

THE Agricultural Business Council of Kansas City



JULY WEBINAR

July 14 | 1:00–2:00 pm

Impact of COVID-19 on
the Food Supply Chain



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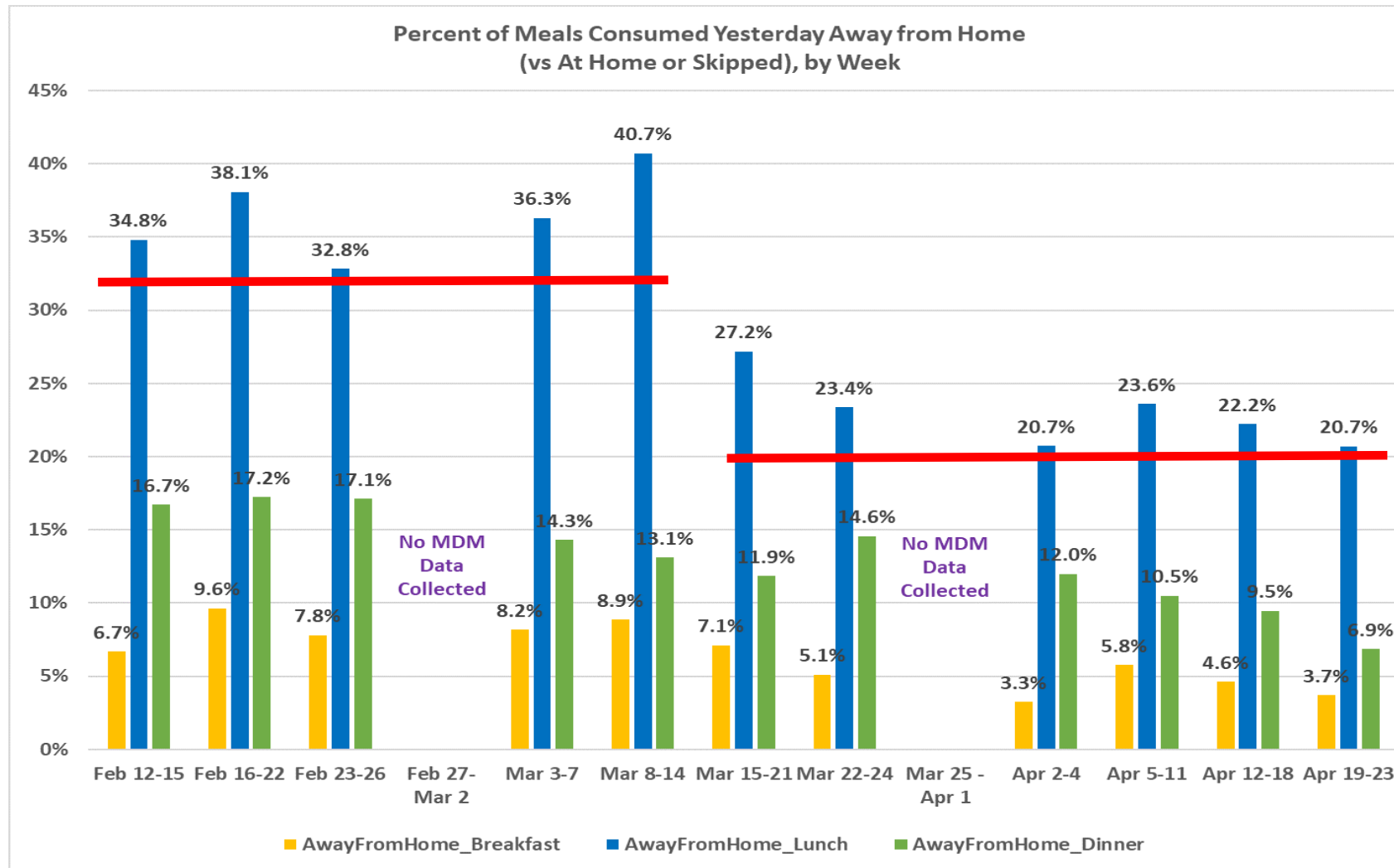
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KANSAS STATE | Agricultural Economics
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<http://www.agbizkc.com/upcoming-events>

SHOCK #1: Shift to At-Home: Mid-March thru April



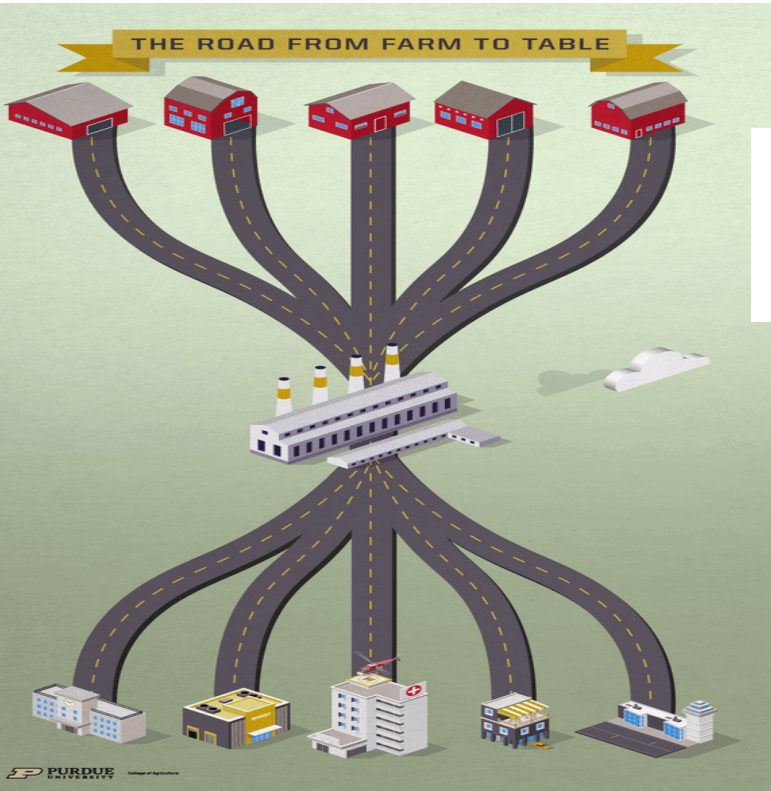
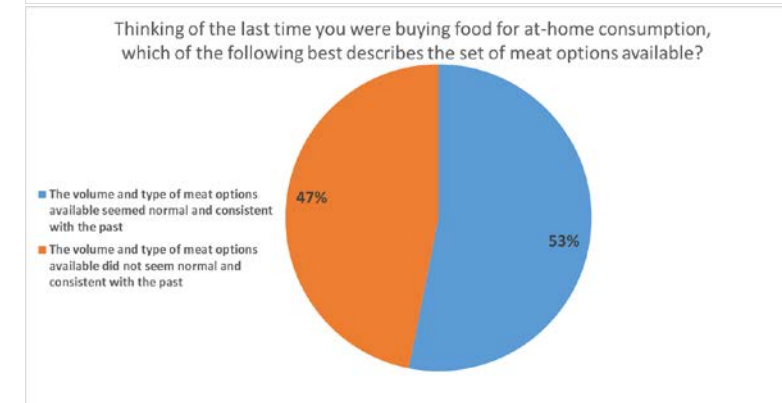
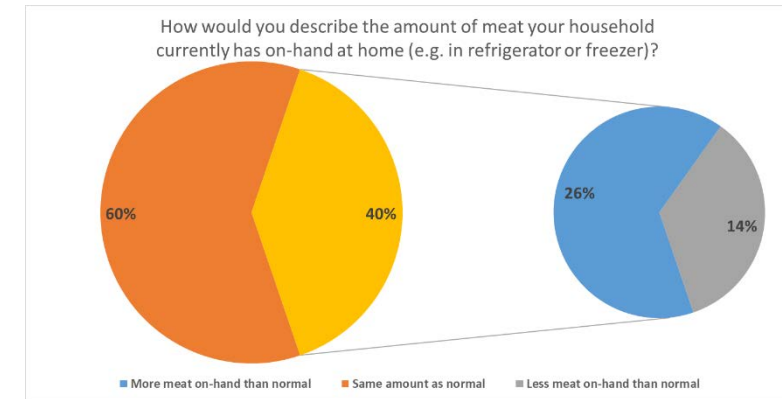
SHOCK #2:

Animal-to-Meat Bottleneck in April-May Societal Calls: *Where's my Meat?*

TIME

COVID-19 Meat Shortages Could Last for Months. Here's What to Know Before Your Next Grocery Shopping Trip

<https://time.com/5830178/meat-shortages-coronavirus/>



Meat shortages as virus forces plants to close

The effects of the coronavirus pandemic continue to ripple through the food industry. Dean Reynolds reports.

MAY 5, 2020

<https://www.cbsnews.com/video/meat-shortages-as-virus-forces-plants-to-close/>

<https://www.purdue.edu/newsroom/releases/2020/Q2/questions-and-answers-about-the-road-from-farm-to-table.html>

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

SHOCK #3? Will Meat Demand Weaken ? / TBD!

Table 2.1. Aggregate Meat Demand Elasticities Summary

| Period | Beef Price Used | Beef Demand | | | Pork Demand | | | Chicken Demand | |
|-----------|-----------------|-------------|------------------|---------------------|-------------|-----------|--------|----------------|-------|
| | | Own-Price | Pork Cross-Price | Chicken Cross-Price | Exp. | Own-Price | Exp. | Own-Price | Exp. |
| 1988-2017 | All-Fresh | -0.479 | 0.087 | 0.023 | 0.803 | -0.307 | 0.141 | -0.339 | 0.425 |
| 1988-2007 | All-Fresh | -0.645 | 0.145 | 0.026 | 0.790 | -0.229 | -0.262 | -0.345 | 0.371 |
| 2008-2017 | All-Fresh | -0.450 | -0.032 | 0.083 | 0.959 | -0.089 | 1.231 | -0.378 | 0.856 |
| 1970-2017 | Choice | -0.593 | 0.120 | 0.041 | 0.118 | -0.973 | -0.170 | -0.133 | 0.218 |
| 1988-2017 | Choice | -0.490 | 0.085 | 0.021 | 0.781 | -0.313 | 0.146 | -0.345 | 0.430 |
| 1970-1994 | Choice | -0.594 | 0.138 | 0.039 | 0.118 | -0.924 | -0.004 | -0.159 | 0.003 |
| 1995-2017 | Choice | -0.468 | 0.049 | -0.044 | 0.867 | -0.287 | 0.634 | -0.469 | 0.960 |

Assessing Beef Demand Determinants

Prepared for the Cattlemen's Beef Board

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

Note: "Exp." is Expenditure abbreviated. All Rotterdam models were estimated using iterative three-stage least squares.

WTP Lower for Those Expecting Worse



| RETAIL | | Ribeye Steak | Ground Beef | Pork Chop | Bacon | Chicken Breast | Plant-Based Patty | Shrimp | Beans and Rice | Something Else |
|--------------------------------------|--------------|--------------|----------------|-----------|----------------|----------------|-------------------|----------|----------------|----------------|
| Finances will be Worse in 1 Year | WTP (\$/lb) | \$ 15.64 | \$ 6.80 | \$ 5.31 | \$ 4.36 | \$ 6.57 | \$ 8.63 | \$ 8.56 | \$ 1.90 | |
| | Market Share | 6.4% | 24.0% | 11.6% | 6.9% | 26.4% | 3.1% | 4.3% | 7.0% | 10.4% |
| Finances will NOT be Worse in 1 Year | WTP (\$/lb) | \$ 16.65 | \$ 7.96 | \$ 6.60 | \$ 5.25 | \$ 7.85 | \$ 8.12 | \$ 9.10 | \$ 2.75 | |
| | Market Share | 7.3% | 23.3% | 13.2% | 7.5% | 26.2% | 2.5% | 4.5% | 7.5% | 8.1% |
| FOOD SERVICE | | Ribeye Steak | Beef Hamburger | Pork Chop | Baby Back Ribs | Chicken Breast | Plant-Based Patty | Shrimp | Salmon | Something Else |
| Finances will be Worse in 1 Year | WTP (\$/lb) | \$ 20.92 | \$ 15.20 | \$12.45 | \$ 14.37 | \$ 13.86 | \$ 7.29 | \$ 14.39 | \$16.53 | |
| | Market Share | 10.2% | 24.1% | 4.1% | 9.0% | 14.2% | 2.0% | 14.3% | 10.5% | 11.6% |
| Finances will NOT be Worse in 1 Year | WTP (\$/lb) | \$ 25.94 | \$ 18.48 | \$13.97 | \$ 18.00 | \$ 17.07 | \$ 12.80 | \$ 17.34 | \$17.38 | |
| | Market Share | 15.3% | 21.9% | 4.2% | 11.0% | 14.4% | 4.8% | 13.8% | 7.6% | 7.1% |

Market Implications

SHOCK #1: Shift to At-Home: Mid-March thru April

- “Not all meat is equal”
 - Weeks of beef round > loin & ham = bacon wholesale price anomalies
 - Market-channel prevalence variation = diverse product level pricing
- Growing discussion around benefit-costs of retail, food service, and export channels being firmly distinct
 - ✓ GT #1: Need to balance added flexibility with efficiency drivers

Market Implications

SHOCK #2: Animal-to-Meat Bottleneck

- Surplus of animals & “shortage” of meat
 - Elevated SOCIETAL interest
- Bottleneck = lower livestock prices & higher meat prices
 - THIS IS WHAT ECONOMISTS EXPECT
- Multiple, growing pushes on myriad of policies
 - ✓ GT #1: Need to CAREFULLY balance possible gains in system robustness with peace-time efficiency
 - ✓ GT #2: Assessment needed and any action based on data/info, not emotion

Market Implications

SHOCK #3: Will Meat Demand Weaken ?

- Has supply-side price support “hidden” weakening demand?
 - Weaker demand = less \$ for industry and ultimately smaller livestock and meat production
 - ✓ GT #1: Ongoing mis-understanding of demand is problematic
 - ✓ GT #2: Recognition of US comparative advantages, growing role of exports, and “fit” with policy and industry strategy must improve
 - ❖ Homework Assignment: Google “Smoot-Hawley Tariff Act of 1930”



More information available at:



This presentation will be available in PDF format at:

<http://www.agmanager.info/about/contributors/individual/tonsor.asp>

Host of COVID-19 industry resources are cross-linked as well