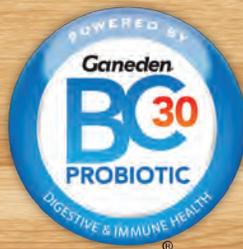


Making Dairy a Slam Dunk





This multi-billion dollar commodity market is begging for innovation. Here, Ganeden fills you in on what you need to know to innovate in the dairy case.

America's taste for dairy products is growing up. A jug of milk, a chunk of cheddar and flavored yogurts are simply no longer enough to satisfy today's hungry consumers. Shopper demand for dairy is high, but they want it jazzed up with added health benefits, innovative delivery forms and unique flavors.

In this report, we'll take a look at what's selling in the dairy case and how the addition of probiotics can turn dairy products into winning SKUs.



Most probiotics cannot survive extreme manufacturing processes, GanedenBC³⁰ can. The probiotic's unique structure safeguards the cell's genetic material from the temperature extremes and pressures involved in the manufacturing process. It easily incorporates into products, overcomes shelf-life challenges and withstands the challenges it's exposed during digestive transit.

Further, research demonstrates that in addition to its digestive benefits, GanedenBC³⁰ promotes immune health and protein absorption. The addition of GanedenBC³⁰ offers the dairy category multiple new possibilities.



Milk

Milk used to be pretty much required on American breakfast tables, but that's not so anymore. The once iconic American beverage has been experiencing slumping sales for the past several decades. In 2011, milk sales hit their lowest level since 1984, according to the US Department of Agriculture. Americans are drinking a whopping 36 percent less milk than in 1970--about 10 less gallons a year.

Why the drop in sales? Milk has stayed largely stagnate. Look at delivery systems, for instance, where innovations have been few and far between--the excitement from a plastic spout can only last so long.



Milk's reputation as healthy has also come under scrutiny, particularly from milk alternatives. Milk made from flax, soy, coconut and hemp to name a few. Perceived health benefits from these 'milks' appeal to today's consumers.

Exciting grab and go drinks with myriad health benefits have been hitting the beverage market while milk quietly trudges along.

The good news for dairy manufacturers is that milk is poised for reinvigoration. The product is incredibly versatile and literally begging for some outside attention.

Consider sales for organic milk. Although organic milk is still less than 5 percent of the milk market, the category continues to gain momentum. In 2011, organic milk sales grew over 15 percent, according to Supermarket News.

Clearly, a new twist on this old standby will get consumers attention. Probiotic milk is just what the market needs with consumer awareness of the friendly bacteria at an all-time high. Acidophilus milks have existed for years but the category has been largely ignored due to poor flavor and consistency and lack of marketing muscle.

By simply adding a probiotic to milk, the product instantly becomes multi-functional. The challenge has been that most probiotics cannot survive the pasteurization process. **GanedenBC³⁰ solves this problem with its unique structure that can withstand pasteurization.**

💡 Product possibilities:

- A grab and go milk-based protein beverage. Research demonstrates that GanedenBC³⁰ promotes protein absorption, great news for today's exploding sports nutrition market.
- Snack-size milk "shots" in a variety of flavors with GanedenBC³⁰ could provide a quick hit of protein, calcium and probiotics—ideal for kids and adults.
- Probiotics added to standard gallon and half-gallon sizes give the benefits of probiotics to cereal, drinks, recipes and more.

\$25 Billion

Ice cream is a \$25 billion market ripe for a healthy makeover!



ICE CREAM

Americans have a hearty appetite for ice cream and eat more of the frozen confection than any other country in the world. This \$25 billion market has strong brand loyalty from customers but history shows shoppers are willing to try new varieties.

Ice cream, like milk, is ripe for a healthy makeover that goes beyond low fat. The success of the frozen yogurt sector speaks to the possibilities for better-for-you options in this category. But adding probiotics to ice cream presents a challenge that has limited its adoption. Probiotic cells have a tendency to burst when frozen and the required overages can be a deal killer. But GanedenBC³⁰ isn't affected by freezing and the organism remains viable even in products with a long shelf life.



Ice cream with new flavors that touch on the superfruits explosion or other healthy botanicals would be a welcome addition. Add in dairy from small farms and eco packaging, and you've got a hot high-margin niche product.

The addition of GanedenBC³⁰ to any ice cream variety adds a marketable health benefit.

💡 Product possibilities:

- Ice cream boosted with probiotics along with vitamin D, prebiotics or calcium.
- Ice cream with digestive benefits and tailored flavors for the quickly growing Hispanic community.
- Lower fat gelato is set to explode onto the marketplace, add probiotics and it's a double-benefit indulgence item.



CHEESE

Although cheese sales slumped during the recession, consumers are once again spending money on the commodity, to the tune of \$18.9 billion in 2011. One key area of growth here is in exports: In 2011, U.S. suppliers shipped a record \$4.82 billion of U.S. dairy products overseas, according to Cheese Market News. Spending patterns demonstrate that shoppers are interested in cheese with healthier options, creative flavors and local and artisanal cheese, according to Mintel.

Mintel's 2012 market report on cheese found that the addition or promotion of probiotics for digestive health increased sales.

In the United States, cheese must be pasteurized unless it is aged longer than two months. This means that most US cheeses don't contain any live bacteria. Although raw milk cheeses may, most die out over time. Hence, another opportunity for functional cheese boosted with Ganeden^{BC30} which could withstand pasteurization thus allowing cheese to be marketed as probiotic.

Cheese makers, should cash in on its versatility and bring the innovative products to market that consumers demand.

Product possibilities:

- Snack-sized probiotic boosted cheese for athletes or kids.
- Pre-grated cheese for probiotic pizza, quesadillas, and salads.



Ganeden^{BC30} *Today's solution for health and innovation in the dairy case*

It's clear that today's consumer wants more options in the dairy case. Moms want healthy, high-protein snacks packaged with kid appeal; athletes and weekend warriors are looking for dairy that meets their needs for low-fat, high-protein foods they can down before and after workouts; seniors seek calcium-rich foods with added nutrients beyond traditional dairy offerings.

And all consumers want dairy foods with the added benefit of healthy digestion.



Ganeden^{BC30} can satisfy these demands and bring exciting innovation to dairy SKUs. The formulation-friendly probiotic can turn any dairy product into a functional food that's targeted to multiple audiences. With rigorous safety and efficacy research behind it, manufacturers can with formulate and market dairy products with confidence.

To learn more about Ganeden Biotech and Ganeden^{BC30}, contact TK.