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Report Highlights:
FAS Beijing forecasts China's cow milk production in 2012 will rise five percent to over 32.2 million metric tons from the previous year. China's nonfat dry milk (NFD) production in 2012 is forecast to recover two percent to 57,000 MT. Meanwhile, China's whole milk powder (WMP) production in 2012 is forecast to rise nine percent to 1.2 MMT. WMP production will fully recover from the impact of the nation-wide melamine crisis in 2008. Higher domestic demand for dairy products will drive China's imports in 2012. Post forecasts China's fluid milk imports will rise 21 percent to 40,000 MT, NFD imports will rise 16 percent to 140,000 MT, and WMP imports will rise 14 percent to 450,000 MT from 2011. China's fluid milk and WMP exports in 2012 are estimated at 27,000 MT and 11,000 MT, up 12 percent and 22 percent respectively.

Executive Summary:

FAS Beijing (Post) forecasts China's total milk production will continue modest growth in marketing year 2012 (January-December), up five percent to 33.4 million metric tons (MMT), while cow milk production is forecast to increase at the same pace, to 32.2 MMT, fueled by domestic demand.

Local producers are slowly rebuilding the Chinese dairy herd following a nation-wide melamine crisis in 2008 when 15 percent of China's dairy cows were taken out of production due to weak demand after the food safety scare. However, recovery is somewhat slow and raw milk output in 2011 and 2012 will likely remain below pre-melamine levels of 35 MMT in 2008.

China's nonfat dry (NFD) milk production in 2012 is forecast to recover two percent to 57,000 MT following another two percent recovery the previous year, the result of greater local demand for infant and functional formula. Meanwhile, China's whole milk powder (WMP) production in 2012 will continue to rise nine percent to 1.2 MMT, based on a seven percent increase the previous year. It took China more than three years to fully recover WMP production from the impact of melamine crisis in 2008.

Higher domestic demand for dairy products, combined with lower tariffs on dairy products from New Zealand (China's largest supplier), policy changes that reduced the value-added tax (VAT) on pasteurized and UHT milk from 17 percent to 13 percent in July 2011, and a stronger RMB against the U.S. dollar will drive China's imports in 2012. Fluid milk imports are forecast up 21 percent to 40,000 MT from the previous year. NFD imports are forecast at 140,000 MT, a 16 percent year-on-year increase. In 2012, Post forecasts the United States will be the second largest supplier to China, accounting for 16 percent of total imports. China's WMP imports in 2012 are forecast to grow 14 percent to 450,000 MT from the previous year due to strong demand for large-size pack materials for further processing or food processing. Whey is China's second largest imported dairy product and imports estimated at about 288,000 MT, valued at $443 million in 2011. Higher sales are expected in 2012 driven by strong demand for infant formula, food processing, and feed production.

Post forecasts China's fluid milk exports in 2012 will recover 12 percent to 27,000 MT following a 14 percent recovery the previous year, the result of demand from Hong Kong. WMP exports in 2012 are forecast at 11,000 MT, a 22 percent rise following estimated double sales in 2011. This forecast has WMP exports approaching pre-melamine crises levels of 2008.

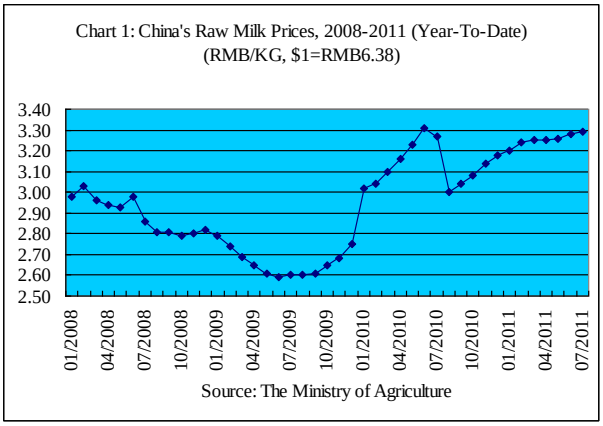
Production

Cow milk production in 2012 continues to recover

Post forecasts China's cows in milk in 2012 will rise a modest five percent to eight million head, while cow milk production will grow at the same pace to 32.2 MMT up from an estimated 30.6 MMT in 2011. Despite the increase output will be below 35 MMT, the production in 2007 before the nation-wide melamine crisis in 2008.

Recently, China's National Statistics Bureau (NSB) announced a new official figure for cow milk production in 2010 of 35.8 MMT, much higher than Post's estimation of 29.3 MMT. Post believes it will take longer than expected for China to fully recover from herd losses following the melamine crisis of 2008. Local producers are slowly rebuilding dairy herds following the melamine crisis, when over 15 percent of China's dairy cows were taken out of production due to weak demand.

Although year-on-year raw milk prices only increased three percent, prices have climbed 27 percent from $407 (RMB 2,600) MT in July 2009 to $515 (RMB3.290) MT in July 2011, reaching a historical record at least for the last four years. Encouraged by higher milk prices in China, operators are increasing imports of breeding dairy cows for genetic improvement, which are expected to approach 90,000 head in 2011.



However, the pace of increase in dairy cow beginning stocks in 2012 is forecast slightly slower than the previous year due to continued withdrawal of backyard operations, which still accounts for an overwhelming majority of China's dairy herd production (please see trend table below.) Although the 2010 and 2011 official data is not yet available, Post believes the withdrawal speed of backyard producers will be much faster following China's new requirement for all processing plants to reapply for verification of processing qualification and re-obtain processing permits by the end of March 2011 (please see details in the policy sector). Given that the new requirement is much stricter, many small plants did not pass the verification and were delisted from production. These local processors generally collected raw milk from small or backyard operators and their insolvency has pushed some backyard operators to slaughter dairy cows in 2011. Although larger operators are taking what could be a risk to expand herd size, the pace of increase in dairy cows is constrained by land resources.

Number of Chinese Dairy Cattle Farms at Different Herd Size, 2007-2009				
	2,007	2,008	2,009	% Change 2009/08
Annual Inventory (Head)	Farms	Farms	Farms	Farms
1-4	2,159,701	1,970,755	1,816,359	-7.83
5-9	295,789	398,744	374,541	-6.07
10-19	149,106	143,358	138,265	-3.55
20-49	42,079	51,804	49,490	-4.47
50-99	14,175	13,842	13,685	-1.13
100-199	4,421	4,425	4,324	-2.28
200-499	2,336	2,679	3,341	24.71
500-999	768	1,026	1,773	72.81
1,000 and above	339	454	706	55.51
Source: The Ministry of Agriculture				

Per capita yield improvement will become a long-term trend rather than fast herd expansion due to resource constraints and higher production costs. The slightly higher rate of cows in milk and

improvement in per capita yield due to larger farm efficiency are expected to result in raw milk recovery in 2011 and 2012. Fueled by domestic demand for genetic improvement, breeding cow imports are expected to continue to grow unless high international dairy cow prices are beyond the reach of Chinese dairy operators, or China's import policy changes. Traders reported that as of January 2011, the Ministry of Agriculture (MOA) requires imported breeding cattle must have records of three generations' blood lines. This is because China imported large number of breeding cows in the last decade, but a portion cannot be used for breeding stock due to poor quality. This new requirement could slow China's breeding animal imports in the short term until exporters adjust to the policy, but over the long run will help China improve genetics to meet the challenges of resource constraints and high production costs. Additionally, on September 19, the National Development and Reform Commission (NDRC) and the Ministry of Finance (MOF) jointly announced a reduction of animal quarantine fees, which reportedly reduced individual farmers' burden by 30 percent.

Inner Mongolia continues to be the largest production area for fluid milk products in China, and is expected to account for 19 percent of total industry revenue in 2011. The Province also has the largest numbers of dairy cows on hand. The largest production bases of major firms Mengniu and Yili are also located in Inner Mongolia.

While higher prices and strong long-term prospects for China's dairy demand are driving production gains, raw milk output growth may continue to be dampened by consumer safety concerns over local milk as a result of repeated melamine detections. In late 2010, the Chinese government seized 2,132 MT of melamine-tainted milk powder during a six-month crackdown. All the milk powder was allegedly left-over from the 2008 melamine crisis. Producers ignored the national regulation to destroy tainted milk powder, holding onto product for future sales after the crisis died down. China's newest dairy standard was implemented on June 1, 2010, and lowers raw milk minimum protein requirement from 2.95 to 2.8 /100 grams, while increasing the bacterial colony maximum requirement from 500,000 to 2 million/ml. These factors have lowered processor confidence with some manufacturers and resulted in shifts of entire product lines to imported ingredients. This strong demand for alternatives to local supply will result in a significant increase in dairy imports in 2011, especially dairy powder, and China's dairy industry anticipates a continued increase in 2012.

Non-fat dry (NFD) milk production will recover two percent

NFD milk production gains in 2012 are forecast to increase two percent to 57,000 MT, up from another two percent increased estimate of 56,000 MT in 2011. NFD accounts for less than five percent of China's total milk powder production. Despite the increase, NFD output will remain below the five-year average production of 60,000 MT before the melamine crisis. In China, there are only a few NFD production lines at top dairy processing plants, namely Yili Company in Inner Mongolia and Ever-Bright Company in Shanghai. NFD production gains also come from some top domestic company efforts to develop high valued-added infant formula with better quality control to gain market shares. As most increased raw milk will continue to be delivered to the whole-fat milk powder sector because of NFD processing capacity limits, China's domestic NFD market will continue to be satisfied by imports in 2012.

Whole-fat milk powder production is forecast to fully recover

Post forecasts China's WMP production will increase nine percent to 1.2 MMT, following a seven percent rise in 2011, thanks to raw milk production increases. This means WMP production will fully recover from the melamine crisis in 2008. Strong prices for a range of food products that use WMP will

encourage WMP production gains through 2012. Key channels include yogurt, ice cream, formulas for specific consumers like school students, pregnant women, the elderly, military, the sick, as well as food products such as bakeries and chocolates. Overall, milk powder demand will be particularly strong from large-sized processing companies, such as Inner Mongolia based Yili and Mengniu, which offer consumers a superior safety profile over smaller companies. Improved WMP exports will also encourage production gains in 2011 and 2012.

Consumption

Consumption of milk, cheese, yogurt and other dairy products differs across regions and particularly in urban versus rural areas. Regions with lower per capita incomes have lower consumption levels. Rural areas have the lowest per capita consumption of these products, even though the rural population accounts for about 60 percent of China's total population. Improvements in living standards and consumption ideas in rural areas will contribute to higher market demand in the future, but urban populations will likely remain the main consumers of dairy products. Despite the overall increase in dairy consumption in China, consumer confidence in domestic dairy products has not yet recovered owing to the seemingly constant reports of melamine detections. Foreign suppliers aggressively tapped into the market and the term "imported" has become almost a guarantee of food safety or at least "free of melamine."

China Per Capita Consumption of Dairy Products, 2008 - 2010 (Kg)				
Products	2008	2009	2010	% Change 2010/09
Urban Area, Fresh Milk	15.19	14.91	13.98	-6.24
Urban Area, Milk Powder	0.57	0.48	0.45	-6.25
Urban Area, Yogurt	3.54	3.88	3.67	-5.41
Rural Area, Total Dairy Products	3.43	3.6	3.55	-1.39
Source: China National Statistics Bureau Yearbooks 2009, 2010, and 2011				

Overall dairy consumption in 2012 is on the rise

Fluid milk: Post forecasts China's total fluid milk consumption in 2012 will rise four percent to nearly 13.1 MMT following another four percent increase from 12.6 MMT the previous year. However, year-on-year per capita consumption has been decreasing due to population growth. China's sixth national population survey announced by NSB on April 28, 2011 shows that China's population reached 1,370,536,875 by the end of 2010, nearly 7.39 million annual births in the last decade. China conducts a national population survey every 10 years.

Consumption gains are mainly the result of rapidly rising interest in dairy products in tandem with higher disposable incomes, increasing health consciousness among the growing middle class, and expanding retail outlets. Although the dairy market sustained a high rate of growth during the past decade, per capita consumption of dairy products in China, especially in rural areas, is still very low suggesting the potential for continued strong demand gains for many years to come. The highest earning income Chinese are not price sensitive, and figure indicate they consume the bulk of imported fluid milk. Some middle-class consumers switch between domestic brand fluid milk and imported milk based on price sensitivity, while most urban consumers prefer pasteurized or UHT milk in carton boxes

or plastic bags available in supermarkets or packed in bottles for home delivery. Dairy bars in the streets in large cities owned by brand companies, such as Sanyuan in Beijing, are gaining popularity among younger generations, which mainly sell fresh milk.

The gap between China's per capita consumption and the average per capita consumption of over 200 kg in developed countries further illustrates the growth potential of China's dairy market. It also explains why China's dairy market, facing so many challenges, has the potential to bounce back quickly after serious set-backs and still show considerable potential for future development.

NFD milk: Post forecasts China's NFD milk consumption in 2012 will rise 17 percent to 156,000 MT following an estimated 23 percent rise the previous year. Consumption gains are the result of rapid demand growth for domestic infant formula. Breast feeding in China has been decreasing because most young mothers in urban areas have jobs and cannot feed their babies after returning to work from maternity leave. In 2010, breast feeding for new-born babies in Beijing was 71 percent, while for babies at six months old it was only 65 percent. The national breast feeding rate in 2010 for babies under six months was only 40-50 percent on average. This explains the strong demand for infant formula.

WMP: Post forecasts China's WMP consumption in 2012 will grow 13 percent to 1.67 MMT, following a seven percent rise in the previous year bolstered by domestic demand. WMP has more channels of consumption such as formulas for school children, the elderly, pregnant women, the sick, reconstitution for making UHT milk, ice cream, yogurt, or food processing such as bakeries and chocolates. However, after additional detections of melamine in 2010, consumption of domestic WMP remains low due to safety concerns and large imports. Some manufacturers shifted entire product lines to imported ingredients. Continued illegal use of contaminated milk powder produced before the 2008 crisis in 2011 may hinder industry efforts to improve the safety profile of Chinese milk and dampen output gains for the foreseeable future.

Policy

AQSIQ's requirement on U.S. dairy export health certificate

On July 22, 2011, AQSIQ notified Post that U.S. dairy exports must comply with the following new requirements to be eligible to export to China. AQSIQ claimed to have notified to the WTO on January 19, 2010.

1. One original export health certificate to accompany each shipment;
2. Export health certificate should be bilingual (English and Chinese).
3. Export health certificate should include:
    a. Product information;
    b. Processing plant and transportation information;
    c. A veterinary certificate for dairy products processed with cow milk from dairy farms free of the five reportable animal diseases including: FMD, brucellosis, TB, anthrax, and bovine fever;
4. A dairy product safety and sanitary certificate.

The U.S. certificate issue is a major challenge to future expansion of U.S. dairy exports to China. Some suppliers postponed shipments to minimize the risks and local buyers tended to switch to other suppliers. As of the date of this report the U.S. and China are still negotiating the certificate language. AQSIQ has

confirmed the old Agricultural Marketing Service (AMS) export health certificate will continue to be accepted during negotiations.

New Zealand infant formula and yogurt to China will enjoy zero tariffs as of 2012

China and New Zealand signed a bilateral Free Trade Agreement (FTA) in 2008. China committed to lower 97.2 percent of import tariffs on imported New Zealand dairy products. According to the FTA tariffs reduction arrangement, New Zealand fluid milk and yogurt to China will enjoy zero tariffs as of January 1, 2012. The tariffs on WMP or cream concentrate to China have been reduced from 15 percent in 2008 to nine percent in 2011, and will further lower to zero by 2017. The Chinese dairy industry believes lower tariffs will encourage higher imports, especially fluid milk imports in 2012.

All dairy plants are required to reapply for processing permit before March 2011

On November 1, 2010, AQSIQ published its No. 119 Announcement, which required all dairy processing plants to reapply for verification of processing qualification and re-obtain processing permits. The deadline was March 1, 2011, but was postponed to the end of March following local industry's request for a grace period. Plants without re-verification and a new permit will be banned from producing dairy products after March 2011. The new requirement is much stricter and adds more testing line-items. Infant formula plants will have to self test a total of 64 line-items including: protein, food additives, and melamine. It also requires plants to test each batch of raw or milk powder materials, and each batch of finished products. Plants are required to have the ability to test for melamine by themselves and are not allowed to outsource melamine tests to a third party. The new policy is described as a "dairy earthquake" by the local industry. By the end of March 643 dairy plants out of China's total 1,176 successfully obtained new production permits, 107 plants were allowed to take corrective actions, and 426 small plants failed. By the end of July, a total of 688 plants re-obtained production licenses (117 are infant formula plants) accounting for 59 percent of the total, and 432 plants were finally delisted from production. All the plants that went out of production were small operations with daily processing of less than 50 MT of raw milk. They mainly produce UHT, flavored drinks with very little milk, or milk powder for local distribution. The Chinese industry forecasts that the new policy will impact 15 percent of China's total dairy production for a short while, and the gap will be filled up quickly by large plants. However, the concern that the new policy will increase production costs by about $780,000 (RMB 5 million) for a small plant and over $1.6 million (RMB 10 million) for a large plant may result in higher dairy product prices, thus weakening competitiveness to foreign products especially when local consumer confidence in domestic dairy products has not fully rebounded.

Value-added tax lowered on pasteurized and UHT milk

On July 6, 2011, China's General Administration of Taxation announced plans to reduce the value-added tax (VAT) for pasteurized milk produced according to the national standard GB19645-2010, and UHT milk produced according to the national standard GB25190-2010 from 17 percent to 13 percent. The product lines will be reclassified as primary agricultural products. Meanwhile, processed flavored milk is not considered a primary agricultural product, so will continue being charged a 17 percent VAT. A lower tax on pasteurized and UHT milk will encourage higher imports in 2012.

Domestic distributors are required to apply for new dairy sales license

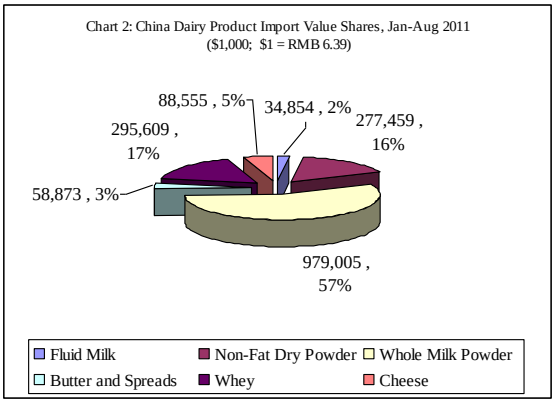
On March 28, 2011, China's General Administration of Industry and Commerce announced two new requirements for food distribution permits effective April 1, 2011. Applicants must now select either Item 4 for dairy products (including infant formula) or Item 5 for dairy products (not including infant

formula). New distributors must apply for the food distribution permit and the dairy sale license simultaneously and prior to commencing business. Distributors who already have the food distribution permit are required to apply for a change of the distribution items in the permit and obtain a dairy sales license before the end of July 2011. Sellers without the new permit and the dairy sales license will not be allowed to sell domestic or imported dairy products in China. The goal behind this new permit system is for the government to have tighter control over dairy distribution to reduce potential malpractice in dairy product sales.

Melamine

On April 20, 2011, the Ministry of Health (MOH), Ministry of Industrialization and Information Technology (MIIT), Ministry of Agriculture (MOA), Administration of Industry and Commerce (DIC), and the General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) jointly published the No. 10 Announcement 2011, which bans the purposeful addition of melamine in milk. No. 10 Announcement stipulates that the maximum residue level (MRL) for melamine in infant formula is 1 mg/kg, and for other food products is 2.5 mg/kg. Both MRLs meet international requirements. This regulation replaced the temporary regulation announced by the five agencies in September 2010 after the 2008 melamine crisis in China. The difference is that the new regulation not only covers dairy products, but extends to all food products, while the old only covered food products containing milk at or above 15 percent. The infant formula requirement remains the same. According to the regulation, violators will be sentenced to jail.

Trade



Buoyed by strong domestic demand, China's overall dairy imports are increasing considerably. Imports from January-August 2011 reached $1.7 billion, up 35 percent from the same period in the previous year. Greater domestic demand for dairy products, combined with lower tariffs on dairy products from New Zealand, reduction of the VAT on pasteurized and UHT milk from 17 percent to 13, and a stronger Chinese currency against the U.S. Dollar are all factor driving China's imports in 2011 and 2012.

New Zealand is the largest supplier to China, accounting for 69 percent of China's total imports. The United States is the second largest supplier. U.S. exports to China from January – August 2011 reached $161 million, nearly 10 percent of China's total imports. This United States will continue to be the second largest supplier to China in 2012, and imports are expected to remain at a steady pace, albeit not as fast-paced as in early 2010. During that time, imports were increasing so fast that MOFCOM sent out a warning to remind importers about the "risk of oversupply of milk powder in the market."

Fluid milk imports forecast up 21 percent

While still a small niche market, China's fluid milk imports will continue to rise through 2012. Imports are forecast to increase 21 percent to 40,000 MT following doubled imports in 2011, much higher than Post previously forecast in the 2010 dairy annual report (see CH10058). Additional detections of melamine in China have encouraged wealthier Chinese to display a preference for imported fluid milk

out of safety concerns. These consumers tend to be less price sensitive and are willing to pay for imported milk at retail markets. The strong RMB is another factor driving imports. The reduced domestic VAT for fluid milk will also help drive imports in 2012. New Zealand, Australia, Germany, and France account for almost all sales gains in 2011 and are expected to continue to grow in 2012.
NFD milk imports to continue higher

Strong demand from infant formula producers has driven imports of NFD milk, which are expected to approach 150,000 MT in 2011, up from an estimated 121,000 MT in 2011 and 55,000 MT just two years ago. While traders report food safety concerns are affecting sales in a number of Chinese dairy product lines, there has been especially weak demand for local milk from manufacturers of infant formula, which accounts for an estimated 10-15 percent of Chinese milk consumption. Chinese travelers are reportedly buying stores out of infant formula from Hong Kong, Macau, or other countries. As a result, Hong Kong and Macau have limited mainland buyers to only a couple of bags at a time. As China's aged population is growing fast, demand for NFD products is especially strong because this consumer group prefers lower fat products. The United States is the second largest supplier of China's imports, accounting for nearly 16 percent of China's total NFD imports. This trend will continue into 2012.

WMP imports are forecast to rise 14 percent
Post forecasts China's WMP imports in 2011 will increase 14 percent to 450,000 MT, following a 21 percent increase in 2011. Higher beginning stocks in 2012 are expected to reduce the pace of increase in WMP imports. New Zealand and Australia will continue to dominate WMP supplies to China in 2011, accounting for over 90 percent of China's total imports.

Whey imports up in 2011 and will continue higher in 2012
Whey is China's second largest imported dairy product. The market size for 2011 is estimated at $2.6 billion. Driven by China's higher demand for infant formula production, food processing, and feed, China's imports in 2012 are forecast to rise 10 percent to over 300,000 MT following another 10 percent increase in the previous year. Low import whey tariffs compared to other dairy products also help drive imports. The United States is the largest supplier to China, accounting for over 50 percent of China's total imports. Although the average unit price for whey from the United States has increased eight percent in January-August 2011 from the same period in the previous year, it is still much cheaper than European products, especially whey protein concentrate prices, because most whey from EU countries are finished products, not large bags like powder for further processing, making U.S. exports competitive. The United States will continue to be the largest supplier to China in 2012.

U.S. cheese to China has doubled
Almost all the cheese available in China's market is imported and processed. New Zealand is the largest cheese exporter to China. From January-August 2011, New Zealand exports to China rose 14 percent to 8,344 MT, valued at $36.2 million and accounting for 41 percent of China's total import cheese market. U.S. exports over the same period more than doubled at $4,199 MT valued at $18.4 million, 23 percent of China's market. Cheaper U.S. cheese prices as a result of the stronger Chinese currency have made U.S. cheese a competitive choice, challenging Australia exports to China. China also imports cheese from France, Italy, and Denmark. An important change to note is that in 2010, local dairy manufacturers began to use U.S. bulk cheese for processed cheese production, a first for China.

Both fluid milk and WMP exports are recovering

China's fluid milk exports in 2012 are forecast to recover 10 percent to 27,110 MT based on an estimated 10 percent increase in the previous year. Almost all gains come from sales to Hong Kong. Despite the gains, China's milk exports remain well below levels previous to the melamine crisis (38,400 MT in 2008).

While China's WMP exports are still very small, exports are gradually recovering from the melamine crisis impact of 2008. 2012 WMP exports are forecast to recover moderately three percent to 9,500 MT following an estimated two percent rise in 2011 resulting from stronger demand in Africa and Hong Kong, approaching almost the same levels prior to the melamine crisis. Nigeria, Myanmar, and Hong Kong markets account for over 80 percent of China's total exports.

Marketing

Market Size

The Chinese dairy market is still growing strongly. The major products and services in this industry are: liquid milk, milk powder, yogurt, butter, other dairy products, and cheese.
According to Euromonitor statistics, total dairy sales in China reached $27,431.9 million in 2010, a near 22 percent increase from 2008. It is estimated that the dairy market is growing another 12 percent in 2011.

Retail value of dairy markets (million RMB)

	2006	2007	2008	2009	2010
Dairy Products	119,194.2	137,705.5	143,821.4	157,944.1	175,235.6
Drinking milk products	52,021.5	58,999.2	59,955.8	62,451.1	67,009.6
Cheese	476.2	559.6	668.7	779.8	916.4
Yoghurt & sour milk drinks	18,975.6	22,962.9	25,195.5	29,143.2	33,280.0
Other dairy products	1,161.2	1,236.7	1,371.4	1,399.5	1,479.7

**Drinking milk products include fluid milk, flavored milk drinks and milk powder etc.*
Source: Euromonitor (Exchange rate between USD and RMB: 1USD to 6.388RMB)

China's GDP surged 10 per cent in 2010, quickly rebounding from the global economic crisis. This is reflected in China's voracious appetite for imported goods sought by the increasingly affluent and aspiring urban consumer as well as for inputs in the manufacturing sector.

Distribution channels of dairy 2010

Retail channel: In China, nearly 80 percent of dairy products are purchased via retail channels. Supermarkets and hypermarkets have become the major outlet for all varieties of dairy products. For cheese products, yogurt, and take-home ice cream the role of supermarkets is even more important due to consumer confidence in their comparatively better cold chain facilities and reliable product sourcing channels. Improved availability of supermarkets and convenience stores in rural areas also contributed to the increasing share in the distribution channel.

Dairy products distribution channel percent breakdown in 2010

Dairy product Categories	Supermarkets/ Hypermarkets	Independent Food Stores	Convenience Stores	Others
Drinking Milk Products*	44.0	27.5	30.1	25.7
Cheese	93.3	4.8	-	6.7

Yogurt/Sour Milk Drinks	90.1	2.6	2.6	4.2
Other Dairy Products	90.6	2.9	2.5	4.0

**Drinking milk products include fluid milk and milk powder etc.*
Source: Euromonitor

Food Service Channel: While competing fiercely in the retail channel, major manufacturers are competing in the food service channel with specially designed brands. Brands such as Angli from Sanyuan, Yiran from Yili, LOOK from Bright Dairy, and Muge from Mengniu are designed to target the food service channel. Although the profit in the food service channel may be higher than that achieved from retail channels, manufacturers face high entrance fees determined by hotels and restaurants and delayed payment in China. Hotels and restaurants normally pay after they sell the products. This has constrained the sales volume of the dairy products through food service channels.

Yogurt bars are a new restaurant format emerging in first tier cities and popular among the younger generation of consumers. Competing with juice bars and ice-cream bars, yogurt bars offer frozen yogurt and yogurt drinks in various flavors. These bars are generally located in Central Business District (CBD) zones. Their floor space is typically limited, and they have few seats, as most consumers choose take the products to their offices or homes.

Other channels: Some dairy products, particularly fluid milk, reach consumers through special channels such as the "school milk program." In this program, milk is delivered to school students directly by government-designated manufacturers who have a good reputation for product quality and safety. In the first tier cities of Shanghai and Guangzhou, some consumers still prefer direct delivery of milk to their home every early morning. Milk directly delivered by producers is perceived as fresher and lower cost.

Marketing Tools
Statistics show that dairy product sales growth is directly related to investment in advertising. Hence, the major dairy players are investing large amounts in branding and advertising. TV commercials are the most important type of advertising for dairy products targeted at retail channels. The most frequently advertised dairy products in China are fluid milk, infant formula or fortified milk powder with minerals, yogurt, ice cream and dairy drinks. Celebrity endorsement (film stars, singers) are frequently used in TV ads.

Some manufacturers have also raised awareness and strengthened the reputation of their dairy products by sponsoring certain political or entertaining projects with wide public attention. For example, Yili sponsored the 2010 Shanghai World Expo, where only Yili dairy products were available to visitors within the Expo Garden.

Online marketing is becoming an increasingly efficient platform to promote dairy products through interactive programs. China had 600 million internet users by mid 2010. These are typically targeted at younger generation consumers. For example, Coca-cola promoted its flavor milk product, and Minute Maid via Tencent QQ.

Trends of Major Product Categories
Fluid Milk: Fluid milk is the largest product segment in this industry, and is sold mainly in paperboard containers or plastic packages. The two main segments that are expected to increase their market share

in the future are milk powder and yogurt. Fierce competition has forced the profit of fluid milk production to low levels. At the national level, UHT milk had about 73 per cent of the market by volume in 2009, thanks to its availability in markets far from the manufacturing site and comparatively lower retail price. In big cities where the cold chain infrastructure is better established, pasteurized milk occupies more than 70 percent of the market.

Competition used to be fierce between UHT milk by resource-oriented manufacturers (represented by Yili and Mengniu) and pasteurized milk by market-oriented manufacturers (represented by Bright Dairy from Shanghai and San Yuan from Beijing). However, in the last two years traditional pasteurized milk manufacturers began investment in the UHT milk sector, while traditional UHT milk manufacturers began to build up farms and pasteurized milk production lines adjacent to huge consumer markets including Shanghai and Guangzhou. The previously heated debate about whether UHT or pasteurized milk was "more nutritious" or "safer" is no longer featured by the media.

Sales value of fluid milk 2006-2010 (RMB)

	2006	**2007**	**2008**	**2009**	**2010**
Fluid milk	52,021.5	58,999.2	59,955.8	62,451.1	67,009.6

Source: Euromonitor

Cheese: The cheese market maintained robust growth in 2010. Since 2005, the Chinese cheese market has doubled its sales volumes from 4,160 MT in 2005 to 9,636.43 MT in 2010 Although not a traditional part of the Chinese diet, the concept that cheese is a good source of protein and calcium has found its way into middle class consumer minds. One successful driving factor is consumer education and the prevalence of Western food, another factor benefiting the market is the overall recovery of the dairy industry following the melamine scandal in late 2008. According to Euromonitor, sales value of cheese grew by 18 percent in retail channels in 2010.

As a niche product, distribution channel for cheese are still limited. Supermarkets and hypermarkets sold 93 percent of cheese in 2010. Cheese products were normally put in a chilled case with other dairy products. Only a small number of brands are generally presented:

Sales value of cheese 2005-2010

RMB million	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Processed cheese	402.81	476.16	559.61	668.67	779.83	916.44

Source: Euromonitor (Exchange rate between USD and RMB: 1vs 6.388)

Sales of cheese break down by categories

% retail value rsp	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Supermarket/hypermarket	91.00	92.00	93.00	93.00	93.20	93.30
Small grocery retailer	6.00	5.00	5.00	5.00	4.90	4.80
Other grocery retailers	3.00	3.00	2.00	2.00	1.90	1.90

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources.

The ratio between spreadable and unspreadable processed cheese was about 39-61 percent in 2010, and has been very stable since 2005, with unspreadable processed cheese slightly outperforming spreadable

cheese and slowly increasing its shares of the market. Cream cheese dominated the spreadable processed cheese market. For unspreadable cheese the most frequently available products are Mozzarella, Monterey Jack, Cheddar, and Parmesan cheese.

Leading domestic dairy companies Bright Dairy, Sanyuan, and Yili have all launched cheese processing lines. They have also run very successful consumer education programs. In 2009, Bright Dairy led cheese sales with 52 percent of the market, followed by Anchor (18.9 percent) and Pikifou (6.7 percent). The top five brands occupy over 85 percent of the cheese market.

Many foreign brands are available in supermarkets in China. Currently there are 11 U.S. cheese brands in the China market including Land O'Lakes and Sargento, which perform very well. Other major import cheese brands are Kraft from various countries, Mainland from New Zealand, President and Cantorel from France, Bega from Australia, Emmi from Switzerland, Feta from Germany, Arla from Denmark, and Kerry Gold from Ireland.

In 2009 and 2010, domestic manufacturers launched more innovative flavors including chocolate, tree nuts, strawberry, and banana flavors and cheese products fortified with vitamins and minerals that appeal to Chinese consumers. Many promotions and price discounts were also offered to attract consumers, which lowered the unit price of cheese, and greatly contributed to the sales growth of cheese products.

It is forecast that China's cheese market will continue to grow rapidly in the next five years, and that growth will spread from first tier city markets to second and third tier markets. Ongoing economic development will increase Chinese consumers' purchasing power, and make high-priced cheese products more acceptable for mass consumers.

Yogurt: The yogurt market maintained its consistently strong growth in China in 2010. The average retail unit price of yogurt products witnessed a slight increase in 2010, due to ongoing launches of relatively high-end products of fruit-flavored and functional yogurt by key players. These products claimed to offer extra benefits or contain real fruit, and thus were able to be sold higher price than other products. Time constraints have created higher demand for yogurt. Consumers are turning to daily usage of dairy products due to faster lifestyles, longer working hours, and less time available for cooking breakfast.

Even though the unit prices went up for both drinking and spoonable yogurt products in 2010, pro biotic spoonable yogurt is expected to record the strongest value growth. The increase of 38 percent was due to growing interest from leading players. Yogurt sales increased by 14 percent in 2010 to exceed $5 million (RMB 33 million).

Thanks to long-term consumer education programs, yogurt is widely perceived a health product that is good for digestion and weight control in China. This appeals to Chinese white-collar consumers. Flavor innovation with new ingredients such as jujube, herbs, and cereals contributed greatly to sales growth. Most health innovation is likely to focus on adding healthy ingredients such a collagen for skin benefits, more fibre for digestion and lower fat content for diet purposes.

Imported yogurt enjoys a stable but small growth rate, as its loyal consumers are mainly expatriates or returned overseas Chinese. Emmi from Switzerland, Elle & Vive from France, Yoplait from Australia and FAGE from Greece are frequently available brands on the shelves of import food supermarkets/stores.

Sales of yogurt values break down by categories

RMB million	2005	2006	2007	2008	2009	2010
Drinking yogurt	1,227.38	1,519.70	1,871.54	2,015.81	2,230.99	2,469.27
Spoonable yogurt	602.48	695.48	778.10	834.85	988.02	1,111.73

Source: Euromonitor International from official statistics, trade associations, trade press, company research, store checks, trade interviews, trade sources.

Hangzhou Wahaha Group has overtaken Bright Dairy & Food Co. Ltd to be the number one player in the yogurt market, accounting for almost 14 percent of value sales in 2009. Hangzhou Wahaha Group, Bright Dairy, and Mengniu were the domestic leaders in this sector in 2010. Meanwhile, some smaller manufacturers explored niche markets, striving to achieve unique values created through innovation in products, branding, and marketing. Frozen yogurt is one of them. In 2009, the frozen yogurt brand "Qin Hai Old Yogurt" by Xiao Xi Niu from Qinghai Province witnessed a tripling of sales from $6 (RMB 40) million in 2008 to $20 (RMB 130) million in 2009.

Milk Powder: Infant formula milk powder sales have grown steadily. In 2009, total sales of infant formula milk powder amounted to $4,422 million, registering an increase of 16 percent over 2008 according to Euromonitor statistics. The high value-added infant formula milk powder market is nearly monopolized by multinational giants from Europe, the United States, and Australia. Apart from the advantages in technology, foreign companies also enjoy a competitive edge in branding and channel management. In addition, foreign brand infant formula also enjoys higher trust among Chinese consumers. Foreign infant formula brands raised prices several times during the past year, but concerns about food safety have made young parents in China less price sensitive.

The top five international brands - International Nutrition (Dumex), Mead Johnson (Enfagrow, Enfapro, Enfachild, Enfaschool), Abbott Nutrition International (Gain, Similac), Nestle (Lactogen, Neslac), and Wyeth (Promise, S-26, Bright Promil) - account for more than 50 percent of the market. Beingmate overtook Yili from Inner Mongolia, Shengyuan from Qingdao, Yashili from Guangdong, and Wonder Sun from Heilongjiang to become the star performer among domestic brands.

Dairy Statistics

Fluid milk PS&D table

Dairy, Milk, Fluid China	2010		2011		2012		
	Market Year Begin: Jan 2010		Market Year Begin: Jan 2011		Market Year Begin: Jan 2012		
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Cows In Milk	7,350	7,320	7,630	7,620		7,975	(1000 HEAD)
Cows Milk Production	29,100	29,300	30,500	30,700		32,150	(1000 MT)
Other Milk Production	1,228	1,228	1,280	1,280		1,350	(1000 MT)
Total Production	30,328	30,528	31,780	31,980		33,500	(1000

							MT)
Other Imports	15	16	17	33		40	(1000 MT)
Total Imports	15	16	17	33		40	(1000 MT)
Total Supply	30,343	30,544	31,797	32,013		33,540	(1000 MT)
Other Exports	22	22	23	25		28	(1000 MT)
Total Exports	22	22	23	25		28	(1000 MT)
Fluid Use Dom. Consum.	12,010	12,060	12,500	12,590		13,140	(1000 MT)
Factory Use Consum.	18,311	18,462	19,274	19,398		20,372	(1000 MT)
Feed Use Dom. Consum.	0	0	0	0		0	(1000 MT)
Total Dom. Consumption	30,321	30,522	31,774	31,988		33,512	(1000 MT)
Total Distribution	30,343	30,544	31,797	32,013		33,540	(1000 MT)
CY Imp. from U.S.	0	0	0	0		0	(1000 MT)
CY. Exp. to U.S.	0	0	0	0		0	(1000 MT)
TS=TD		0		0		0	

(Data included in this report is not official USDA data. Official USDA data is available at http://www.fas.usda.gov/psdonlineonline)

Non-fat dry milk PS&D table

Dairy, Milk, Nonfat Dry China	2010		2011		2012		
	Market Year Begin: Oct 2010		Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Beginning Stocks	0	0	0	0		0	(1000 MT)
Production	55	55	56	56		57	(1000 MT)
Other Imports	91	89	100	121		140	(1000 MT)
Total Imports	91	89	100	121		140	(1000 MT)
Total Supply	146	144	156	177		197	(1000 MT)
Other Exports	0	0	0	0		0	(1000 MT)
Total Exports	0	0	0	0		0	(1000 MT)
Human Dom. Consumption	146	144	156	177		197	(1000 MT)
Other Use, Losses	0		0	0		0	(1000 MT)
Total Dom. Consumption	146	144	156	177		197	(1000 MT)
Total Use	146	144	156	177		197	(1000 MT)
Ending Stocks	0		0	0		0	(1000 MT)
Total Distribution	146	144	156	177		197	(1000 MT)
CY Imp. from U.S.	12	14	15	19		23	(1000 MT)
CY. Exp. to U.S.	0	0	0	0			(1000 MT)
TS=TD		0		0		0	

(Data included in this report is not official USDA data. Official USDA data is available at http://www.fas.usda.gov/psdonlineonline)

Whole milk powder PS&D table

Dairy, Dry Whole Milk Powder China	2010		2011		2012		
	Market Year Begin: Jan 2010		Market Year Begin: Jan 2011		Market Year Begin: Jan 2012		
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Beginning Stocks	110	110	80	80		85	(1000 MT)
Production	1,000	1,030	1,050	1,100		1,200	(1000 MT)
Other Imports	320	326	430	396		450	(1000 MT)
Total Imports	320	326	430	396		450	(1000 MT)
Total Supply	1,430	1,466	1,560	1,576		1,735	(1000 MT)
Other Exports	3	3	3	9		11	(1000 MT)
Total Exports	3	3	3	9		11	(1000 MT)
Human Dom. Consumption	1,337	1,373	1,502	1,474		1,666	(1000 MT)
Other Use, Losses	10	10	5	8		8	(1000 MT)
Total Dom. Consumption	1,347	1,383	1,507	1,482		1,674	(1000 MT)
Total Use	1,350	1,386	1,510	1,491		1,685	(1000 MT)
Ending Stocks	80	80	50	85		50	(1000 MT)
Total Distribution	1,430	1,466	1,560	1,576		1,735	(1000 MT)
CY Imp. from U.S.	1	0	0	0		0	(1000 MT)
CY. Exp. to U.S.	0	0	0	0		0	(1000 MT)
TS=TD		0		0		0	

(Data included in this report is not official USDA data. Official USDA data is available at http://www.fas.usda.gov/psdonlineonline)

Dairy trade matrices

China Fluid Milk Imports, 2009-2011 (Year-To-Date, Metric Tons)					
	Jan-Dec	Jan-Dec	Jan-Aug		Jan-Aug
	Quantity	Quantity	Quantity Comparison		% Change
Origin	2009	2010	2010	2011	2011/2010
World	12,763	15,889	9,626	21,944	127.97
New Zealand	5,577	7,420	4,235	8,994	112.37
Germany	1,678	3,077	1,627	7,342	351.26
France	2,128	3,421	2,460	3,090	25.61

Australia	1,601	1,423	889	2,042	129.70
United Kingdom	193	231	171	211	23.39
United States	36	43	16	93	481.25
South Korea	1,196	37	37	44	18.92
Other	354	237	191	128	-32.98
HS Codes: 0401.1000, 0401.2000, and 0401.3000					
Source: Global Trade Atlas					

China Non-Fat Dry Milk Powder Imports, 2009-2011 (Year-To-Date, Metric Tons)					
	Jan-Dec	Jan-Dec	Jan-Aug		Jan-Aug
	Quantity	Quantity	Quantity Comparison		% Change
Origin	2009	2010	2010	2011	2011/2010
World	70,443	88,544	60,009	80,922	34.85
New Zealand	46,515	48,633	35,911	47,627	32.63
United States	6,012	14,110	7,909	12,819	62.08
Australia	10,179	8,079	4,362	8,031	84.11
Germany	1,944	2,960	2,285	3,986	74.44
France	766	3,562	2,009	2,558	27.33
United Kingdom	2	200	200	1,246	523.00
Singapore	1	1490	1001	904	-9.69
Ireland	424	2,035	1,287	750	-41.72
Switzerland	525	778	578	725	25.43
Argentina	0	907	504	504	0.00
Netherlands	1,152	1,966	990	466	-52.93
Finland	402	706	607	276	-54.53
Belgium	539	669	668	75	-88.77
Canada	1,050	650	650	0	-100.00
Belarus	525	500	500	0	-100.00
Other	407	1,299	548	955	74.27
HS Codes: 0402.1000					
Source: Global Trade Atlas					

China Whole-Fat Milk Powder Imports, 2009-2011 (Year-To-Date, Metric Tons)					
	Jan-Dec	Jan-Dec	Jan-Aug		Jan-Aug
	Quantity	Quantity	Quantity Comparison		% Change
Origin	2009	2010	2010	2011	2011/2010
World	177,345	325,529	226,650	263,983	16.47
New Zealand	157,395	287,883	201,750	245,378	21.62
Australia	7,873	16,688	12,212	6,787	-44.42
Denmark	2,425	8,351	3,356	5,172	54.11
Chile	0	1,550	1,550	2,500	61.29
Argentina	3	1,101	600	1,305	117.50
France	6,209	1,610	778	950	22.11
Singapore	9	1,055	703	815	0.00
Belgium	29	2,601	2,375	300	-87.37
Uruguay	0	1,525	1,125	200	-82.22
Germany	142	342	200	135	-32.50
Poland	600	0	0	96	0.00
United States	51	377	283	35	-87.63
Netherlands	2,251	665	584	1	-99.83
United Kingdom	25	898	640	0	-100.00
Other	333	883	494	309	-37.45
HS Codes: 0402.2100, 0402.2900, 0402.9100, and 0402.9900 Source: Global Trade Atlas					

China Butter and Dairy Spread Imports, 2009-2011 (Year-To-Date, Metric Tons)					
	Jan-Dec	Jan-Dec	Jan-Aug		Jan-Aug
	Quantity	Quantity	Quantity Comparison		% Change
Origin	2009	2010	2010	2011	2011/2010
World	17,569	14,904	10,294	12,327	19.75
New Zealand	14,045	11,233	7,788	9,840	26.35
Australia	1,952	1,746	1,164	994	-14.60
France	509	172	510	627	22.94
Argentina	77	766	298	277	-7.05
United States	112	0	140	185	32.14
Belgium	54	193	99	130	31.31
Netherlands	229	0	79	63	-20.25
Finland	274	136	0	0	0.00
Other	317	658	216	211	-2.31
HS Codes: 0405.1000, 0405.2000, and 0405.9000 Source: Global Trade Atlas					

China Whey Imports, 2009-2011 (Year-To-Date, Metric Tons)					
	Jan-Dec	Jan-Dec	Jan-Aug		Jan-Aug
	Quantity	Quantity	Quantity Comparison		% Change
Origin	2009	2010	2010	2011	2011/2010
World	287,537	262,992	169,494	192,217	13.41
United States	140,012	141,524	88,035	97,824	11.12
France	49,758	35,633	20,464	26,773	30.83
Netherlands	13,745	10,333	6,757	12,626	86.86
Germany	15,107	16,339	9,484	12,159	28.21
Ireland	13,070	9,270	4,770	12,000	151.57
Finland	14,148	13,654	8,784	8,839	0.63
Argentina	5,767	4,805	2,247	6,043	168.94
Poland	5,778	7,950	3,433	3,828	11.51
New Zealand	3,701	5,050	3,866	3,188	-17.54
Australia	8,930	6,390	3,891	3,185	-18.14
Uruguay	250	3,050	1,025	2,325	126.83
Belgium	528	170	120	725	504.17
Ukraine	3,175	3,075	2,875	650	-77.39
India	384	624	560	228	-59.29
Italy	646	306	126	225	78.57
Canada	7,610	2,009	1,709	150	-91.22
Austria	2,166	1,195	1,195	100	-91.63
Spain	1,396	360	360	2	0.00
Other	1,366	1,255	9,793	1,347	-86.25
HS Codes: 0404.1000 and 0404.9000 Source: Global Trade Atlas					

China Cheese Imports, 2009-2011 (Year-To-Date, Metric Tons)					
	Jan-Dec	Jan-Dec	Jan-Aug		Jan-Aug
	Quantity	Quantity	Quantity Comparison		% Change
Origin	2009	2010	2010	2011	2011/2010
World	16,978	22,921	15,139	18,498	22.19
New Zealand	8,735	11,864	7,468	8,344	11.73
United States	1,691	2,704	1,911	4,199	119.73
Australia	4,490	5,170	3,710	3,903	5.20
France	326	538	339	364	7.37
Italy	242	364	215	335	55.81
Netherlands	345	268	161	292	81.37
Uruguay	50	215	165	224	35.76
Denmark	139	325	173	210	21.39
Germany	168	239	149	164	10.07
Other	792	1,234	848	463	-45.40
HS Codes: 0406.1000, 0406.2000, 0406.3000, 0406.4000, and 0406.9000 Source: Global Trade Atlas					

China Fluid Milk Exports, 2009-2011 (Year-To-Date, (Metric Tons)					
	Jan-Dec	Jan-Dec	Jan-Aug		Jan-Aug
	Quantity	Quantity	Quantity Comparison		% Change
Origin	2009	2010	2010	2011	2011/10
World	20,030	22,492	14,467	16,429	13.56
Hong Kong	19,864	22,130	14,325	16,028	11.89
Macau	165	179	118	112	-5.08
Other	1	183	24	289	0.00
HS Codes: 0401.1000, 0401.2000, and 0401.3000 Source: Global Trade Atlas					

China Whole-Fat Milk Powder Exports, 2009-2010 (Year-To-Date, Metric Tons)					
	Jan-Dec	Jan-Dec	Jan-Aug		Jan-Aug
	Quantity	Quantity	Quantity Comparison		% Change
Origin	2009	2010	2010	2011	2011/10
World	9,737	2,780	2,110	6,153	191.61
Nigeria	2,567	136	0	3,689	0.00
Myanmar	1,519	1,323	1,052	892	-15.21
Hong Kong	54	319	206	560	171.84
Iraq	128	0	0	466	0.00
United Arab Emirates	46	100	0	355	0.00
Vietnam	57	0	0	70	0.00
Venezuela	5,250	0	0	0	0.00
Other	116	902	852	121	-85.80
HS Codes: 0402.2100, 0402.2900, 0402.9100, and 0402.9900 Source: Global Trade Atlas					

China raw milk prices

China Milk Prices On Average, 2008-2011 (Year-To-Date) (RMB/KG, $1=RMB6.39)					
MONTH	2008	2009	2010	2011	% Change 2011/10
January	2.98	2.79	3.02	3.20	5.96
February	3.03	2.74	3.04	3.24	6.58
March	2.96	2.69	3.10	3.25	4.84
April	2.94	2.65	3.16	3.25	2.85
May	2.93	2.61	3.23	3.26	0.93
June	2.98	2.59	3.31	3.28	-0.91
July	2.86	2.60	3.27	3.29	0.61
August	2.81	2.60	3.00		
September	2.81	2.61	3.04		
October	2.79	2.65	3.08		
November	2.80	2.68	3.14		
December	2.82	2.75	3.18		
Source: The Ministry of Agriculture					

(End of the report)