Volume 4, Issue 2: February 2025

CONSUMER FOOD INSIGHTS

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INTRODUCTION

Consumer Food Insights (CFI) is a monthly survey of more than 1,200 American adults from across the country. Since January 2022, the Center for Food Demand Analysis and Sustainability (CFDAS) at Purdue University has used this survey to track trends and changes in consumer food demand and food sustainability behaviors. Visit <u>purdue.ag/CFDAS</u> or contact <u>cfdas@purdue.edu</u> for more details.

In this edition, we examine responses to the CFI survey by annual household income broken down into three groups: less than \$50k, \$50k-100k and \$100k or above.² New questions this month explore consumer perceptions of processed foods. Do they know what they are? Are people concerned about their healthfulness? Why do they think people might choose them over unprocessed or minimally processed alternatives?

KEY INSIGHTS FROM FEBRUARY

- Affordability plays a larger role in grocery purchasing decisions than taste and nutrition among those earning less than \$50k annually.
- Many consumers express concern about the healthfulness of processed foods but tend to include them in their usual basket of groceries.
- Convenience, price and taste preference were the top reasons consumers say one might choose processed over unprocessed foods.
- Poor diets are more common among the lowest earning group, though higher incomes do not necessarily lead to much healthier diets.
- Many American households earning less than \$50k report being food insecure (42%), driving the overall food insecurity rate (14.6%).



FOOD -1 INSECURITY -1

FOOD -3
SPENDING
\$186/WEEK

GROCERY +0 STOCKOUTS +0

*+/- in upper right corner tracks the unit change in the statistic from the previous month or quarter, depending on data collection frequency



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What are consumer perceptions of processed foods?

New questions this month gauge attitudes, knowledge and beliefs about processed foods. **Figure 1** summarizes the distribution to a question asking how important it is for consumers to eat foods free from additives, preservatives or artificial ingredients on a scale from not at all important (0) to very important (10). The weighted average rating is 7.1, showing that consumers consider it important to eat unprocessed or minimally processed foods.

Figure 2 reveals that the vast majority of consumers are familiar with the term "processed food," and nearly two-thirds say they can explain what a processed food is.

Despite the importance of avoiding additives among many consumers, grocery baskets typically feature processed or ultra-processed foods in addition to unprocessed or minimally processed items (**Figure 3**)³. Of note, the healthfulness of processed and ultra-processed foods is not always Black and White, so gauging consumer perspectives in this area is important.

Figure 1. "On a scale from not at all important (0) to very important (10), how important is it for you to eat foods that are free from additives, preservatives, or artificial ingredients?", Feb. 2025

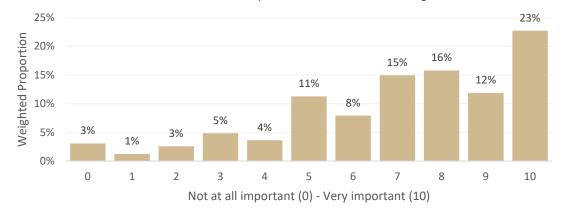


Figure 2. "Have you heard of the term 'processed food?"", Feb. 2025

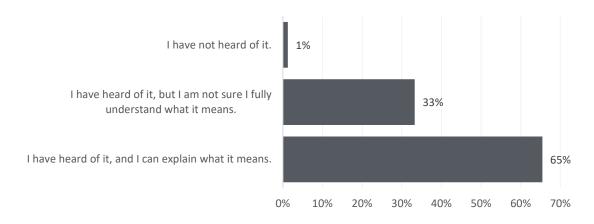
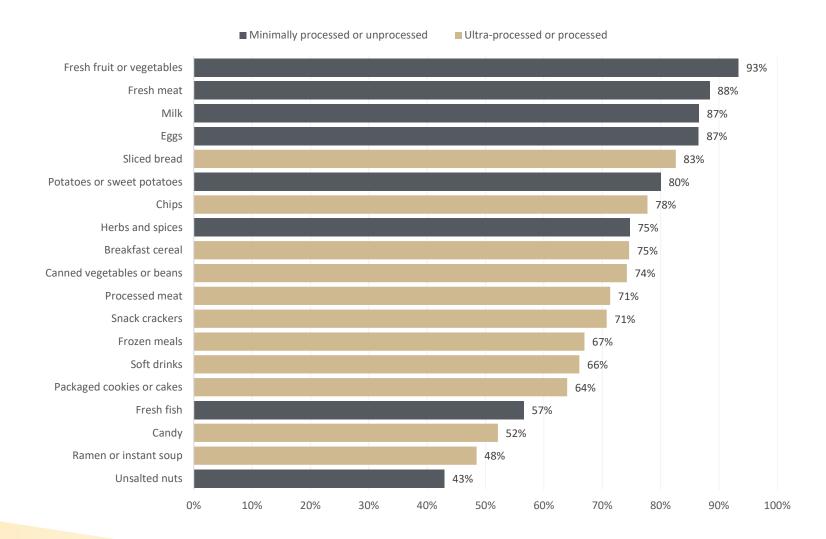




Figure 3. "Which of the following foods do you or does the primary food shopper for your household purchase during a typical grocery shopping trip?", Feb. 2023





What are consumer perceptions of processed foods?

Even though many respondents display moderate concern (6.9 average) regarding the healthfulness of processed foods (**Figure 4**), 43% believe there is room for some ultra-processed foods in a healthy diet (**Figure 5**). However, nearly one-third believe all ultra-processed foods are unhealthy and should be avoided. On the other hand, many consumers who hold this belief report including common ultraprocessed foods, such as breakfast cereal, chips, snack crackers and processed meats in their typical grocery basket.

This highlights a disconnect between consumer beliefs and concerns about the healthfulness of processed food and what they actually select when grocery shopping.

Figure 4. "On a scale from not at all concerned (0) to very concerned (10), how concerned are you about the potential health impacts of processed and ultra-processed foods?", Feb. 2025

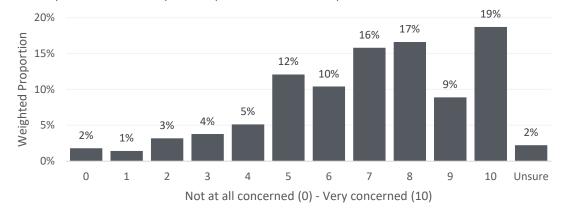
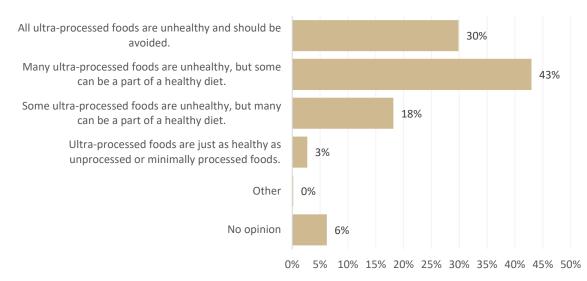


Figure 5. "Please select the statement that most closely reflects your opinion of ultra-processed foods.", Feb. 2025

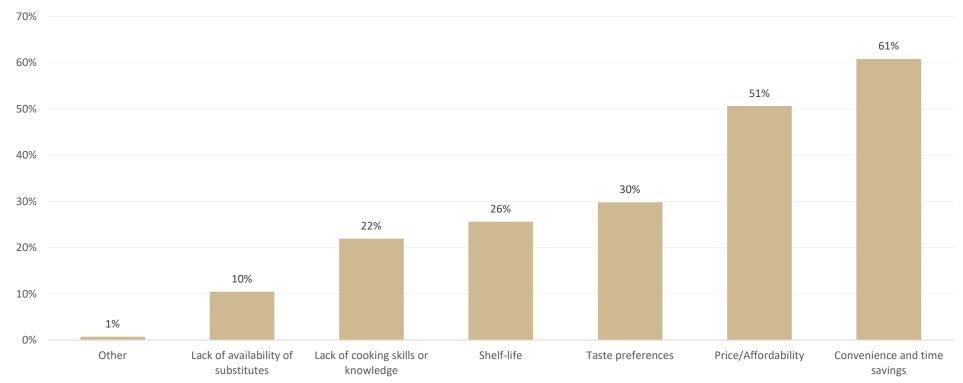




What are consumer perceptions of processed foods?

When it comes to choosing processed or ultra-processed foods over unprocessed or minimally processed alternatives, the majority of consumers cite convenience and time savings, price/affordability and taste preference as the top reasons (**Figure 6**). This leads into our Food Values section, which continues to show taste and affordability coming just ahead of nutrition in terms of importance to consumers.

Figure 6. "What do you think are the main reasons people might prefer processed or ultra-processed foods over unprocessed or minimally processed alternatives? Please select the top two.", Feb. 2025

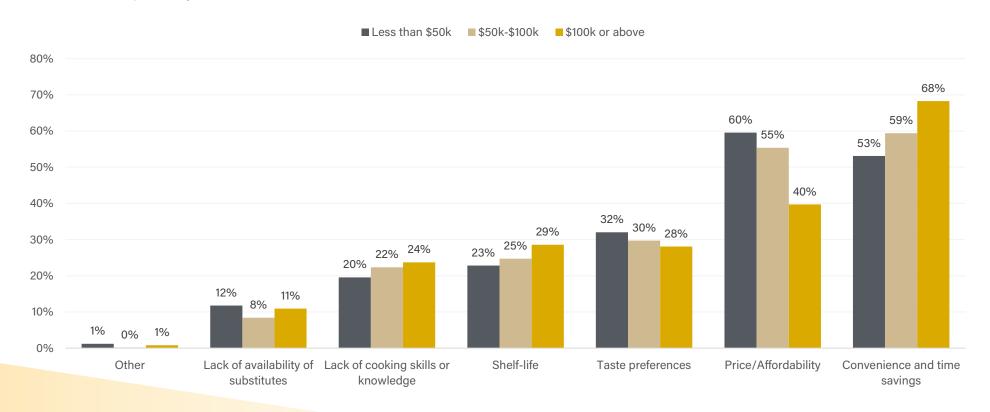




What are consumer perceptions of processed foods?

We see that perceived motivations behind choosing processed over unprocessed foods slightly differs based on the consumer's annual household income (**Figure 7**). Low-income consumers are more likely to perceive affordability as a barrier to choosing unprocessed or minimally processed alternatives compared to others, while high-income consumers view convenience as a top reason to choose processed over unprocessed foods. Overall, most consumers view convenience and affordability as the primary reasons.

Figure 7. "What do you think are the main reasons people might prefer processed or ultra-processed foods over unprocessed or minimally processed alternatives? Please select the top two." by annual household income, Feb. 2025



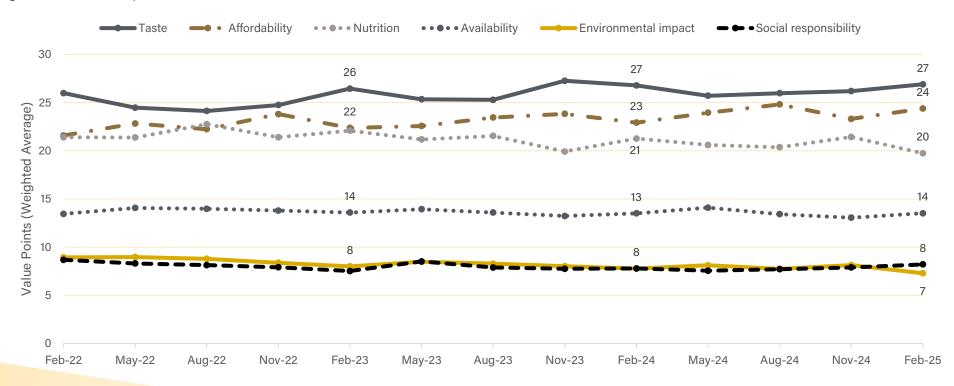


FOOD VALUES

What attributes do Americans value most when purchasing food?

Respondents were asked to allocate 100 points to six food attributes based on their importance when grocery shopping.⁴ Food values remain resilient to shocks and disruptions in the food system, with little change over the past three years in what consumers look for when purchasing their food. Above all else, consumers prioritize the taste of their food, followed by affordability and nutrition. These three attributes remain a top priority for consumers when grocery shopping, while environmental impact and social responsibility have a much smaller impact on their decision-making (**Figure 8**).

Figure 8. Share of 100 points allocated to food attributes, Feb. 2025



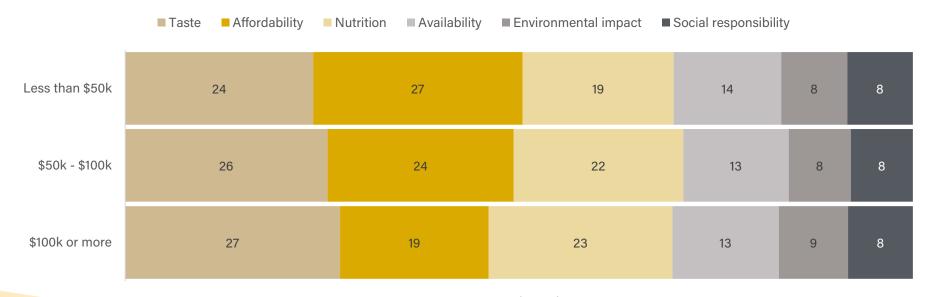


FOOD VALUES

What attributes do Americans value most when purchasing food?

Further disaggregating food values reveals some differences between consumers of different income levels (**Figure 9**). In particular, we observe a higher point allocation to affordability among consumers from low-income households compared to those making \$100k or more. Understandably, the cost of food plays a bigger role in the decisions of those who face greater financial constraints. Conversely, with a greater food budget, high-income households tend to focus more on the taste and nutrition of their food. Overall, environmental impact and social responsibility tend to get left behind when it comes to what attributes consumers consider while shopping for food. This does not mean these attributes are not important to consumers, they just tend to lag behind more immediately tangible attributes like taste, affordability, nutrition and availability.

Figure 9. Share of 100 points allocated to food attributes by annual household income, Feb. 2025



Value Points



DIET QUALITY

What is the quality of the American adult diet?

Utilizing a 9-item questionnaire known as the Mini-EAT Tool⁵, we estimate consumers' reported diet quality in the last 30 days.

Figure 10 summarizes Mini-EAT scores since February 2024. Diets are classified as unhealthy (<61), intermediate (61-69) and healthy (69<). American adults score an average of 62 on this scale, which puts them in the intermediate classification, just above the unhealthy threshold. The overall average has remained steady of the past 12 months.

Figure 11 disaggregates the past 13 months of Mini-EAT data by annual household incomes. We observe higher average scores among consumers from households with a greater annual income. While poor diets are more common among low-income consumers, those with higher incomes are not eating much healthier. The average scores among those making \$50k or more still fall in the intermediate classification, showing room for improvement for consumers of all financial situations.

Figure 10. Weighted average Mini-EAT diet quality score, Feb. 2024 - Feb. 2025

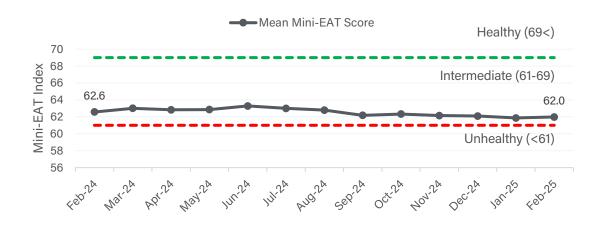
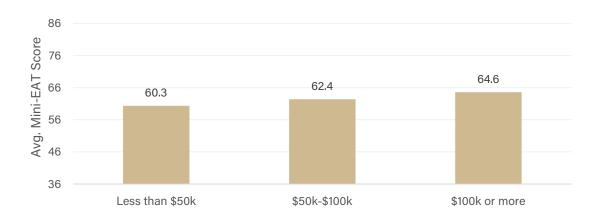


Figure 11. Weighted average Mini-EAT diet quality score by annual household income, Feb. 2024 - Feb. 2025





FOOD EXPENDITURES

How much are American households spending on their food?

Each month, consumers report their household's weekly spending on food from the last 30 days (**Figure 12**). On average, consumers reported spending about \$119/week on groceries (FAH) and \$67/week on restaurants and other carryout this month (FAFH).⁶

Consumer estimates of food price inflation over the past 12 months remained unchanged from last month at 5.2%. However, future expectations for food prices over the next 12 months jumped 0.7 percentage-points from last month (Figure 13). Food prices remain a primary focus in national media as consumers look for the presidential administration to deliver on its promise of lower grocery costs. Consumers may be growing less optimistic about the future of food prices as avian flu puts a strain on egg prices and food prices continue to rise.

Figure 12. Weekly household food expenditures, Jan. 2022 - Feb. 2025

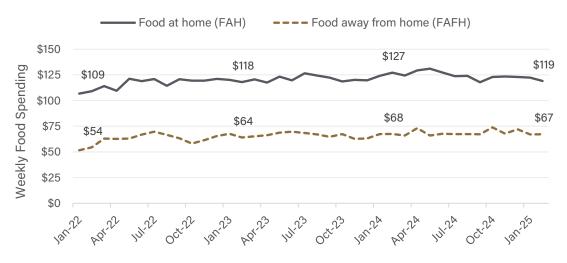


Figure 13. Consumer estimates of food inflation compared to gov. estimate, Jan. 2022 - Feb. 2025



*The Consumer Price Index (CPI) is a measure of inflation computed by the U.S. Bureau of Labor Statistics.



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FOOD EXPENDITURES

How much are American households spending on their food?

Further diaggregating food spending by annual household income reveals unsurprising differences (**Figure 14**). Those making more annually tend to have greater food budgets than those making less.

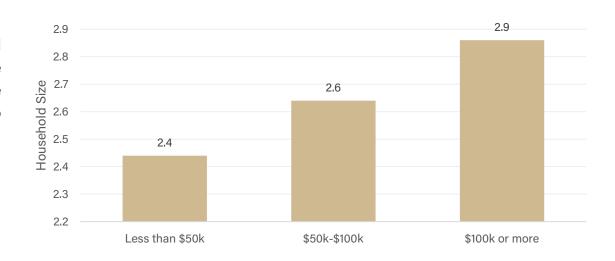
However, an important characteristic to consider is household size (**Figure 15**). High-income households spending the most on food tend to also be larger. Despite this correlation, average per person weekly food spending is still higher among those making \$100k or more per year (\$82) compared to those making \$50k-\$100k (\$69) and those making less than \$50k annually (\$60).

As shown in the next section, this lower food budget among low-income households can have implications for food security, as a sizable share of consumers within these households struggle to afford enough nutritionally adequate food.

Figure 14. Weekly household food expenditures by annual household income, Jan. 2022 - Feb. 2025



Figure 15. Weighted average household size by annual household income, Jan. 2022 - Feb. 2025





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FOOD SECURITY

Which Americans are having trouble buying food for their families?

Based on a set of six standard questions about food purchased and eaten in the past 30 days, we estimate national food insecurity to be 14.6% in February (**Figure 16**).⁷

Figure 17 shows substantial differences in household insecurity rates by annual household income. Given that a primary component of food security is financial well-being, those in low-income housholds making less than \$50k annually are more likely to struggle with food insecurity. Availability of nutritionally adequate food in stores is important, but producers and policymakers must ensure the prices of these foods remain affordable for consumers of all incomelevels as food prices continue to rise.

Figure 16. Rate of household food insecurity in the last 30 days, Jan. 2022 - Feb. 2025

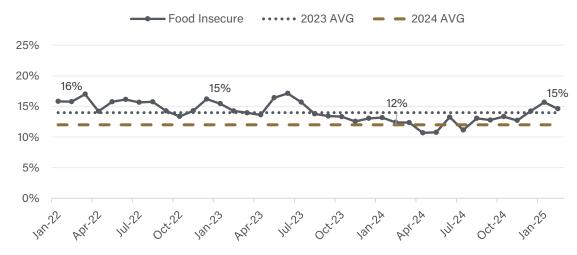
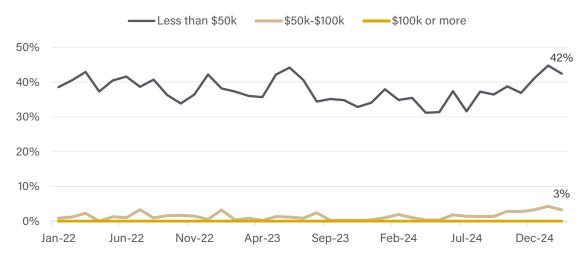


Figure 17. Rate of household food insecurity in the last 30 days by annual household income, Jan. 2022 - Feb. 2025





CONSUMER BEHAVIORS

How are Americans navigating their food environment?

Consumers are asked to report the frequency at which they chose certain foods, checked labels and performed at-home food behaviors (**Figure 18**). Notably, we observe high-income consumers choosing foods commonly perceived as more ethical or sustainable, such as cage-free eggs, wild-caught fish or organic food. These consumers also tend to check for food origin and clean or natural labels more often than low-income households.

Consumers in households making less than \$50k also tend to report recycling their food packaging less frequently than others. However, it is difficult to conclude that this difference is due to a greater sense of environmental responsibility among high-income consumers or a result of education about or availability of recycling services.

Figure 18. Frequency of consumer shopping and eating habits by annual household income, Jan. 2022 - Feb. 2025

		Less than \$50k	\$50k-\$100k	\$100k or more		
	Chose generic foods over brand-name foods	3.3	3.3	3.2		
	Chose local foods over non-local foods	2.9	3.0	3.2		
	Chose wild-caught fish over farm-raised fish	2.7	2.9	3.2		
	Chose grass-fed beef over conventional beef	2.7	2.8	2.8 3.1		
	Chose cage-free eggs over conventional eggs	2.6	2.8	3.1		
	Chose organic foods over non-organic foods	2.5	2.7	3.0	Mean	
	Chose plant-based proteins over animal proteins	2.3	2.3	2.5	Score	
					5	Always
	Checked the use-by/sell-by date at the store	3.9	4.1	4.1	4	Often
	Checked the nutrition label before buying new foods	3.4	3.4	3.6	3	Sometimes
	Checked for natural or clean labels	2.8	3.0	3.1	2	Rarely
	Checked where my food originated	2.7	2.9	3.1	1	Never
	Checked for food recalls	2.8	2.8	2.8		
	Checked for GMO ingredients	2.6	2.8	2.9		
Checked how my food was produced		2.6	2.7	2.9		
	Took steps to reduce food waste at home	3.7	3.8	3.8		
	Recycled food packaging	3.1	3.6	3.9		
	Threw away food past the use-by date	3.2	3.2	3.3		
	Composted food scraps	2.3	2.6	2.6		
	Ate fruits and vegetables without washing them	2.2	2.2	2.3		
	Ate rare or undercooked meat	1.8	1.9	2.0		
	Ate raw dough or batter	1.9	1.9	2.0		



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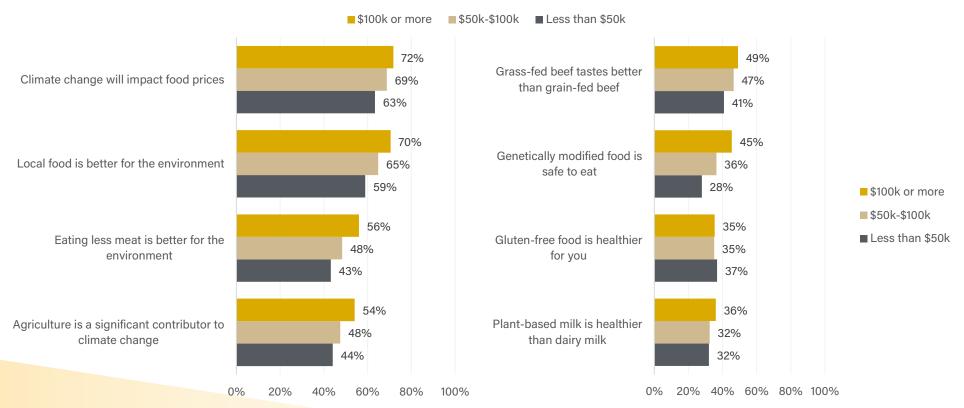
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CONSUMER BELIEFS

What do Americans believe about their food and food system?

Figure 19 summarizes consumer agreement with various statements pertaining to our food system. The general direction of agreement with statements about the connection between our food system and climate change is consistent across most consumers, with slightly greater levels of agreement among high-income consumers. However, the largest gap between high- and low-income consumers concerns the belief that GMO food is safe to eat. Increased education about the safety of GMO foods for consumption is needed. These groups are much more aligned in their beliefs when it comes to the healthfulness of plant-based milks and gluten-free food.

Figure 19. Share of consumers who "somewhat agree" or "strongly agree" with claims about food by annual household income, Mar. 2022 - Feb. 2025





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CONSUMER TRUST

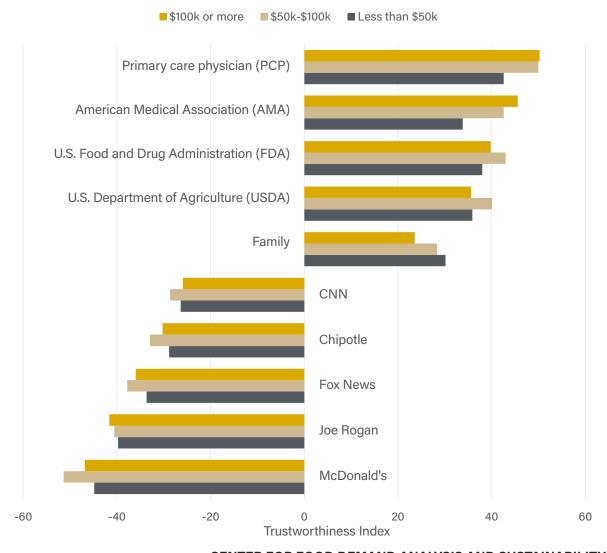
Who do Americans trust on topics of food?

Respondents select their most-trusted and least-trusted sources of information about healthy and sustainable food, which are scored on a Trust Index from -100 (least trusted) to 100 (most trusted).⁸

The top five most and least trusted sources of food-related information selected in response to this question remain relatively consistent across income groups (**Figure 20**). However, we observe family members scoring higher on the trust index among consumers in low-income housholds, while professionals and organizations, such as primary care providers, score higher among those in households making at least \$50k annually.

Overall, trust in federal organizations tasked with securing the nation's health and food system, such as the USDA and FDA, has remained relatively stable and positive over time, inlcuding during the first two months of the new presidential administration.

Figure 20. Trust index of food-related information from federal government organizations by annual household income, Jan. 2022 - Feb. 2025





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ENDNOTES

1 Data were collected from an online opt-in panel maintained by the company Dynata over a 4-day period from February 17-20, 2025. 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. Population proportions reflect the most recent complete year of ACS census data (2023). Every respondent from the previous month was recontacted and asked to take the survey again. Not all respondents retake the survey, so the sample is filled with a new pool of respondents each month. Data collection for every survey begins on the third Monday of each month, unless otherwise dictated by holidays or extenuating circumstances. This report is released on the second Wednesday of the following month.

2 Sample size: Jan. 2022 - Feb. 2025: Less than \$50k (n=18,703); \$50k-\$100k (n=15,613); \$100k or more (n=12,901)

Feb. 2025: Less than \$50k (n=436); \$50k-\$100k (n=400); \$100k or more (n=382)

3 Harvard T. H. Chan School of Public Health (2023). Processed Food and Health. The Nutrition Source, Harvard T.H. Chan School of Public Health. Accessed: 3 March 2025. https://nutritionsource.hsph.harvard.edu/processed-foods/

4 Descriptions of each attribute:

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)

5 Lara-Breitinger KM et al. Validation of a Brief Dietary Questionnaire for Use in Clinical Practice: Mini-EAT (Eating Assessment Tool). J



ENDNOTES

Am Heart Assoc. 2023 Jan 3;12(1):e025064. doi: 10.1161/JAHA.121.025064. Epub 2022 Dec 30. PMID: 36583423; PMCID: PMC9973598.

6 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.

7 High or marginal food security (i.e., food secure): 0-1 reported indications of food-access problems; little indication of change in diet or food intake. Respondents who reported an 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 shows that using a modified income-based screening procedure for internet surveys better approximates 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 indication of reduced food intake. Very low food security (i.e., food insecure): 5-6 reported indications of disrupted eating patterns, changes in diet, and reduced food intake.

8 Trust questions were not fielded in the Consumer Food Insights survey from October 2022 - December 2022.

