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Consumers Calling the Shots: Desire for Transparency is Reshaping Dairy Supply Chains

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Key Points:

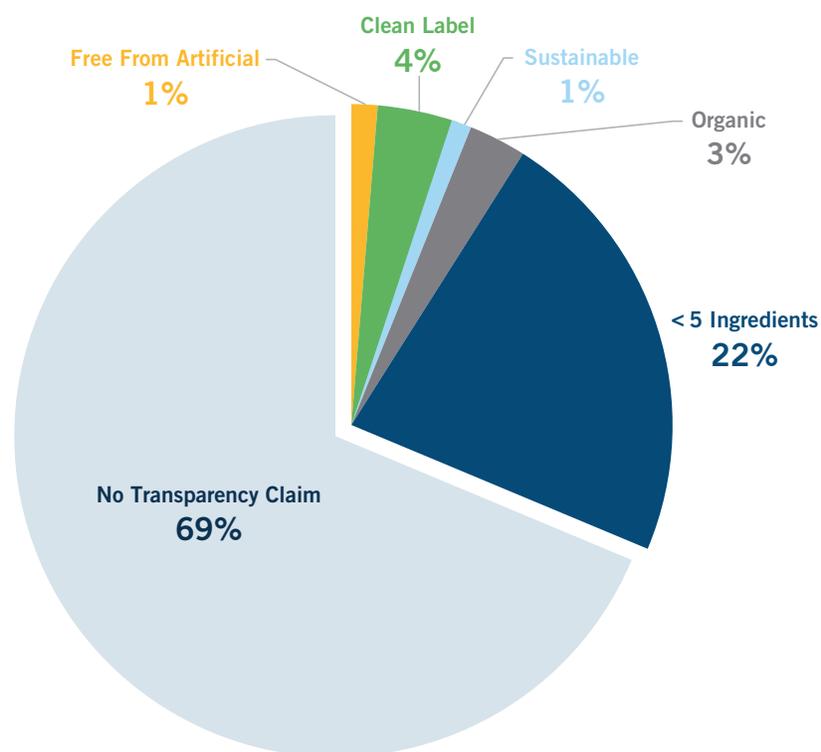
- Dairy consumers are increasingly removed from the farm and are seeking more transparency when it comes to how and where their food was made.
- Demands for transparency take many forms and will continue to grow and evolve with consumers' incomes, diets, and demographics.
- Meeting these evolving demands provides opportunity for some dairy producers, cooperatives, and processors, but will require re-working supply chains into greater segmentation and direct contracts with farms.
- Procuring milk that meets specific emerging demands involves paying premiums to incentivize farms to undertake costly new production practices and involves the risk that consumer preference may shift toward something else in a short period.
- Dairy farmers located near consumer centers can tap into higher value markets by marketing directly to consumers to capitalize on consumer desire to be more connected to the farm.
- Cooperatives are able to tap into existing value by promoting their family-farm owned structure and may see opportunities to segment and manage premiums within their own milk supply.

Introduction

A dwindling share of the U.S. workforce is engaged in agriculture and the population as a whole is becoming further removed from the farm. As the population moves toward urban centers and consumers become more affluent, a disconnect widens between those producing food and those consuming it. Meanwhile, consumers are increasingly interested in understanding where their food comes from and they are forming opinions about farm management practices, ranging from the use of GMO feed to animal welfare and antibiotic use.

To meet these new demands, brands and retailers are seeking certifications and adding labels touting claims like non-GMO and organic. But procuring the milk that meets these standards often requires contracting with farms directly and offering a premium to incentivize farmers to alter their production practices. This is a shift from the traditional model of buying from a larger pool of commoditized milk from cooperatives.

EXHIBIT 1: Transparency Claims Represent 31 Percent of Food Sales



Source: Nielsen

Short of seeking specific information about farming practices, some consumers want to feel a stronger connection to the farms that produce their milk. Some cooperatives have been able to tap into this demand by highlighting their family farm members and cooperative ownership structure, and some farms have been able to benefit from direct marketing to consumers.

While there is no guarantee that any specific product trend (non-GMO, organic, etc.) is here to stay, the underlying desire for transparency and connection from the consumer will have a lasting impact on how milk is produced and procured. Producers, cooperatives and processors adept at marketing, advertising, and supply chain logistics, and who are in close proximity to the consumer, stand to benefit the most from these constantly evolving and growing transparency trends.

Labels and Assurances

At the retail level, consumers are beginning to look for labels indicating farm management practices. In some cases this takes the form of individual products certifying

and labeling themselves as organic, GMO free, rBST-free or other categories. It can also take the form of retailers requiring certain assurances about management practices on the farm like Whole Foods Market's 5-Step animal welfare rating program.

U.S. sales of products with some form of transparency claim on the label represent 31 percent of all sales and growing. (See Exhibit 1.) Even in cases where conventional product sales are declining for a specific category, transparency claims have been able to buck this trend and grow sales within their overall declining category.¹

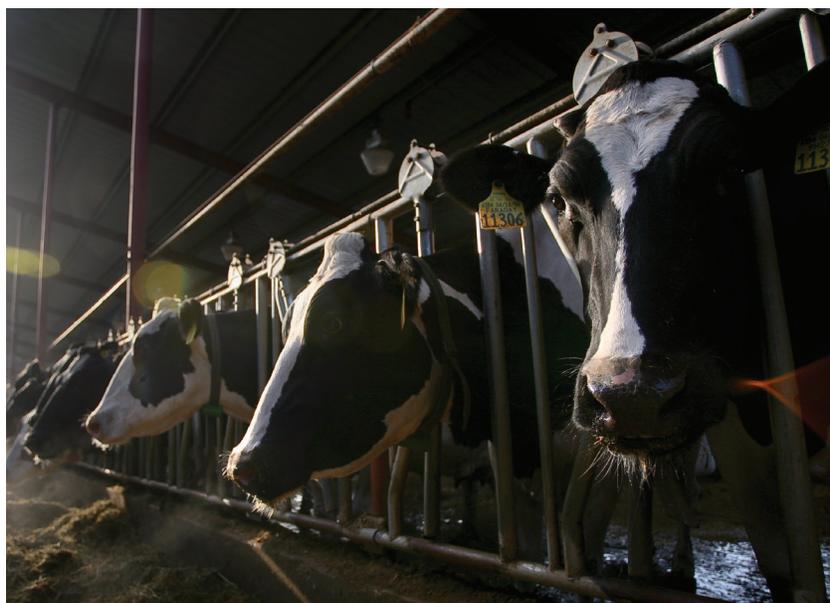
Faced with the risk of individual retailers requiring differing and potentially conflicting farm management practices from their suppliers, National Milk Producers Federation developed

the FARM (Farmers Assuring Responsible Management) program as a proactive step to define and audit responsible farm management as an industry. This prevents individual farms from being susceptible to unique requirements based on the retailer they ultimately supply.

Supply Chain Challenges

As consumers indicate preferences for specific and often costly farm management practices, sourcing milk that fits those preferences presents challenges. One example is organic milk which involves a costly three-year transition period for a conventional farm followed by ongoing higher feed costs. In order to incentivize a producer to go through this transition and accept these higher costs, buyers of organic milk typically pay a higher and less volatile milk price than conventional milk, driven by the higher price organic milk captures at the retail level.

Non-GMO dairy products are another category that is gaining traction. Danone is one of the largest examples, seeking to provide yogurt made from milk from cows



fed non-GMO feed in three of its largest U.S. brands: Dannon, Oikos, and Danimals. This creates a new category and price point for Danone that enables them to meet another customer preference. Due to the higher costs and greater uncertainty surrounding non-GMO feed, some of the contracts for non-GMO milk are set on a cost-plus basis in which the farm is paid a fixed premium over their production cost.

Danone published a pledge in 2016 to move toward natural ingredients, source non-GMO animal feed, label its products with information about GMO content, and work with dairy farm partners to implement sustainable agriculture practices. The company partnered with Validus to provide animal welfare audits and the Non-GMO Project for verification of non-GMO compliance. In a 2016 interview with *Food Navigator*, Michael Neuwirth, senior director of public relations, acknowledged the challenges of transitioning to non-GMO feed and said that in regards to the additional cost, “We believe that these changes will create incremental value for our brands and the company overall, and we believe that continued growth in sales will minimize and ultimately offset any difference. But it is a journey, so we will see.”² By July 2017, the first Dannon products with the

Non-GMO Project Verified seal appeared on store shelves, and through 2018 additional products were continually added with the seal.

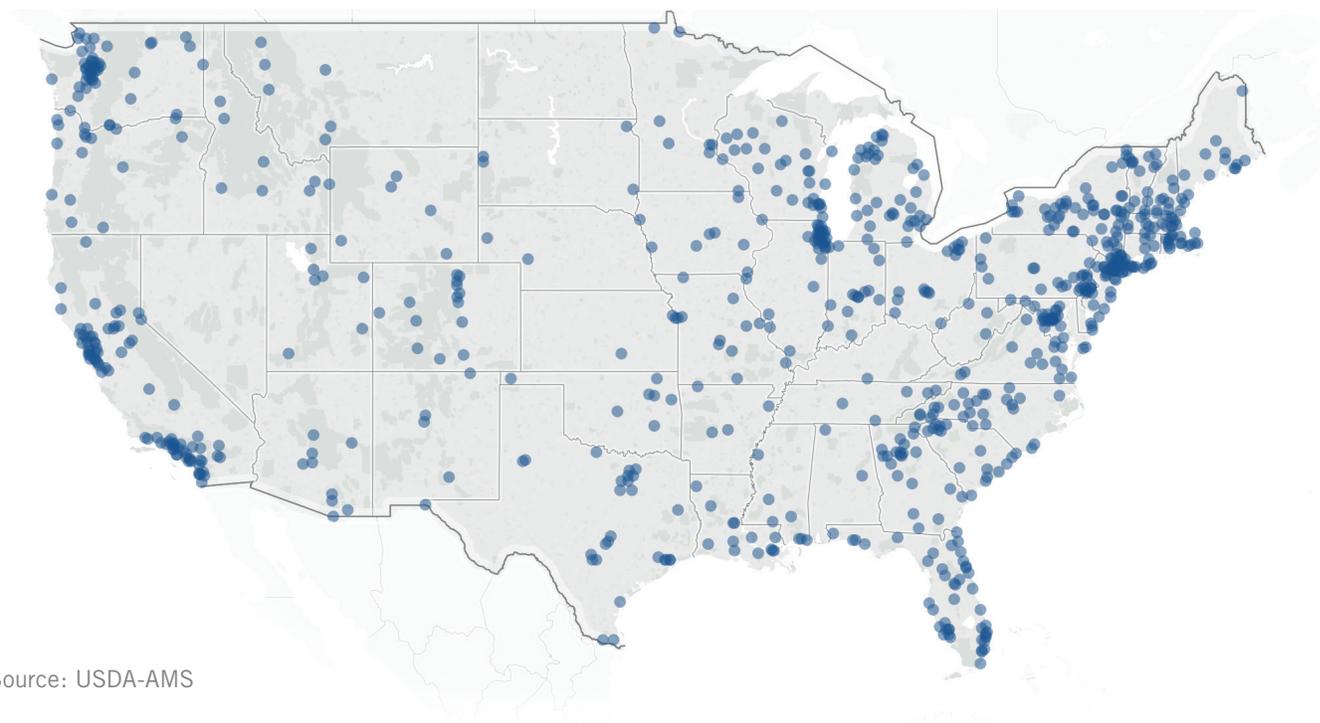
One of the newest and fastest growing milk brands in the U.S. that reflects the trend for transparency at a genetic and micronutrient level is A2 milk. A2 milk, primarily marketed by the a2 Milk Company brand which started in Australia, is milk that contains only the A2 beta-casein protein as opposed to most other milk on the market that contains both A1 and A2 proteins. The a2 brand claims this product is easier to digest than normal milk for people who suffer mild discomfort from dairy, though it will not have an

impact on those who suffer from lactose intolerance or milk allergies. Achieving A2-only production at the farm level is a matter of breeding and genetics.

A2 milk has gained significant market share in Australia where it originated as well as expanding into infant formulas and into China. In the second half of 2018, U.S. distribution increased over 50 percent to more than 9,000 stores. The company as a whole experienced a 59 percent gain in EBITDA over the first four months of its fiscal 2018, but had negative EBITDA in the U.S. due to heavier marketing outlays. The a2 Milk Company plans to spend \$22 million on marketing in fiscal 2019 to take advantage of this opportunity to rapidly build distribution and brand awareness. Following this heavy marketing investment, the company expects positive monthly EBITDA for the U.S. segment within three years. The company cites the consumer trend of seeking greater transparency and more traceable supply chains as among the trends they are best positioned to capitalize on.³

Some farms have already begun transitioning the genetics of their herds in anticipation of continued growth in this market. Depending on existing herd genetics, the transition to A2-only production can be less burdensome and expensive than organic or non-GMO, and the corresponding premium is therefore often less significant.

EXHIBIT 2: Farmers Markets with Sales of Dairy Products



Source: USDA-AMS

With any of these specific new products, the challenge to the supply chain is that there is no longer one commoditized pool of milk to be distributed efficiently into different products and brands. Rather, there are a number of brands and manufacturers which now need to work back to the farm level to contract directly for a segregated milk supply.

As a result, cooperatives may see members seeking out these direct contracts for a premium elsewhere. Many farms, however, will still prefer the stability of cooperative membership in the wake of highly publicized contract cancellations in the recent past between producers and the milk processors who had contracted directly with them for their milk. Some cooperatives may look for opportunities to segment portions of their member milk supply which can meet some of these new criteria and handle premiums internally, adding a logistical benefit to customers.

Direct Connections

Although the definition of “local” varies by person, it fosters a sense of being part of a regional eco-system rather than an industrialized global supply chain and

carries with it a sense of reduced transportation and environmental impact. Often, a consumer’s ability to buy directly from a farm overrides their concerns about many of the other labels they may seek at the grocery store because of the trust and direct connection they feel to the farm.

Many metro areas now have at least one farm or milk bottler engaged in home delivery of milk in glass bottles. While this can command a substantial premium, it connects the consumer to a nostalgic sense of directly supporting local farms. This reflects more than a convenience factor because with home delivery of groceries, conventional milk from the grocery store can be delivered just as easily for less money and likely comes from an equally local farm. The consumer is paying a premium for the feeling of a direct connection to a specific farm.

Another growing direct marketing opportunity for producers or artisan cheesemakers is farmers markets, which are concentrated in urban centers. (See Exhibit 2.) While often commanding a premium price, farmers markets have grown in popularity as an opportunity for consumers to interact directly with farmers, ask questions, build trust

EXHIBIT 3: Direct to Consumer Sales (All Agricultural Commodities)

Marketing Practice	Sales		Number of Operations
	\$ Million	Percent	
On Farm Store	1,322	44	51,422
Farmers Market	711	23	41,156
Other Markets	360	12	39,765
Off Farm Store or Stand	236	8	14,959
CSA	226	7	7,398
Online Marketplaces	172	6	9,460
Total Direct to Consumer	3,027	100	114,801

Source: USDA - NASS

and feel a connection. Total direct to consumer sales of agricultural food products, including farmers markets, have risen from \$0.4 billion in 1992 to \$1.3 billion in 2012 and over \$3 billion in 2015. (See Exhibit 3.)

In 2015, there were 8,750 dairy operations with sales directly to consumers representing nearly 20 percent of the 43,584 licensed dairy farms in the U.S. that year.

Cooperatives often benefit from being able to tap into existing value in their family farm owned structure and story. Cabot Cheese, Tillamook, and Prairie Farms Dairy are three examples of cooperative-owned brands that have benefited from actively promoting their farmer-owner structure and highlighting their farmer members in advertising, promotions, and product labels. This often results in stronger margins at a lower cost than other projects requiring investments in plants and equipment.

Cabot Cheese, the consumer brand owned by dairy cooperative Agri-Mark, capitalized on their proximity to urban population centers in the Northeast region. In 2016, the company bussed 95 farmers to New York City as part of their "Farmers' Gratitude Tour." Farmers spent four days visiting stores, handing out samples, and interacting with the public to highlight the farmer-ownership of the brand. Such events are relatively inexpensive options for generating substantial amounts of grassroots public awareness and coverage in both traditional and social media.

Given the challenging state of the dairy economy currently, more traditional and higher capital investments are difficult for farmer-owned cooperatives. Highlighting the farmer-ownership of these brands provides a lower-capital expenditure that can often work within existing marketing budgets while incrementally adding value to their brand from the underlying consumer demand for a connection to where their food comes from.

Outlook

Today, more than any time before, consumers are calling the shots along dairy supply chains. Their demands are having impacts as far upstream as the input and feed suppliers, to dairy farms in the case of non-GMO feed and herd genetics with A2-protein. This is causing dairy supply chains to re-shape and optimize to find the best way to derive value from these new demands with the least amount of friction between producer and consumer.

Rising urbanization portends a continuation of the current trend of consumers demanding more transparency. Dairy farmers located near consumer centers can tap into higher value markets by marketing directly to consumers that want to be more connected to the farm. Cooperatives, meanwhile, are able to tap into existing value by promoting their family-farm owned structure. While the benefit is difficult to measure precisely, this can strengthen the brand in the eyes of the consumer at minimal additional cost, particularly when larger capital expenditures on plants and equipment may be on hold due to a challenging farm economy.

However, cooperatives will face competition from independent processors and brands looking to pay premiums to contract directly with farmers. In other cases, cooperatives will have opportunities to pay premiums internally for milk that meets certain criteria and can handle the logistics and sales. Paying premiums to incentivize farms to undertake costly new production



practices, though, involves the risk that consumer preference may shift toward something else in a short period.

As these transparency-based demands continue to grow and evolve with consumers' incomes, diets, and demographics, the industry will need to find a balance between taking advantage of opportunity in the domestic market by tapping into these trends and continuing to grow a global presence in dairy commodity markets. ■

References

¹Nielsen. 2017. "The Importance of Transparency in the Fresh Department."

²Watson, Elaine. 2016. "Dannon to transition to non-GMO feed for milk in flagship brands over three years." *Food Navigator USA*, April 26.

³a2 Milk Company. 2018. "2018 Annual Report."

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