Rx = A daily dose of dairy

Consumers are checking out the dairy aisle for healthy functional foods offering more than great taste

BY DOUG BURN

Dairy sometimes gets an undeserved bad rap. Despite reminders from nutritionists that dairy products are an essential part of a healthy lifestyle, fad diets often exclude dairy products such as milk, regardless of recent studies indicating that adding dairy to your diet may actually help promote weight loss. It's no wonder that processors are now looking for innovative and creative ways to drive home the message that dairy offers great taste with an extra hit of health benefits.

As consumers are demanding more functionality to their foods, processors are responding with greater choice in everything from yogurt to soy beverages and milk to margarines and cottage cheese. Low- or no-fat offerings have become standards, while organics, specialty flavours or ingredients (such as margarine with heart-healthy olive oil), convenient packaging (for example, portable, single-serve containers, often with added fruit) and vitamin-enriched items are increasingly being added to mainstream product lines.

Photos (yogurt images): Danisco USA, Inc.

GOOD-FOR-YOU FATS

Dairy processors now have more options when it comes to creating foods and beverages with healthy additives like omega-3 and probiotics. Recent nutrition and consumer studies as well as market forecasts suggest a growing need and demand for these ingredients. According to Dr. Bruce Holub, a University of Guelph professor and one of North America's leading nutritional experts in the area of omega-3 EPA/DHA, "North Americans currently consume about 130 mg of EPA/DHA daily." Meanwhile, the American Heart Association recommends 500 to 1,800 mg of EPA/DHA (eicosapentaenoic acid and docosahexaenoic acid) daily to "significantly reduce deaths from heart disease," and, "a total intake of 1,500 to 3,000 grams of ALA (alpha linolenic acids) per day seems beneficial." The Canadian Heart and Stroke Foundation also estimates that 14.4 per cent of Canadians over 19 suffer from high blood pressure, a leading cause of heart disease.

Omega-3 consumption has been rising since the egg graders launched omega-3 eggs a decade ago, and since 2004 as dairy processors launched omega-3 milks, ice creams, cheeses, yogurts, soy beverages and margarines. With few exceptions, the omega-3 fatty acids in these products are vegetable-based ALA, from flax oil added to milk at the dairy or milk produced by cattle fed a diet rich in flax. While the human body needs ALA and can produce DHA and EPA from the ALA found in flax seed and other vegetable oils, the DHA and EPA do not accumulate to any significant extent in the critical tissues of the body. As a result, people seeking to maximize their DHA and EPA levels still need to consume significantly more fatty fish such as sardines and salmon to achieve the recommended daily requirement of 500 mg of DHA and EPA.

However, recent innovations now make it possible to simply dose a product with active cultures at the end of the production line rather than fermenting milk in vats to achieve these properties. And omega-3 fatty acids can now be added to milk in the same way that chocolate and other flavours are currently added, rather than purchasing milk from cows fed a special flax-rich diet. As a result of these technologies, expect to see an expanded range of dairy and non-dairy products that can be advertised as rich in omega-3 fatty acids and/or having active probiotic cultures.

Dartmouth, N.S.-based Ocean Nutrition Canada Limited (ONC) has developed a new marine-based omega-3 ingredient, MEG-3, a patented microencapsulated fish oil powder available in commercial quantities for dairy and other food processors to incorporate into their products. In the last 12 months, ONC has won applications for MEG-3 in breads (in the U.S.), nutritional supplements (in both Canada and the U.S.), yogurt (in the U.S., Japan and the U.K.), fluid milk (in Hong Kong), tortillas (in Canada) and most recently for Farmers Dairy's Farmers Choice Partly Skimmed Milk and Danone's new Cardivia yogurt (both in Canada).

Farmers Co-operative Dairy of Bedford, N.S. co-branded Farmers Choice with MEG-3 for the product's launch last October and, says marketing communications specialist Carolyn McCormack, consumer feedback has been positive. But, she adds, "Due to the fact this product is new to consumers, it's important to educate and inform consumers about the many health benefits attributed to marine-based omega-3."

In January, Boucherville, Que.-based Danone Canada Inc. repackaged its Cardiva line (originally launched last August) and co-branded the yogurt with MEG-3. "This is very significant for us, to have our ingredients co-branded with Danone, a global leader in the food industry," says Ian Lucas,

ONC's executive vice-president of Global Marketing. Lucas credits the omega-3 ingredient's success, in part, to its ease of use. The microencapsulation technology first protects the fish oil from oxidation, then when digestion breaks down the gelatin matrix of the microencapsulation the fish oil becomes absorbable. MEG-3 is a free flowing powder, which can be added to a variety of foods, can withstand the rigour of food processing and can be heated to high temperatures including pasteurization. According to Tom Pugh, director of Marketing with Danone, the partnership has been successful. "We see real value in co-branding our Cardivia yogurt with MEG-3 because it clearly communicates to consumers that they are getting EPA and DHA from fish oil, which has been demonstrated through thousands of studies to support good heart health," he says.

REGULARITY SELLS

Probiotics may aid digestion, boost immunity, lower cholesterol and alleviate atopic diseases, but for many consumers the unique selling proposition seems to be regularity – the prevention of diarrhea and constipation. So it wasn't surprising when The Dannon Company (Danone's U.S. subsidiary) accompanied the announcement of its U.S. launch of Activia (Danone Canada launched Activia in Quebec in May 2004) – touted as "the first and only probiotic yogurt that is clinically proven to help naturally regulate your digestive system in two weeks" – with findings from an extensive survey of regularity problems among American adults. The results were remarkable and help to explain the considerable investments that processors have made in new product developments for probiotic yogurts.

Among the 21,000 adults surveyed, 11 per cent reported irregularity (defined in the survey as constipation lasting two days or more) at least once in the previous three months. Irregularity was reported by 14 per cent of women, nine per cent of men and 14 per cent of men and women over age 45. One in four (26 per cent) adults said they had suffered irregularity five or more times in the most recent month.

In fact, all of the major yogurt makers in Canada, including Yoplait, Danone and Parmalat/Astro, have introduced products with enhanced probiotic features in the last two years. A new U.S. report suggests their timing is excellent. Packaged Facts, a division of MarketResearch.com, notes that U.S. sales of all cultured dairy products have increased by 11 per cent per year since 2000, reaching US$9 billion in 2004.

While overall growth will maintain this pace through 2009, demand will shift significantly to products delivering higher levels of probiotics in more convenient forms. Packaged Facts' forecasted annual growth rates for selected categories include: yogurt, approximately three per cent; cottage cheese, more than four per cent; yogurt drinks and smoothies, greater than 44 per cent; and probiotic shots, greater than 126 per cent. Recent retail sales data also shows that drinkable yogurt demand in Canada has already doubled in the last two years. According to ACNielsen's MarketTrack, sales in this category jumped 53 per cent in the 52 weeks ended Jan. 21 to $55 million.

Dairy processors will soon find it easier to add probiotic strains to a variety of foods and beverages beyond yogurt thanks to a recent innovation made in collaboration with Tetra Pak and Chr. Hansen. Tetra Pak's Direct, Liquid Inoculation system allows processors to add Chr. Hansen's documented probiotic strains directly to finished food products. The system represents a considerable breakthrough because up until now probiotics have been largely limited to fermented dairy products as the heat treatment of beverages kills live bacteria. Now, the healthy bacteria can be added to foods and beverages in a closed, clean system. According to Hans Christian Beider, Marketing manager for Probiotics at Chr. Hansen, new applications for probiotics may include fluid milk, flavoured milk and chilled juices and beverages. And, says Dr. Mirjana Curic-Bawden, the company's senior scientist based in Milwaukee, the first of these second-generation probiotic foods and beverages should be released this year.

GETTING FRESH

Guelph, Ont.-based Organic Meadow, Canada's largest organic dairy co-operative, faces a challenge that other dairy processors must envy. Although its products command a 20- to 30-per-cent premium at retail, the company can barely meet surging demand for its products. That's not surprising, according to ACNielsen statistics, which show that Canadian retail sales of organic milk at National Grocery Banners have

MADE FOR CONVENIENCE

Mississauga, Ont.-based Gay Lea Foods recently won a 2006 people's choice New Product Award in the dairy category for a product it launched and dropped a decade ago. President and CEO Andrew MacGillivray says that while the single-serve Nordica Cottage Cheese sold reasonably well when it was first introduced, consumers soon lost interest. Now, with the widespread consumer acceptance of single-serve yogurt, the timing was right for the "new" line of 113-g containers (plain and with fruit) in multipacks of four. "To our surprise sales were as strong in the September through November period after our launch as we expected to find in January when sales of cottage cheese and other diet foods typically peak," says MacGillivray.

While MacGillivray is pleased to see regular cottage cheese consumers increasing their weekly purchases, "What's more exciting is that the product is drawing in new users to the category," he says. "We are driving category growth." Gay Lea limited distribution of the line to Ontario.

The company took the same market approach with the launch of the new Gay Lea Spreadable Butter Blend, releasing it exclusively in Ontario last year. In choosing the 80:20 blend of butter and canola oil for Gay Lea Spreadable Butter Blend MacGillivray reviewed dairy blends throughout North America. "We were looking for a particular taste profile – a blend that tastes identical to butter," he explains. Consumers, says MacGillivray, "particularly like the convenience of the product and the fact that it stays fresh longer."

Despite the warm consumer reaction, MacGillivray says marketing has been somewhat of a delicate balancing act, since Gay Lea must import the product (made to its specifications) until the multimillion-dollar expansion now underway at its Guelph, Ont. plant allows it to produce the blend in Canada. Due to strict quotas on dairy imports, the company can't afford to have demand overwhelm supply, and so has limited the introduction to a single sku.

doubled in the last two years to $18 million, comprising one per cent of overall fluid milk sales.

Last year Organic Meadow sought to develop the under-serviced Prairie market's six million consumers with the launch of Canada's first UHT organic milk. There are herds of dairy cattle producing organic milk in British Columbia, Ontario and Quebec, but none on the Prairies, so fresh organic milk is a rarity on store shelves from Calgary to Thunder Bay, Ont. To meet the demand, Organic Meadow introduced a 250-mL Tetra Prisma Aseptic carton, with an extended shelf life allowing the company to supply customers west of Sudbury, Ont. from Kerry Group's aseptic facilities in Sainte Claire, Que. However, remarkably strong demand for the product in Quebec and logistical problems in Western Canada have delayed further market development. For now shipments to Prairie retailers are routed through Vancouver.

Organic Meadow general manager Terry Ackerman says the single-serve cartons of plain, strawberry and chocolate organic milk are selling better than expected, generally driven by parents buying them for school lunches. He also notes that they sell much better in Quebec, where consumers are used to buying aseptic milk, than in Ontario where aseptic milk is more unfamiliar. In March Organic Meadow extended its 20 sku fluid milk lineup with the launch of Canada's first Lactose Free Milk.

Despite its growing popularity, the price premium for organic milk is unlikely to decline in the foreseeable future due to shortages of organic feed. Organic feeds cost more to produce as the yield per acre is less than for conventional grains due to the absence of chemical fertilizers, insecticides and herbicides. Central Canadian farmers are increasing production of organic feeds to take advantage of the prices – three times those of conventional feed grains – but it takes four years for a farm to be certified organic. As a result, producers are increasingly supplementing local supplies with imports from U.S. border-states and the Canadian Prairies, translating into higher freight and exchange rates.

Given this and other issues surrounding dairy pricing, it should be interesting to see what ingredients make it into next year's list of dairy must-haves, and whether or not this year's cream of the crop still make an impression with consumers. FC

Retail Sales: Fluid Milk and Dairy Products – 52 weeks ending Jan. 21, 2006

	Channels*	Value Latest 52 Weeks $ Million	Volume Change 52 Weeks Per cent	Value Change 52 Weeks Per cent
Total Milk incl. Specialty	NGB	$1,841.8	0%	+4%
Cream excl. Whipping Cream	NGB	$159.5	+1%	+6%
Total Soy Drinks	NGB	$91.4	+7%	+3%
Total Chocolate Milk	NGB	$98.9	+8%	+11%
Total Organic Milk	NGB	$18.4	+23%	+34%
Total Eggs	+GM+WC	$527.5	-3%	-1%
Total Liquid & Replacement Eggs	+GM+WC	$16.3	+3%	+6%
Total Table Spreads	+GM+WC	$702.7	-4%	+2%
Total Butter	+GM+WC	$388.3	-4%	+4%
Total Margarine	+GM+WC	$312.8	-5%	-1%
Total Cheese – Pre-Packaged	+GM+WC	$1,664.2	+2%	+7%
Total Processed Cheese	+GM+WC	$252.9	+3%	+5%
Total Natural Cheese	+GM+WC	$1,148.3	+1%	+6%
Everyday Natural Cheddar	+GM+WC	$632.5	-1%	+4%
Natural excl. Cheddar	+GM+WC	$515.8	+3%	+9%
Total Yogurt-Type Products	5C	$957.0	+7%	+10%
Total Yogurt in Tubes	5C	$34.6	-3%	-1%
Total Drinkable Yogurt	5C	$55.0	+49%	+53%
Total Ice Cream-Type Products	+GM+WC	$519.8	+2%	+4%
Total Regular Ice Cream	+GM+WC	$433.0	+2%	+4%
Total Frozen Yogurt	+GM+WC	$36.1	+17%	+22%

NGB: National Grocery Banner
+GM+WC: National Total Grocery + General Merchandiser + Warehouse Club
5C: National Total Grocery + Drug + Mass Merchandiser + General Merchandiser + Warehouse Club
Source: ACNielsen MarketTrack, 52 weeks ending Jan. 21, 2006