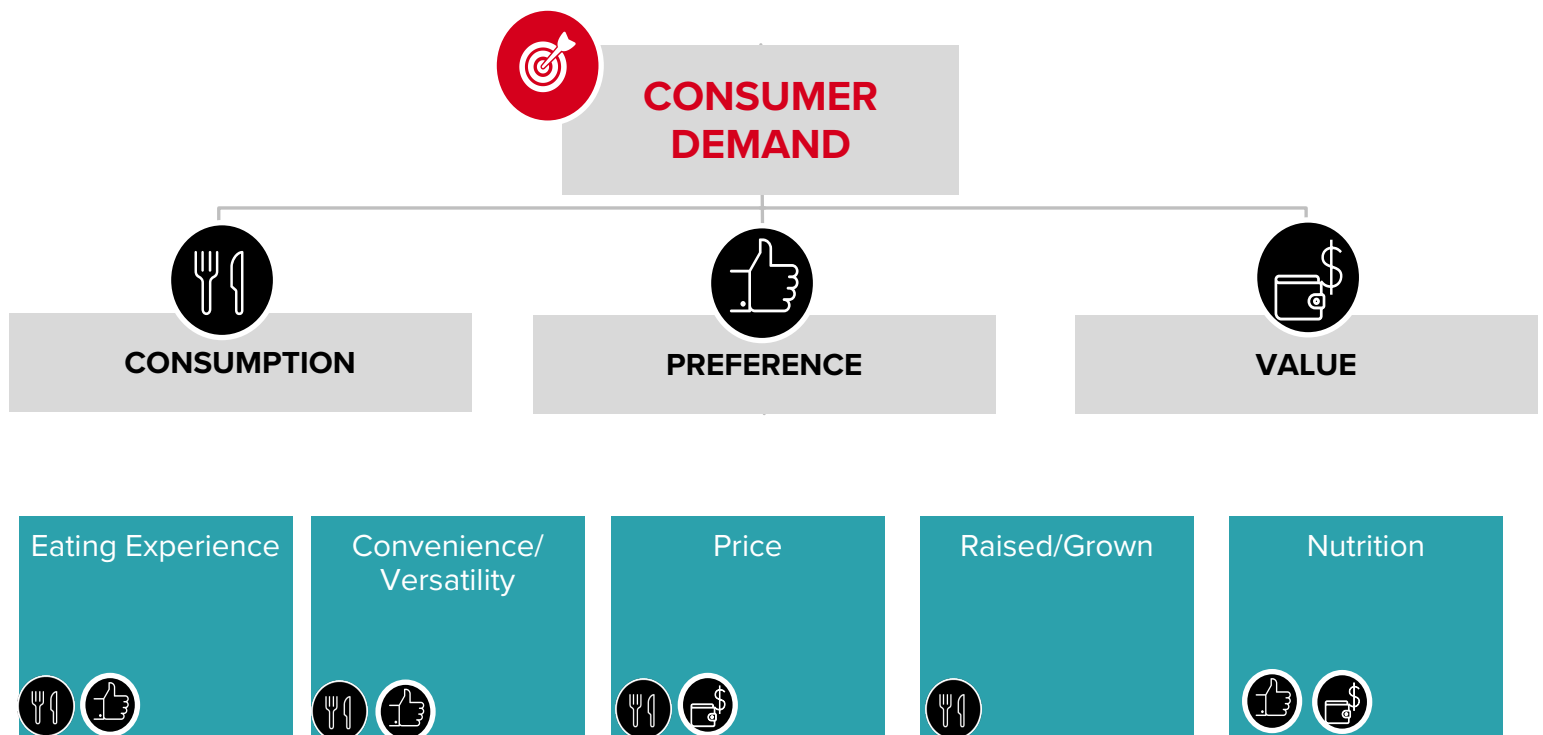


BEEF INDUSTRY REVIEW AND CONSUMER INSIGHTS: FEBRUARY 2023 EDITION

In the face of historic price levels, supply chain issues, and general consumer uncertainty about the future, consumers have continued to turn to beef for a reliable and valuable protein source. Demand for beef products has remained strong, and consumers have repeatedly claimed that they will continue purchasing beef, both in retail and foodservice settings.

Consumer Self-Perceived Demand Drivers

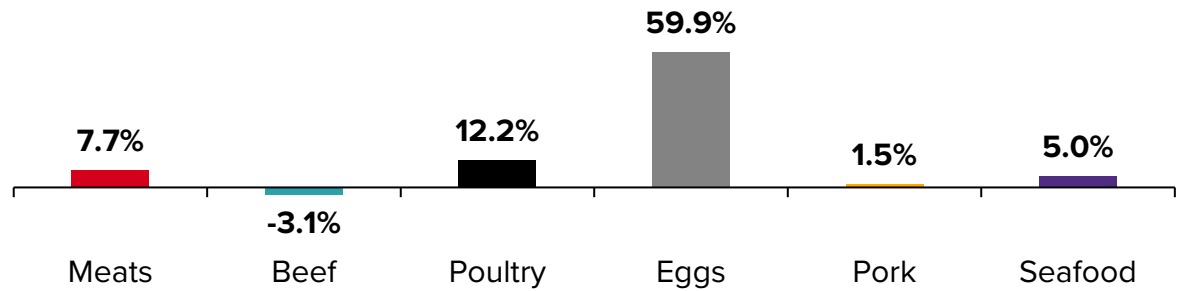
The Consumer Demand Drivers are based off self-reported consumer data collected through the Consumer Beef Tracker. The assessment was run to determine what components were driving consumption, preference of one protein over another and the value of a protein.



EFFECTS OF INFLATIONARY PRESSURES ON BEEF CONSUMPTION AND EXPENDITURES

Beef has experienced far lower levels of inflation when compared to other proteins in the Food at Home category.

Inflation Levels for Various Proteins: December Percent Change 2022 vs. Year Ago

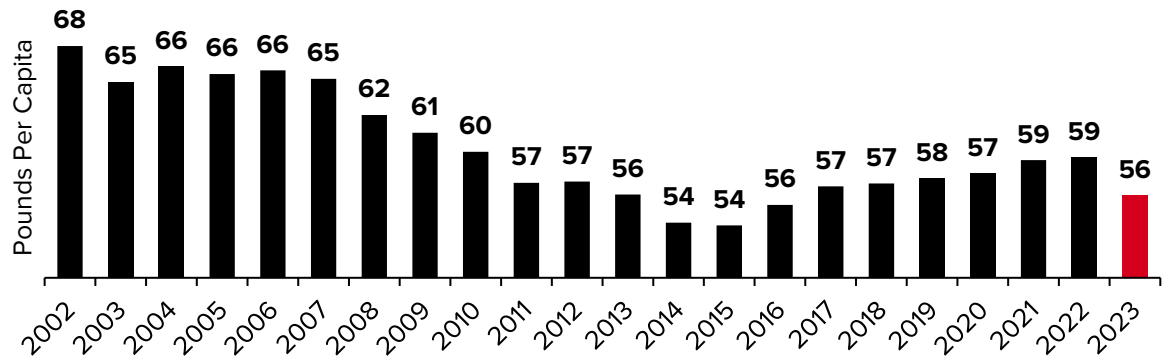


Source: U.S. Bureau of Labor Statistics, Consumer Price Index, Not Seasonally Adjusted, Data Ending December 2022.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

Although beef demand remains strong, consumption is projected to dip slightly in 2023, potentially due to drought related supply issues.

Per Capita Net Beef Consumption (Lbs.)



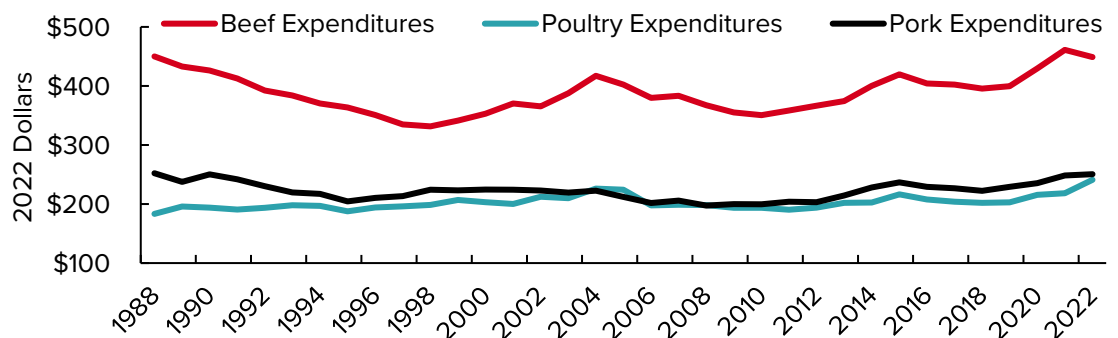
Note: USDA projection shown in red.

Source: USDA, Office of the Chief Economist.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

2022 beef expenditures saw a 2.6% decrease from the 2021 record highs but are still at second highest level since 1988.

Real Per Capita Consumer Beef Expenditures



Source: USDA, Economic Research Service, U.S. Bureau of Labor Statistics.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

Consumer sentiment (how secure consumers are feeling about the future economy) is still 16% lower than a year ago. However, sentiment scores have been increasing over the past few months.

Current Consumer Sentiment

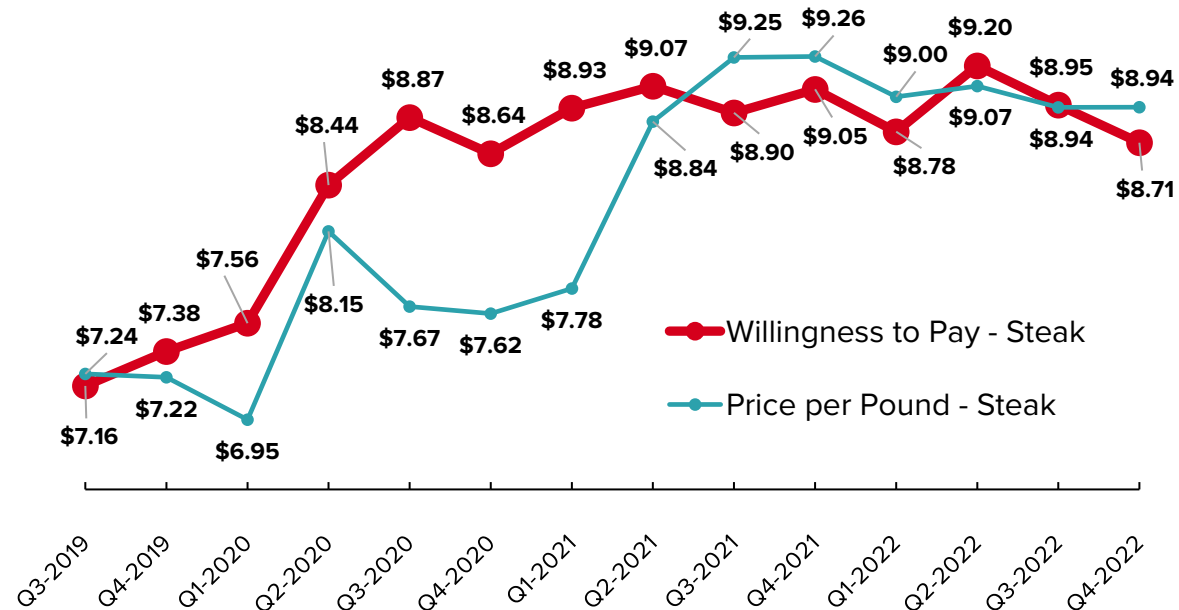


Source: University of Michigan, Consumer Sentiment Index, 2012 – 2022.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

Willingness to pay has decreased for the previous two quarters in 2022 but remains strong overall.

Beef Steak: Willingness to Pay vs. Average Price Per Pound



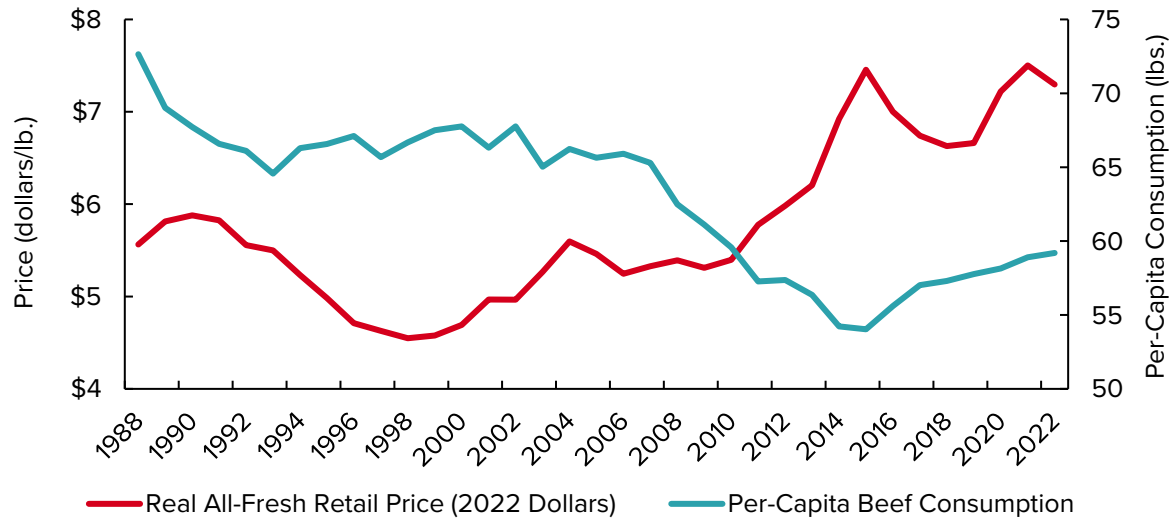
Source: Consumer Beef Tracker 2019 – 2022, BB6/7/7A; NielsenIQ, Discover, Steak Sales 2019 – 2022.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff

HISTORICAL RELATIONSHIP BETWEEN BEEF PRICES AND CONSUMPTION

Consumption and inflation-adjusted retail prices have been trending up since 2018 indicating that demand is remaining healthy (despite the recent dip in prices from 2021-2022).

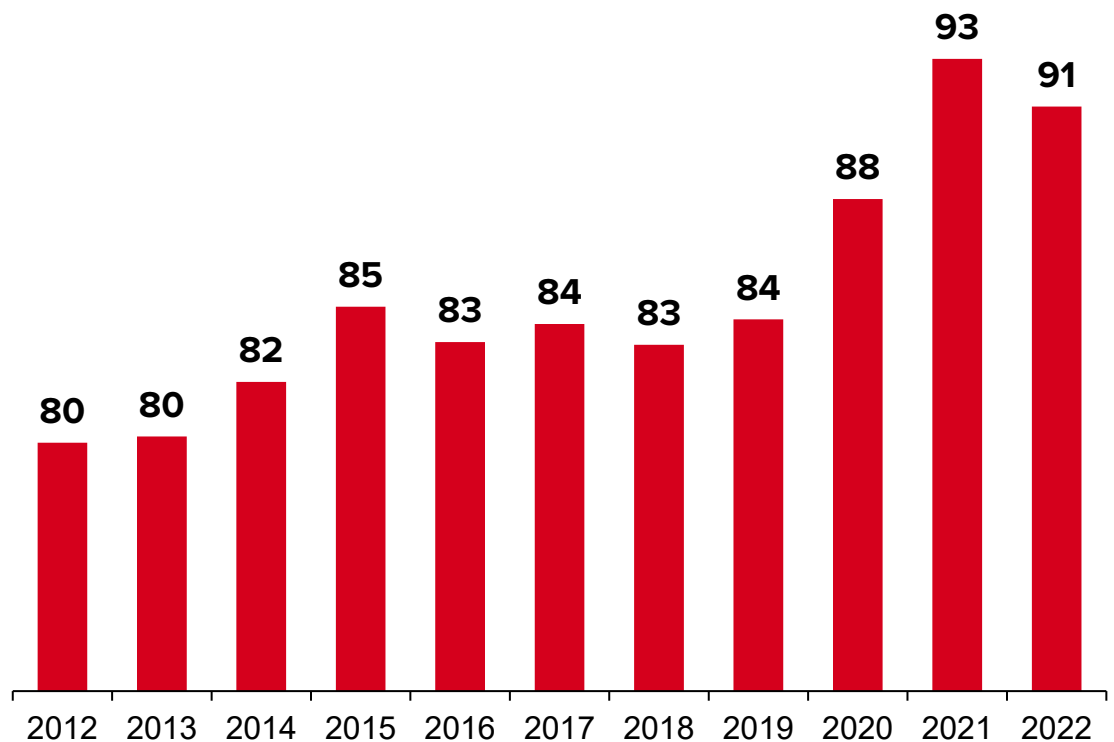
Per Capita Consumption and Inflation-Adjusted Beef Prices (2022 Dollars), 1988 - 2022



Source: USDA, Economic Research Service, US Bureau of Labor Statistics.
Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

Placing various consumption and price data into an index also indicates that beef demand is still strong despite a slight decrease from 2021 - 2022.

U.S. Annual Beef Demand Index



Source: USDA, Economic Research Service, US Bureau of Labor Statistics.
Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff. Demand Index: 1988 = 100

CONSUMER PROTEIN PREFERENCES

Consumption

% of Consumers Eating Weekly or More

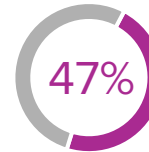
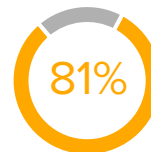
Meat Alternatives

Beef

Chicken

Pork

Fish



Among Weekly+ Meat Alt Eaters:

72%

84%

60%

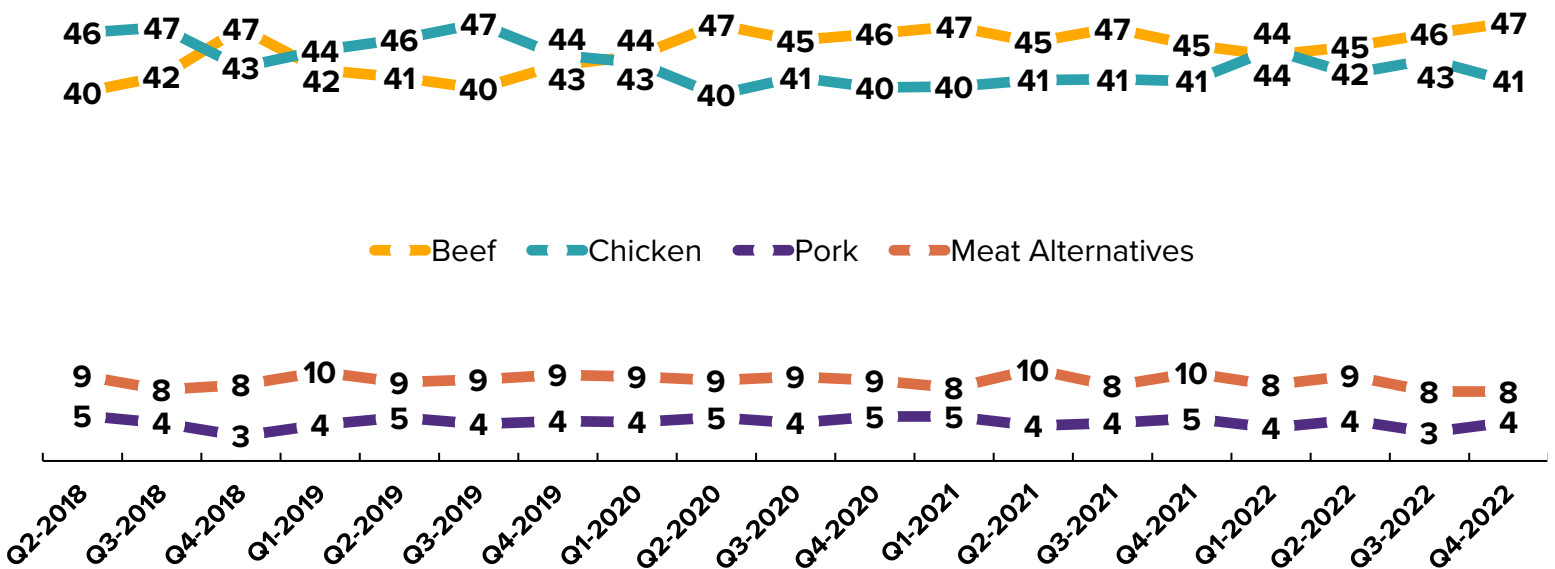
68%

Over two-thirds of consumers reportedly eat beef on at least a weekly basis.

Source: Directions Research, Consumer Beef Tracker Jan – Dec 2022.
Analysis: National Cattlemen’s Beef Association, on behalf of The Beef Checkoff.

Consumer Top Protein Sources (Percent Ranked #1)

Among a long list of proteins, consumers consistently rank beef as a top source of protein.



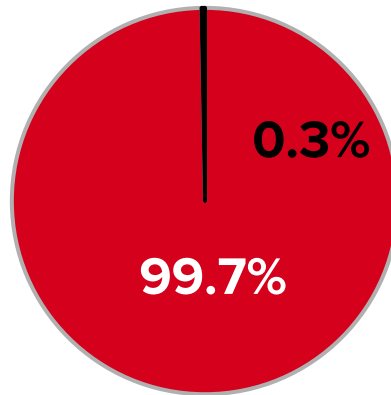
Source: Directions Research, Consumer Beef Tracker Jan – Dec 2022.
Analysis: National Cattlemen’s Beef Association, on behalf of The Beef Checkoff.

MARKET SHARE OF FRESH MEAT ALTERNATIVES

Fresh meat and beef substitutes represent a small percentage of the fresh meat and beef markets. This has changed very little over the past few years.

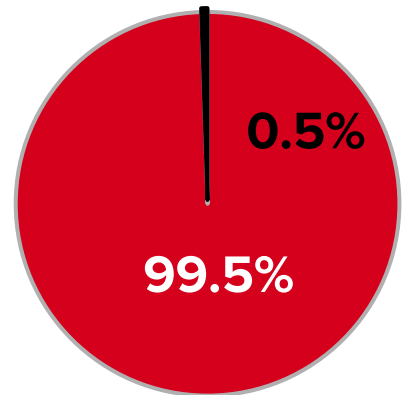
Market Share of Fresh Meat/Beef Substitutes

Animal Proteins vs. Substitutes



■ All Animal Proteins ■ AP Substitutes

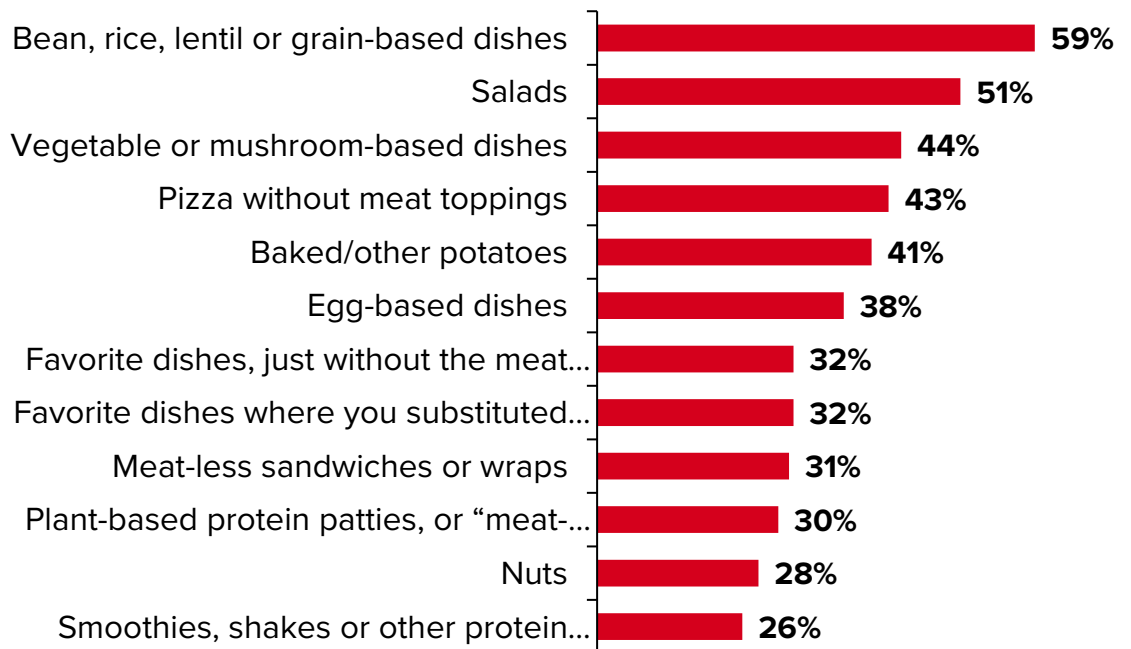
Beef vs. Beef Substitutes



■ Beef ■ Beef Substitutes

Note: Beef substitute forms include chubs, ground, patties. Animal protein constitutes beef, bison, chicken, fowl, lamb, pork, turkey, and veal. Only fresh products were included in calculations.
Source: NielsonIQ, Discovery. Retail Protein Sales ending 12/31/2022
Analysis: National Cattlemen’s Beef Association, on behalf of The Beef Checkoff

Items Consumers Eat Instead of Meat



Source: Directions Research, Consumer Beef Tracker Jan – Dec 2022.
Analysis: National Cattlemen’s Beef Association, on behalf of The Beef Checkoff.

When consumers are intentionally making or ordering a meal without meat, they aren’t replacing with meat substitutes, instead they are having meals that don’t traditionally contain meat or simply removing the meat.

CONSUMER BEHAVIOR IN RESPONSE TO PERCEIVED PRICE INCREASES

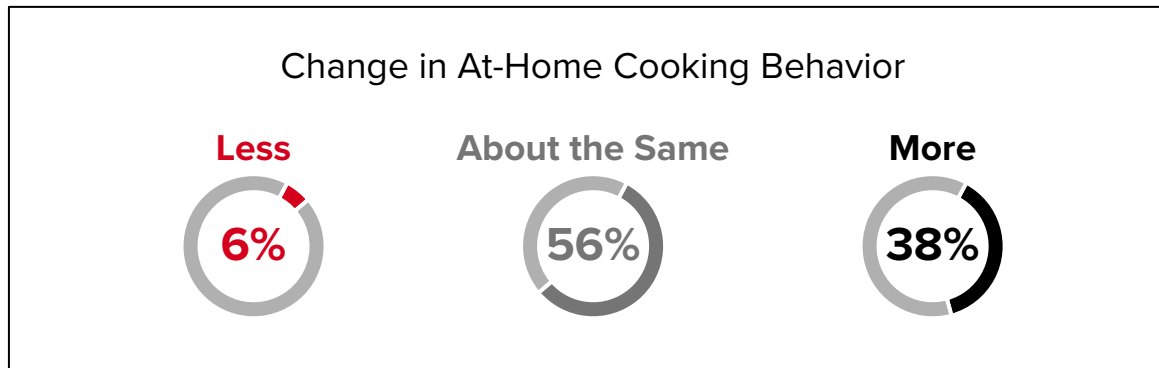
Over three-quarters of meals are being cooked at home and those who are cooking more at home plan to continue doing so.



Meals Cooked at Home

76% of meals cooked at home

94% of those cooking more at home say they will continue to do so

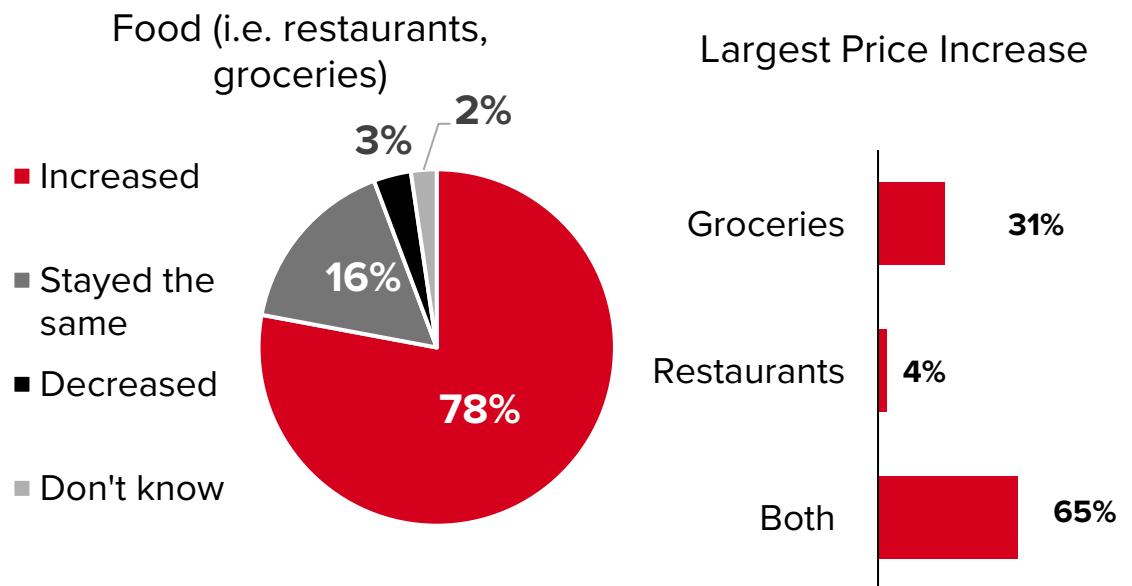


Source: State of Consumer Survey, August 2022.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

Over three-quarters of consumers noticed a price increase in food with most noticing it in both groceries and restaurants.

Perceived Price Increases in Food



Source: State of Consumer Survey, August 2022.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

TRENDS OF ONLINE GROCERY AND MEAL ORDERING

Online Grocery Ordering Behavior

64%

are Ordering Groceries Online

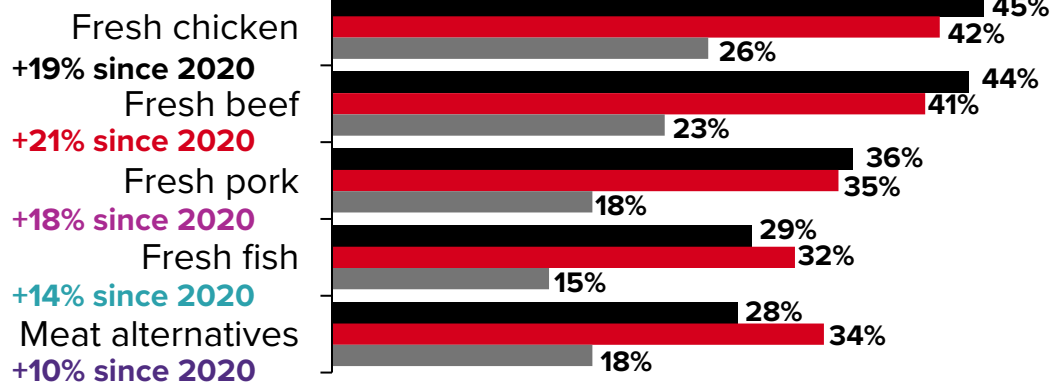


Top 3 Platforms Used

Store App/Website



■ 2022 ■ 2021 ■ 2020



Source: State of Consumer Survey, August 2022.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

Many consumers continue to purchase groceries online, potentially due to the convenience offered.

Online Meal Ordering Behavior

80%

are Ordering Meals Online



Top 3 Platforms Used

Restaurant App/Website



Categories Purchased for Pick-Up/Delivery



Source: State of Consumer Survey, August 2022.

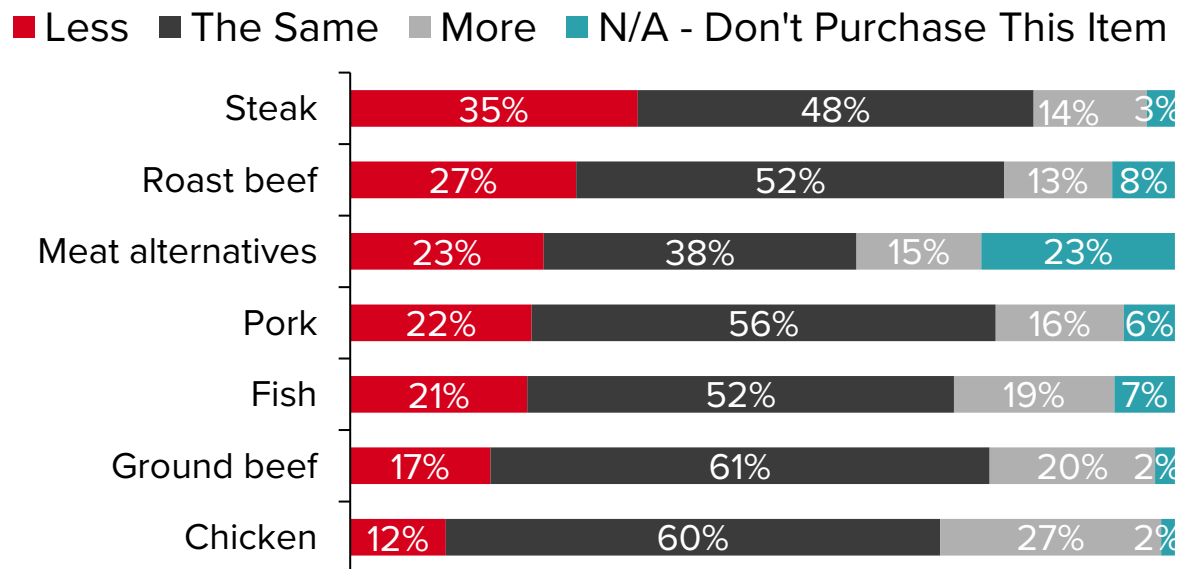
Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

A large majority of consumers are ordering meals online, with many choosing an app to complete their orders.

CURRENT PURCHASING TRENDS AND FUTURE BEEF CONSUMPTION

Many consumers are planning on increasing purchases of lower priced items, such as ground beef and chicken.

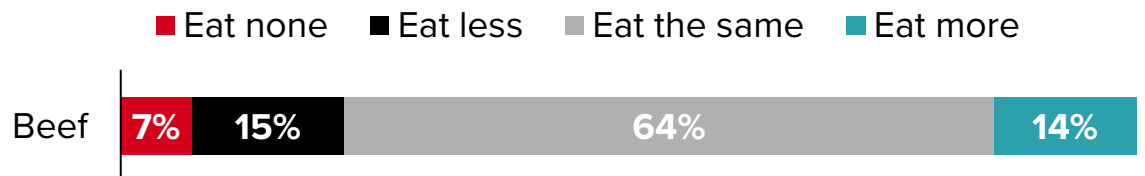
Purchasing More/Less



Source: State of Consumer Survey, August 2022.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

Future Beef Consumption



Almost two-thirds of consumers plan on eating at least the same amount of beef they currently do.

Reasons to Eat Less

- Price is too expensive
- Other meats are healthier
- Concerned beef will negatively impact long-term health
- Beef has too much fat
- Trying to eat more plant-based protein

Reasons to Eat More

- You enjoy the taste of beef
- Grilling more often
- A beef meal is quick and easy to prepare
- Adding proteins to your diet
- Beef has become more of a family favorite

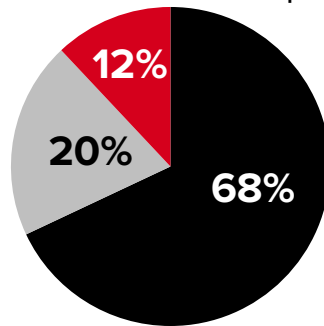
Source: Directions Research, Consumer Beef Tracker Jan – Dec 2022.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff

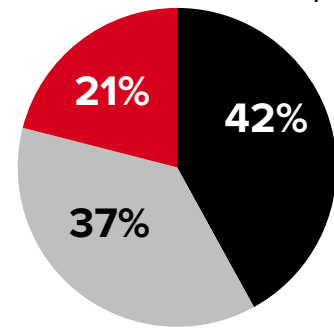
Over two-thirds of consumers are positive about beef overall and just under half have positive perceptions about beef production.

Perceptions of Beef

Overall Beef Perceptions



Beef Production Perceptions



■ Positive
■ Neutral
■ Negative

Source: Consumer Beef Tracker Jan – Dec 2022.
Analysis: National Cattlemen’s Beef Association, on behalf of The Beef Checkoff.

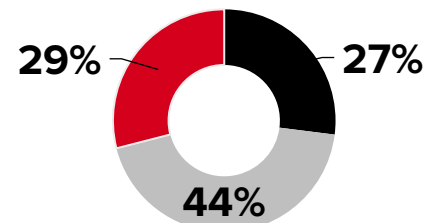
Most consumers are unfamiliar with how cattle are raised but consider this aspect when choosing a protein source.

Consumer Knowledge

Familiarity with How Cattle are Raised



Consider How Food Was Raised/Grown

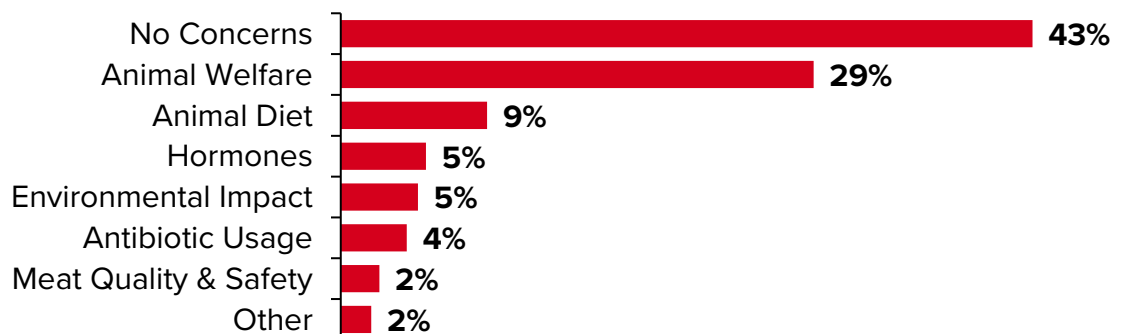


■ Sometimes ■ Often/Always ■ Never/Rarely

Source: Consumer Beef Tracker Jan – Dec 2022.
Analysis: National Cattlemen’s Beef Association, on behalf of The Beef Checkoff

43% of responses indicated no concerns. The top expressed concern was Animal Welfare (29%).

Unaided Concerns with Production



Source: Consumer Beef Tracker Jan – Dec 2022.
Analysis: National Cattlemen’s Beef Association, on behalf of The Beef Checkoff.

PROTEIN PERFORMANCE AT RETAIL

Fresh Meat Sales at Retail




Dollar sales at retail for beef, chicken, and pork saw year over year growth, while volume sales for beef and pork saw decreases.

2022 Retail
Fresh Meat
Sales

+6.8%
\$ sales growth

-1.6%
Lbs. sales growth

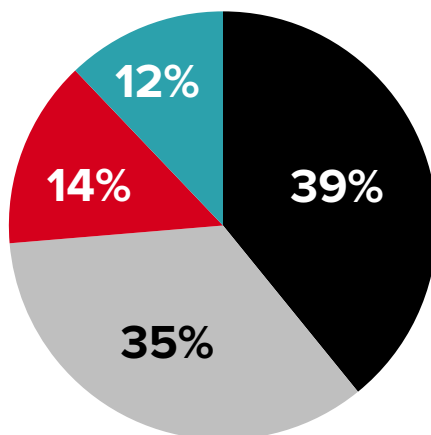
Fresh Meat \$56 Billion in 2022

	\$	Lbs.
	+3.1%	-3.1%
	+16.5%	+1.3%
	+5.2%	-2.5%

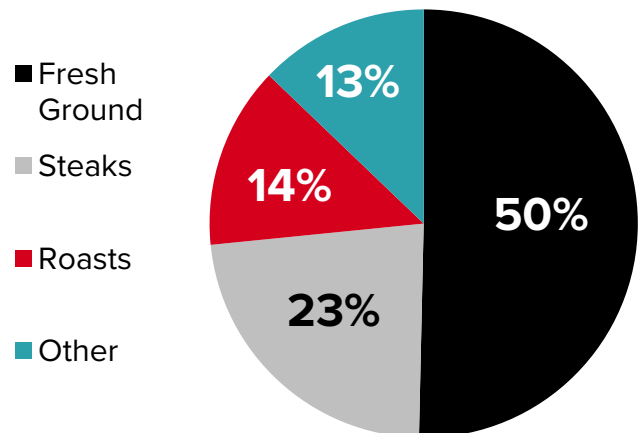
Source: NielsonIQ, Discover, Full-Year 2022 Fresh Meat Sales, Data Ending December 31, 2022.
Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

Fresh ground beef tops sales in both value and volume

Beef Sales (\$)



Beef Sales (Lbs.)



Fresh ground beef has made up most of 2022 retail beef sales, both in terms of value and volume.

Source: NielsonIQ, Discover, Full-Year 2022 Fresh Meat Sales by Primal, Data Ending December 31, 2022.
Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

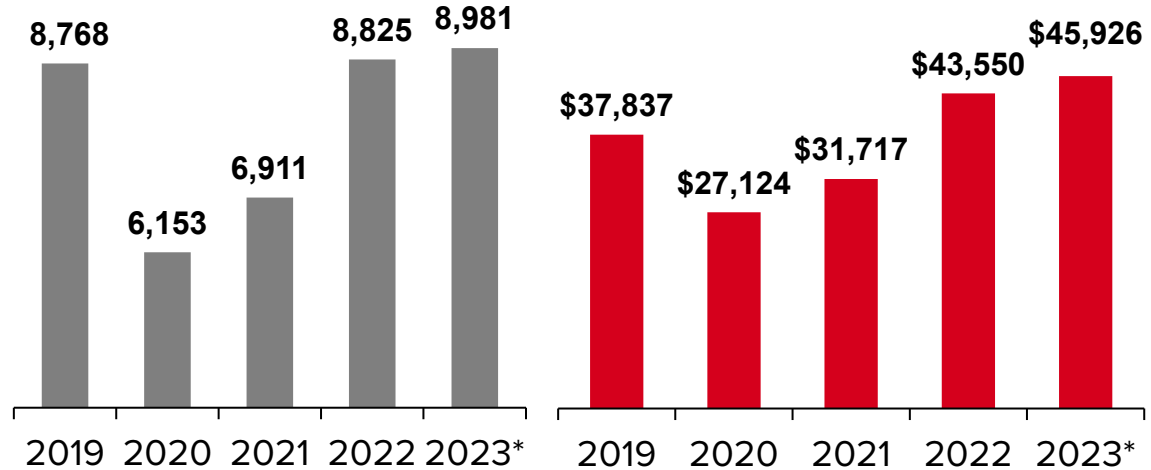
BEEF PERFORMANCE AT FOODSERVICE

Beef sales by volume and value at foodservice saw a decline from 2019 – 2020 but has since been rebounding to pre-COVID levels.

Beef Sales at Foodservice

Beef Pounds in Million Lbs.

Beef Pounds in Millions \$



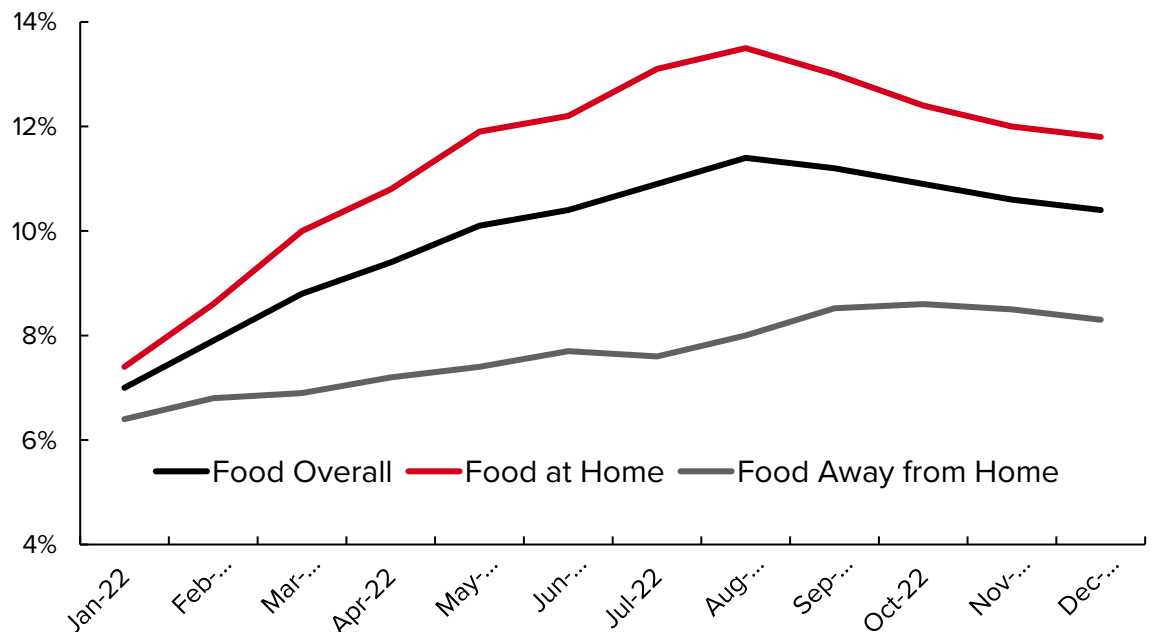
*Projection

Source: GlobalData, Beef Product by Channel in U.S., 2019 – 2023.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.

U.S. Food Inflation Rates (Percent Change vs. Year Ago)

Throughout 2022, Food at Home (retail) inflation rates have surpassed the Food Away From Home (foodservice) rates.



Source: U.S. Bureau of Labor Statistics, Consumer Price Index, Not Seasonally Adjusted, December 2022.

Analysis: National Cattlemen's Beef Association, on behalf of The Beef Checkoff.