Meat Demand: Insights from the Meat Demand Monitor (MDM) Project

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August 15, 2024

2024 Risk & Profit Conference

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

KANSAS STATE

Department of Agricultural Economics

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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.

Demand is **NOT** Per Capita Consumption

2013 Beef Demand Determinants Study



http://www.beefboard.org/evaluation/ 130612demanddeterminantstudy.asp



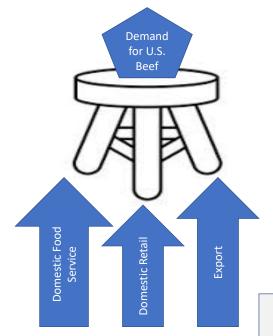
MARKETING > OUTLOOK

What's The Similarity Between Blue Jeans and Beef Demand?

Beef consumption and beef demand isn't the same thing. Here's an explanation.

Burt Rutherford | Sep 19, 2013

 $\underline{http://www.beefmagazine.com/beef-demand/what-s-similarity-between-blue-jeans-and-beef-demand}$



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

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

Broad MDM Overview

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

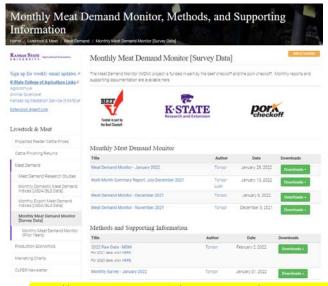
- Monthly surveys & experiments > 2,000 U.S. residents
 - ❖>1,000 food service, restaurant focused
 - ❖>1,000 retail, grocery-store focused
- Systematic economic modeling of consumer meat demand, preference, and behavior

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

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



- ✓ SHORT MONTHLY REPORTS & APPROVED TWEETS (#MDM)
- ✓ RAW DATA
- ✓ SURVEY INSTRUMENTS & UNDERLYING PROCEDURE DOCS
- ✓ ACADEMIC PAPERS USING MDM
- ✓ LINKS TO EXAMPLE MEDIA USE
- 6 https://www.agmanager.info/livestock-meat/meat-demand/monthly-meat-demand-monitor-survey-data

Broad Activity Flow

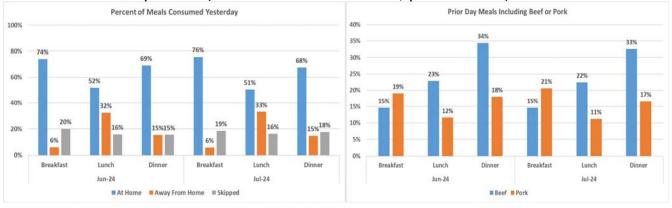
- ■Ongoing data collection (~1st 25 days of each month)
 - KSU's Qualtrics & Dynata/Samplify
- Monthly base analysis
 - ■USDA approval on 4-page report & Tweets/LinkedIn posts
 - AoA live interview summary / NHF written summary
- Periodic USFR coverage & other 1-off Assessments

Broad Overview of Survey Sections

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

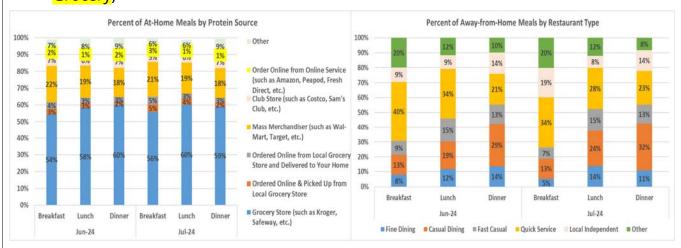
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- Prior Day Recall
 - Breakfast/Lunch/Dinner
 - Location, Species, & Source
 - Protein-Species (i.e. breakfast: at-home, pork-bacon)



Broad Overview of Survey Sections

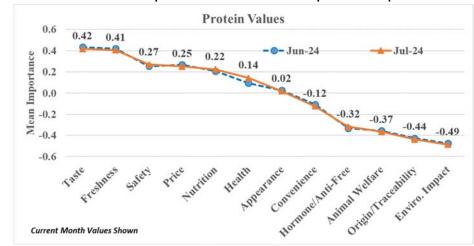
- Prior Day Recall
 - Protein-Species-Source (i.e. breakfast: at-home, pork-bacon, bought from Grocery)



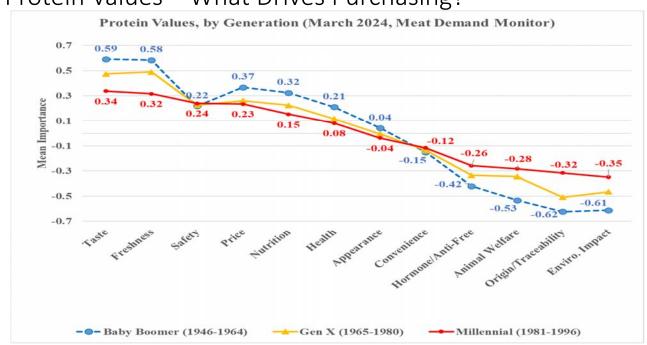
■ Protein Values

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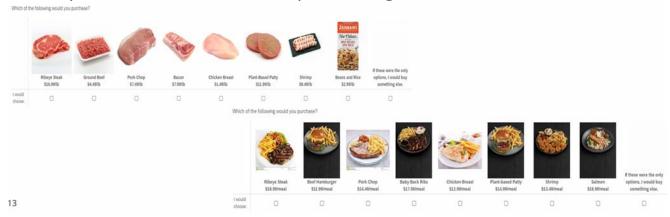
Most/Least important factors in protein purchasing decision



Protein Values – What Drives Purchasing?



- Choice Experiment: Design
 - ■1/2 Retail & 1/2 Dinner-Meal, Food Service
 - •9 questions each (27 in complete design for each market channel)

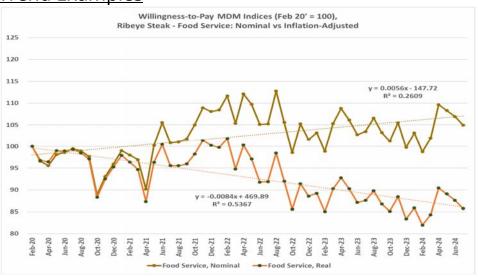


Broad Overview of Survey Sections

■ Choice Experiment: Mean WTP Estimates

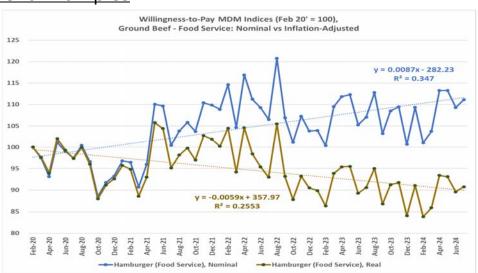
RETAIL		Ribeye Steak	[18] [18] 14] 14] 14] 14] 14] 14] 14] 14] 14] 14		Pork Chop	Bacon		Chicken Breast		Plant-Based Patty		Shrimp		Beans and Rice	Something Else
Jun-24	WTP (\$/lb)	\$ 18.07	\$ 9	.11	\$ 7.62	\$	6.50	\$	8.87	\$	7.21	\$	9.19	\$ 3.74	
	Market Share	9%	249		14%	9	%	2	26%		2%		4%	8%	6%
Jul-24	WTP (\$/lb)	\$ 17.75	\$ 8	.41	\$ 7.01	\$	5.88	\$	8.29	\$	8.36	\$	9.51	\$ 3.18	
	Market Share	9%	24%		13%	8	%	2	27%		2%		4%	7%	7%
FOOD SERVICE		Ribeye Steak	Bee Hambu		Pork Chop		aby Ribs		icken reast		nt-Based Patty	Sł	wimp	Salmon	Something Else
Jun-24	WTP (\$/lb)	\$ 27.58	\$ 20	.63	\$15.89	\$ 1	8.93	\$	18.74	\$	13.30	\$	18.48	\$20.04	
	Market Share	16%	25%		4%	10	0%	1	15%		4%		13%	9%	5%
Jul-24	WTP (\$/lb)	\$ 27.07	\$ 20	.97	\$16.41	\$ 1	9.17	\$	18.55	\$	13.35	\$	18.81	\$19.65	
	Market Share	14%	26%		5%	10	0%	1	14%		4%		14%	8%	5%

■ WTP Trend Examples



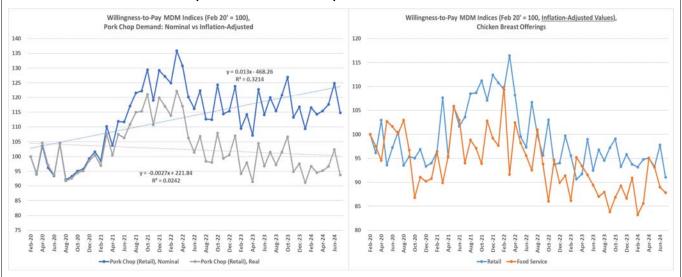
Broad Overview of Survey Sections

■ WTP Trend Examples



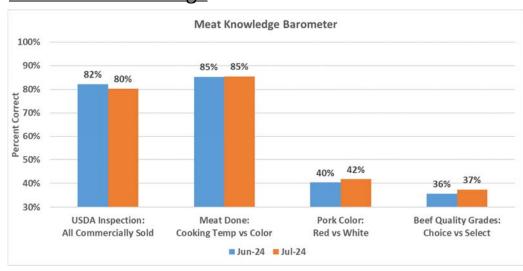
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■ WTP Trend Examples - NOT Unique to Beef



Broad Overview of Survey Sections

Consumer Knowledge

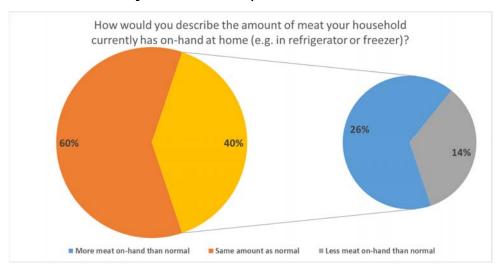


- ■"Ad Hoc" Section Varies by Month
 - Several COVID-19,pandemic-oriented questions
 - Open-ended (how many would you buy) retail question
 - Retail price expectations vs last month

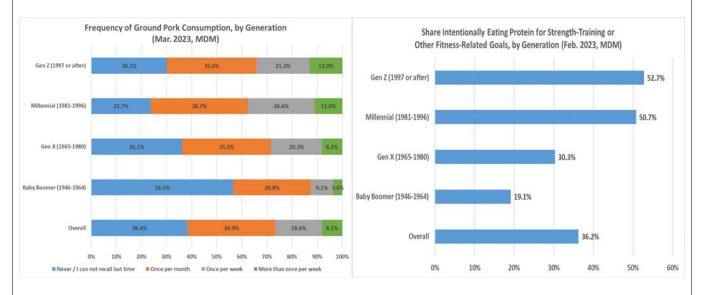
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Broad Overview of Survey Sections

■ Ad Hoc Section: May 2020 Example

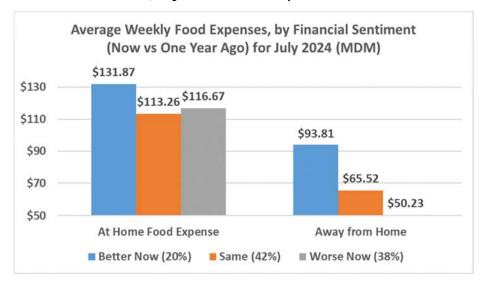


■ Ad Hoc Section: Generational Insights, Q1-2023

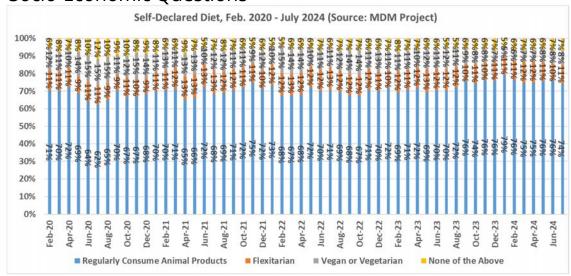


Broad Overview of Survey Sections

■ Ad Hoc Section: July 2024 Example



Socio-Economic Questions



Media Partnering







✓ AOA (MIKE PEARSON/JESSE ALLEN HOST)

- ✓ GT monthly interview w/ latest MDM info
- ✓ 1 million live listeners each interview;
 - √ + 200k via Sirus Rural Radio
- √ 5,500 AoA podcast downloads each month

✓ USFR (TYNE MORGAN HOST)

- ✓ 500,000 listeners/video viewers each interview
- ✓ 5-10,000 on each AgDay website post

√ #MDM TWEETS (@TONSORGLYNN)

√ Jan-Sep 23': > 30,000 impressions

✓ AGMANAGER.INFO

✓ >20,000 page views to-date of MDM page

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EXAMPLES OF HIGH-IMPACT

ACADEMIC ARTICLES, THESES, & DISSERTATIONS

- 8 peer-reviewed articles so far
- 1 KSU M.S. Thesis (Taylor, 2021) & 2 KSU Ph.D Dissertations (Anderson, 2023; Bina, 2024)
- MDM data currently being used in multiple active research projects



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EXAMPLES OF HIGH-IMPACT

















J.S. Farm Report 10/25/22 - Houndtable









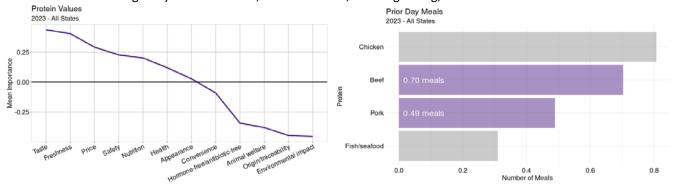


State-Level Dashboard (Justin Bina)

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

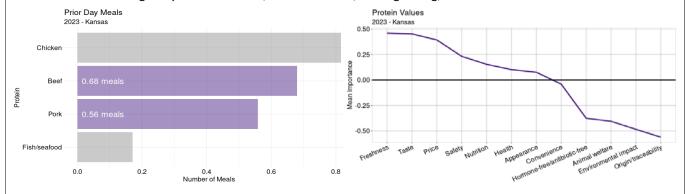


State-Level Dashboard (Justin Bina)

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

✓ KANSAS (2.4 MILLION, 0.9% OF U.S. POPULATION)

- √ 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

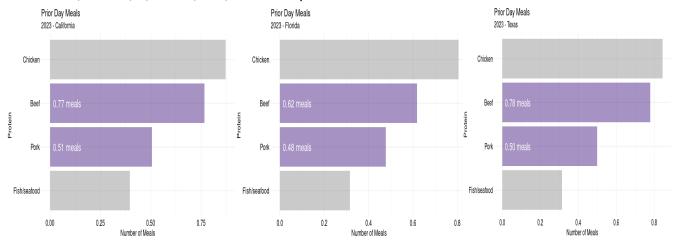


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✓ CA, FL, & TX (COMBINE > 27% OF UNITED STATES POPULATION)

✓ 3,494 CA; 2,582 FL; & 2,853 TX respondents in 2023

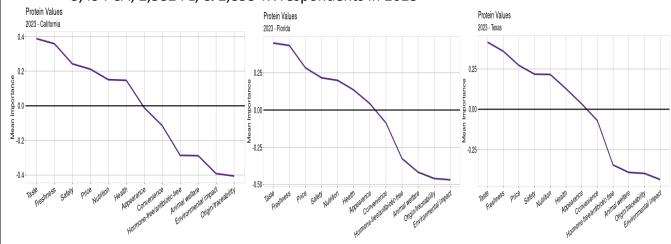


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31 MDM Project Webpage https://www.agmanager.info/livestock-meat/meat-demand/monthly-meat-demand-monitor-survey-data

Meat Demand Monitor: Financial Sentiment Matters

KANSAS STATE

Department of Agricultural Economics

Feb. 2024 Special Report

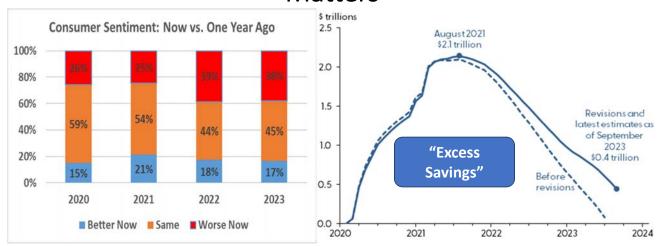
MDM: Meat Demand Monitor

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.

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



https://www.frbsf.org/research-and-insights/blog/sf-fed-blog/2023/11/08/data-revisions-and-pandemic-era-excess-savings/

Meat Demand Monitor: Financial Sentiment Matters

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%

Meat Demand Monitor: Financial Sentiment Matters

ercenta	ge Change in In	flation-Adjusted Food Service Willingness to Pay vs. Prior Year, by Year and Financial Sentiment Subset									
Year	Diet Subset	Ribeye	Hamburger	Pork Chop	Babyback Ribs	Chicken Breast	Plant- Based Patty	Shrimp	Salmon	Respondents	Share of Respondents
2021	Better Now	-0.24%	6.77%	9.97%	4.41%	4.15%	20.75%	1.02%	3.39%	3,073	20.94%
2021	Same	1.83%	4.10%	4.96%	1.10%	2.20%	0.28%	1.67%	2.04%	7,998	54.51%
2021	Worse Now	-0.28%	-3.52%	2.65%	-4.39%	-6.75%	-3.58%	-5.27%	-2.85%	3,602	24.55%
2022	Better Now	17.03%	21.91%	28.11%	21.94%	26.88%	24.09%	22.28%	16.66%	3,105	17.74%
2022	Same	-3.31%	0.87%	-0.60%	-3.59%	-0.41%	-1.24%	-2.35%	-1.72%	7,614	43.49%
2022	Worse Now	-6.89%	-6.88%	-6.62%	-6.79%	-4.86%	-15.29%	-6.01%	-7.32%	6,787	38.77%
2023	Better Now	-13.39%	-13.09%	-16.20%	-15.74%	-16.11%	-17.75%	-12.01%	-11.64%	2,702	16.50%
2023	Same	-8.82%	-10.00%	-9.54%	-9.59%	-10.39%	-9.31%	-10.60%	-7.02%	7,481	45.68%
2023	Worse Now	-5.82%	-2.59%	-5.72%	-4.45%	-5.16%	-2.93%	-5.11%	-6.07%	6,194	37.82%