

# Tetra Pak Dairy Index

A biannual news and information source about the dairy industry

Issue 2 - December 2009

## Focus on Developed Markets

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Ambient LDP consumption rises in developed markets

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### Dear Readers,

As part of our continued commitment to the dairy industry, we are pleased to present the second issue of the Tetra Pak Dairy Index, which is designed to offer the latest facts, figures and trends related to the global dairy industry.

This issue of the Dairy Index focuses on developed markets<sup>1</sup>, which together represent 31% of worldwide liquid dairy consumption and includes countries such as the United States, France, Australia and Japan.

### Total LDP consumption remains steady worldwide

Although the global economic crisis has affected many sectors, it has not affected milk as much as other foods. That's because milk is a healthy, nutritious and affordable food staple, which 44% of the world's population drinks every day. In fact, from 2008 to 2009, total consumption of milk and other liquid dairy products (LDP) has remained steady worldwide — growing by 1.3% — in line with our previous guidance.

### Future growth predicted

Looking ahead, we expect continued growth in global LDP consumption, with a compound annual growth rate (CAGR) of 2.2% from 2009 to 2012. Much of this growth will be led by emerging markets, such as India, China and the Middle East — which have driven the vast majority of growth in the industry over the past four years.

Times are tougher for developed countries because many already have high milk consumption rates. For example, per capita LDP consumption in Ireland — the world's largest LDP consuming nation on a per capita basis — is 160 litres per year, while per capita LDP consumption in China is only 19 litres per year. In this report, we'll be looking at the many ways dairy producers in developed countries are creating new products and new consumption occasions to grow.

### A key growth sector: ambient LDP

One of the key areas of growth worldwide is ambient (long-life) LDP. In fact, consumption of ambient LDP across developed countries is projected to grow by 0.6% to 26.7 billion litres in 2009, despite a dip in overall LDP consumption in these countries during the same time period. This growth in ambient LDP consumption is expected to continue, with a projected CAGR of 0.7% in developed countries from 2009 to 2012.

We hope you find this report useful and would welcome your comments at [dairyindex@tetrapak.com](mailto:dairyindex@tetrapak.com). You can also find the Tetra Pak Dairy Index at [www.tetrapak.com/dairyindex](http://www.tetrapak.com/dairyindex).

Sincerely,

**Dennis Jönsson**  
President and CEO Tetra Pak Group

<sup>1</sup> Developed markets are defined as markets where at least 45% of the population has an annual purchasing power of more than 5,000 USD. This includes 43 countries around the world.

## Consumption of ambient liquid dairy products in developed countries achieves gains as overall LDP consumption dips in 2009

In an economic climate described by many experts as one of the worst recessions since the 1930s, consumption of ambient white milk and other ambient liquid dairy products (LDP) across developed countries is projected to grow 0.6% to 26.7 billion litres in 2009 — up from 26.5 billion litres in 2008. Total ambient and chilled LDP in these countries is expected to dip 1.2% during this period, declining to 84.2 billion litres in 2009 from 85.2 billion litres in 2008, according to new research from Tetra Pak.

Tetra Pak forecasts continued growth for ambient LDP in these developed countries, with a projected Compound Annual Growth Rate (CAGR) of 0.7% from 2009 to 2012. During the same time period, total LDP consumption in these countries is expected to return to more stability, declining by 0.2% CAGR.

### Emerging markets continue to drive growth

Even in today's economic climate, dairy producers in most of the world's emerging markets can count on population growth, rising incomes and the novelty of liquid dairy products as a new addition to people's diets. However, those in developed economies, which represent 32% of global LDP consumption, are faced with already high levels of consumption, many other beverage options and a highly competitive market where established brands compete with in-store labels for consumer attention.

Indeed, emerging markets, such as China, India and Pakistan, which today account for 68% of total LDP consumption, are expected to be the drivers of global LDP growth, with total global consumption forecast to rise at a CAGR of 2.2% from 2009 until 2012. (Please see page 7 for additional information on global LDP consumption.)

### Producers encourage growth in developed countries

Even so, dairy producers in developed countries are not standing still. To maintain consumption levels in the top consuming developed countries — both ambient and chilled — they are introducing new products, packaging and marketing concepts, driven by a number of consumer trends in these countries.

Among developed countries, the top 10 countries by volume are the United Kingdom (UK), the United States (US), Canada, Japan, South Korea and Australia — primarily chilled markets, and France, Germany, Italy and Spain — primarily ambient markets. Together they represent 76% — or 66.7 billion litres — of the LDP volumes (including alternatives) consumed

by developed countries and 23.5% (including dairy alternatives) of worldwide LDP consumption.

And while many consumers are pinching pennies in these difficult times, research shows they are increasingly interested in products that are natural, authentic, healthy and environmentally sound.

### Factors driving ambient LDP growth

The growth in ambient LDP in developed countries can be attributed to many factors such as:

- 1 A general trend toward health and wellness, which is driving demand for enriched products often sold in ambient packages
- 2 Busy stretched lifestyles drive convenient, time-saving solutions
- 3 A desire to enjoy life within the current economic downturn with small treats and new consumption occasions that favour ambient products
- 4 A growing trend toward economisation with consumers deploying money-saving strategies

### White milk remains the biggest LDP sector

Across developed countries, white milk represents the biggest sector within the LDP sector, with a 76% market share. Ambient white milk, with consumption volumes of 46.1 billion litres, holds a 69% share of the white milk category and chilled, with 19.5 billion litres, holds a 29.2% share. (Unprocessed white milk makes up the remaining 1.8% share.) While consumption of chilled white milk is expected to decline at a CAGR of 0.9% from 2009 to 2012, consumption of ambient white milk is expected to reach a CAGR of 0.5% during this period.

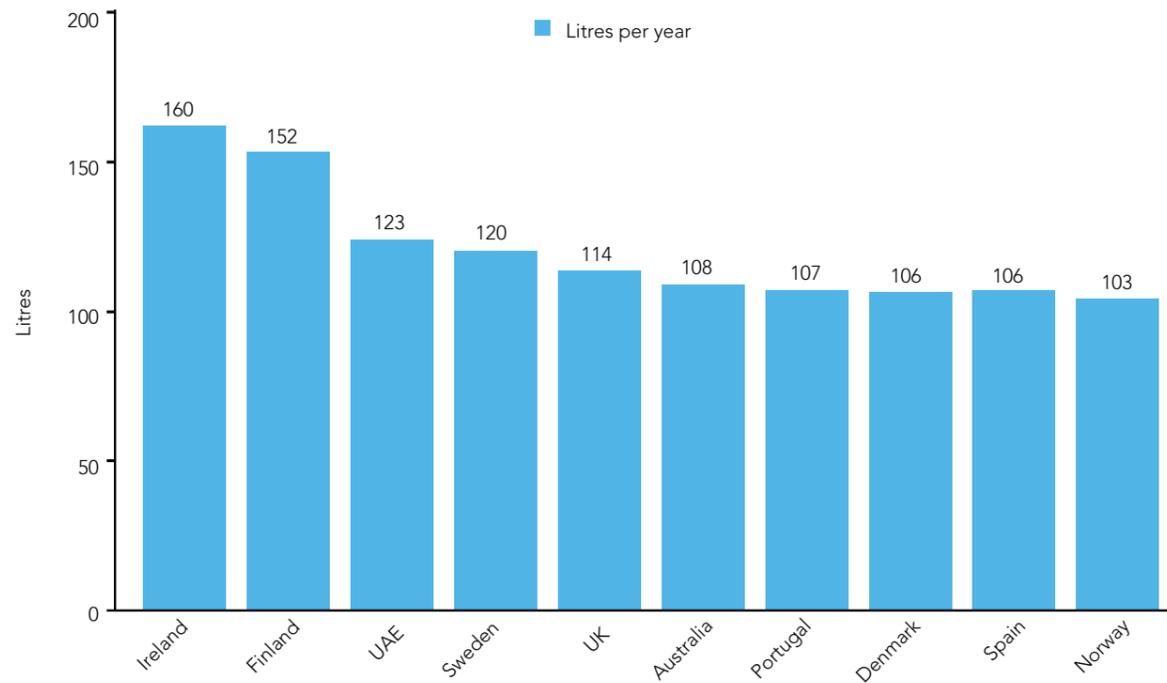
Although white milk consumption remains steady across developed countries, these markets face an additional challenge as they try to drive new growth. In many of these countries, per capita LDP consumption rates are already very high — ranging from 160 litres per capita annually in Ireland to 103 litres per capita in Norway. To drive new growth, dairy producers are looking at new products, such as flavoured milk and soy milk, positioning milk in appealing new ways, catering to consumer trends, such as healthy lifestyles, and promoting the benefits of long-life products.

...State-of-the-industry continues on page 4

**Per capita LDP consumption rates are high in developed countries**

LDP consumption per capita

Top per capita LDP consumption can be different from total LDP consumption. Ireland ranks number one on a per capita consumption basis, but seven of the top ten developed markets in terms of total LDP consumption by volume do not make the top per capita consumption list.



Source: Tetra Pak, 2008

**New products and consumption occasions highlight benefits of ambient products**

As dairy producers in developed countries — particularly chilled markets — look for new ways to grow, they are finding new ways to promote the benefits of long-life products.

For example, in Canada, where chilled dairy products represent 91% of the market, 53% of ambient white milk users buy ambient products for out-of-home use. The convenience of long-life milk makes it particularly attractive for use at cottages and for camping trips where refrigeration is difficult.

In Australia, another traditionally chilled market in which chilled dairy products enjoy 86.3% market share, the leading ambient white milk brand has attracted new consumers with the recent launch of a two-litre ambient package which is positioned as more convenient and relevant for Australian families, who prefer to buy milk in larger sizes.

Meanwhile, in Spain's long-established ambient market, where ambient dairy products have a 92.7% market share, dairy producers have driven growth by establishing a new segment in fortified and functional milk. This includes milk with added calcium for healthy bones and milk with Omega 3 for healthy hearts.

Liquid dairy products represent more than 1/5 of all beverages sold worldwide. Only coffee, hot tea and bottled water are more widely purchased and consumed.

Source: Tetra Pak

**Flavoured milk and soy milk represent new growth opportunities**

After white milk, flavoured milk is the second largest LDP category in developed countries with 6.1% market share or almost 5.4 billion litres. While the flavoured milk market is expected to see a decrease of 0.2% CAGR between 2006 and 2009 — primarily because of recessionary pressures which caused a decrease of 2.3% in volumes consumed between 2008 and 2009 — it is expected to recover and stabilise post recession. In fact, from 2009 to 2012, the flavoured milk market is forecast to see a CAGR of 0.2%

Despite the recent overall dip in total flavoured milk, ambient flavoured milk — which makes up 25.9% of the flavoured milk category — saw volumes increase by 1.7% from 2008 to 2009. Between 2009 and 2012, growth in the ambient flavoured milk category is expected to continue at a CAGR of around 1.5%.

**Novelty, variety and adventurous new tastes**

From chocolate to mango to green tea, flavoured milk gives dairy producers opportunities to attract new consumers all around the world with novelty, variety and adventurous taste experiences.

Not only is flavoured milk creating new milk consumption opportunities, it is also transforming a product, which consumers often see as a basic commodity, into a fun, dynamic and appealing new beverage.

Across the top 10 developed countries, the UK, Spain, Canada and Australia — though starting from low consumption volumes — have all seen growth in flavoured milk consumption over the past 12 months.

**An alternative to cow's milk**

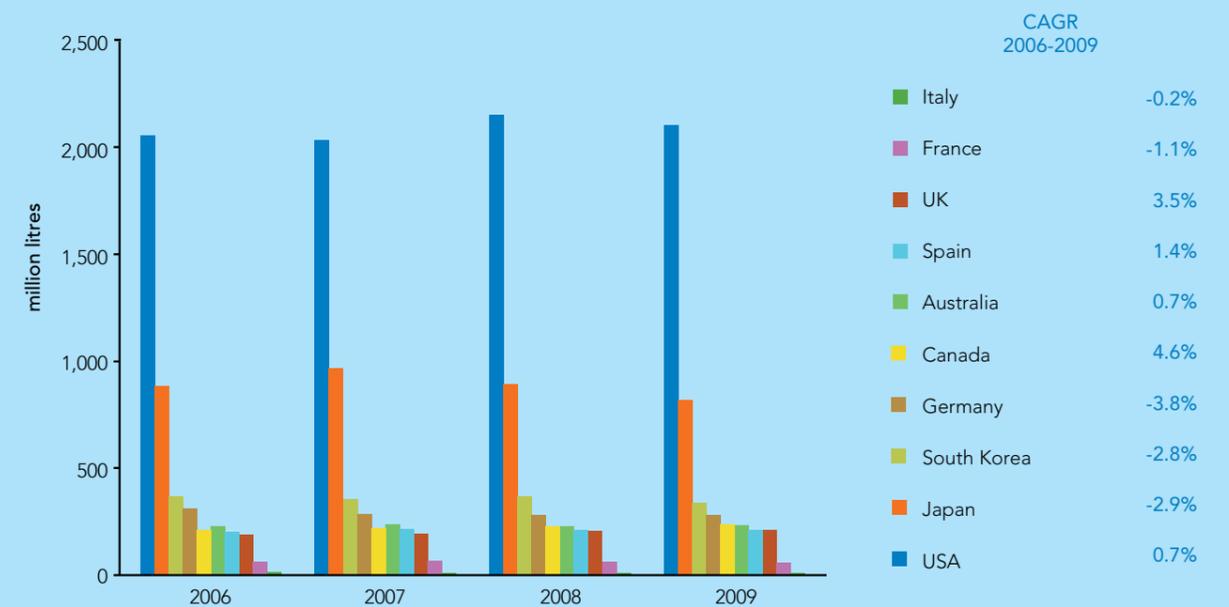
In many developed countries, soy milk is positioned as a healthy natural alternative to cow's milk — the nutritional content of soy milk is roughly the same as partially skimmed milk without the calcium.

Soy milk, which currently makes up 2.1% of the liquid dairy market across developed countries or approximately 1.8 billion litres in 2009, grew at a CAGR of 1.0% from 2006 to 2009.

Like many typically higher priced products in the LDP category, soy milk consumption fell by 4.4% in 2009 compared to 2008, due primarily to recessionary pressures. However, the sector is expected to pick up again post recession.

**Flavoured milk shows steady growth across many developed countries**

Milk consumption in the Top 10 developed countries



Source: Tetra Pak, 2009

**Top 10 total dairy developed countries remain split in preferences for ambient and chilled**

Expected total 2009 dairy consumption: 66.7 billion litres\*



Source: Tetra Pak, 2009

\*Includes dairy alternatives such as rice, nut, grain and seed-based milks

**Developed countries remain split in preference for chilled and long-life milk**

As the dairy markets in developed countries have matured, they have evolved into two distinctive groups, those with chilled distribution chains and those with ambient distribution chains.

In "chilled markets" such as Australia, Canada, Japan, the UK and the US, milk is distributed using the chilled logistics chain in which refrigeration is required along every step of the value chain. The shelf life of chilled milk typically ranges from 5-10 days, depending on local market conditions. By contrast, in "ambient" or long-life markets like France, Germany and Italy, milk is distributed without any need for refrigeration or preservatives and typically has a shelf life of 4-9 months, depending on local market conditions.

**Decentralisation key to chilled market development**

The reasons each country has developed as a chilled or ambient market differ by country. However, around the world, chilled markets tend to share one important characteristic — dairy farming and production is decentralised so the distribution chain can quickly and cost-effectively transport milk from farms to dairy producers, retailers and, ultimately, to consumers before it begins to deteriorate.

When Ultra High Temperature (UHT) technology first became available in the early 1960s — making ambient milk a reality — the countries that were most interested were countries like France, Italy

and Spain, where raw milk production was fairly centralised and had to be transported to consumers who were located far away from production centres.

In these markets, it was difficult and more expensive to transport milk through a chilled distribution chain, so UHT milk was seen as a practical alternative. Many of these markets had not yet invested in the big chilled distribution chains that were already common in countries like the US and Australia, so they could make the switch to ambient fairly easily. In addition, ambient milk supported the creation of big national dairy brands, which had the capability of providing a wide variety of products to cater to different consumer needs.

**Convenience, social change and new distribution models drive ambient growth**

In some cases, the growth of ambient milk also came about as a result of social change and changes in the distribution model. For example, in Spain, which was originally a chilled market, ambient milk was a convenient choice at a time when more and more women were joining the workforce and had less time to shop regularly.

In France, the rise of hypermarkets as the main distribution channel for purchasing milk meant that shopping patterns changed. French consumers no longer shopped regularly, but, like Spanish consumers, began shopping only several times a month for staples such as milk. With each trip to the hypermarket, they bought large quantities, which were intended to last for longer periods of time. Ambient milk fits this need perfectly.

**The global picture: emerging countries continue to drive growth**

**Total LDP consumption expected to rise at a 2.2% CAGR from 2009 to 2012**

Emerging countries — including India, Pakistan, the Middle East and China — which today account for 68% of total LDP consumption, are expected to continue to drive total LDP consumption worldwide over the next three years. From 2009 to 2012, total LDP consumption is forecast to rise at a 2.2% CAGR globally — to 281 billion litres — in line with previous estimates from Tetra Pak in the June 2009 Tetra Pak Dairy Index.

In fact, emerging countries have driven the vast majority of growth in the global dairy industry — 95.8% from 2005 to 2008 — with growth based primarily on increasing populations and rising household incomes which, in turn, have influenced consumption habits.

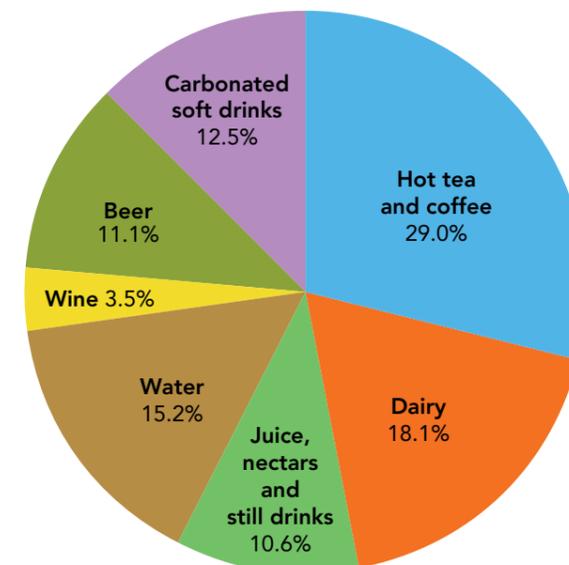
From 2008 to 2009, worldwide consumption of white milk and other LDP (excluding soy and dairy alternatives) has grown by 1.3%, in line with previous guidance from Tetra Pak's June 2009 Dairy Index.

By the end of 2009, worldwide consumption of LDP is expected to reach around 262.8 billion litres — up from 259.4 billion litres in 2008. This figure increases to 284.3 billion litres when including soy milk and other dairy alternatives such as rice, nut and seed-based milks.



**Liquid dairy products represent more than one-fifth of all beverages sold worldwide**

All liquid food - 1.574 billion litres - 2009



Source: Tetra Pak, 2009

**Economy impacts value-added products, but future growth predicted**

While global LDP consumption has grown by 1.3% during the economic downturn, growth of value-added, higher-priced products, such as fortified and functional milk, has dipped slightly in some countries over the past six months compared to Tetra Pak's June 2009 forecasts. For example, in Spain, where fortified milk accounts for 20% of total milk consumption, the recession has encouraged some consumers to return to regular white milk — generating an increase of 5% in consumption of regular white milk. However, this is expected to be temporary.

The fast-growing segments of the liquid dairy category, such as flavoured milk and soy milk, are expected to continue to grow globally at CAGRs of 3.3% and 3.1% respectively from 2009 to 2012.

Michael Zacka, vice president, Marketing and Product Management, Tetra Pak: "While the global economic downturn has certainly influenced consumption of milk and other liquid dairy products, particularly in developed countries, these products have not seen the same decline as other foods. This is because milk is widely considered a healthy, nutritious and affordable food staple that plays a central role in the daily routines and dietary traditions of millions of people all over the world. For this reason, we expect to see global consumption of milk and other liquid dairy products continue to rise at a steady rate until 2012."

# Four consumer trends influence purchasing behaviour in developed countries

In developed countries such as Japan, Australia, North America and Western Europe, four current global trends are having particular influence in shaping the dairy industry. In these markets, concern about health and well-being, stretched lives, enjoying life and economisation is influencing the way consumers purchase and drink milk and other LDP, according to Tetra Pak and other research sources.

## 1. Health and well-being

Health and fitness is the number 8 personal value among consumers around the world, according to recent research from GfK Roper Consulting, which surveyed 30,000 consumers in 25 countries. From being overweight to concerns around cancer and heart disease, many of consumers' health concerns are directly related to food and healthy eating.

In fact, consumers see healthy eating as one of the most important things they can do to improve their personal health and well-being.

Milk and other LDP, which mothers traditionally give to their children from a young age and are widely considered healthy and nutritious, are well positioned to take advantage of this trend.

For example, fortified and functional LDP, such as products with added calcium or Omega 3 for healthy hearts, are on the rise in many countries around the world. (Please see Spanish market spotlight on page 12 of this report for one example of this trend.)

In addition, some segments of this market are still showing steady growth, despite the economic downturn. For example, fortified and functional flavoured milk has grown worldwide at a CAGR of 6.5% from 2006 to 2009 and is expected to continue growing at a CAGR of 5.5% from 2009 to 2012.

## 2. Stretched lives

Consumers worldwide — particularly those in developed countries — are attempting to juggle busy lives with work, home and social commitments. This is driving demand for food and beverage solutions to fit an increasingly busy, mobile and flexible lifestyle where there is little time for frequent shopping. As more women joined the workforce, they shop less frequently and in larger quantities. Long-life products can be stored without refrigeration for 4-9 months, depending on local market conditions, enabling consumers to buy greater quantities and shop less frequently.

Said Michael Zacka, vice president, Marketing and Product Management, Tetra Pak: "Stretched lives are contributing to the growth of ambient products in markets like North America, which traditionally favour chilled products. That's because consumers in these markets are looking for convenient, time-saving solutions, such as ambient ready-to-drink milk, which can help them better manage their busy lifestyles."

An example of how busy lifestyles are driving an increase in ambient LDP can be found in the US, where parents are starting to buy ambient baby and toddler milk which they can store at home, avoiding frequent trips to the supermarket. With a forecast CAGR of 1% for ambient baby and toddler milk between 2009 and 2012 in the US, this category represents almost 50% of the 1.7% forecast CAGR of the total ambient LDP category in the US during this period.

## 3. Enjoying life

Although living a full and happy life is becoming more and more important all around the world, consumers are adapting their desire to enjoy life to the current economic situation. While enjoying life and enjoying food still go hand-in-hand, consumers in developed countries are cooking and eating more often at home and finding new and sometimes more economical consumption occasions — such as picnics, and camping trips.

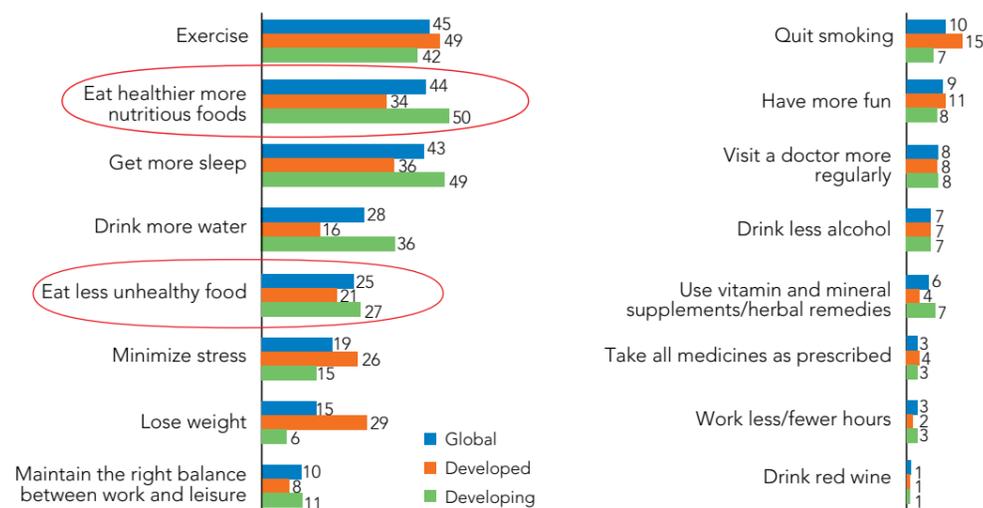
Even so, the desire for a little treat now and then is firmly entrenched in modern life as a reward for working hard — particularly when it comes to food and beverages.

This desire for small indulgences and special treats is driving consumption of flavoured milk — among both adults and children — in developed countries. For example, in Germany, children drink flavoured milk at school, while in the US, flavoured milk is a popular accompaniment to adult breakfasts and children's lunches.

Dairy producers are also increasingly positioning flavoured milk as an on-the-go, healthier alternative to carbonated drinks, particularly among schoolchildren.

From 2009 to 2012, the total flavoured milk market in developed countries is forecast to reach a CAGR of 0.2%. During this same time period, the ambient flavoured milk market is expected to rise at a CAGR of 1.5%.

**Healthy eating is key to improving personal health and well-being**  
% who mention things they can do to most improve personal health and well-being



Source: GfK Roper Reports Worldwide 2009, based on a survey of 30,000 consumers in 25 countries.

## Food enjoyment is part of a full and happy life

Consumers try to eat healthy and economically, but also indulge in small treats



**56%**  
Agree that they really enjoy eating and drinking — even if they eat and drink too much on some occasions

**51%**  
Agree that while watching television or reading, they enjoy having something to nibble on or sip

**44%**  
Agree that when it comes to food they're always on the lookout for something new

Source: GfK Roper Reports Worldwide 2008, survey of 30,000 people in 25 countries

## 4. Economisation

As part of a growing trend, which has strengthened due to the global economic downturn, consumers worldwide are adopting new purchasing habits.

While global consumers are generally not cutting back on their milk consumption, they are “trading down” by routinely turning to less expensive options. This includes exploring channels such as discount stores, buying more retail brands and exploiting new money-saving strategies.

### Consumers employ money-saving strategies

% age 15+ who have done activity in the past 12 months



Source: GfK Roper Reports Worldwide 2009, survey of 30,000 consumers in 25 countries

### Money-saving strategies

44% of global consumers and 57% of consumers in developed countries say they now shop more carefully for everyday necessities — employing a number of money-saving strategies from using coupons to taking advantage of volume discounts to purchasing items second-hand.

### Discount retailers

Many consumers in developed countries are also turning to discount retailers. In fact, discounters across the top 10 LDP developed countries saw their collective market share increase at a CAGR of 6.8% between 2006 and 2009, according to Tetra Pak data.

To maintain the low distribution costs and gain the efficiencies that enable them to pass on lower costs to consumers, most European discount stores focus on ambient products while limiting their chilled offer.

For example, discounters in Germany were an essential factor in the country's development as an ambient market in the 1970s and 1980s when price-conscious consumers flocked to new discount stores. Today, discounters represent 44.9% of Germany's total drinking milk products sales — more than double that of any other advanced countries — and ambient dairy products enjoy a 64.7% market share.

### Ambient products

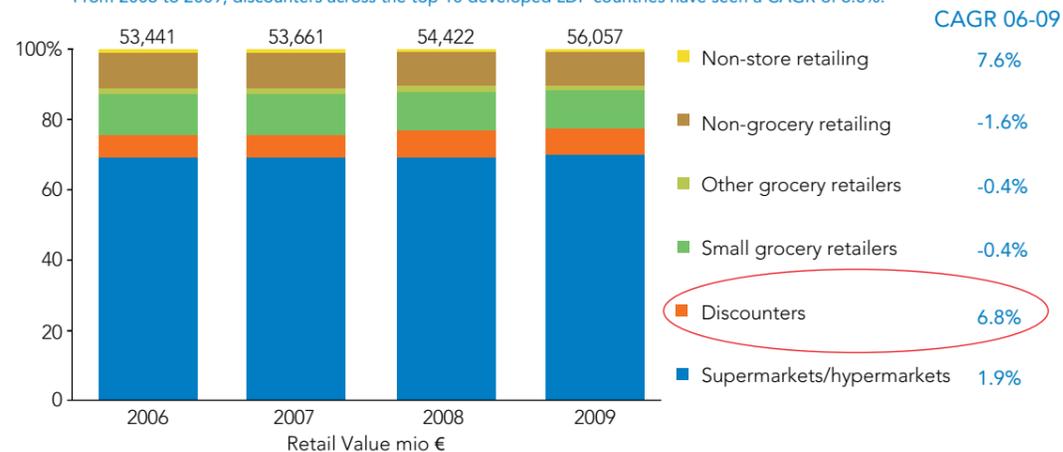
The economisation trend is also influencing the growth of ambient products in many developed countries. For example, in some countries, such as Germany, ambient products are sold at a more economical price than chilled products — encouraging consumer purchasing. In other countries, such as France, ambient products are offered as part of special retailer promotions, where consumers can buy in large quantities at a more favourable price. Since ambient products can typically be stored for at least four months without requiring refrigeration, these promotions are very appealing to consumers.

Michael Zacka, vice president, Marketing and Product Management, Tetra Pak, said: “Consumer purchasing behaviour for liquid dairy products is rooted in the role that those products play in their lives. For example, in advanced markets like the US, Western Europe and Australia, consumers buy milk as a force of habit. However, during the economic downturn, some consumers used to chilled milk have looked at other choices, for example, opting to try ambient products. We can expect to see some of this behaviour continue post-recession as consumers grow accustomed to new shopping habits.”

### Discounters in the top 10 developed LDP countries enjoy gains

Percentage of sales by channel type: Milk drinks\*

From 2006 to 2009, discounters across the top 10 developed LDP countries have seen a CAGR of 6.8%.



Source: Euromonitor 2009

\*includes fresh/pasteurised milk, long-life/UHT milk, goat milk, flavoured milk and flavoured powder milk drinks, soy beverages and powdered milk.

## Increasing importance of environmental performance

Environmental pollution is the number 4 concern around the world, after inflation and high prices, crime and lawlessness, and recession and employment, according to recent research from GfK Roper Consulting, which surveyed 30,000 consumers in 25 countries. While environmental awareness and concern is not yet making a large impact on consumer purchasing behaviour, it is an area to watch moving forward, particularly as retailers and the dairy industry launch new environmental initiatives.

### Retailers encourage environmental action

Retailers in many developed countries are stepping up efforts to persuade consumers to help protect the environment. For example, Tesco, a leading international grocery retailer based in the UK, has started to roll-out carbon footprint labelling on products in the dairy category. And in the US, discount retailer Wal-Mart is one of the key partners in developing an initiative to support dairy sustainability.

# 42% of decision makers and influencers think that environmental and energy factors have the most influence on the future use of beverage packaging

Source: GlobeScan Environmental Survey, 2009

### Environmental aspects of packaging remain a high priority

According to a Tetra Pak-commissioned study by GlobeScan, a market research firm specialising in sustainability, consumers continue to be interested in the environmental aspects of packaging, the ability to recycle and to reduce the overall quantity of packaging material - even during an economic downturn. In fact according to GlobeScan, decision makers and influencers expect environmental factors to play a key role in influencing the future use of packaging.

### Global dairy industry signals commitment to address climate change

For the first time, a wide range of dairy farming and industry organisations, national and regional dairy associations and companies from throughout the dairy supply chain, have come together in a united effort to address the climate change issue. During the World Dairy Summit in Berlin in September 2009, the global dairy industry signed the Global Dairy Agenda for Action on Climate Change, a declaration to take action to address this issue.

The declaration identifies the need to pool dairy industry knowledge and resources in order to achieve the necessary changes in technology and practices to further reduce emissions. As a first step in sharing best practices, promoting environmentally focused initiatives and improving the overall performance of the dairy sector, the International Dairy Federation and its partners have launched a dedicated website: [www.dairysustainabilityinitiative.org](http://www.dairysustainabilityinitiative.org)

### US dairy industry takes action to improve environmental practices

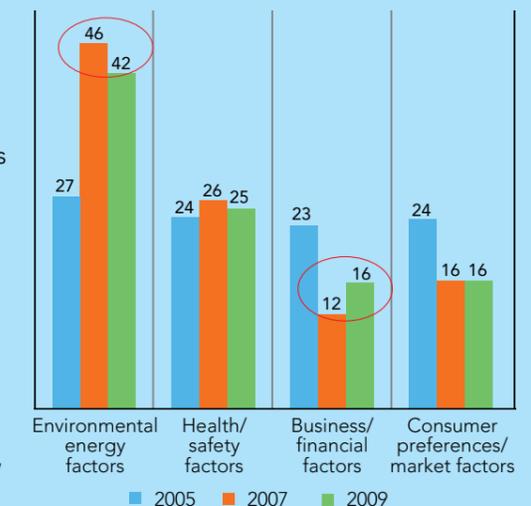
In the US, approximately 17% of the adult population — or 44 million people — are characterised as consumers who follow lifestyles of health and sustainability (LOHAS), according to the Natural Marketing Institute. LOHAS consumers are strong environmental advocates who conserve, recycle, purchase eco-friendly products and are politically active on environmental issues.

In a market where both consumers and retailers are increasingly demanding products that are produced, packaged and distributed in a sustainable way, the US dairy industry has taken the reins to improve environmental practices in the American food industry.

In 2009, the US dairy industry committed to reduce its global greenhouse gas emissions by 25% by 2020. Every segment of the fluid milk supply chain — from farm to table — has pledged to accelerate innovation and action to reduce the industry's carbon footprint.

So far, 12 projects are underway, which will reduce the industry's carbon footprint by 12%, and, when implemented, will generate an estimated USD 238 million in business value. Specific actions include conducting the first-ever comprehensive life cycle assessment of greenhouse gas emissions across the US fluid milk value chain. They also include projects ranging from new ways to produce feed for dairy cows to new methods to process, package and distribute milk.

### Environmental factors to have the most influence on the future use of beverage packaging, according to decision makers and influencers



Source: GlobeScan Environmental Survey 2009. Countries surveyed: Brazil, China, France, Germany, the United States and EU/Brussels.

## SPAIN

# Innovation is key to growth in a mature market

While the global recession has hit Spain hard, milk continues to be a dietary staple and volumes of milk consumed have remained stable over the past year. With an extremely well established ambient market share, dairy brands are now focusing on innovation and growing new sectors of the dairy market.

Sales of fortified milk — including milk with added calcium, milk with Omega 3, milk designed for infants and lactose-free milk — have proved popular in Spain, with fortified milk now accounting for 20% of total milk consumption.

However, since the price of value-added milk is higher than that of regular white milk, recessionary pressures are expected to impact sales of value-added milk in the short term. Over the past year, the trend shows that consumers are returning to regular white milk at home, sales of which have increased by 5%; though, this is trend is expected to be temporary. Post recession, the fortified milk market is forecast to return to pre-recession levels, growing by around 3% between 2011 and 2012.

However, even during the recession, some types of fortified milk have continued to grow market share. For example, between July 2008 and July 2009, volumes of infant milk and lactose-free milk, while very low, grew by 36% to 34 million litres.

### Why is fortified milk so popular?

Since the 1990s, both the Spanish government and regional health officials have focused on improving health by promoting programmes such as NAOS (a national initiative designed to improve public health by educating the public on the benefits of healthy nutrition, physical activity and obesity prevention). This has helped raise awareness about health and healthy lifestyles and nutrition. Some Spanish dairies have also invested heavily in developing new added value ranges and have teamed up with prestigious universities and institutions to demonstrate the value of fortified milk.



### The development of ambient milk

The growth in ambient market share in Spain, which today stands at 98%, accelerated in the 1970s and 1980s as a result of social change, modifications in the distribution model and the concentration of dairy producers into fewer geographical areas.

With more women going out to work, many had less time to shop for groceries, including chilled milk, which in Spain has a typical shelf life of three days, compared to ambient milk's three months or more. At the same time that women were entering the workforce in larger numbers, supermarkets and hypermarkets began to appear, squeezing out small, local grocery stores and prompting people to shop less frequently and in greater quantities. These developments favoured the growth of ambient milk packages, which could be easily stored in large quantities and which did not require refrigeration until they were opened.

A geographical shift was occurring too. By 1970, 80% of Spain's milk was produced in the north while 60% was consumed in the south. This new geographical split meant that efficient transportation of milk became more important than ever and ambient milk, with its extended shelf life, was far easier and less costly to transport.

## US & CANADA

# North American dairy producers create thirst for ambient products

Consumers in the United States and Canada have traditionally preferred their milk chilled, white and available in either gallon or two-litre packaging. For example, in the US, the world's third largest consumer of liquid dairy products after India and China, chilled products represent 89.2% of all liquid dairy products consumed, including dairy alternatives, or nearly 23.9 billion litres annually. Nearly 77% of US consumers prefer plain white milk over other liquid dairy products, and 67% of these consumers buy their whole white milk in gallon sizes.

In Canada, chilled products comprise 91% of all liquid dairy products consumed, including dairy alternatives — more than any other advanced market by percentage. Canadian consumers enjoy nearly 3.2 billion litres of chilled liquid dairy products annually and, like the US, white milk is the beverage of choice, representing 76.4% of all liquid dairy products consumed.

### Producers innovate with niche products, consumption occasions

At the same time, as part of their efforts to diversify beyond white milk, increase operational efficiencies beyond the chilled logistics chain and position milk against carbonated beverages and juices, dairy producers in the US and Canada are looking at new milk consumption occasions and special niche products to help drive growth.

For example, the Canadian cream market, which is growing at a rate of 5-6% annually, offers a perfect fit for ambient products. Currently 95% of all cream is sold in either one-litre or 500 ml gable-top chilled packages, which cannot provide a very long shelf life. Ambient cream, which doesn't require refrigeration and typically has as shelf life of more than six months before opening, can be sold in the coffee aisle of the supermarket at an average retail price of more than CAD 3.00 per litre. This not only provides additional value for the consumer, it also offers a new, profitable niche for dairy producers.

Producers in the US and Canada are also looking at new consumption opportunities that go beyond breakfast — the key milk consumption occasion globally — and that take milk outside the home. For example, one segment that is currently under-developed in both countries is the "school lunch box" and "school snack" market for children. Producers are increasingly trialing 250 ml and 500 ml ambient packages of both white milk and flavoured milk to cater to this market.



Tetra Pak in Canada developed a successful summer 2008 advertising campaign aimed at the "weekend cottage" market with Parmalat as the featured brand. After a comprehensive regional advertising campaign, sales of ambient white milk in the region increased by 72% compared to the same period in 2007.

In addition, Canadian producers have found new ways to appeal to the vacation and camping markets by positioning ambient products as ideal for trips and weekends at the cottage.

### Ambient growth forecast to continue

As a result of all these initiatives, the ambient products are gaining ground across both countries — with a projected CAGR of 1.8% in the US and a projected CAGR of 0.4% in Canada from 2006 to 2009. Tetra Pak forecasts that these ambient products will continue to grow at a CAGR of 2.2% in the US and a CAGR of 1.2% in Canada from 2009 to 2012.

## About Tetra Pak

Tetra Pak is the world's leading food processing and packaging solutions company. Working closely with our customers and suppliers, we provide safe, innovative and environmentally sound products that each day meet the needs of hundreds of millions of people around the world. With over 20,000 employees and operations in more than 150 countries, we believe in responsible industry leadership and a sustainable approach to business. Our motto, "PROTECTS WHAT'S GOOD,"™ reflects our vision to make food safe and available, everywhere.

More information about Tetra Pak is available at [www.tetrapak.com](http://www.tetrapak.com)

