



Texture innovation smooths
the way for today's dairy

Today's dairy finds new places at the table – and on-the-go.

The profile of the dairy aisle is evolving. Inherently nutrient-rich dairy products are fueling health-minded consumers' appetites for convenient nourishment – but in distinctly different ways than even a decade before.

Protein-rich dairy is an increasingly popular choice for fitness, weight management and healthy aging. At the same time, as more of the world's population shifts from rural to urbanized areas, a greater percentage of daily calories are consumed from proteins versus carbohydrates.¹

Global demand for dairy is expected to increase by 2.5% annually to 2020.¹

Together, these trends create a significant opportunity for dairy foods and beverages. The outlook for the category is strong, with global demand expected to increase by 2.5% annually to 2020. Companies that can innovate to meet changing consumer expectations – while continuing to satisfy their senses – will see the greatest success.

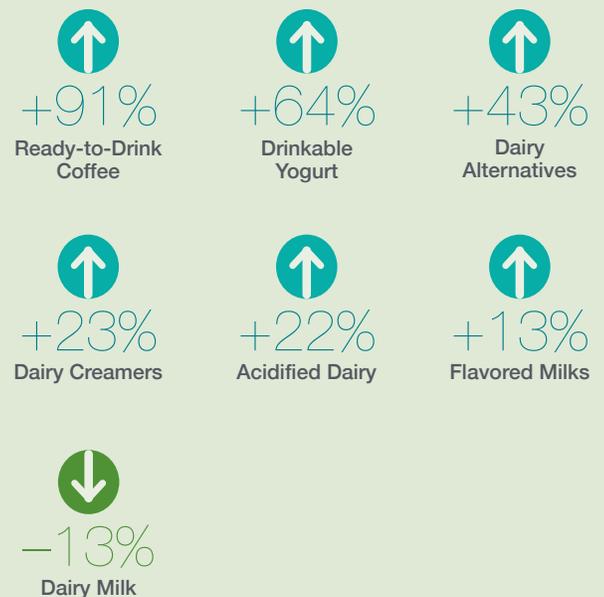
Fewer gallons, more options in dairy beverages

From 2012 to 2017, per-capita consumption of fluid milk beverages decreased by 13%² However, it doesn't mean that consumers are abandoning dairy beverages. Rather, as preferences and lifestyles have shifted, a greater variety of dairy beverages and smaller serving sizes are gaining ground.

During that same time period, drinkable yogurts have seen double-digit growth. Probiotic kefir is growing substantially. Sales of milk-based coffee beverages have skyrocketed. And plant-based dairy alternatives have soared into the triple digits.³

For busy consumers, single-serving dairy beverages can offer a convenient way to consume nutrient-rich ingredients as a snack or light meal on-the-go.

U.S. Dairy Beverage Sales Trends, 2012-2017²



Yogurt carves out new niche markets



While the U.S. has typically lagged behind the rest of the world in yogurt consumption, interest in its perceived health benefits is driving growth and innovation in key segments, including:

Functional Yogurts can offer higher concentrations of nutrients, including vitamins and protein, to fuel fitness, promote digestion and prolong satiety.

Drinkable Yogurts, a traditional favorite in European countries, are becoming increasingly popular among U.S. consumers for their perceived healthfulness and convenience.

Full-Fat Yogurts, such as Greek, Australian and European varieties, are displacing lower-fat varieties in the dairy case as consumers embrace their authenticity, health and satiety benefits.^{4,5}

Kids' Yogurts are a popular choice for lunchboxes and nutritious snacking, with kid-friendly flavors and innovative packaging.

Current trends contribute to dairy's popularity

Today's consumers are paying more attention to the foods they buy: their ingredients, their origins and their journey to store shelves.

The "Clean Label" Trend

Many dairy products are naturally wholesome, making them a popular choice for consumers seeking greater authenticity and simplicity in their food.

To boost the appeal even further for label-conscious consumers, many manufacturers are formulating their products to eliminate artificial (or artificial-sounding) colors, flavors, preservatives, texturizers and GMOs. Some are even taking it to the next level; communicating a level of supply chain transparency that goes all the way back to the farm.

60%

of respondents said that they paid "extremely close/close" attention to clean label in dairy products.⁶

Reduced Sugar

Reducing sugar consumption, whether for weight management or general health, has become a growing concern for consumers worldwide. In fact, a recent study found that 76% of respondents said they were trying to limit or avoid sugars in general.⁷ And when it comes to the dairy products parents buy for their children, sugar comes under even closer scrutiny.

40%

By 2021, dairy alternatives could account for 40% of the total combined market for dairy and dairy-alternative beverages.³

Dairy Alternatives

In the nearly 40 years since soy milk was first introduced in the U.S. and Europe, the offerings for plant-based dairy alternatives have expanded significantly to include a wealth of options from nuts, seeds, legumes, fruits, grains and root vegetables. In fact, industry experts predict that by 2021, the market for dairy alternative beverages could account for 40% of the total combined \$28 billion market for dairy and dairy-alternative beverages.³

A variety of factors are contributing to the category's growth, including dairy sensitivity issues, consumer perception that plant-based products are healthier for them, a desire to avoid hormones or antibiotics, and concerns about animal welfare.

Texture innovation in modern-day dairy

Today's consumers are looking for greater nutrition, functionality and transparency from their dairy products. At the same time, they expect their yogurt to be rich and creamy, and their beverages to have an appealing taste and texture. And while sugar reduction is increasingly important, parents know that sweetness is a key sensory appeal for kids.

To balance these complex (and occasionally contradictory) expectations, it pays to partner with an expert. An experienced formulation partner can streamline product development and speed your path to market. Sometimes you have to use multiple label-friendly ingredients to replace the one less desirable ingredient to get the same texture and stabilization.

And when it comes to ingredient replacement in dairy alternatives, it can be especially challenging because they lack milk fat, which typically can give a lot of texture

and mouthfeel to dairy-based products. Formulators are tasked to make up for that loss in mouthfeel through the use of texturizers or processing methods.

At Cargill, we have a portfolio of texturizing solutions readily available, backed by teams of experienced formulation experts. We also regularly partner with customers to develop custom solutions to meet specific needs.

Texturizing Solutions for Dairy and Dairy Alternatives

- Carrageenan
- Chicory Root Fiber
- Custom Texturizing Systems
- Lecithins
- Maltodextrins
- Pectin
- Starches
- Trehalose

Contact us to learn more: 1-877-SOL-UTNS (765-8867) | www.cargill.com

¹ Global Dairy Sector –Trends and Opportunities, Deloitte Touche Tohmatsu Ltd., accessed at https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/ConsumerBusiness/ie_Dairy_Industry_Trends_and_Opportunities.pdf

² Euromonitor International.

³ Dairy and Dairy Alternative Beverage Trends in the U.S., 4th Edition, Packaged Facts, 2017

⁴ "The State of the Industry: Dairy," Food Business News. December 5, 2016, accessed at http://www.foodbusinessnews.net/articles/news_home/Business_News/2016/12/State_of_the_industry_Dairy.aspx?ID={5CF24771-C7F9-471D-901C-447B57AFE03D}

⁵ "Full-Fat Dairy Sales Rebound as Consumer Perceptions Evolve," Food Industry Dive. June 27, 2016, accessed at <https://www.fooddive.com/news/full-fat-dairy-sales-rebound-as-consumer-perceptions-evolve/421604/>

⁶ Cargill Proprietary Research, August 2017.

⁷ International Food Information Council (IFIC) 2017 Food and Health Survey, accessed at <http://www.foodinsight.org/2017-food-and-health-survey>
Food Business News. "Protein to Remain on-Trend in 2018." January 11, 2018, accessed at http://www.foodbusinessnews.net/articles/news_home/Consumer_Trends/2018/01/Protein_to_remain_on_trend_in.aspx?ID={6A2A8DD5-C077-48BD-8944-5C9A7E44BCD6}

"Market Opportunities in Kids' Food & Beverages." Food Insider Journal, September 6, 2017.

Food Business News. "Keeping Dairy Clean and Authentic." September 19, 2016, accessed at http://www.foodbusinessnews.net/articles/news_home/Business_News/2016/09/Keeping_dairy_clean_and_authen.aspx?ID={11945C33-5278-475D-AC41-AFDB943A2C3D}&page=3

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