Modern Meat Demand: Situation & Encouragement for Broader Perspective

Glynn Tonsor gtonsor@ksu / @TonsorGlynn

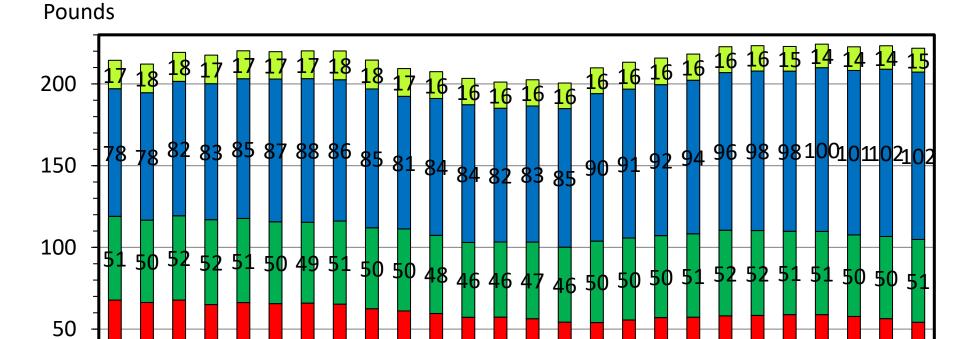
October 10, 2024 2024 Lockton Food, Agriculture & Beverage Conference

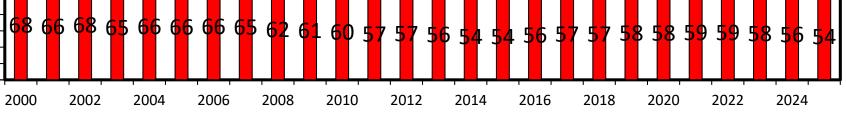
Where Are We Going?



US RED MEAT & POULTRY CONSUMPTION

Per Capita, Retail Weight, Annual





■ Beef ■ Pork ■ Total Chicken □ Turkey

Data Source: USDA-NASS and USDA-ERS, Compiled & Analysis by LMIC

04/08/24

M-C-01

Livestock Marketing Information Center

0

Demand is **NOT** Per Capita Consumption

2013 Beef Demand Determinants Study



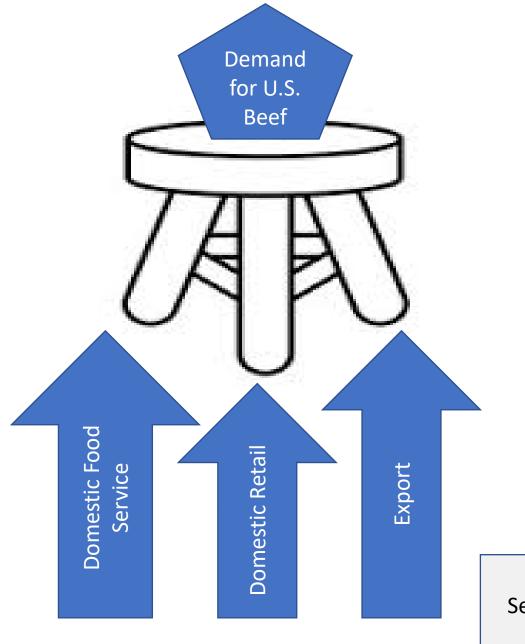
http://www.beefboard.org/ evaluation/130612demand determinantstudy.asp

LMIC

2024: 58.5 lbs

2025: 56.5 lbs

2026: 54.7 lbs

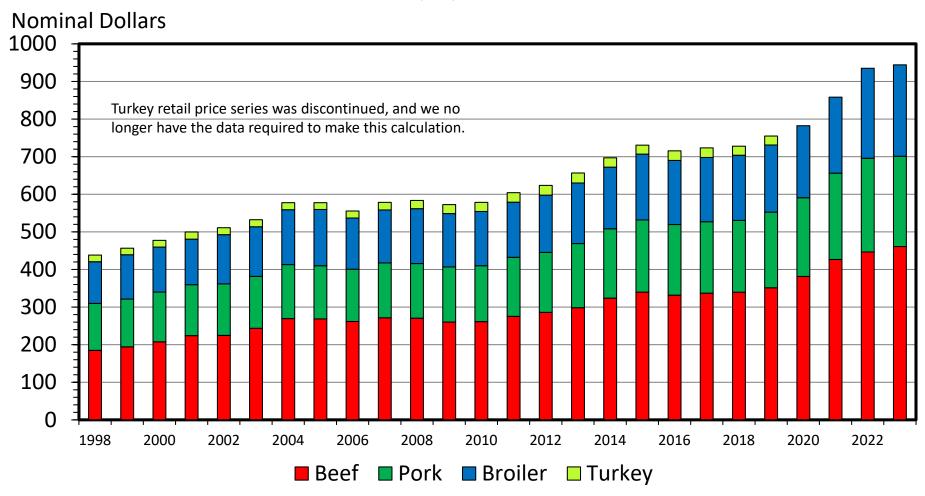


See Nov 22' Extended Discussion w/ Matt Perrier on Practically Ranching:

https://www.buzzsprout.com/1995747/11686340

US EXPENDITURES FOR MEAT & POULTRY

Per Capita, By Type of Meat, Annual

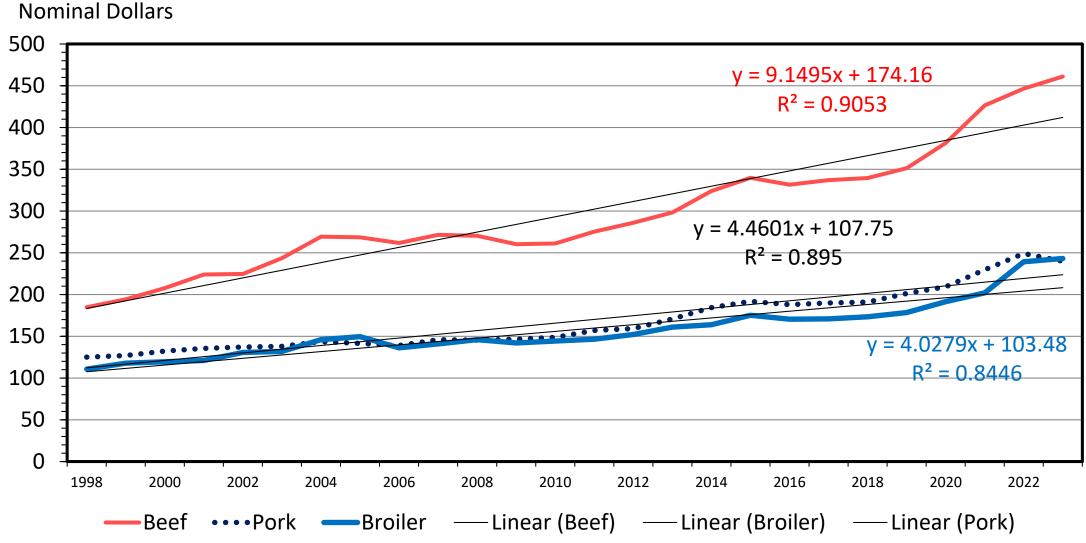


Data Source: Bureau of Economic Analysis & USDA-ERS, Compiled by LMIC

M-C-16A 04/08/24

US EXPENDITURES FOR MEAT & POULTRY

Per Capita, By Type of Meat, Annual

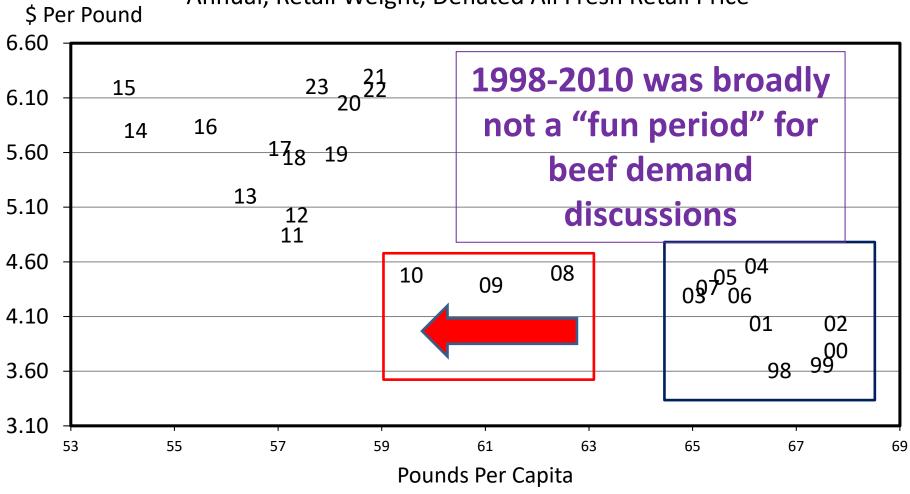


Data Source: Bureau of Economic Analysis & USDA-ERS, Compiled by LMIC

M-C-16B 04/08/24

BEEF PRICE-QUANTITY RELATIONSHIP

Annual, Retail Weight, Deflated All Fresh Retail Price

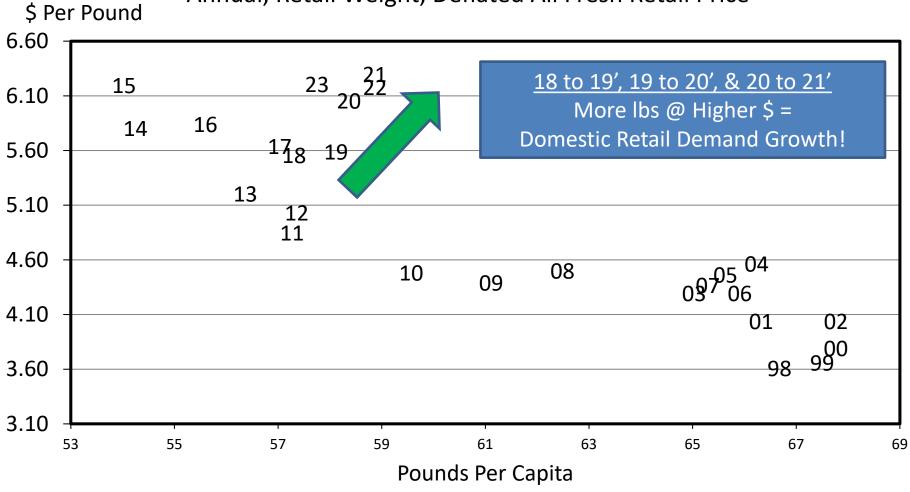


Data Source: Bureau of Economic Analysis & USDA-ERS, Compiled by LMIC

C-P-65A 04/04/24

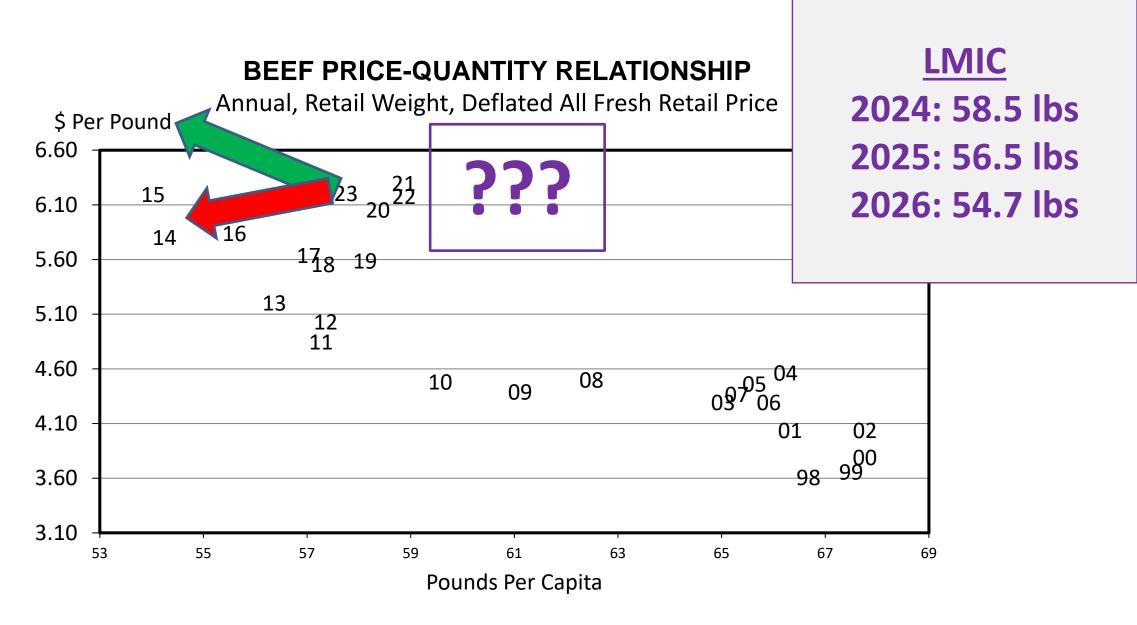
BEEF PRICE-QUANTITY RELATIONSHIP

Annual, Retail Weight, Deflated All Fresh Retail Price



Data Source: Bureau of Economic Analysis & USDA-ERS, Compiled by LMIC

C-P-65A 04/04/24

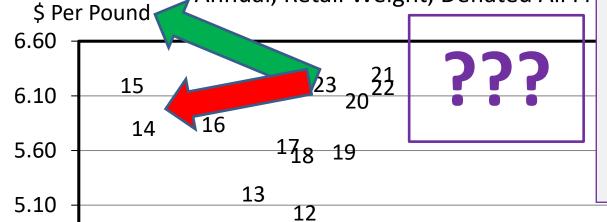


Data Source: Bureau of Economic Analysis & USDA-ERS, Compiled by LMIC Livestock Marketing Information Center

C-P-65A 04/04/24

BEEF PRICE-QUANTITY RELA





57

Size of Economic Pie Dictated by **Demand Patterns**

Journal of Agricultural and Resource Economics 34(2):213-236 Copyright 2009 Western Agricultural Economics Association

Evaluating the Farmer's-Share-ofthe-Retail-Dollar Statistic

Gary W. Brester, John M. Marsh, and Joseph A. Atwood

Data Source: Bureau of Economic Analysis & OSDA-ERS, Compiled by Living

55

4.60

4.10

3.60

3.10

53

Consumer confidence sees largest decline in more than three years

yahoo!finance

JOSH SCHAFER

September 24, 2024 at 10:10 AM

Broad MDM Overview

1-STOP LOCATION FOR U.S. MEAT DEMAND TRENDS & INFORMATION

- Monthly surveys & experiments > 2,000 U.S. residents
 - **❖>1,000** food service, restaurant focused
 - **❖>1,000** retail, grocery-store focused

Systematic economic modeling of consumer meat demand, preference, and behavior

FUNDING PARTNERSHIP & TIMING

- Fully launched Feb. 2020
 - Jointly funded by Beef & Pork Checkoffs

- Current Beef Checkoff support scheduled to end September 2025
- Pork Checkoff under annual renewal

All MDM outputs, procedures, & data fully available on KSU's AgManager.info website

Monthly Meat Demand Monitor, Methods, and Supporting Information

ome / Livestock & Meat / Meat Demand / Monthly Meat Demand Monitor [Survey Data]



Monthly Meat Demand Monitor [Survey Data] The Meat Demand Monitor (MDM) project is funded in-part by the beef checkoff and the pork checkoff. Monthly reports and supporting documentation are available here.







monding med Demand mondo			
Title	Author	Date	Downloads
Meat Demand Monitor - January 2022	Tonsor	January 28, 2022	Downloads ▼
Multi-Month Summary Report: July-December 2021	Tonsor Lusk	January 13, 2022	Downloads -
Meat Demand Monitor - December 2021	Tonsor	January 6, 2022	Downloads +
Meat Demand Monitor - November 2021	Tonsor	December 3, 2021	Downloads -

Methods and Supporting Information

Monthly Meat Demand Monitor

Title	Author	Date	Downloads
2022 Raw Data - MDM For 2021 data, click HERE.	Tonsor	February 2, 2022	Downloads →
For 2020 data, click HERE.			
Monthly Survey - January 2022	Tonsor	January 31, 2022	Downloads →

- ✓ SHORT MONTHLY REPORTS & APPROVED TWEETS (#MDM)
- **✓ RAW DATA**
- ✓ SURVEY INSTRUMENTS & UNDERLYING PROCEDURE DOCS
- ✓ ACADEMIC PAPERS USING MDM
- ✓ LINKS TO EXAMPLE MEDIA USE

Broad Activity Flow

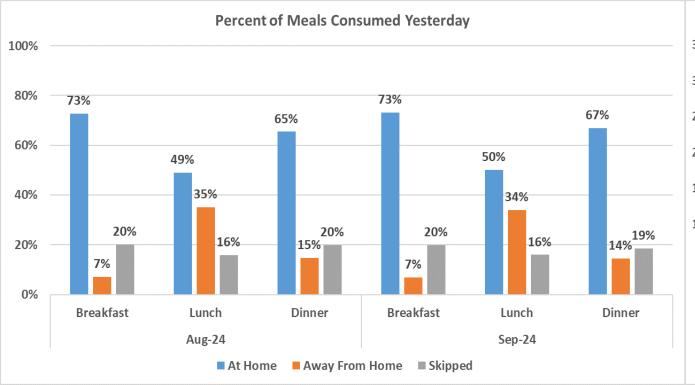
- Ongoing data collection (~1st 25 days of each month)
 - KSU's Qualtrics & Dynata/Samplify

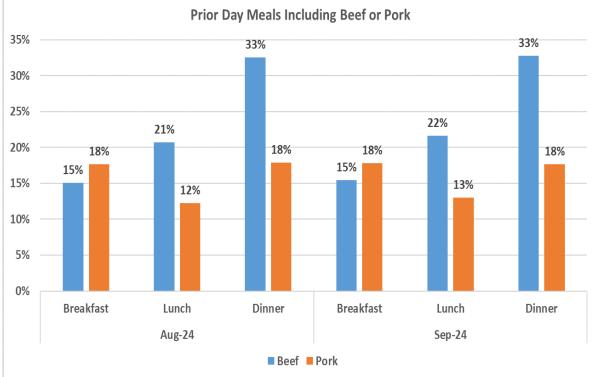
- Monthly base analysis
 - USDA approval on 4-page report & Tweets/LinkedIn posts
 - AoA live interview summary / NHF written summary

Periodic USFR coverage & other 1-off Assessments

- Prior Day Recall
- Protein Values
- Choice Experiment
- Consumer Knowledge
- Ad Hoc Section
- Socio-Economic Questions

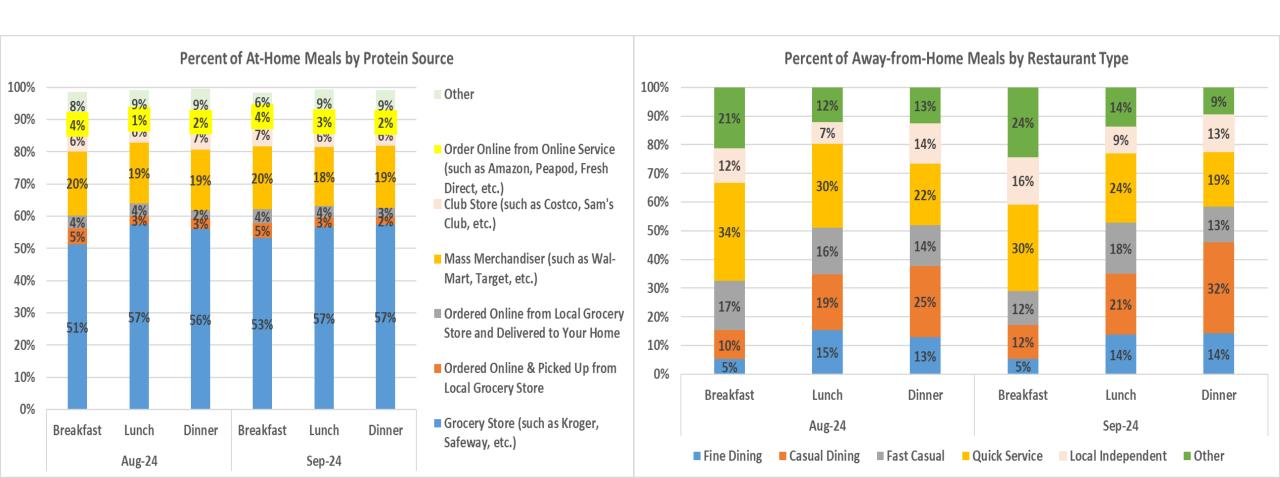
- Prior Day Recall
 - Breakfast/Lunch/Dinner
 - Location, Species, & Source
 - Protein-Species (i.e. breakfast: at-home, pork-bacon)





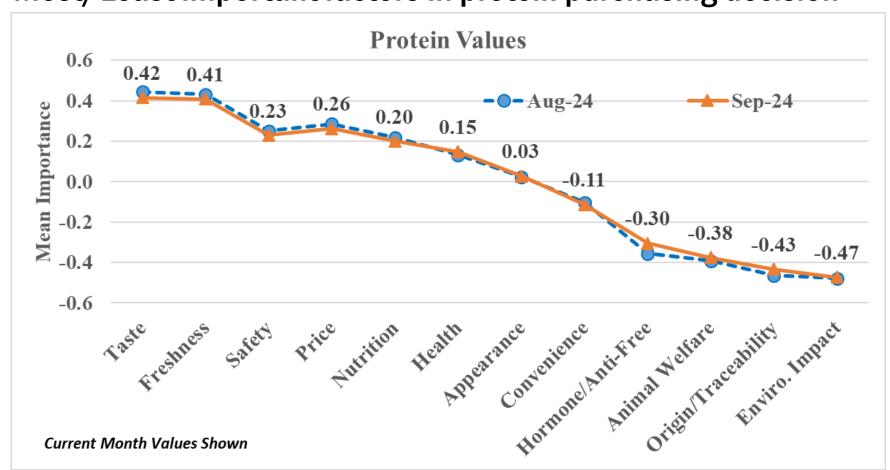
Prior Day Recall

Protein-Species-Source (i.e. breakfast: at-home, pork-bacon, bought from Grocery)

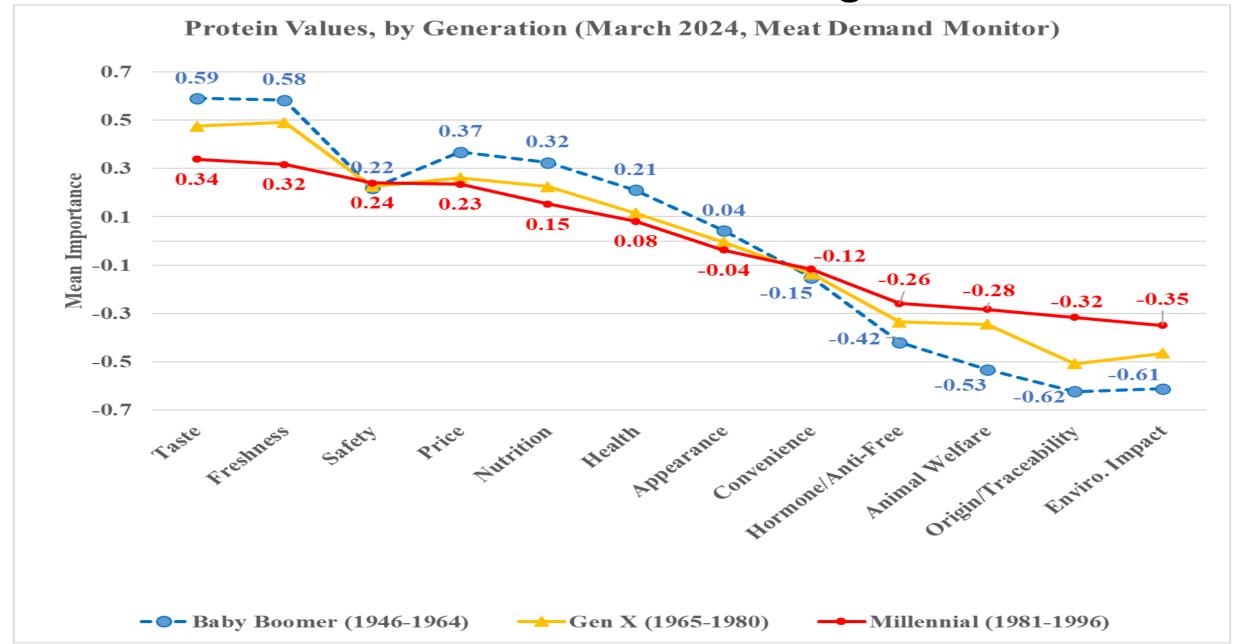


Protein Values

Most/Least important factors in protein purchasing decision



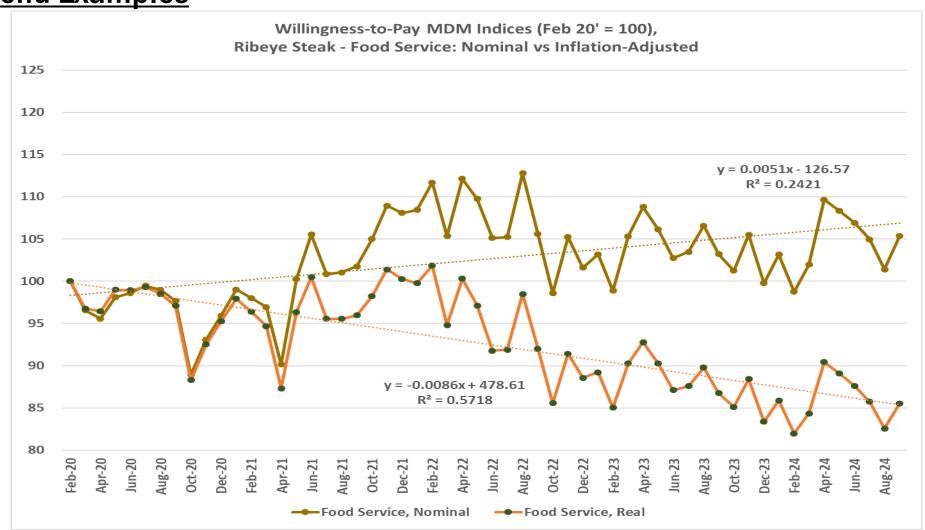
Protein Values – What Drives Purchasing?



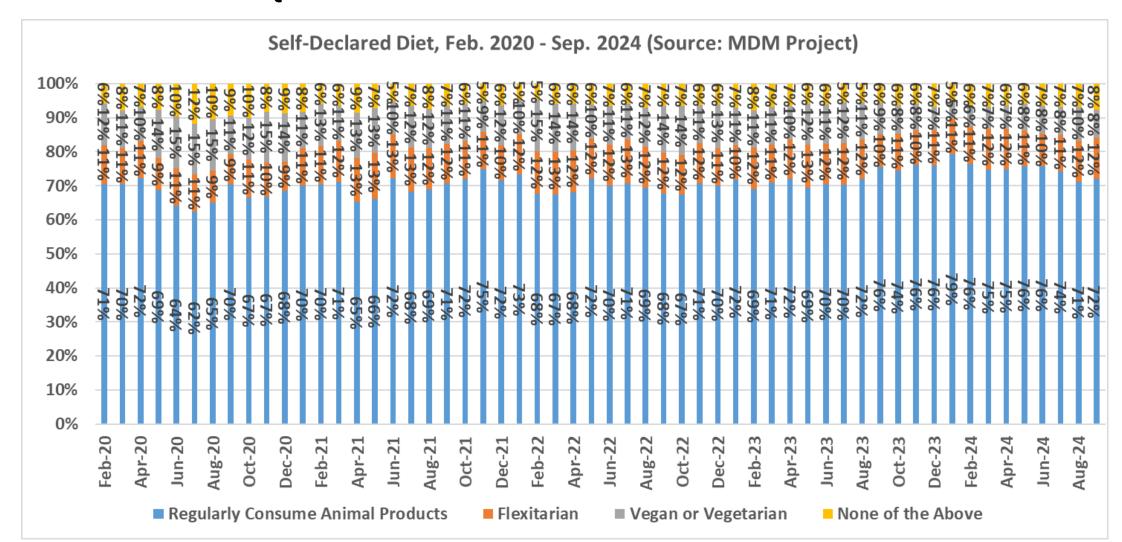
Choice Experiment: Mean WTP Estimates

	RETAIL	Ribeye Steak		Ground Beef	Pork Chop	E	lacon		nicken reast	Pla	nt-Based Patty	SI	hrimp	Beans and Rice	Something Else
Aug-24	WTP (\$/lb)	\$ 17.70	\$	9.04	\$ 7.49	\$	5.97	\$	8.86	\$	8.32	\$	9.78	\$ 3.40	
	Market Share	8%		24%	13%		7%	-	27%		2%		5%	7%	6%
Sep-24	WTP (\$/lb)	\$ 17.45	\$	8.61	\$ 6.82	\$	5.71	\$	8.28	\$	8.44	\$	9.33	\$ 2.88	
	Market Share	8%		24%	12%		8%	-	26%		3%		4%	7%	7%
E0-0	FOOD SERVICE		Ribeye Beef		Beef Pork		Baby Chicken		Plant-Based		Shrimp Salmon	Something			
	U JERYKE	Steak	Ha	mburger	Chop	Ba	ck Ribs	В	reast		Patty	31	nrimp	Salmon	Else
Aug-24	WTP (\$/lb)	\$ 26.15	\$	19.54	\$15.14	\$	17.58	\$	17.51	\$	12.06	\$	17.32	\$18.69	
	Market Share	15%		26%	4%		9%		15%		4%		13%	9%	6%
Sep-24	WTP (\$/lb)	\$ 27.18	\$	20.46	\$16.33	\$	19.00	\$	18.37	\$	12.60	\$	17.97	\$19.50	
	Market Share	15%		26%	5%		10%		14%		3%		12%	9%	5%

WTP Trend Examples



Socio-Economic Questions



Meat Demand Outdoes Meat Avoidance

Meat Science 190 (2022) 108843



Contents lists available at ScienceDirect

Meat Science





U.S. perspective: Meat demand outdoes meat avoidance



^a Department of Agricultural Economics, Kansas State University, United States of America



https://www.sciencedirect.com/science/article/pii/S0309174022001115

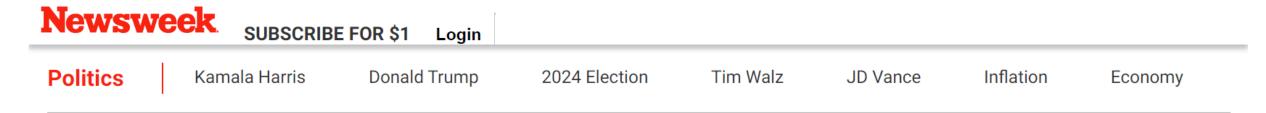
^b Department of Agricultural Economics, Purdue University, United States of America

Punchline point:

- Yes meat prices are up, compared to prior years BUT
 - this reflects elevated farm-to-plate costs
 - & in some cases (but not all) stronger meat demand

9/2/24, 8:28 AM

Kamala Harris' Grocery 'Price Gouging' Plan Is Riddled With Problems, Experts Say - Newsweek



Kamala Harris' Grocery 'Price Gouging' Plan Is Riddled With Problems, Experts Say

Meat Demand Monitor: Financial Sentiment Matters

KANSAS STATE

MDM: Meat Demand Monitor

Department of Agricultural Economics

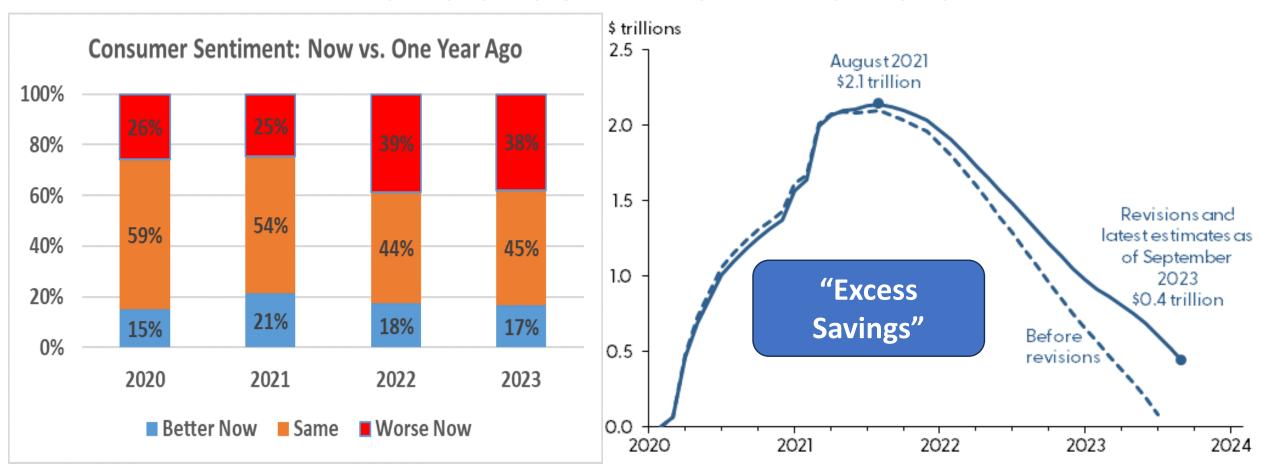
Feb. 2024 Special Report

The MDM tracks U.S. consumer preferences, views, and demand for meat with separate analysis for retail and food service channels. MDM is a monthly online survey with a sample of over 2,000 respondents reflecting the national population.

U.S. Meat Demand Update & Role of Financial Sentiment: 2020-2023

https://www.agmanager.info/livestock-meat/meat-demand/monthly-meat-demand-monitor-survey-data/us-meat-demand-update-and-role

Meat Demand Monitor: Financial Sentiment Matters



Meat Demand Monitor: Financial Sentiment Matters

Percentage Change in Inflation-Adjusted Retail Willingness to Pay vs. Prior Year, by Year and Financial Sentiment Subset						nent Subset					
Year	Diet Subset	Ribeye	Ground Beef	Pork Chop	Bacon	Chicken Breast	Plant- Based Patty	Shrimp	Beans and Rice	Respondents	Share of Respondents
2021	Better Now	12.72%	27.24%	36.05%	53.52%	33.15%	36.29%	37.32%	160.49%	3,148	21.60%
2021	Same	1.74%	5.02%	6.86%	13.08%	4.50%	5.01%	3.17%	33.79%	7,857	53.90%
2021	Worse Now	2.61%	5.58%	7.86%	18.22%	2.58%	-4.64%	-1.04%	37.29%	3,572	24.50%
2022	Better Now	12.63%	29.26%	33.48%	38.54%	30.94%	19.30%	13.39%	35.44%	3,075	17.68%
2022	Same	-4.56%	2.71%	0.84%	0.08%	2.48%	-4.02%	-6.56%	15.50%	7,614	43.78%
2022	Worse Now	-11.77%	-9.91%	-8.06%	-11.82%	-9.23%	-13.06%	-9.94%	-7.69%	6,703	38.54%
2023	Better Now	-13.89%	-16.97%	-18.83%	-32.47%	-21.30%	-31.01%	-23.51%	-23.52%	2,815	17.17%
2023	Same	-8.20%	-7.51%	-8.35%	-10.48%	-8.73%	-13.48%	-6.43%	-12.31%	7,356	44.87%
2023	Worse Now	-4.92%	-7.36%	-8.51%	-6.30%	-7.33%	-9.39%	-5.72%	-8.20%	6,223	37.96%

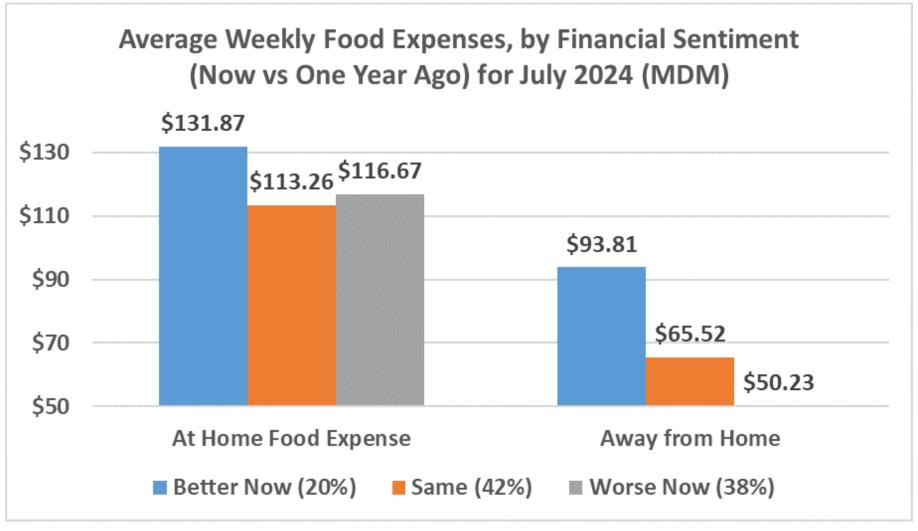
KANSAS STATE

Department of Agricultural Economics

Vol. 5, Issue 7 ● July 2024

MDM: Meat Demand Monitor

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https://www.agmanager.info/livestock-meat/meat-demand/monthly-meat-demand-monitor-survey-data

KANSAS STATE

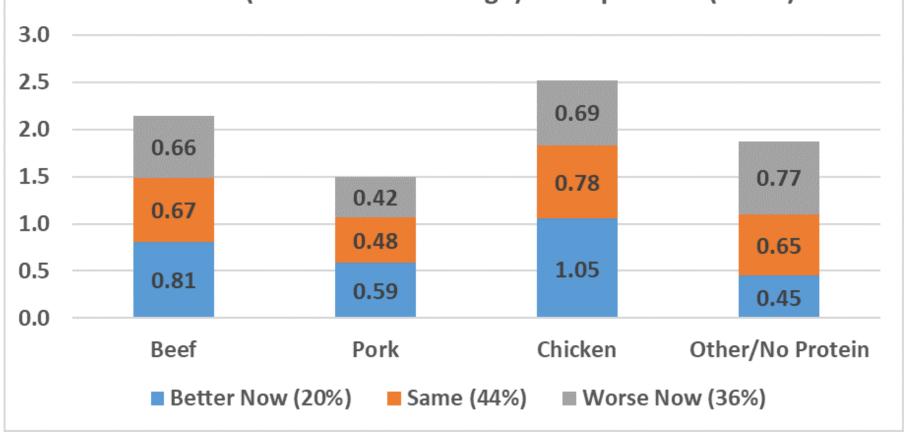
Department of Agricultural Economics

Vol. 5, Issue 9 • Sep. 2024

MDM: Meat Demand Monitor

The MDM tracks U.S. consumer preferences, views, and demand for meat with separate analysis for retail and food service channels. MDM is a monthly online survey with a sample of over 2,000 respondents reflecting the national population.





State-Level Dashboard (Justin Bina)

https://ksumeatdemandmonitor.shinyapps.io/MDMapp/

Meat Demand Monitor ♠ Home State Summaries Quarterly Insight

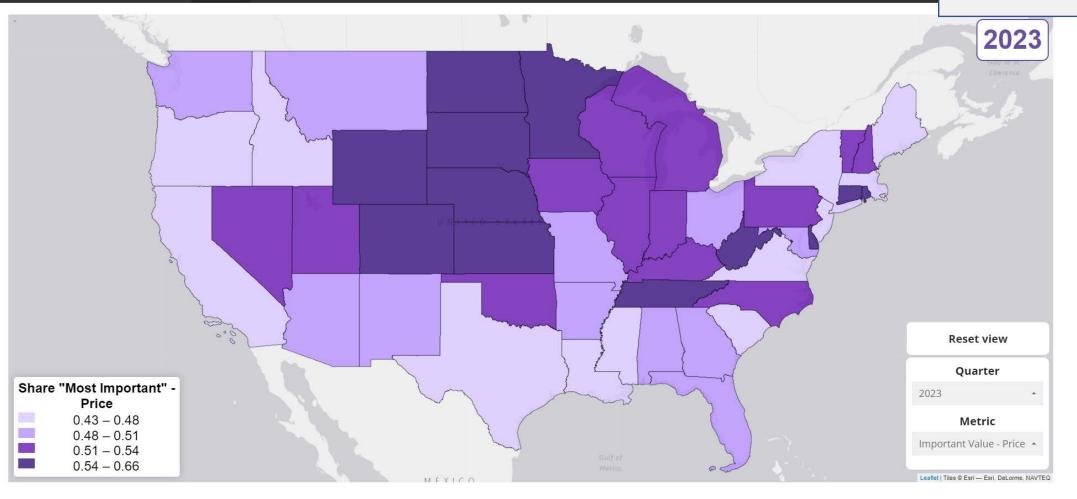
3 Supporting Information

• ND: 0.66

• WY: 0.62

CA: 0.45

HI: 0.43

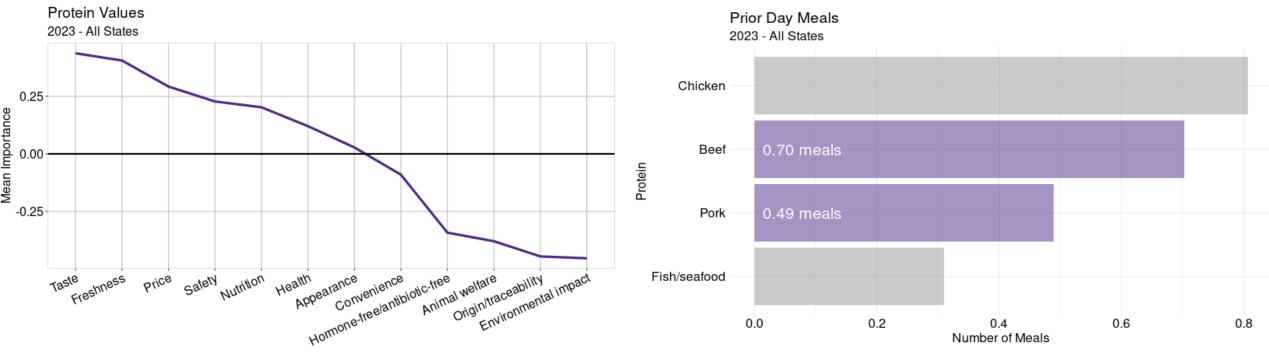


State-Level Dashboard (Justin Bina)

https://ksumeatdemandmonitor.shinyapps.io/MDMapp/

✓ UNITED STATES

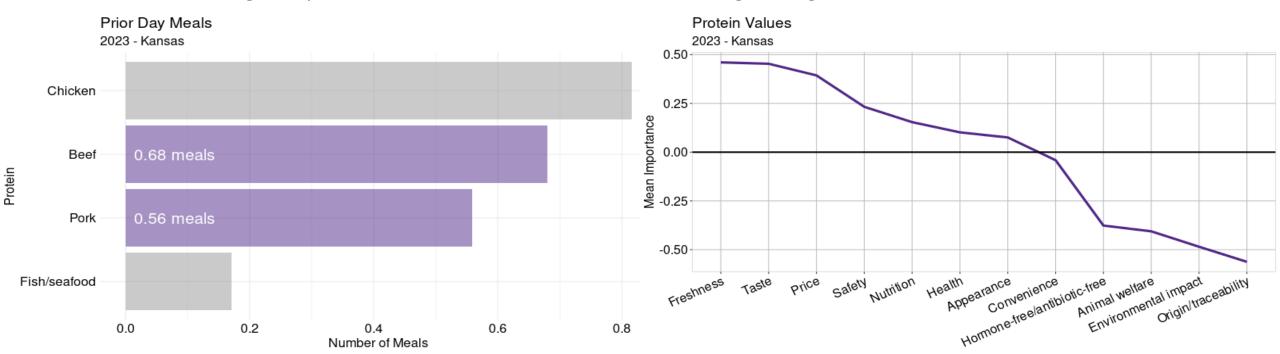
- √ 33,135 respondents in 2023
 - ✓ Mean \$73.4k household income
 - ✓ Mean \$115 (\$68) at-home (away-from-home) weekly food expenditures
 - ✓ 72% regularly consume meat, 11% flexitarian, 10% veg or veg, 6% other



State-Level Dashboard (Justin Bina)

https://ksumeatdemandmonitor.shinyapps.io/MDMapp/

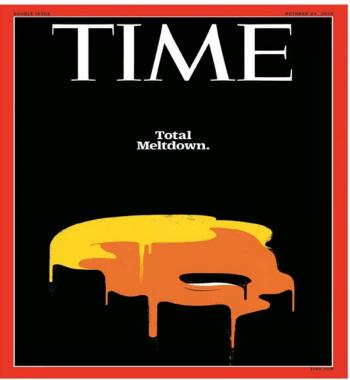
- ✓ KANSAS (<1% OF U.S. POPULATION)
 </p>
 - ✓ 317 respondents in 2023
 - ✓ Mean \$63k household income
 - ✓ Mean \$105 (\$65) at-home (away-from-home) weekly food expenditures
 - ✓ 74% regularly consume meat, 13% flexitarian, 6% veg or veg, 7% other



GT's Thought Framing Suggestions for "Contentious Times"

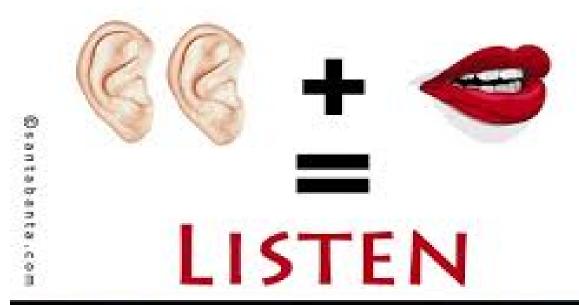








"IT IS TO A MAN'S HONOR TO AVOID STRIFE, BUT EVERY FOOL IS QUICK TO QUARREL" PROVERBS 20:3

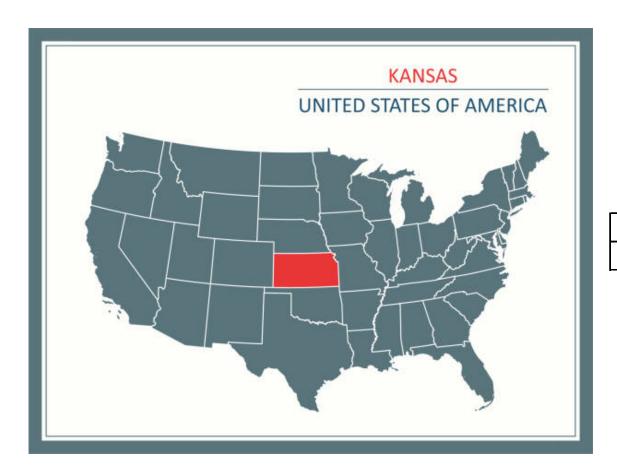


We have two ears and one mouth so that we can listen twice as much as we speak.

Epictetus

"MY DEAR BROTHERS AND SISTERS, TAKE NOTE OF THIS: EVERYONE SHOULD BE QUICK TO LISTEN, SLOW TO SPEAK ..."

JAMES 1:19



	Population (residents)	Arable Land (hectares)
KS	2.94 million	18.1 million

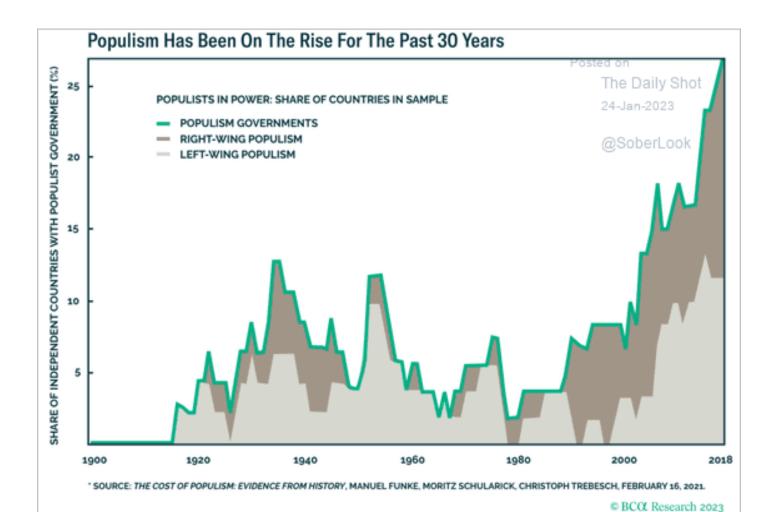




Jan. 1, 2024 USDA	US (mil hd)	KS (mil hd)	KS % of US
Beef cows	28.223	1.264	4.5%
Steers, 500 lbs & over	15.789	2.04	12.9%
Cattle on Feed	14.4233	2.6	18.0%

	Population (residents)	Arable Land (hectares)
World	8.12 billion	1.38 billion
U.S.	345 million	157.7 millon
U.S. %of Gobe	4.2%	11.4%
KS	2.94 million	18.1 million
KS%of U.S.	0.85%	11.48%
KS%of Gobe	0.04%	1.31%











~15% of Human Population ~85% of Human Population



Thank you!

GLYNN T. TONSOR
PROFESSOR
DEPT. OF AGRICULTURAL
ECONOMICS

KANSAS STATE UNIVERSITY

EMAIL: GTONSOR@KSU.EDU

WATCH FOR: #MDM

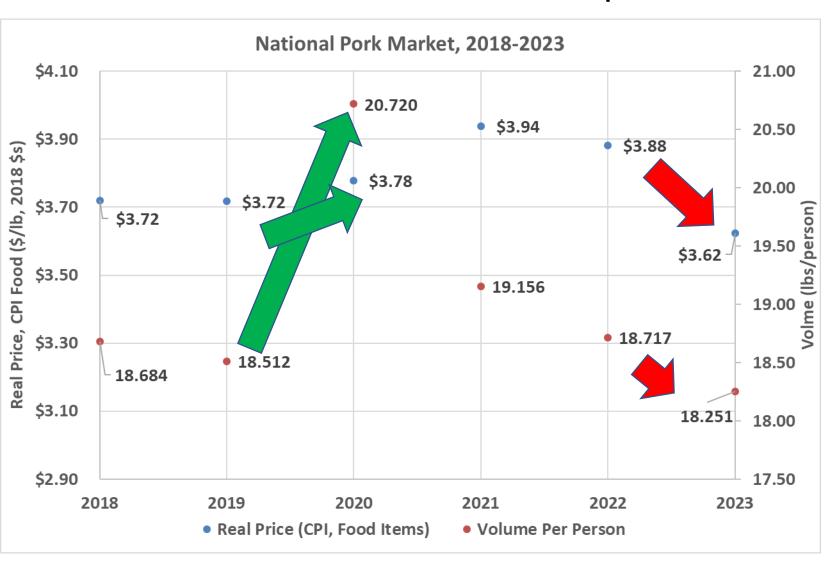
RETAIL ADVISORY COMMITTEE (RAC) / PACKER PROCESSOR INDUSTRY COUNCIL (PPIC) FALL MEETING NASHVILLE, TN

Shared Recent Research Findings w/ Dr. Jayson Lusk

- Consumer Sensitivity to Pork Prices: A 2018-2023 Comparison of 50 U.S. Retail Markets and 6 Pork Products?
 - Modeling Impacts of Location- and Product-Targeted Demand Enhancement on Pork Producer Profitability

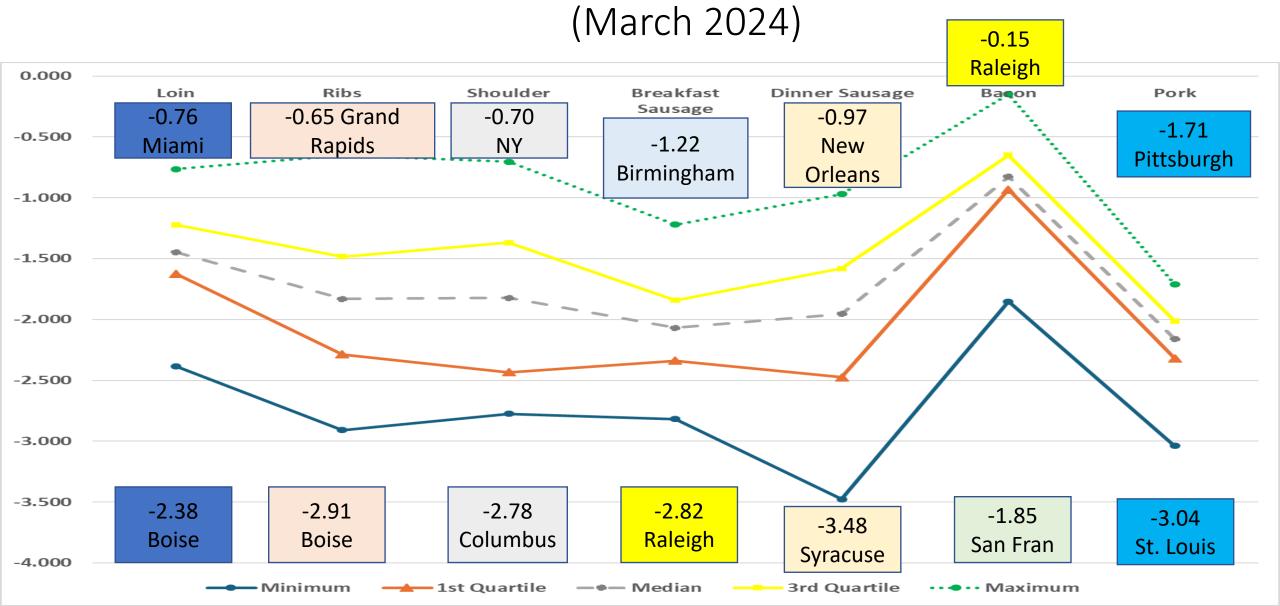
https://www.agmanager.info/livestock-meat/meat-demand/meat-demand-research-studies

Reconsider national pork market



✓ REAL (CPI, Food) \$/Ib vs Lbs/person ✓ "Clear demand growth" in 2020 ✓ "Clear demand decline" in 2022 & 2023 ✓ -- note <u>real</u> 2023 price was below 2018

Consumer Sensitivity to Pork Prices: A 2018-2023 Comparison of 50 U.S. Retail Markets and 6 Pork Products?



Final Thoughts – RAC/PPIC Remarks

 We CAN & SHOULD act strategically given latest price-sensitivity and demand pattern insights

✓ Targeted promotion, periodic evaluation & ongoing re-assessment have increasing merit