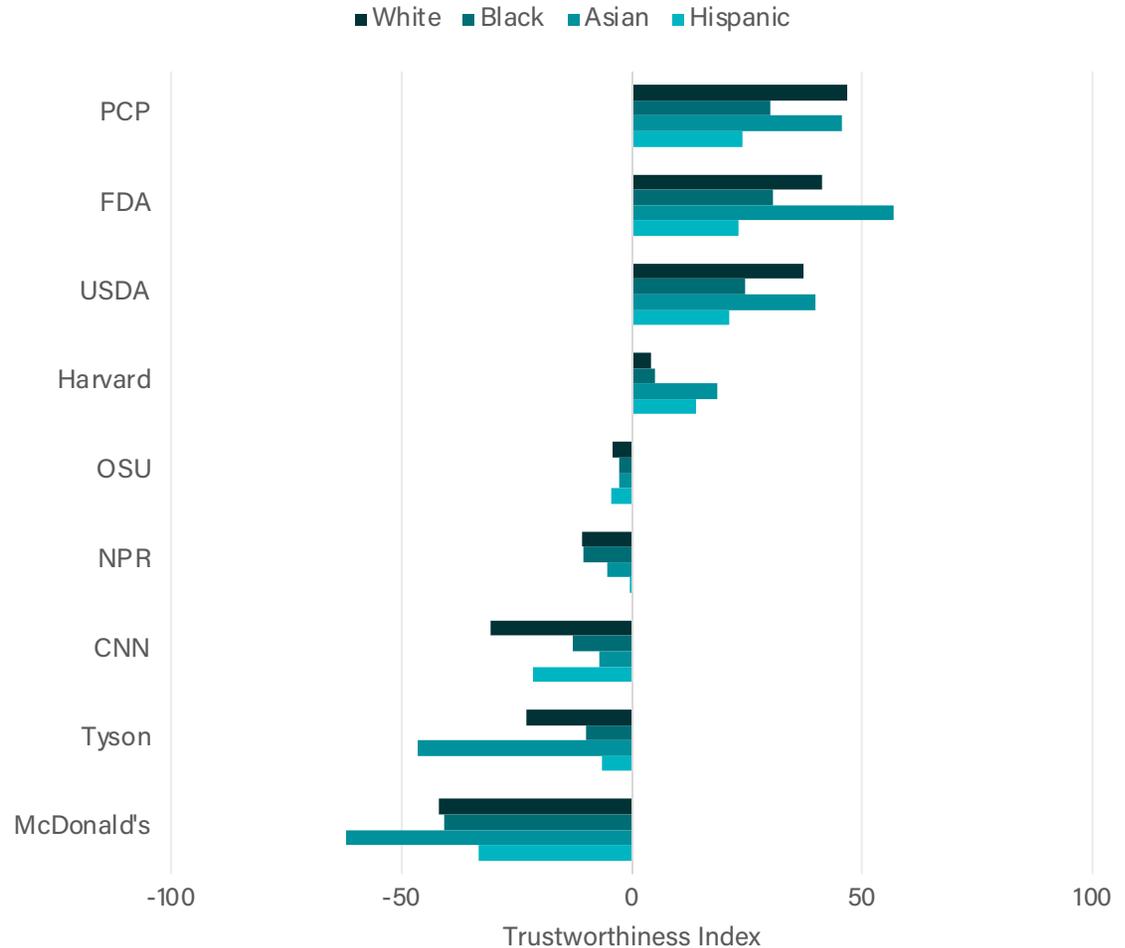
	White	Black	Asian	Hispanic	
Chose generic foods over brand name foods	3.3	3.2	3.1	3.5	
Chose local foods over non-local foods	3.1	3.3	2.9	3.3	
Chose wild-caught fish over farm-raised fish	2.9	3.1	3.0	3.1	
Chose grass-fed beef over conventional beef	2.9	3.2	2.8	3.1	
Chose cage-free eggs over conventional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

# 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 disaggregated by racial and ethnic group, large differences in trust emerge (**Figure 15**). Specifically, White and Asian adults trust their primary care physician (PCP), the Department of Agriculture (USDA), and the Food and Drug Administration (FDA) much more than Black and Hispanic adults. Asian adults also distrust food companies significantly more than other groups. Across demographics, Harvard is rated more trustworthy than Ohio State (OSU), NPR proves less polarizing than CNN, and McDonald's scores much worse than Tyson foods.

**Figure 15.** Trustworthiness Index of Food-related Information Sources by Race & Ethnicity, January - May 2022



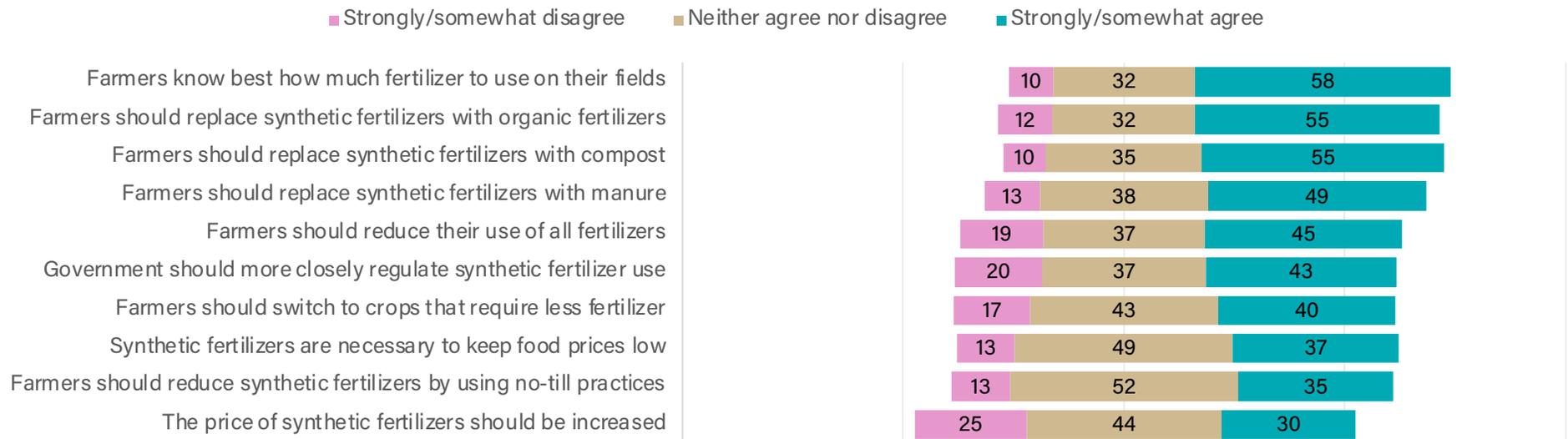
**Trust in the Food and Drug Administration dropped 20% from last month**, which corresponds with growing public criticism of the agency's recent handling of a baby formula plant closure.

# CONSUMER BELIEFS

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

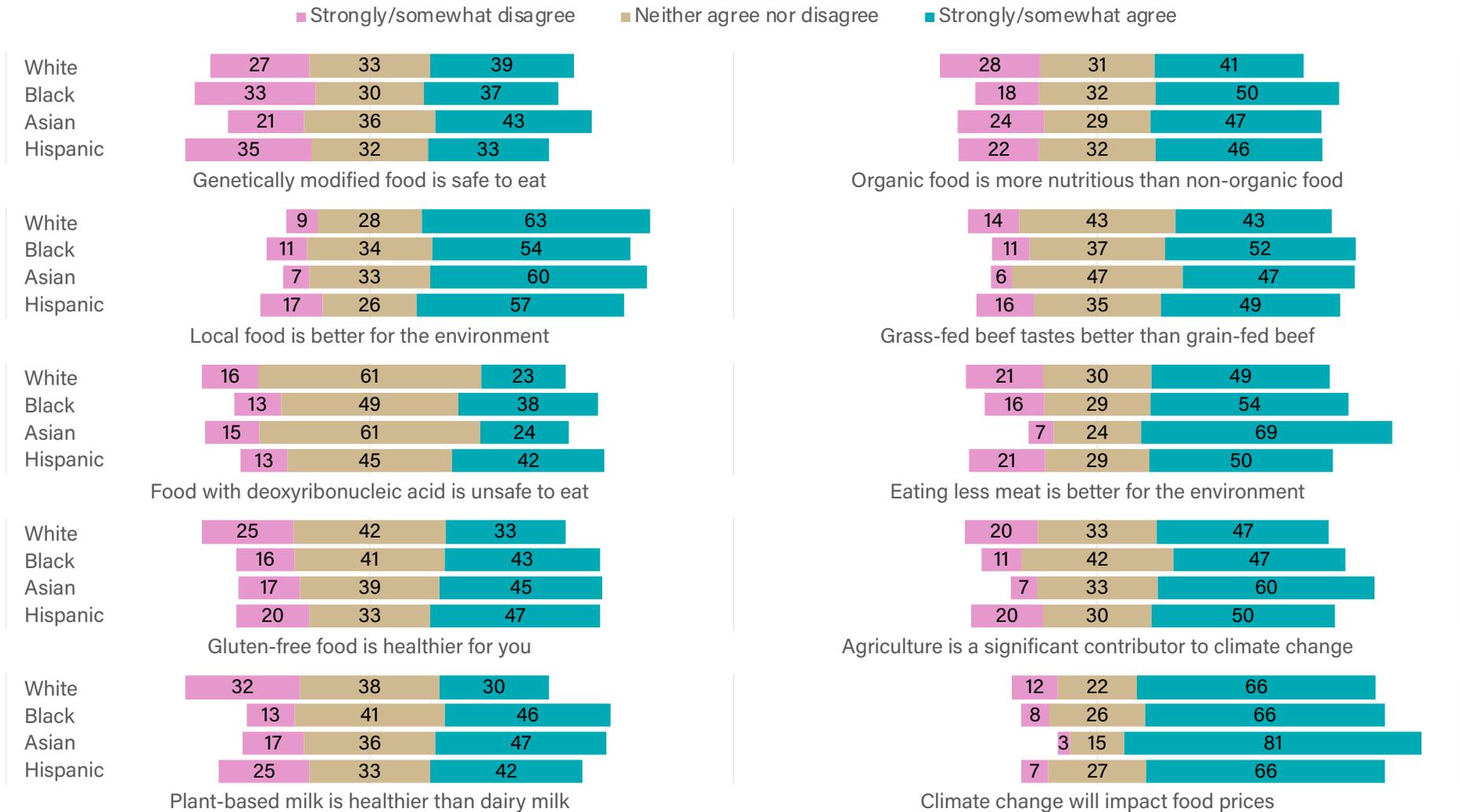
A majority of Americans think farmers should replace synthetic fertilizers with organic fertilizers, but there is less agreement over how exactly this move away from synthetic fertilizers should occur (**Figure 16**). To this point, fewer people believe farmers should replace synthetic fertilizers with manure, yet manure is currently used as a significant source of organic fertilizer on organic farms. A majority also neither agree nor disagree with the statement that farmers should replace synthetic fertilizers by using no-till practices, suggesting a lack of popular knowledge about less conventional growing practices. But by far the least popular option presented to respondents is increasing the price of synthetic fertilizers. Additionally, we observe differences in the general beliefs that racial and ethnic groups have about the food system (**Figure 17**). For example, a sizeable majority of Asian adults agree that eating less meat is better for the environment while a majority of White adults do not agree with this statement.

**Figure 16.** Consumer Agreement with Claims about Agricultural Fertilizers, May 2022



# CONSUMER BELIEFS

Figure 17. Consumer Agreement with Claims about Food and Nutrition by Race & Ethnicity, March - May 2022



# FOOD POLICY

## Where do Americans stand on food policy?

While most of the surveyed policies remain widely popular, certain policy preferences correlate with racial and ethnic demographics (**Figure 18**). For example, Asian adults tend to favor new regulations and taxes, such as a fee on greenhouse gas emissions or on sugar-sweetened beverages, at higher rates than other groups. Hispanic adults support creating a pathway for undocumented farmworkers to obtain citizenship and Black adults support expanding SNAP benefits at the highest rates. Conversely, White adults support all of the aforementioned policies at the lowest rate, suggesting more conservative policy preferences within this group. Support for increasing conservation program funding to improve environmental outcomes on farms has the most consistent support across groups, which is notably considering Biden's USDA has claimed climate policy is a priority.

## 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.

**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.

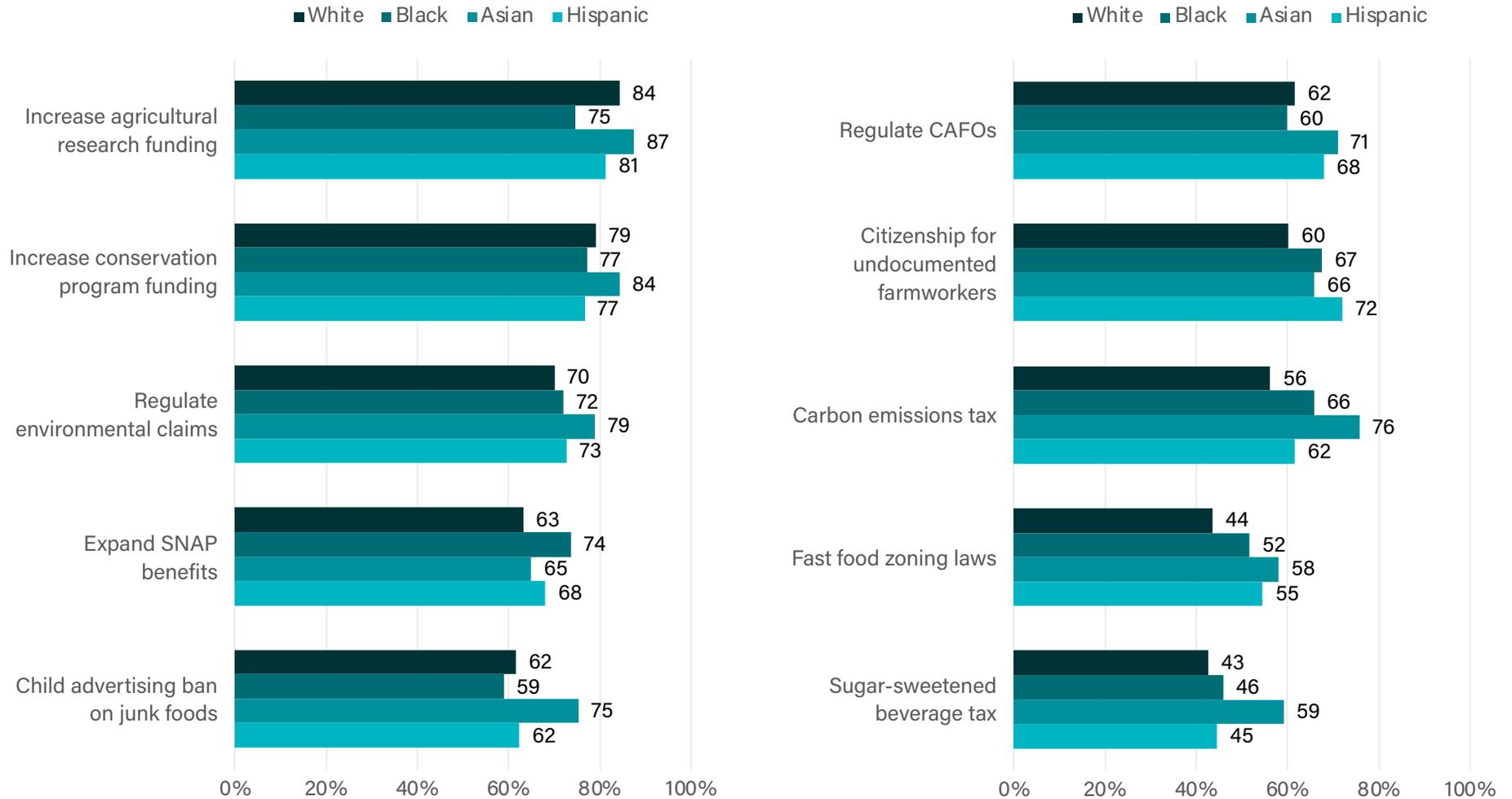
**Impose a fee on all food producers according to the carbon footprint of their products** unless they take clear action to reduce their greenhouse gas emissions.

**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 18. Favorable Support for Food and Agriculture Policies by Race & Ethnicity, January - May 2022



# ENDNOTES

**1** Data were collected from an online panel maintained by the firm Dynata over a two-day period from May 16-17, 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 37% 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** White, Black, and Asian adults include those who report being only one race and are not Hispanic. Hispanics adults are of any race.

**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.