

# **The Dairy Products Market in China**

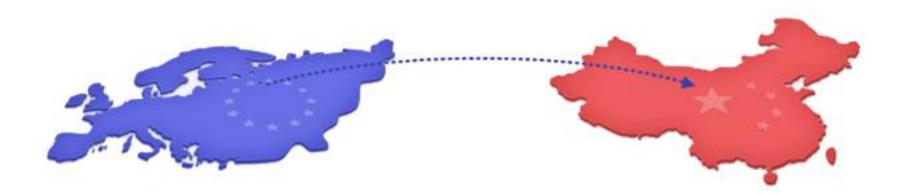
Embassy of Portugal – Beijing July 4, 2013



A project funded by the European Union







- The EU SME Centre in Beijing is a project funded by the European Union
- To assist European SMEs to export to China and establish, develop and maintain commercial activities in the Chinese market
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- Matchmaking and networking



# Diagnostic kit Are you ready for China?



- Includes four reports and an online quiz
- Covers all aspects of early market entry in China
- Includes lists of national and European support organisations
- Includes a multitude of links to further sources of information
- Freely available on our website
   www.eusmecentre.org.cn



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- Market Overview
  - Market Size
  - Future Development
- Breakdown by Product Category (Size, Imports, Prices, Standards, Labels)
  - Liquid Milk
  - Milk Powder
  - Infant Milk Formula
  - Cheese
  - Ice Cream
- Opportunities and Challenges
- Relevant Exhibitions
- Relevant Institutions

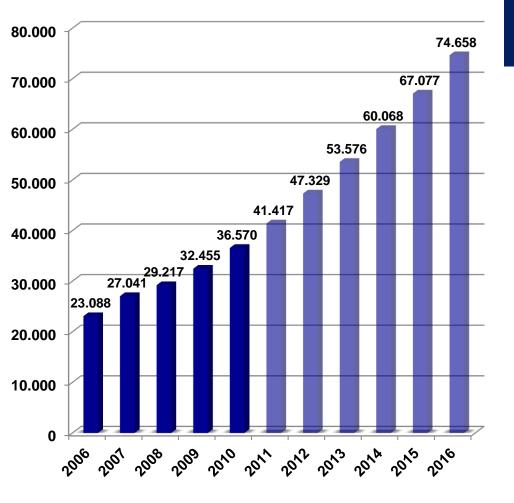


# **Dairy Products Market in China**

#### **Market Overview**



# Market Size Retail Value in US\$ Millions

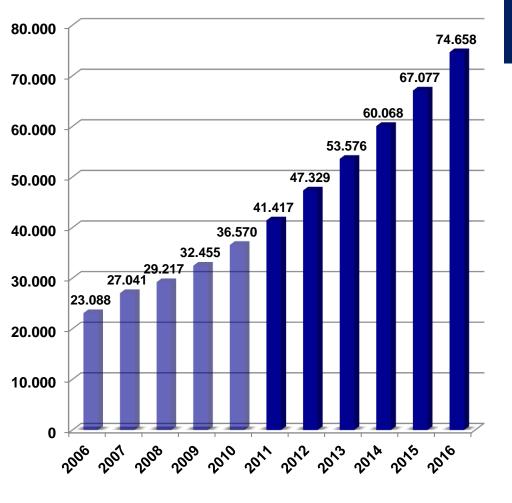


#### **Facts and Details**

- China represents the second largest retail market for dairy product globally after the US;
- Per-capita spending on dairy products reached US\$30.9 in 2011. Thanks to increasing income levels, this value is expected to be growing in the next future;
- Baby and infant milk formula showcased the highest growth rates for the period 2006-2010 (170,6%) wherease coffe whiteners and condensed milk registered the lowest rates (26,4%);
- Per capita annual consumption of dairy products is around 28 kg in urban areas, but is only around 12 kg in rural areas;
- New Zealand is the biggest exporter (45.6% of total imports in 2012), followed by France, the Netherlands and the US;
- Around 80% of dairy products reach consumers via retailers. For cheese products, yogurt, and take-home ice cream, the supermarkets' role is even more important.



### Market Size Future Development



#### **Drivers for Future Growth**

- Rising disposable income;
- Increased urbanisation;
- Improved affordability of domestic cold storage facilities;
- Increasing demand for safer and healthier food;
- Increased awareness of health benefits of dairy products;
- Based on the "XII Five-Year" plan, the output of the dairy industry will increase by 5.8% annually and reach 50 million tons by 2015.



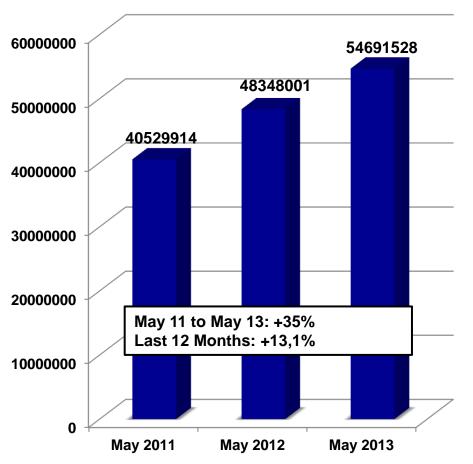
# **Dairy Products Market in China**

#### **Breakdown by Product Category**

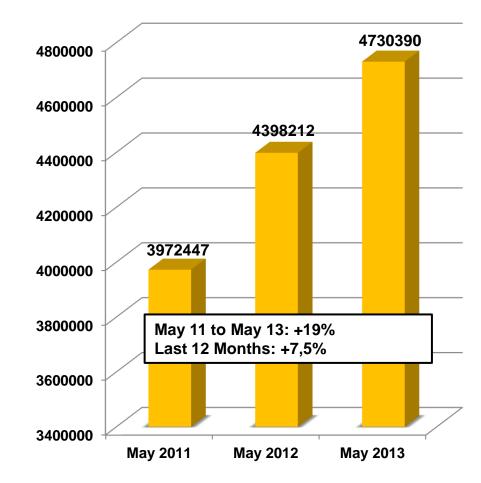


# Breakdown by Product: Liquid Milk

Sales Value (1000 RMB)



Sales Volume (1000 litre)

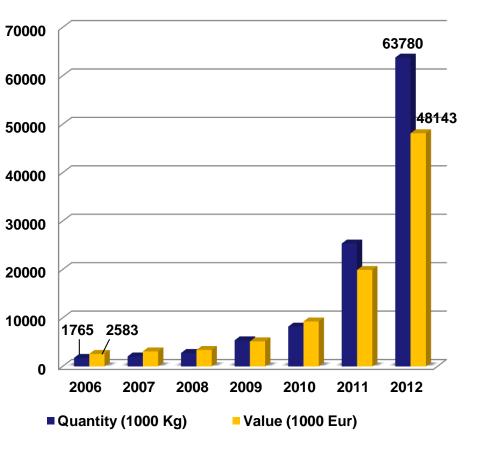


source The Nielsen Company, 2013



# Liquid Milk Imports from EU 27

#### EU 27 Export of Liquid Milk to China



#### **Facts and Details**

- Y-o-y Gr 2011-2012: +141% Exp Value +151% Exp Quantity
- CAGR 2006-2012: +62,8% Exp Value +81,8% Exp Quantity
- Fluid milk is the largest product segment in the dairy industry, and is sold mainly in cardboard containers and plastic packages;
- Due to the rapid spreading of food safety awareness amongst consumers, manufacturers have been introducing new product categories able to satisfy buyers' specific requests (i.e. calcium-fortified, iron-fortified, low-fat or fat-free drinking milk products, organic dairy products, as well as products added with functional ingredients);
- Flavored milk drinks with fruit juice will continue gaining market momentum through the whole 2013;
- Main players in the market are local companies: Mengniu, Yili and Wangwang.



### Liquid Milk Prices

#### **Retail Channel**





#### **Online Retail**



#### Mengniu

Telunsu 250ml x 12
RMB 58.5

#### Yili

WT GHE

• Jindian 250ml x 12 • RMB 58

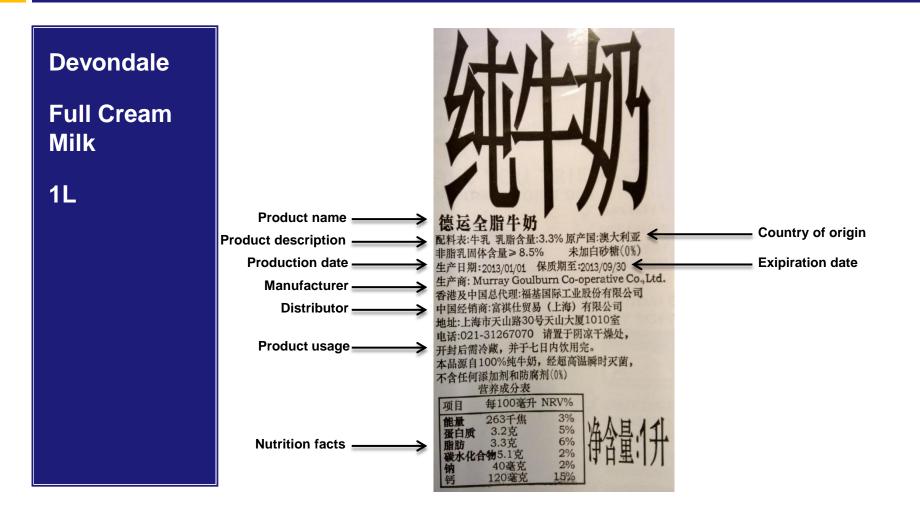
#### Oldenburger

• Full Cream Milk 200ml x 12

• RMB 66



### Liquid Milk Product Label Sample







• National Standard: GB 19301-2010 National food safety standard for raw milk

Item	Indicators	Inspection Methods		
Freezing point <sup>a.b</sup> / °C	- 0.500 ~ - 0.560	GB 5413.38		
Relative Density/(20°C/4°C)	1.027	GB 5413.33		
Protein (g/100g)	2.8	GB 5009.5		
Fat (g/100g)	3.1	GB 5413.3		
Impurities (mg/kg)	4.0	GB 5413.30		
Milk solids-not-fat (g/100g)	8.1	GB 5413.39		
Acidity/°T Bovine milk Ovine milk	2~18 6~13	GB 5413.34		
<sup>a</sup> Tested 3 hours after the milking. <sup>b</sup> Applies only to Holsteins cows.				





• National Standard: GB 11673-2003 Hygienic standard for milk beverage

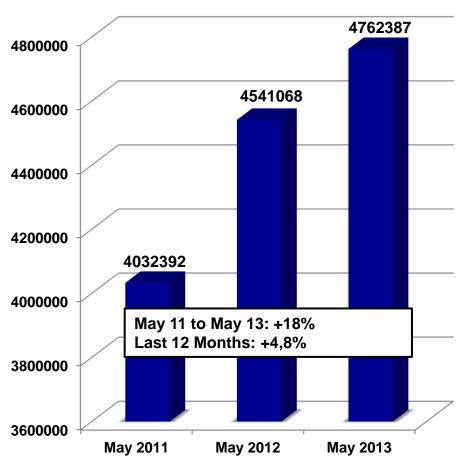
Organic Indicators				
ltem		Indicators		
Protein / (g/100 mL)	≥	1.0		
Fat <sup>a</sup> / (g/100 mL)	2	1.0		
Total Arsenium (As) (mg/L)	S	0.2		
Lead (Pb) / (mg/L)	≤	0.05		
Copper / (mg/L)	≤	5.0		
<sup>a</sup> Applies only to fresh milk.				

Microbial Indicators				
ltem	Indicators			
Total Bacterial Colony (cfu/mL) ≤	10000			
Coliform / (MPN/100 mL) ≤	40			
Fungi / (cfu/mL) ≤	10			
Yeast (cfu/mL) ≤	10			
Bacteria (Salmonella, Shigella, staphylococcus Aureus)	Must not be detected			

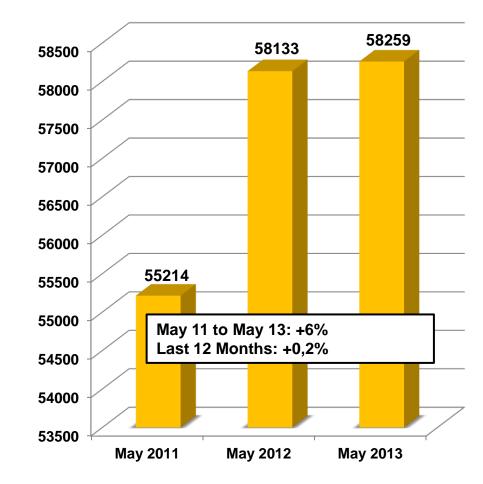


### Breakdown by Product: Milk Powder

Sales Value (1000 RMB)



Sales Volume (1000 litre)

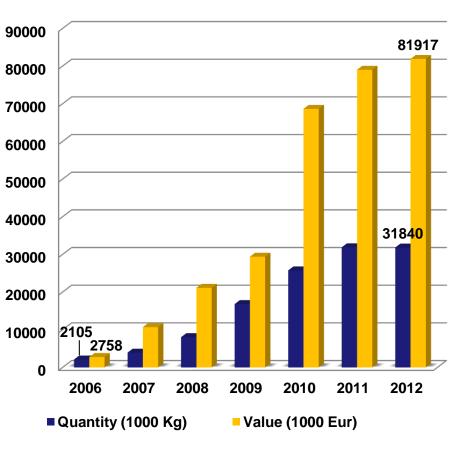


source The Nielsen Company, 2013



## Milk Powder Imports from EU 27

#### EU 27 Export of Milk Powder to China



#### **Facts and Details**

• Y-o-y Gr 2011-2012: +3,65% Exp Value

-0,14% Exp Quantity

- CAGR 2006-2012: +75,9% Exp Value +57,2% Exp Quantity
- The melamine scandal which bursted in China in 2008 has inceased domestic demand for imported milk powder. In 2011-2012 it remained the biggest import item;
- New Zealand, with over 80% of market share, is the biggest milk powder exporter to China, followed by United States, Australia and EU;
- Main players in the market are: Yili, Nestlé and ShengYuan Dairy.



## Milk Powder Prices

#### **Retail Channel**





#### **Online Retail**



### Milk Powder for Young Women 400g

• RMB 36

Yili

#### Nestlé

- Full Cream Milk Powder 400g
- RMB 33.8

#### **DutchCow**

- High Calcium Nutritional Milk
   Powder 400g
- RMB 36



### Milk Powder Product Label Sample

Cambricare

Skimmed Milk Instant Powder

900 g

康宝瑞道 净含量:	NA DEPENDENT AND A DEPENDENT	原产	Vie 日/月/年3 第2章
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TAR	1520 (kJ)	563	以使用紙、其由作品。 這些素和香蕉、含和
NB	33,4(g)	13	
一批和原则	0.8(g)		1
里水化合物	0,5(g)		1
7.8	54.1(g)	198	1
1	54.1(g)		1
14	390 (ng) 1240 (ng)	1558	The second
5. 148的A 4. 本位品幣 5. 为了体化。	難對的勢粉量此權取來 1-約。	每讓可以許通研 沖满为配比這會 加入國本或許本	的小师。 你不能在我们的你们的。 你们我们就是我们的你们们



### **Milk Powder Standards**

National Standard: GB 19644-2010 Milk Powder 

Item		Milk Powder	Formulated Milk Powder	Test Method
Protein (%)	2	34% of MSFN <sup>a</sup>	16.5	GB 5009.5
Fat <sup>b</sup> (%)	2	26.0	-	GB 5413.3
		18 7 ~14		GB 5413.34
Moisture content / (mg/kg)	≤	16	-	GB 5413.30
Moisture Content (%)	≤	5.0		GB 5009.3
<sup>a</sup> Milk solids-not-fat (% = 100% - fat (%) – moisture (%). <sup>b</sup> Applies only to whole milk powder.				

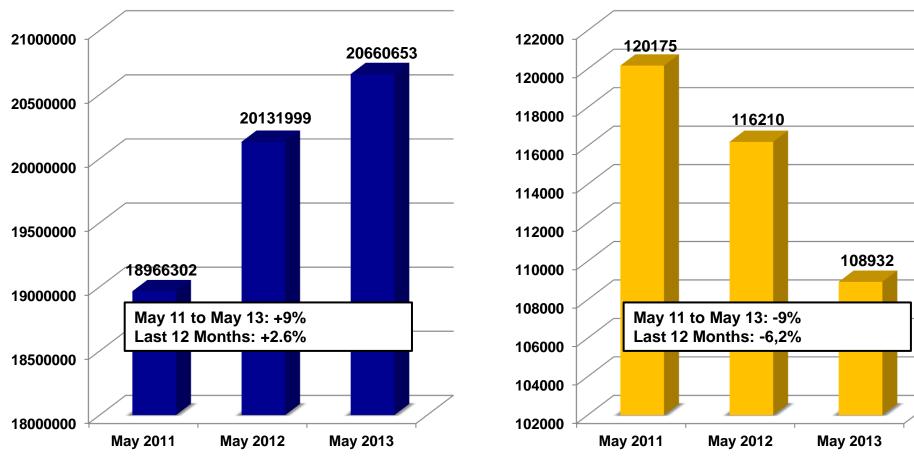
Applies only to whole milk powder.



## Breakdown by Product Infant Milk Formula

Sales Value (1000 RMB)



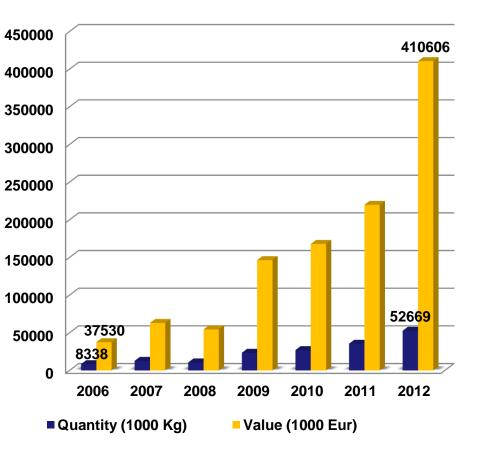


source The Nielsen Company, 2013



# Infant Milk Formula Imports from EU 27

#### EU 27 Export of Infant Milk Formula to China



#### **Facts and Details**

• Y-o-y Gr 2011-2012: +86.7% Exp Value

+48.5% Exp Quantity

- CAGR 2006-2012: +48.9% Exp Value +35.9% Exp Quantity
- Exports of infant formula to China increased in the first two months of 2013 by 114 percent following almost 50 percent increase in 2012 compared to 2011;
- The market is almost monopolized by international brands from Europe, US, Australia and New Zealand due to the high brand recognition and confidence they enjoy amongst Chinese consumers;
- The Netherlands (22.5%), New Zealand (18.6%), France (16.1%) and Singapore (17.2%) represented the top baby/toddler formula milk powder exporters to China at the end of 2012
- Major players in the market are: Dumex, Mead Johnson and Wyeth.



# Infant Milk Formula Prices

#### **Retail Channel**





#### **Online Retail**



#### **Dumex**

All in One Growing Up 900gRMB 198



#### **Mead Johnson**

A+ Growing Up 900g
RMB 193

#### Wyeth

- Progress Gold Growing Up 900g
- RMB 198

source Average of off-line retail channels



### Infant Milk Formula Product Label Sample

#### Cambricare

Starter Infant Milk Powder

900 g





### Infant Milk Formula Standards

#### National Standard: GB 23790-2010 – Infant Formulas

Index of Protein, Fat and Carbohydrate					
Nutrient	Unit	Per 100 KJ		Per 100 Kcal	
		Min	Max	Min	Max
Protein <sup>b</sup> : <ul> <li>Milk-based infant formula</li> </ul>	g	0.45	0.7	1.8	3.0
<ul> <li>Soybean-based infant formula</li> </ul>	g	0.5	0.7	2.25	3.0
Fat <sup>c</sup> in which: <ul> <li>Linoleic acid</li> </ul>	g	1.05	1.4	4.4	6.0
• α-linolenic acid	g	0.07	0.33	0.3	1.4
Linoleic acid/α-linolenic	mg	12	N.Sª.	50	N.Sª.
Acid ratio		5:1	15:11	5:1	15:1
Total Carbohydrated	g	2.2	3.3	9.0	14.0

<sup>a</sup>No Specification.

<sup>b</sup>For infant formulas based on milk protein and its processed products, the content of lactalbumin should be over or equal to 60%; the content of protein should be calculated as nitrogen (N) x 6.25; for infant formulas based on beans and their processed products, the content of protein should be calculated as nitrogen (N) x 5.71.

<sup>c</sup>In the finished products, the total content of lauric acid and myristic acid (tetradecanoic acid) should not exceed 20% of the total fatty acid; the maximum content of trans fatty acid should not exceed 3% of total fatty acid; the eruc acid content should not exceed 1% of the total fatty acid. <sup>d</sup>The content of lactose in total carbohydrate should be over or equal to 90%.



### Infant Milk Formula Standards

• National Standard: GB 23790-2010 – Infant Formulas

Indices of Vitamin					
Nutrient	Unit	Per 100 KJ		Per 100 Kcal	
		Min	Max	Min	Max
Vitamin A	μg REª	14	43	60	180
Vitamin D <sup>b</sup>	μg	0.25	0.6	1	2.5
Vitamin E	Mg α-TE°	0.12 <sup>d</sup>	1.2	0.5 <sup>d</sup>	5
Vitamin K	μg	1	6.5	4	27
Vitamin B <sub>1</sub>	μg	14	72	60	300
Vitamin B <sub>2</sub>	μg	19	119	80	500
Niacin and niacinamide <sup>e</sup>	μg	70	360	300	1500
Vitamin B <sub>6</sub>	μg	805	45	35	175
Vitamin B <sub>12</sub>	μg	0.025	0.36	0.1	1.5
Pantothenic icid	μg	96	478	400	2000
Folic acid	μg	2.5	12	10	50



# Infant Milk Formula Standards

Indices of Vitamin					
Nutrient Unit Per 100 KJ Per 100 Kcal				0 Kcal	
		Min	Max	Min	Мах
Vitamin C <sup>f</sup>	mg	2.5	17	10	70
Biotin	μg	0.4	2.4	1.5	10

<sup>a</sup>RE is retinol equivalent. 1 µg RE=3.33 IU A=1µg All trans retinol (Vitamin A). Ingredients of Vitamin A shall come from preformed retinol. When calculating or claiming activities of Vitamin A, no carotenoids ingredient shall be included.

<sup>b</sup>Calciferol, 1  $\mu$ g Calciferol = 40 IU Vitamin D.

<sup>C</sup>1  $\alpha$ -TE ( $\alpha$ -tocopherol equivalent)=1 mg d- $\alpha$ -tocopherol.

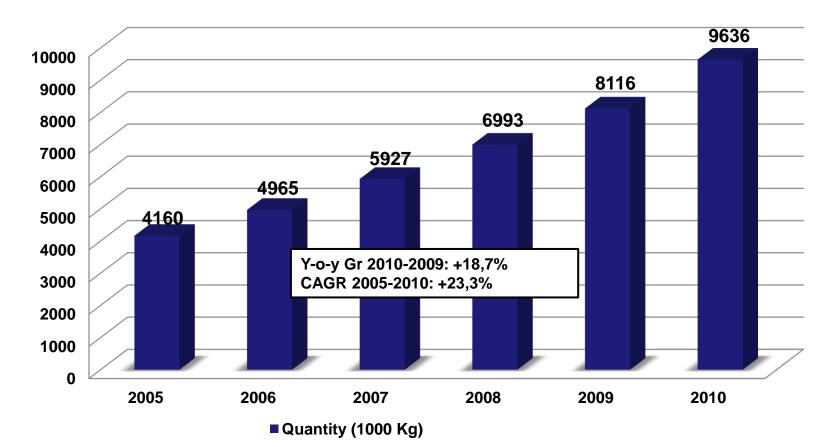
<sup>d</sup>The content of Vitamin E should be at least 0.5 mg of  $\alpha$ -TE per gram of polyunsatured fatty acid. The minimum of Vitamin E content should be regulated according to the number of double bonds in polyunsatured fatty acids in the formula as follows: 0.5 mg of  $\alpha$ -TE per gram of linoleic acid (18:2 n-6); 0.75 mg of  $\alpha$ -TE per gram of  $\alpha$ -linolenic acid (18:3 n-3); 1.0 mg of V per gram of arachidonic acid (20:4 n-6); 1.25 mg of  $\alpha$ -TE per gram of Eicosapentaeonic Acid (20:5 n-3);1.5mg of  $\alpha$ -TE per gram of docosahexonic acid (22:6 n-3). <sup>e</sup>Niacin: excludes precursor form.

<sup>f</sup>Expressed by ascorbic acid.



### Breakdown by Product Cheese

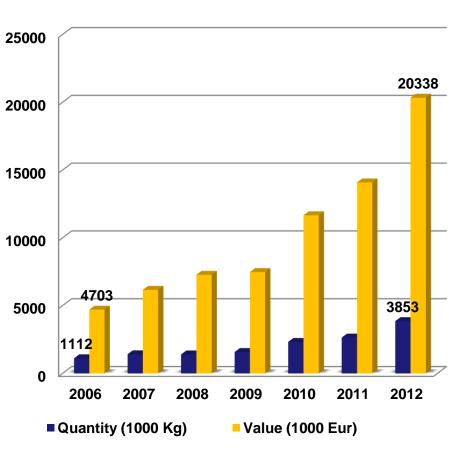
**Total Export of Cheese to China** 





### Cheese Imports from EU 27

#### EU 27 Export of Cheese to China



#### **Facts and Details**

- Y-o-y Gr 2011-2012: +44,4% Exp Value +45,9% Exp Quantity
- CAGR 2006-2012: + 27,6% Exp Value + 23% Exp Quantity
- Cheese still represents a niche market in China. Most consumption occurrs in larger cities where Western-style food can be found;
- Cheese is widely marketed as a health conscious product to high-income consumers. Although white-collar workers are still the key purchasers, however, families are increasingly turning their attention to cheese for the benefits it brings to children in terms of calcium intake;
- The largest importers of cheese to China are United States, France, Demark, New Zealand and Australia;
- So far, only processed cheese products have penetrated the Chinese market;
- Major players in the market are: Bright Dairy and Food Co, Fonterra Commercial Trading.



### Cheese Prices

#### **Retail Channel**





#### **Online Retail**



#### Fonterra

- Anchor Cheddar Processed Cheese 250g
- RMB 19.80



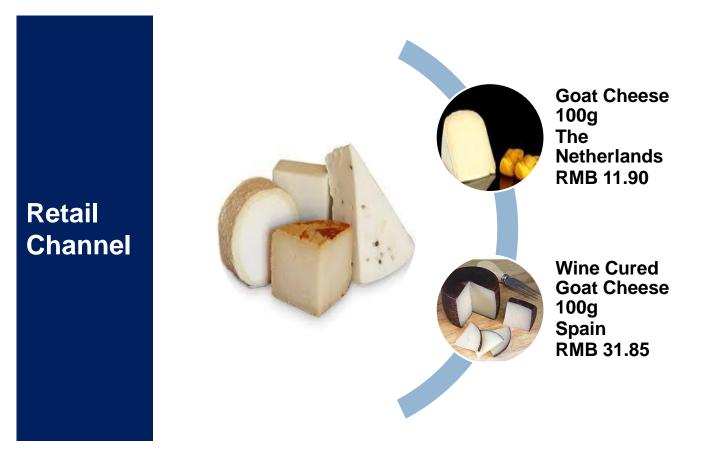
#### Milkana

- 棒棒奶酪 500g
- RMB 56

• Phladelphia 250g
 • RMB 29.80



### Goat Cheese Prices





### Cheese Product Label Sample

Fonterra

Anchor Cheddar Processed Cheese 250g

900 g





### **Cheese** Standards

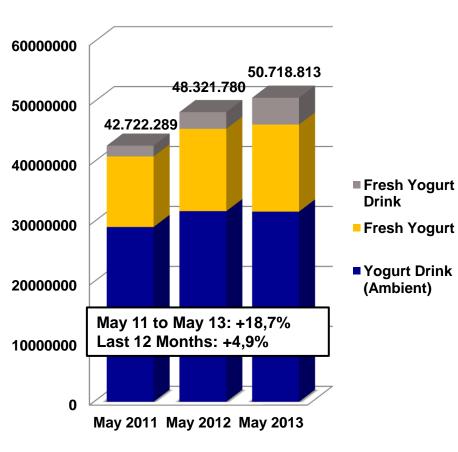
#### • National Standard: GB 5420-2010 Cheese

Item	Plan of Sampling and Limit
Coliform	n=5, c=2, m=100 cfu/g, M=1000 cfu/g
Staphylococcus aureus	n=5, c=2, m=100 cfu/g, M=1000 cfu/g
Salmonella	n=5, c=0, m=0 cfu/25g
Listeria monocytogenes	n=5, c=0, m=0 cfu/25g
Yeast <sup>a</sup> /(cfu/g)	50
Fungi <sup>a</sup> /(cfu/g)	50
<sup>a</sup> mold ripened cheese is not included.	

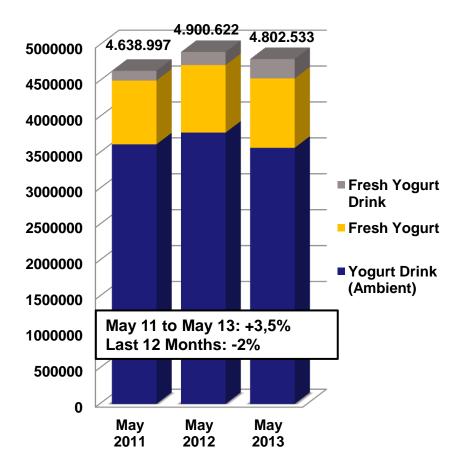


# Market Size Breakdown by Product: Yogurt

Sales Value (1000 RMB)



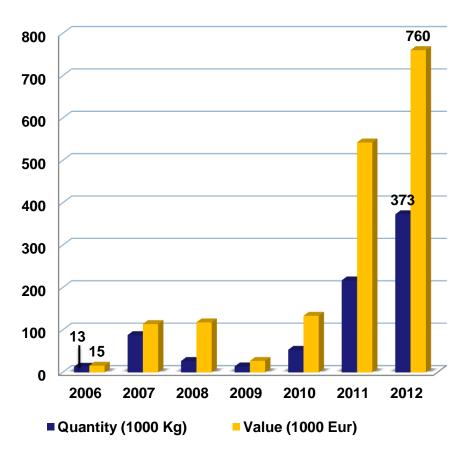
Sales Volume (1000 litre)





### Yogurt Imports from EU 27

EU 27 Export of Yogurt to China



#### **Facts and Details**

- Y-o-y Gr 2011-2012: +40,1% Exp Value +71,7% Exp Quantity
- CAGR 2006-2012: +90,6% Exp Value +74,3% Exp Quantity
- Drinking yogurt registers higher value sales as Chinese consumer consider it more convenient than spoonable yogurt;
- Functional yogurts (i.e. pre-biotic and probiotic varieties) and other health and wellness yogurts are increasingly gaining popularity in the Chinese market;
- Major players in the market are: Mengniu, Wahaha, Bright Dairy and Food Co, Yili.
- National Standard: **GB 2746-199.**



### Yogurt Prices

#### **Retail Channel**





#### **Online Retail**



# Bright Mosilian 190g x 12 RMB 58.8

# E HARRA

OGUI

#### Mengniu

- Suansuanru 250ml x 24
- RMB 45.3

#### **Emmi**

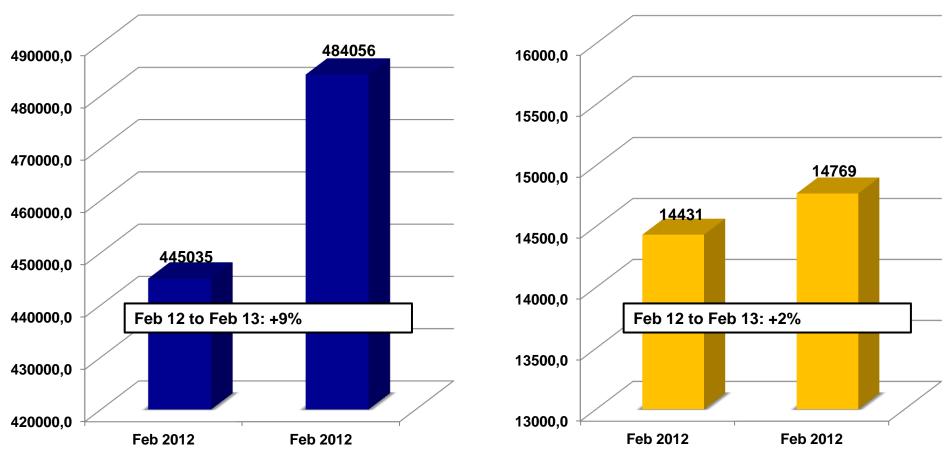
- Swiss Premium yogurt low fat 1.6%, 100 g
- RMB 7.6



# Breakdown by Product Ice Cream

Sales Value (1000 RMB)

Sales Volume (1000 litre)

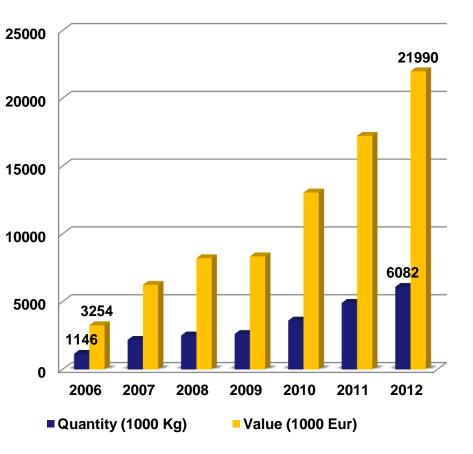


source The Nielsen Company, 2013. Data for 22 cities Hypermarket.



### Ice Cream Imports from EU 27

#### EU 27 Export of Ice Cream to China



#### **Facts and Details**

- Y-o-y Gr 2011-2012: +27,6% Exp Value +24% Exp Quantity
- CAGR 2006-2012: +37,4% Exp Value +32% Exp Quantity
- The higher demand for impulse and indulgence products stimulated the growth of ice cream sales in 2012. Due to rising disposable income and improving purchasing power, more consumers are willing to buy indulgence products;
- Developing healthy eating trend will determine the future growth of the ice-cream sector in China. The product, indeed, is considered as unhealthy (due to fat and sugar content, and additives, artificial colours etc. etc.), and the spread of awareness of food health and safety may drive consumers towards perceived healthier alternatives.
- Professional Standard: SB/T 10013-2008 Frozeb drinks-Ice cream.



## Ice Cream Prices

#### **Retail Channel**



Walls
Cornetto (flavour chocolate) 67g\*6
RMB 15.8



#### Yili

• QiaoleZi (flavour plain )80g\*6

• RMB 14.4



#### Allied Faxi Food

Baxi (flavour mix) 60g\*6RMB 24.2

#### **Online Retail**

 Impossible to retrieve data.
 Product not sold on-line due to storage and delivery constraints.



# **Dairy Products Market in China**

### **Opportunities and Challenges**



# Dairy Products Market in China Opportunities and Challenges

#### **Opportunities**

- Consumption of dairy products can be expected to continue rising in absolute terms in the future;
- Rising incomes and the spread of food safety awareness will drive the future demand for dairy product China;
- EU brands enjoy high recognition in China;
- New dairy products recently introduced in the market (soft cheese and semi-soft cheese, dairy based frozen products etc. etc.) are performing well.

#### Challenges

- High costs associated with establishing infrastructure and distribution channels;
- The market is still fragmented;
- Fierce competition by local actors;
- Years after the melamine scandal, Chinese brands are slowly regaining market confidence.



# **Dairy Products Market in China**

**Relevant Exhibitions** 



#### 

•Time: July 17 to 19, 2013

• Venue: Shanghai New International Expo Centre (SNIEC), 2345 Long Yang Road, Pudong Area, Shanghai, 201204, China.

•Organizer: China International Exhibitions (CIE)

•Contact: Uly Liu; Vicky Leung;

•Tel: 86-21-6209 5209 / +852-2876 5114

•Fax: +86-21-6209 5210 / +852-2520 0750

• E-Mail:
 • <u>chinabevtek@chinaallworld.com</u>
 • <u>vicky@chinaallworld.com</u>

**FHC CHINA** •Time: November 13 to 15, 2013 2013 • Venue: Shanghai New International Expo Centre (SNIEC), 2345 Long Yang China Road, Pudong Area, Shanghai, 201204, China •Organizer: China International Exhibitions (CIE) FHC •Contact: Ms Lily Zhu / Ms Becky Sun •Tel: +86-21-6209 5209

•Fax: +86-21-6209 5210

•fhc@chinaallworld.com

•E-mail

The Asian Food Marketplace				
China 2014	<ul> <li>Time: May 13 to 15, 2014</li> <li>Venue: Shanghai New International Expo Centre Hall N1-N5 &amp; E5-E7</li> </ul>			
Sial (	Organizer: Comexposium			
S	<ul> <li>Contact: Ms Mia Wang</li> <li>E-mail:</li> <li>mia.wang@comexposiu</li> </ul>			
	<u>m-sh.com</u>			



# **Dairy Products Market in China**

### **Relevant Institutions Supporting Agencies**



## Dairy Products in China Relevant Institution

Name of the Institution	Website
Ministry of Agriculture of the PRC	http://english.agri.gov.cn/
National Health and Family Planning Commission of China	http://www.npfpc.gov.cn/
Dairy Association of China	http://www.dac.com.cn/
EU SME Centre	http://www.eusmecentre.org.cn/
China IPR SME Helpdesk	http://www.china-iprhelpdesk.eu

Network of Chambers of Commerce in China



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