CoBANK
KNOWLEDGE EXCHANGE

July 2020

Dairy Supply Chains Adapt as Consumers React to COVID-19

By Phil Plourd
President of Blimling and Associates, Inc.

Inside...

Key Points:

- COVID-19 is dramatically affecting consumer habits and dairy supply chains as food service demand plummets and grocery sales surge.
- Consumers struggling with job losses and economic uncertainty have quickly returned to buying basic dairy products like fluid milk, commodity cheese, and butter.
- Product offerings at grocery stores have shrunk to meet the surge in consumer demand for basic dairy products.
- As food service demand returns, wholesale prices for some dairy products have risen sharply with potential to accelerate retail prices for certain items, which would ostensibly have a negative impact on dairy product demand.
- Consumer behavior will likely remain in its current state for the next 12 to 18 months. As the economy reopens, potential changes in consumer habits, the level of social distancing that remains in place, and the level of disposable income will again reshape dairy supply chains long term.

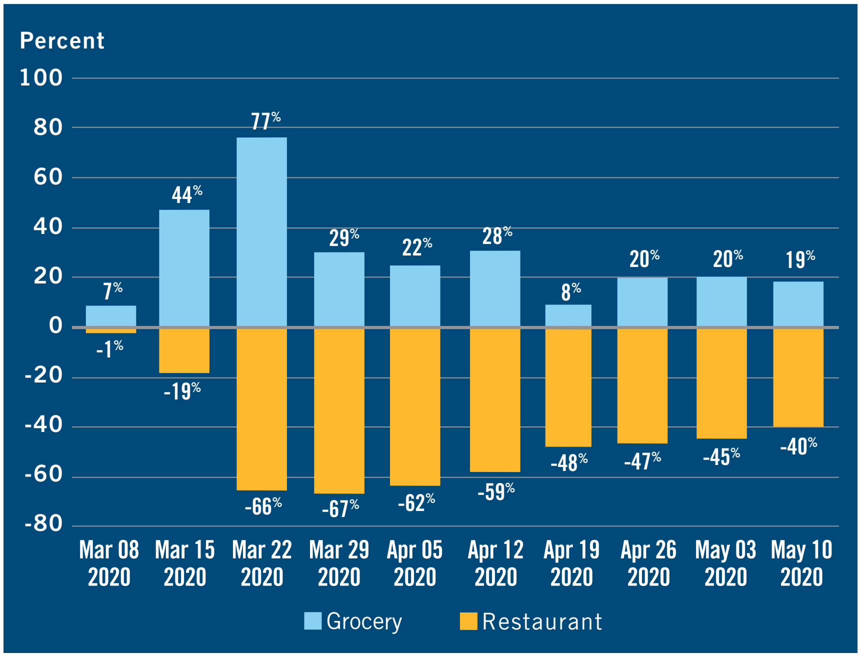
Introduction

After several weeks enduring various “safer at home” edicts, life with COVID-19 for many U.S. consumers has meant adjusting their consumption habits. Consumers aren’t going out but are instead spending time doing puzzles, riding bikes, and knitting, according to sales data. We are experiencing a “back-to-basics” moment unlike anything most of us have experienced in our lifetime.

Most profound, perhaps, is a massive shift in where consumers eat. Before the pandemic unfolded in the U.S., Americans spent about as much money in restaurants as in grocery stores. That changed in March as restaurants across the U.S. closed virtually overnight. Consumers instead flocked to grocery stores. During the week ending March 29, data published by AC Nielsen and Black Box Intelligence showed chain restaurant sales down 67% year-over-year while grocery store sales increased 29% *(Exhibit 1).*

In a recent IRI survey, 73% of Americans say they are cooking 80% or more of all meals for all household members from scratch, up from 40% before the pandemic.

EXHIBIT 1: U.S. Grocery and Restaurant Sales vs. Last Year



Source: AC Nielsen, Black Box Intelligence, The Wall Street Journal

For the dairy industry, the pivot meant skyrocketing sales in grocery stores. Persons familiar with scanner data say dairy aisle volume increased by nearly 30% year-over-year between mid-March and late May. As part of the process, consumers are snapping up products that in recent years had fallen out of favor. Processed cheese sales increased by nearly 20% during the eight weeks ending May 31. White milk sales gained more than 10% during the same period. Cereal, one of milk's long-lost friends, is also doing well with sales up almost 15%.

Is this the new normal?

Psychologist Abraham Maslow believed individuals first seek to meet basic needs of food, clothing, and shelter. With that accomplished, people become more aspirational. At the top of the hierarchy, with lower levels covered, people seek self-actualization and a perfected mode of being. The hierarchy explains why consumers were pursuing highly particular, niche foods before the pandemic; they had all the basics covered.

Suddenly, with supply chains slowing or shutting down amidst the pandemic, that's not a given. Consumers flocked to grocery stores, buying white milk in gallon jugs and processed cheese slices to cover basic needs.

Several factors will determine how long it takes consumers to move back toward the top of Maslow's hierarchy of needs, with supply chains adjusting to new realities.

Consumers and Disposable Income

May unemployment came in near 13%, with some forecasts calling for higher rates in the months ahead. Piper Sandler's early May survey indicates that 55% of Americans don't expect spending to return to normal for at least seven months, forcing many consumers to stick with the basics. That could be good for traditional bulk items such as fluid milk, commodity cheese and butter. It might not be so great for specialty items and products focused on food service. Demand could suffer overall.

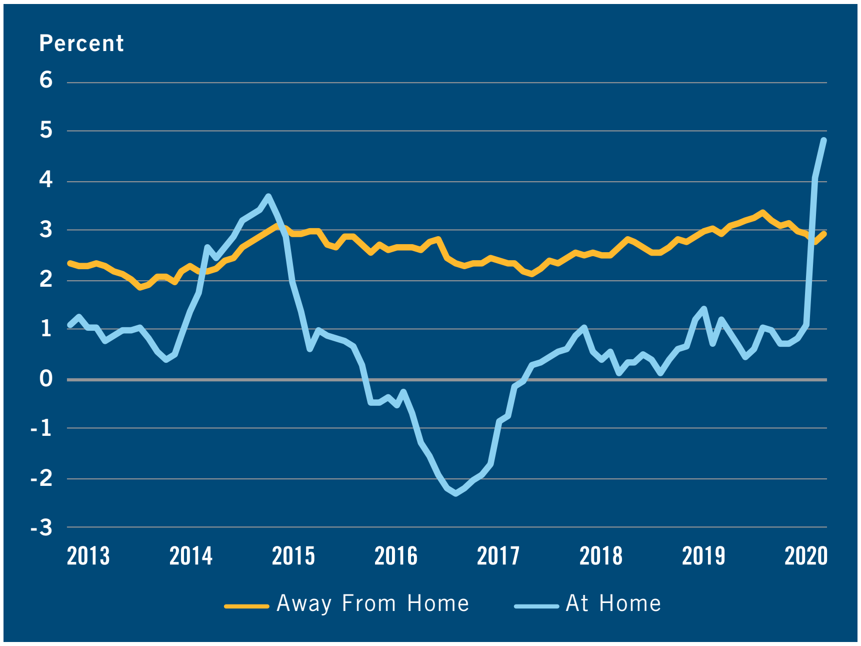
In the 2008-10 recession, dairy consumption growth slipped. Domestic cheese use declined by 0.4% in 2008, the only year with a move backwards in the last 25. Butter demand did not grow much at all in 2009 or 2010, performing much worse than the preceding and following years. With demand hobbled, ending stocks increased. Cheese inventories ended 2008 up 7% YoY and then rose another 13% in 2009. Butter ending stocks finished 2009 13% above year-prior levels. It took several months for prices to recover. A repeat in 2020 could mean carrying heavier-than-normal stockpiles, potentially weighing on dairy product and milk prices into 2021.

Consumer Habits

As restrictions lift and assuming the virus doesn't spiral out of control, will consumers immediately return to business travel, aggressively scheduling activities for children and eating on the run? Polls still show reluctance.

In late April, a *Business Insider* poll found just 9% of Americans believed they would resume their routine exactly as it was before the lockdowns, with only 16%

EXHIBIT 2: Food Inflation – Year-Over-Year



Source: BLS

saying they would resume "almost all" of their activities. The Piper Sandler survey found that 71% of Americans say they will keep cooking at home after disruptions end. At a minimum, we think it will take some time for sit-down restaurant traffic to look anything like it did before the pandemic unfolded. Forecasts from Open Table suggest that the U.S. could lose up to 25% of its restaurants.

Any structural reduction in restaurant sales has potential product mix implications for dairy processors and converters. For instance, firms that specialize in making or packaging products for food service accounts will need to retool, making different types of cheese or filling different-sized sour cream containers for at-home consumption.

Grocery Store vs. Food Service Demand

There are several unknowns about restaurant traffic and dairy product demand. But, we believe that we lose at least some commercial cheese and butter/butterfat demand in the current environment. Our analysis suggests that pre-pandemic domestic cheese demand was 42% retail, 48% food service, and 10% institutional.

Amidst the pandemic, we believe retail demand for cheese is up 35%, food service demand is down 25%, and institutional demand is down 60%. If accurate, aggregate demand is down 35 million pounds per month.

For butter, we estimate pre-pandemic demand was split 45% for retail, 45% for food service, and 10% institutional. If retail demand is up 60%, food service demand is down 50% and institutional demand is down 60%, butter consumption is falling 2 million pounds per month. That number gets bigger when looking at other high fat items. Government buying has filled the gap. Exports can also absorb supplies. Absent those factors, overall consumption is not necessarily higher.

Higher retail prices may also impact the demand equation. We see evidence that grocery prices are increasing at a rapid rate even as overall food commodity prices did not move much before mid-May. According to the U.S. Bureau of Labor Statistics, "food at home" prices in May increased by 4.8% versus year-prior levels, the biggest annual increase since January 2012 *(Exhibit 2).* This represents a radical reversal in a multi-year trend that saw food-at-home prices flat while food away from home prices increased consistently. Extra labor is adding cost, and consumers may have to pay. Now, wholesale prices for some products are sharply higher with potential to accelerate retail prices for certain items. Higher prices would ostensibly have a negative impact on dairy product demand.

Consumers and Convenience

"Don't underestimate the laziness of the American consumer" is a bedrock belief of Blimling and Associates. Consumers have always demanded convenience. Net of income and government restrictions, will consumers'

demand for convenience take command? Data suggests it is already playing a role. Restaurant sales, while down sharply, have actually fared better than feared. Quick service outlets had some insulation, with various reports showing 60% to 70% of sales already happening through drive through windows before the pandemic. Closing the average fast food dining room hurt but did not cripple sales while pizza sales have outpaced pre-pandemic levels. Domino's, for instance, said that its U.S. same-store sales increased by 21% year-over-year from April 20 through May 17. That's especially good for the dairy industry considering how much cheese pizza carries to the dining table. Because pizza remains relatively inexpensive and convenient, it should continue to outperform in the months ahead.

Recognizing that Americans were already becoming more content to sit at home and have someone deliver dinner, casual dining chains were building up their off-premises capacity before the pandemic. The best performers were moving 15% of sales through delivery and pickup. Now, with many dining rooms closed or operating at reduced capacity, operators have built out and advertised their capabilities. Consumers who were tiring of their own cooking noticed. Black Box Intelligence showed chain restaurant sales down only 40% during the week ending May 10 even with most restaurant dining rooms closed.

The dairy industry faces two issues: Are customers ordering as much food via carryout/delivery? And, how big of a role does dairy play in those dishes, especially with operators trimming offerings? Credible anecdotal reports suggest that consumers are not skimping on takeout, such as ordering appetizers with full meals. Some companies marketing dairy products to restaurant chains report their accounts are keeping dairy – especially cheese – front-and-center. More than one company reports that quick-service chains are interested in using products with cheese as a way to grab share from the fast casual and casual dining segments.

Supply Chains

So much of the price volatility experienced over the past 90 days has more to do with massive supply chain disruptions than major changes to aggregate demand and supply. Perishability played a big role in the upheaval. As demand spun toward retail, food service operators disposed of fresh products that now have to be replenished for reopening. Anecdotal reports suggest some buyers are asking if suppliers can develop and provide extended shelf life alternatives. Movement in that direction would presumably help on the supply side, giving manufacturers and dairy farmers more supply cushion. A world with more extended shelf life manufacturing options might mean less dumping of milk that took place in April.

Business models may also be readjusted from "just in time" inventory practices to having more inventory stored in warehouses. Over the years, major grocers reduced inventory levels from several months to several weeks of supply. When the pandemic-induced shut downs jolted retailers, those inventories sold out in days. Carrying additional inventory requires more working capital and more storage space. If retailers extend inventories, will they pay the price or look to somehow share costs with manufacturers and marketers? A recent report from consultancy A.T. Kearney projects that inventory carrying costs will go up by between 5% and 10% if business keep more inventory on hand. That would create between $22 and $45 billion in total additional cost across U.S. supply chains for all goods. This increased cost carrying supplies may negatively impact the ability of processors and/or grocers to invest in other parts of the business.

Grocers are also cutting down on product selection to enhance operational efficiency. Published reports say that the popular Wegman's supermarket chain, for example, has cut its offerings from about 52,000 products to 30,000 products. Data from Nielsen shows that for the four weeks ending June 13, supermarkets carried nearly 7% fewer dairy items than the year prior. For dairy companies and other food marketers, that could mean fewer line extensions, fewer opportunities to differentiate, fewer chances to test new concepts.

If we continue to see rationalization of SKUs (stock keeping unit codes that identify each unique product), does that hurt smaller, specialty manufacturers and marketers more than national brands? Or, will some "local" players become more popular because proximity to marketplace offers real or perceived advantages for retailer and consumer alike? In the near-term with consumers currently gravitating back to the basics in the midst of the pandemic, headwinds exist for both national and local specialty products.

Conclusion

Longer term, the dairy industry outlook is more uncertain with potential changes in consumer tastes and habits balanced with performance of the U.S. economy and the level of consumers' disposable income. It seems likely that consumer behavior will be different for the next 12 to 18 months than it was pre-pandemic. As that behavior takes root, dairy supply chains will need to adjust from farm to fork.

CoBank's Knowledge Exchange Division welcomes readers' comments and suggestions. Please send them to KEDRESEARCH@cobank.com.