

# Dairy Products China News

## Guaranteed Exclusive Analysis

Vol. 14 Issue 6 2021

Welcome to the June issue of Dairy Products China News.

China's import growth for dairy in May has continued to command attention, a notable example being whey. Last year's strong increase in China's imports of whey – mainly US whey permeate – was continued in the data for May, as noted later in this issue. According to China's Ministry of Agriculture and Rural Affairs (MARA), the number of large-scale pig farms (>500 pigs per year) increased from 160,000 to 178,000 in 2020. Genesus estimates the world's largest pig producer, Muyuan, grew its herd by 1.3 million sows last year! The aggressive capacity expansion of such farms in 2020 means that China's pork production in 2021 is forecast at 49.27 million tonnes. Pig numbers have built back up since November 2019, a result of recovery efforts following herd losses due to the outbreak of ASF. This was despite ASF (a number of new outbreaks from last December through into February curbed pig production in certain regions, mostly in the north, and 10 such outbreaks have been reported this year) and the impact of other diseases such as porcine reproductive and respiratory syndrome.

At the start of June, the total number of pigs was 266.33 million, up 5% vs. May – the 2<sup>nd</sup> consecutive month the population has increased. Sow numbers are up, but the growth trend has slowed down – the average price of domestic pork has fallen for 20 weeks in a row. According to the National Bureau of Statistics, the current live slaughter pig price was RMB15.8/kg, down nearly 60% from RMB36.8/kg in early January. This approaches the break-even point for pig production, especially given the recent higher prices of feed raw materials such as corn and soybean meal, squeezing the profits of pig farmers and discouraging them from further expanding production. Some respite may come later in the year as harvested corn becomes available in Q4. Adding in the US efforts to grow demand in China's food industry for its whey permeate (and much smaller volumes of milk permeate) is a reminder that meaningful forecasting of future demand in China is not easy, even though edible applications are a relatively long-term technical sell which will likely not move the dial rapidly.

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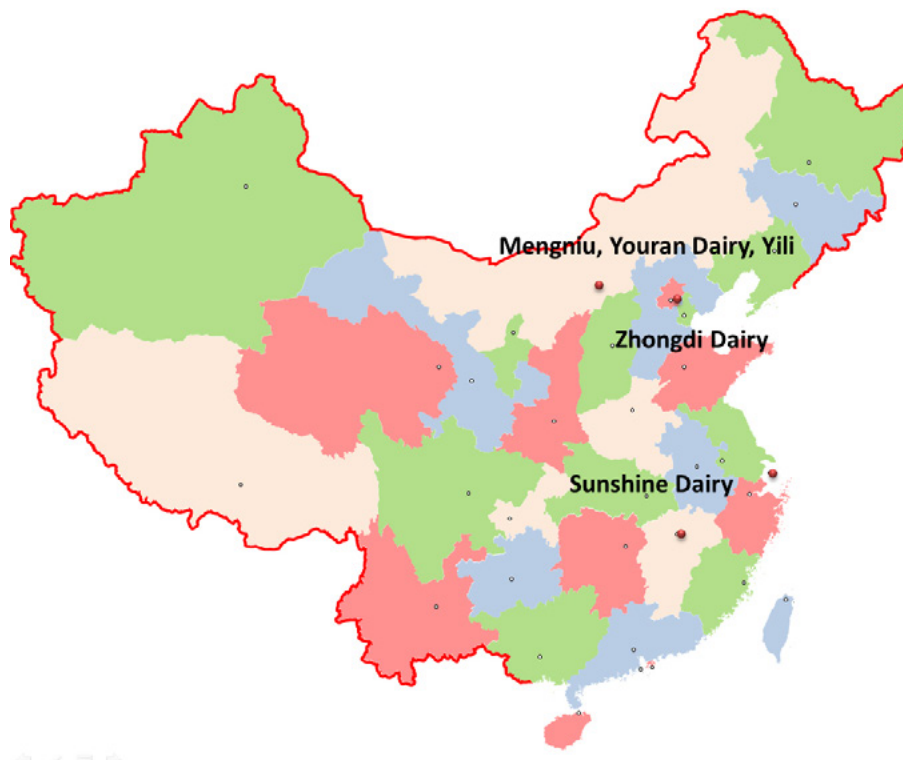
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## Headlines

- ▶ The China Milk Quotient Report for 2021 was released on 27 May, suggesting a milk quotient which remained unchanged in 2021 vs. 2020, and highlighting high awareness of dairy but low levels of consumption and dairy product understanding.
- ▶ The launch of the 3<sup>rd</sup>-child policy in China on 31 May brought good news for IMF producers in China – and seems likely to increase the concentration level in this market.
- ▶ Demand for cream and butter have been growing rapidly in China and in line with this, on 2 June, a new draft National Standard for Food Safety – Cream, Butter and Anhydrous Milkfat was issued to solicit feedback, although with limited changes only.
- ▶ On 15 June, the State Administration for Market Regulation issued a Q&A-style document to respond to frequently asked questions regarding re-registrations of IMF products, aiming to reduce the costs of registration.
- ▶ On 31 May and 11 June, 4 draft standards related to raw milk quality and production techniques were issued. The concept of milk grading is introduced, and technical specifications for the implementation of the National Standard for Food Safety—Raw Milk are provided.
- ▶ Since 2020, the GUMPs segment has become very attractive with numerous product launches, the latest being Mengniu, which on 1 June introduced a product formulated with probiotics from breast milk, claimed as a world first.
- ▶ Reckitt Benckiser announced on 5 June that it would sell IFCN China to Primavera Capital for an implied USD2.2 billion, a deal expected to complete in H2 this year.
- ▶ Youran Dairy went public officially on 18 June, and its total value reached USD3.0 billion (HKD23.3 billion) by the close of trading on the day.
- ▶ On June 19, Sunshine Dairy's IPO application was accepted – it intends to raise RMB600.8 million (USD94.5 million) for funding its expansion.
- ▶ The average price of raw milk rose moderately in June and is currently RMB4,270/t (USD671.7/t). The shortage of supply and rising costs, as well as the steady demand growth, remain the key factors behind the high milk prices.

## Major Companies and Sites Mentioned in This Issue



## Market Dynamics

### China Milk Quotient Static in 2021

**Summary:** *The China Milk Quotient Report for 2021 was released on 27 May, suggesting a milk quotient which remained unchanged in 2021 vs. 2020, and highlighting high awareness of dairy but low levels of consumption and dairy product understanding.*

On 27 May, the Report for China Milk Quotient in 2021 was jointly released by FrieslandCampina, the China Dairy Industry Association and the China International Exchange and Promotional Association for Medical and Health Care. (The term "milk quotient" was firstly suggested in 2018 to evaluate Chinese consumers' interaction with dairy products. Once more this year the survey was done by local research firm Dataway across 20 cities in China and 10 countries including the Netherlands, the US, the UK, New Zealand and Japan).

The report indicates the country achieved the same milk quotient in 2021 as in 2020, meaning high awareness but low consumption and knowledge of dairy products. From 2018 to 2021, the average awareness score for drinking milk was over 80, but below 60 for actual consumption and knowledge about the product. In 2021, the scores were 50.2 and 55.9 for these last aspects, respectively.

#### Chinese Dairy Intake Improved

The survey showed that only 25.5% of the local population had dairy products daily; these consumers – termed as "the milk population" – now number around 360 million, with still over 1 billion people who have not yet developed the habit of drinking milk. In the latter group, 74.2% said that they hadn't developed the habit in childhood, 16.1% said they felt sick after drinking milk, and others noted the high price of dairy products

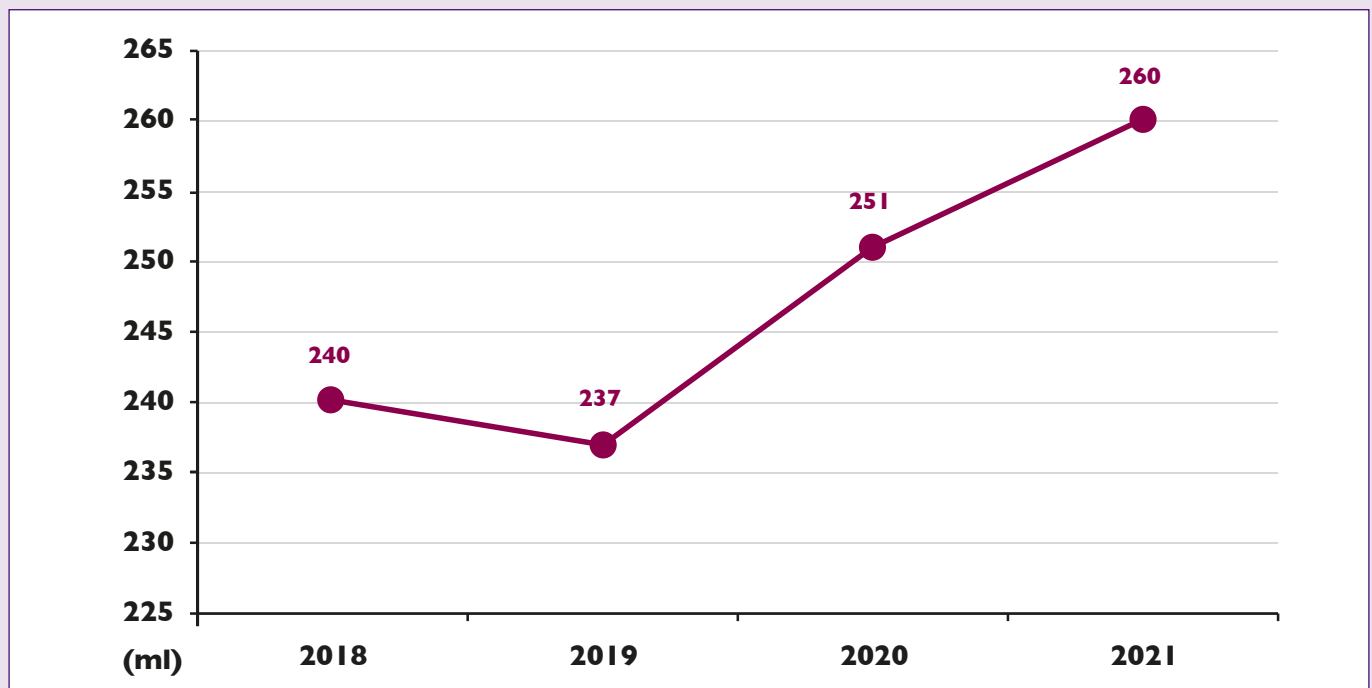
(5.4%) and concerns over product quality (4.3%).

Despite the limited "milk population", the daily intake volume of dairy products in China in LME terms has increased steadily in recent years from 240ml to 260ml, with a notable rise last year of 23ml from 237ml in 2019 since COVID-19's occurrence. Overall, 30.7% of respondents said they had spent more on dairy products since the pandemic – this figure was 36% amongst female respondents.

The increased intake of dairy products came from: foods containing dairy ingredients (25.4% – products such as cream biscuits and cream cakes), yoghurt (20.5%), liquid milk (15.7%), milk powder (14.1%) and cheese (14.1%).

Notably, parents of children aged 0–3 had the highest milk quotient of 66.5, but the milk quotient of elderly people aged 65+ went down between 2019 and 2020.

**TABLE 2.1-I Trend in Per Capita Dairy Intakes in China's "Milk Population" 2018–2021**



Source: China Milk Quotient Report, 2021

Note: Daily intake of dairy products (LME)

### Healthy dairy products and new consumption occasions

According to the survey, 42% consumers preferred dairy products that helped activate or raise immunity, 38.2% preferred those that improved bone or joint health and over 30% preferred those that improved sleep and digestive health, suggesting health is a key reason for growing Chinese dairy consumption.

Respondents tended to choose dairy products containing probiotics (52.1%), that were low-fat or skimmed (48%) and were low-sugar or sugar-free (46.4%). 37% of respondents believed that "lactoferrin is good to improve immunity" – 7.7 percentage points higher than in 2020 – and this was even higher (53%) among parents of children aged 0–3, with

33.5% focusing on the level of lactoferrin in products.

Consumption occasions for dairy have also diversified to include tea time, social gatherings and during sports. Snacks containing milk such as Naizao (dates coated in milk powder) and cheese sticks as well as milk beverages such as milk tea were popular among young people. For example, when doing sports, milk (43.1%) was the favourite drink for exercisers after water (55.7%).

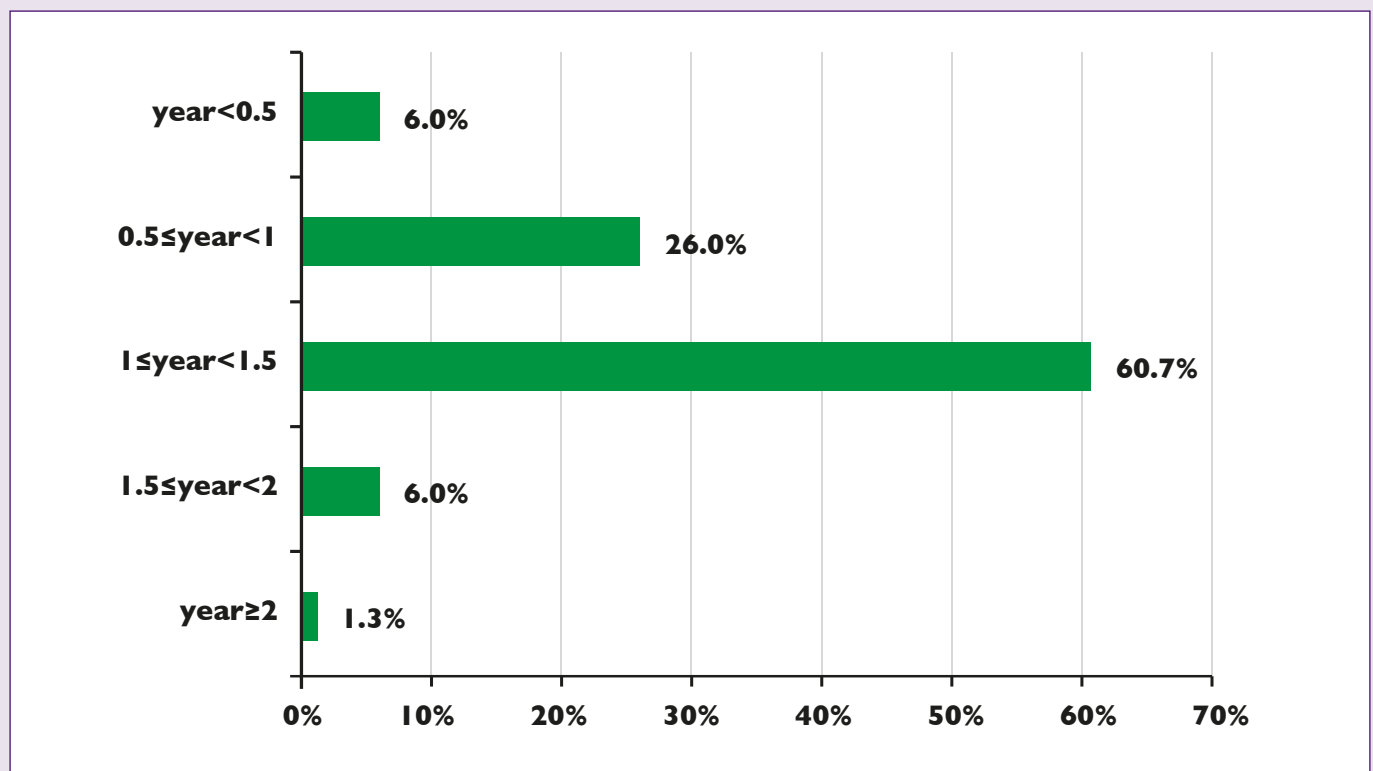
### Misunderstandings about dairy products

The survey showed people were very interested in knowing about dairy products, wanting to know the ingredients and functions – but high general awareness of dairy contrasted with limited understanding of its health and nutritional benefits.

13.7% of respondents said they were lactose intolerant (suggesting 190 million Chinese may have this problem), but 65.7% of lactose-intolerant people had the misconception that this meant they couldn't have any dairy product. In response to this, experts noted that such consumers can try yoghurt as well as lactose-free or low-lactose dairy products to gradually improve their tolerance.

Additionally, many parents of children aged 0–3 had misunderstandings in respect of breast milk. It was said in the survey that 98% of children aged 0–3 drank breast milk from birth, on average for 13 months – far below the WHO's recommended 24 months. But, surprisingly, 53.8% of parents thought that IMF products were better than breast milk.

**TABLE 2.1-2 Durations of Breastfeeding for Children aged 0–3**



Note: Report for China Milk Quotient in 2021

### China's comparatively low dairy consumption

This was the first time the milk quotient survey included 10 other countries, and the comparisons between the countries highlighted 3 major problems in China in this regard.

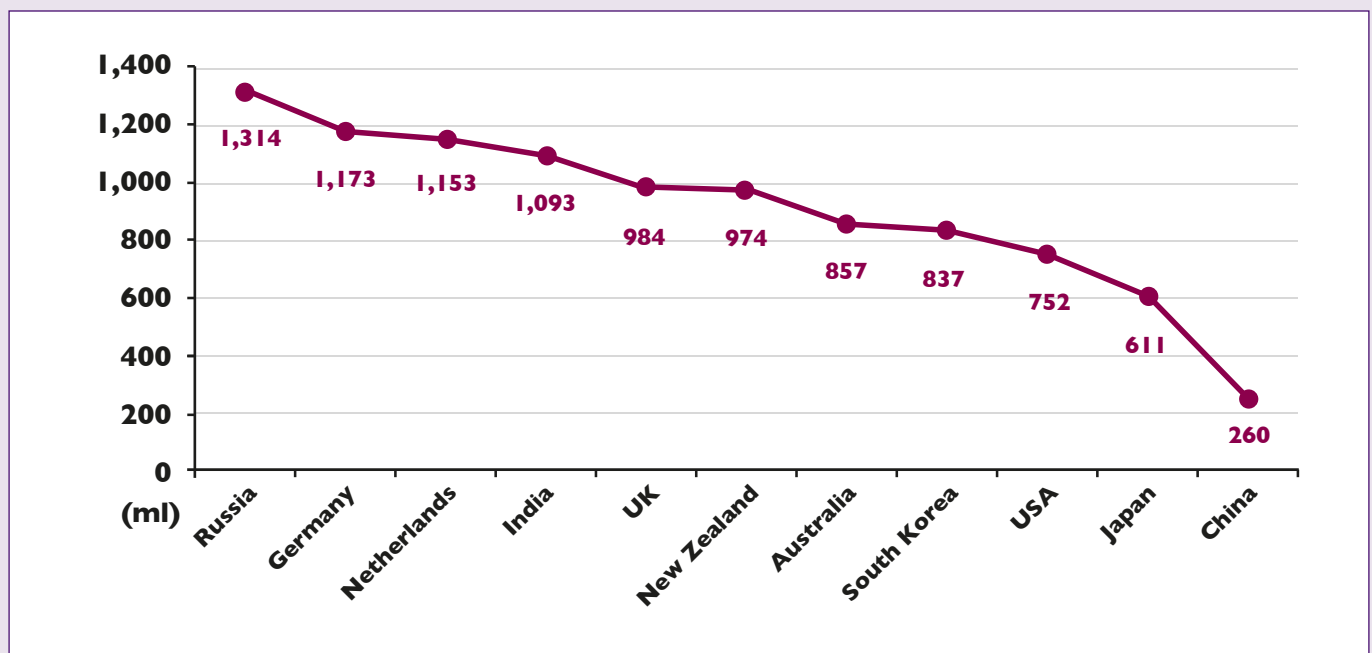
- Lowest intake volume – China's dairy intake was only 260ml, while the others all exceeded

600ml (4 countries – Russia, Germany, the Netherlands and India – even saw daily intake volumes over 1,000ml)

- Limited product range consumed – Chinese mainly drank liquid milk but seldom cheese, which only accounted for 6.4% of the total dairy intake, the least among all the countries surveyed (where it exceeded 40%)

- Lowest proportion of "milk families" (meaning where all family members consume dairy products) – China's level of 35.7% was close to that in South Korea (35.9%) and slightly lower than Japan (40%). India had the highest proportion (71.8%), and levels exceeded 60% in the US, Germany, the UK, Netherlands and Australia

### 2.1-3 Per Capita Daily Dairy Intake in Surveyed Countries



Source: China Milk Quotient Report, 2021

Note: Based on LME

## Governmental Direction

### China's 3<sup>rd</sup>-child policy – Some Good News for the IMF industry

**Summary:** The launch of the 3<sup>rd</sup>-child policy in China on 31 May brought good news for IMF producers in China – and seems likely to increase the concentration level in this market.

It was announced at the meeting of the Political Bureau of the Central Committee of the Communist Party on 31 May that a 3<sup>rd</sup>-child policy and supporting measures would be introduced, in response to population aging. The supporting measures include strengthening guidance for young people's views on marriage and family, improving policies on maternity leave and insurance, increasing the fair availability of education resources and reducing families' expenditure on education.

Local watcher of the dairy market Song Liang suggested that this will help expand the IMF (infant milk formula) market and reduce the price war.

According to the country's 7<sup>th</sup> population census published by the National Bureau of Statistics on 11 May:

- 12 million births were recorded in 2020, the fewest since 1952 (2.65 million less than in 2019, and 5.23 million less than in 2017)
- The fertility rate of women of childbearing age fell to 1.3, below the warning level (1.5) and much lower than the replacement level (2.1)

The IMF market will be further reduced if the birth rate keeps going down, of course. Euromonitor forecast China's IMF sales values to grow annually by only 3.9% in 2021–2025 vs. 6.5% for the period 2015–2020. The low birth rate plus the new national standards for IMF have intensified the industry's push for survival of the fittest, but it is hoped that this policy change will alleviate pressure to some extent.

The demographic economist Liang Jianzhang expects the policy will boost the number of births by several hundred thousand but less than 1 million each year.

The IMF producers target new parents as they are often willing to pay big premia to play it as safe as possible, as they lack childcare experience and have not yet developed purchasing habits or affiliations. Conversely, parents of 2<sup>nd</sup> / 3<sup>rd</sup> children tend to follow previous habits and become more rational and less likely to try new brands, especially those from the smaller/lesser-known manufacturers, so the position of the major brands in IMF looks like being strengthened, and the level of market concentration raised.

Euromonitor shows the Concentration Ratio (CR3) in the IMF market in China rising since 2015 to 38% in 2020, so back to the level of 2007 before the "melamine incident" – led by China Feihe Ltd (China Feihe, Stock Code: HK.06186) at 14.8% and Nestlé at 12.8%. These are chased by a whole pack of other IMF producers – most significant of which are Health and Happiness (H&H) International Holdings Ltd (H&H Group, Stock Code: HK.01112), Inner Mongolia Yili Industrial Group Co., Ltd (Yili, 600887), China Mengniu

Dairy Company Ltd (Stock Code: HK.02319), Ausnutria Dairy Corp Ltd. (Ausnutria, Stock Code: 1717), Beingmate Baby & Child Food Co., Ltd. (Beingmate, Stock Code: 002570), Shijiazhuang Junlebao Dairy Co., Ltd. (Junlebao) and Synutra Nutrition Food Co., Ltd. (Synutra).

The positive influence of the 3<sup>rd</sup>-child policy for the major players became clear in the stock market. In the afternoon on 31 May, Chinese dairy enterprises listed on the A share market and in Hong Kong saw rapid growth before closing – Beingmate up 8.1%, Yashili International Holdings Ltd. (Yashili, Stock Code: 1230, part of Mengniu) up 6.8%, Ausnutria up 3.4%, China Feihe by 2.4% and Mengniu by 2.2%.

According to the 7<sup>th</sup> population census, the annual growth rate of China's population in 2011–2020 was 0.53%, down by 0.04 percentage points from the previous decade. This reflects multiple factors including the reduced number of women of childbearing age, couples' decisions to postpone having children and the rising cost of raising children. With the new policy representing an extension of the 2<sup>nd</sup>-child policy, the number of 3<sup>rd</sup> children seems likely to be lower than the number of 2<sup>nd</sup> children. But in fact, the impact of the 2<sup>nd</sup>-child policy was more limited than some had expected, with the number of birth rising in 2016 when the policy change occurred only to decline for 4 years in a row. In the long run, the 3<sup>rd</sup> child policy will have a limited impact it seems, due to the ongoing reduction in the number of women of childbearing age and the changes in young people's lifestyles and expectations.

## Draft National Standards for Cream, Butter and AMF

**Summary:** Demand for cream and butter have been growing rapidly in China and in line with this, on 2 June, a new draft National Standard for Food Safety – Cream, Butter and Anhydrous Milkfat (AMF) was issued to solicit feedback, although with limited changes only.

The secretariat of the Review Committee of National Standard for Food Safety issued the draft National Standard for Food Safety – Cream, Butter and Anhydrous Milkfat on 2 June, with comments invited up to 20 July. The Standard will replace the 2010 version, with clearer definitions of cream and butter while other contents such as physicochemical indexes and sensory requirements unchanged.

### Major changes in the Standard

#### Revised terms and definitions

- The definitions were revised as follows.
  - Cream = products with a fat content of 10.0g–80.0g/100g, processed from the separated fatty part of "raw" (meaning natural – that is, not reconstituted) milk, and with or without food additives or nutrient supplements
  - Blended cream = products with a fat content of 10.0g–80.0g/100g, processed from raw milk and (or) cream, butter and AMF and other raw dairy materials, with or without food additives or nutrient supplements

- The permitted additions are defined as:

- Butter = products with a fat content of not less than 80.0g/100g, processed from milk and (or) cream, with or without other dairy materials, food additives or nutrient supplements.
- AMF = products with a fat content of not less than 99.8g/100g, processed from milk and (or) cream, with or without other materials and food additives.

### Added compositional Indicators

The main compositional indicators are given as follows:

**TABLE 3.2-2 Compositional Indicators in the Draft National Standard for Food Safety — Cream, Butter and AMF**

Item	Indexes		
	Cream and Blended cream	Butter	Anhydrous milkfat
<b>Water g/100g ≤</b>	/	165	0.1
<b>Fat g/100g ≥</b>	10	80	99.8
<b>Acidity oT ≤</b>	30	20	/
<b>MSNF g/100g ≤</b>	/	2	/

Source: The secretariat of the Review Committee of National Standard for Food Safety

Note: Fat in AMF (g/100g) = 100 – water (g/100g); The acidity index is inapplicable to products after fermentation or acid content adjustment; MSNF (g/100g) = 100 – fat (g/100g) – water (g/100g) (Salt content to be subtracted for salted butter).

### Removed maximal residue limits of pathogenic bacterium

The GB29921-2013 National Standard for Food Safety—Maximal Residue Limits of Pathogenic Bacterium is now being revised, including dairy products. It does not specify an MRL for pathogenic bacterium (*staphylococcus aureus* and *salmonella*), noting that "the limits should be in line with that in GB29921". Other MRLs remained unchanged.

The development of the bakery and tea beverage sectors in recent years in China have resulted in surging demand for cream and butter, especially for cream, with its varied potential applications. New tea beverages perceived as healthy and fashionable have become very popular among consumers. These are designed to be

rich-tasting and fresh, often produced instore; they are typically much more branded products than the traditional leaf tea consumed in China.

According to the White Paper on New Tea Beverages 2020 issued by Nayuki (a leading brand owned by Shenzhen Pindao Catering Management Co., Ltd.) and CBNDData:

- Total sales of all types of tea and tea beverages through all channels in China in 2020 were forecast at USD69.5 billion (RMB442 billion)
- Sales of new tea beverages were forecast to reach USD15.7 billion (RMB100 billion) in 2020 and over USD17.3 billion (RMB110 billion) in 2021

As a result several companies have been investing in cream products. For instance, Junlebao Juncheng Dairy

Co., Ltd. announced in Aug., 2020 it would add a 5,400 t/a cream line in its milk powder plant; Inner Mongolia Yili Industrial Group Co., Ltd. (Yili, 600887) pushed into the foodservice channel with a new cream product in Nov., 2020; Bright Dairy & Food Co., Ltd. (Bright Dairy, Stock Code: 600597) was promoting its BCB cream products (imported from Germany) during the China International Import Expo last year.

Butter has remained more limited to bakery and cooking. Its import volumes shot up dramatically in 2018, dropped significantly by 29.4% in 2019 to 61,556 tonnes, and then bounced back in 2020 to 85,580 tonnes, up by 39.1% – however amongst Chinese consumers, low product awareness and usage levels remain barriers to growing the retail channel sales.

### SAMR FAQ on IMF!

**Summary:** On 15 June, the State Administration for Market Regulation issued a Q&A-style document to respond to frequently asked questions regarding re-registrations of IMF products, aiming to reduce the costs of registration.

The National Standard for Food Safety—Infant Formula Food (GB10765-2021), National Standard for Food Safety—Formula Food for Older Infant (GB10766-2021) and National Standard for Food Safety—Young Children Formula Food (GB10767-2021) will take effect on 22 Feb., 2023. In order to answer questions regarding registration of IMF in the transition period before the new

national standards put into force, the State Administration for Market Regulation issued the Notice of the Registration of Infant Milk Formulae Products on 15 June to address a number of FAQs:

**Q.** For registered formulae that will be adjusted according to the new national standards, which should be treated as registration changes, and which should be de-registered and then registered as new formulae?

**A.**

- Registration changes: Adjustment of formulae in lines with the new national standards should be treated as registration change in principle. Examples could be the

addition of choline in stage 1 formulae, of chemical compound sources of mineral substances, vitamins, choline, selenium and manganese in stage 2 formulae and content adjustment of active ingredients of food additive formulation

- Registration as new formulae after deregistration: Where key ingredients are added or removed, such cases should be re-registered as new formulae. For instance, adding or removing raw materials as dietary fibre (including fructo-oligose, GOS, polyfructosan, raffinose, polydextrose and yeast  $\beta$ -glucan), nucleotides and bacteria should require re-registering as new products after deregistration

**Q.** What materials are needed when applying for re-registrations (registration change included) under the new national standards?

**A.**

- Registration application form for IMF (or application form for registration change)
- Relevant R&D and argumentation materials for formulae adjustments, including:
  - List for comparing between the new and registered formulae (such as in standards for raw materials and food additives, formula composition and content and nutrition information), and explanation for adjustment details and reasons
  - Composition and content of food additive formulation and corresponding executive standards
  - Verification reports for techniques for no less than 3 batches of commercial products, including input information of raw and auxiliary materials and analysis on uniformity, technical stability and conformity of nutrition constituents
  - Explanation of obvious differences in formulae
  - Control schemes of hazardous substances such as contaminant, microorganism and fungaltxin that may involved
  - Sources of bacterial strains and prevention and control of bacterial contamination (for formulae added with active materials)
- Product formulae
- Explanation of production techniques (needed when production techniques specified in registration certificate are changed), including:

- Rationales for changes in production techniques specified in registration certificate
- Explanation of similarities and differences between the production techniques (including processes, technical parameters, critical control points, major production equipment, division of working areas and raw material adding process) of different formulae under the same series, and a list with major differences remarked on

- Flow chart and explanatory text

- Inspection report of products
- Material for product stability research (needed both for registration change and registration of new formulae), including:
  - Stability analysis of different batches of products and of parameters of the major production processes
  - Applicant should complete by themselves the research on product stability of shelf life. Tests in the stability research can be launched by applicants themselves or by 3<sup>rd</sup>-party agents
- Label sample

#### Clarifications should reduce registration costs

This reflects the government's wish to finish the registration of IMF as soon as possible, minimising impact on the companies' operations.

Beingmate Co. Ltd. (Beingmate, Stock Code: 002570), Shijiazhuang Junlebao Dairy Co., Ltd. and Ausnutria Dairy Corp Ltd. (Ausnutria, Stock Code: 1717) all commented favourably on the Q&A and indicated that they were now preparing for registrations:

- Beingmate is progressing work on registrations and has not yet applied for registration of new formulae
- Junlebao has been conducting detailed research into variation ranges of raw and auxiliary materials and nutrients, stability of production techniques, processing of nutrients and attenuation of nutrients in shelf life
- Ausnutria has not yet applied for registration, but is now preparing to do so in line with the new national standards through activities such production trials



## Draft Raw Milk Standards

**Summary:** On 31 May and 11 June, 4 draft standards related to raw milk quality and production techniques were issued. The concept of milk grading is introduced, and technical specifications for the implementation of the National Standard for Food Safety—Raw Milk are provided.

Chinese consumers have paid more attention to "raw materials", as they have been able to spend more on their diets.

Nowadays, natural milk is replacing reconstituted milk and becoming the first choice of consumers thinking about their health, and there is an increasing number of products on the market which sell on the basis of their high quality milk sources. With this in mind, 4 standards have been issued for soliciting public comments.

On 31 May, the Dairy Association of China issued China Dairy 20 Alliance

Standardized Raw Milk, a draft group standard on which it invited comments by 30 June. This relates to raw milk produced and purchased by the China Dairy 20 Alliance members. Compared to the National Standard for Food Safety (GB 19301-2010), this draft increases the protein content from 2.8g/100g to 3.0g/100g and the fat content from 3.1g/100g to 3.5g/100g – supporting the major processors' push for higher quality

**TABLE 3.4-2 Draft Standard – China Dairy 20 Alliance Standardized Raw Milk**

Item	Index
<b>Freezing point (°C)≤</b>	- 0.500 to - 0.560
<b>Relative density (20°C/4°C)≥</b>	1.027
<b>Protein (g/100g)≥</b>	3.0
<b>Fat (g/100g)≥</b>	3.5
<b>Impurity (mg/kg)≤</b>	4.0
<b>MSNF (g/100g)≥</b>	8.1
<b>Acidity (°T)</b>	11 to 17

Source: Dairy Association of China

Note: Raw milk comes from healthy cows without any change in components (colostrum milked within 7 days after calving, milk generated when the cows are receiving antibiotics or in withdrawal periods or poor quality milk are excluded); Freezing point is only applied to Holstein cows, and is tested 3 hours after milking.

On 11 June, the National Technical Committee on Standardization of Animal Husbandry issued 3 draft standards – Grading Raw Milk Quality, Technical Specification of Raw Milk Production and the Technical Specification of Controlling Colony Forming Unit in Raw Milk – inviting comments by 10 July. The concept of "grading raw milk" was put forward for the first time in an industrial standard (previously, it was seen in

**TABLE 3.4-4 China Dairy 20 Alliance**

No.	Company name	No.	Company name
<b>1</b>	Inner Mongolia Yili Industrial Group Co., Ltd. (600887)	<b>1</b>	New Hope Dairy Holdings Co., Ltd. (002946)
<b>2</b>	Inner Mongolia Mengniu Dairy (Group) Co., Ltd. (HK.02319)	<b>2</b>	China Zhongdi Dairy Holdings Company Limited (HK.01492)
<b>3</b>	Bright Dairy & Food Co., Ltd. (600597)	<b>3</b>	Jinan Jiabao Dairy Co., Ltd.
<b>4</b>	China Modern Dairy Holdings Ltd. (HK.01117)	<b>4</b>	Zhongken Dairy Co., Ltd.
<b>5</b>	Shijiazhuang Junlebao Dairy Co., Ltd.	<b>5</b>	Henan Huahuan Dairy Group Co., Ltd.
<b>6</b>	Beijing Sanyuan Foods Co., Ltd. (600429)	<b>6</b>	Nanjing Weigang Dairy Co., Ltd.
<b>7</b>	Xi'an Yinqiao Dairy Industry (Group) Co., Ltd.	<b>7</b>	Beingmate Baby & Child Food Co., Ltd. (002570)
<b>8</b>	Inner Mongolia Shengmu High-tech Husbandry Co., Ltd.	<b>8</b>	Guangdong Yantang Dairy Co., Ltd. (002732)
<b>9</b>	Heilongjiang Feihe Dairy Co., Ltd. (HK.06186)	<b>9</b>	Xinjiang Tianrun Dairy Co., Ltd. (600419)
<b>10</b>	Heilongjiang Wondersun Dairy Co., Ltd.	<b>10</b>	Fujian Changfu Dairy Stock Group Co. Ltd.

Source: Dairy Association of China

local standards and group standards), encouraging guide processors to separate streams by quality to optimise the use of quality milk and avoid waste. The latter 2 technical specifications are ancillary to the GB 19301-2010.

Grading Raw Milk Quality is in response to the requirement for "grading and classification" contained in the Central No.1 Document (the first document

issued by the Central Committee of the country's Communist Party each year, representative of the priority placed rural issues by the Central Committee and the State Council). It proposes 3 raw milk grades – "Extra Superior", "Superior" and "Qualified". Processors can choose milk of different grades to produce dairy products with differentiated prices, so driving the whole dairy industry towards higher quality through market forces.

**TABLE 3.4-6 Grading of Raw Milk Quality**

Index	Grade		
	Extra Superior	Superior	Qualified
<b>Fat (g/100g) ≥</b>	3.4	3.3	3.1
<b>Protein (g/100g) ≥</b>	3.1	3.0	2.8
<b>Colony Forming Unit (CFU/mL) ≤</b>	5×10 <sup>4</sup>	1×10 <sup>5</sup>	2×10 <sup>6</sup>
<b>Somatic Cell Count (one cell/mL) ≤</b>	3×10 <sup>5</sup>	4×10 <sup>5</sup>	1×10 <sup>6</sup>

Source: National Technical Committee on Standardization of Animal Husbandry

Note: Samples should be collected from milk tanks or milk tanker vessels of farms. Rules: All 4 indexes should all be reached before the raw milk can be classified as corresponding grade.

The Technical Specification of Raw Milk Production aims to ensure that the quality of raw milk is at least as good as the national standard, focusing on techniques for milk production and farm management. It provides terms and definitions related to milk production and technical requirements regarding health and hygiene of farm workers, breeding environment, milking cows,

control of milk colour, taste, odour, composition, pollution, mycotoxins, microorganisms, somatic cell numbers, pesticide and veterinary drug residues.

Testing in China in recent years has shown significant variances in levels of colony forming units (CFU) in raw milk – 3.1% of the 1,170 samples tested during the preparation of the standard exceeded the maximum

limit. The Technical Specification of Controlling Colony Forming Unit in Raw Milk provides technical support aimed at ensuring quality and safety by regulating the monitoring, deviation rectification, verification and recording of feed, water, environment, milking, storage and transport processes, cow and farm worker health and of course the CFU levels.

## Company Dynamics

### Mengniu Targets GUMPs

**Summary:** Since 2020, the GUMPs segment has become very attractive with numerous product launches, the latest being Mengniu, which on 1 June introduced a product formulated with probiotics from breast milk, claimed as a world first.

In Wuhan City, Hubei Province on 1 June – International Milk Day and Children's Day – a launch event for Mengniu M8 growing-up formula was held by Yashili International Holdings Ltd. (Yashili, Stock Code: 1230 – part of China Mengniu Dairy Company Ltd (Stock Code: HK.02319).

This is claimed to be the world's first GUMP containing probiotics from breast milk. The event including a tasting session for 10,000 people, with close to a further 50 offline tasting events planned across the country.

Mengniu M8 is aimed at children aged 3 to 6, and includes Bifidobacterium lactis Probio-M8 as well as other ingredients such as FOS and GOS, yeast β-glucan and 28 fruit and vegetable powders.

Cooperating with the Inner Mongolia Agricultural University, Mengniu separated this – its first patented bacterial strain – from healthy breast milk, and this is its first use in an end product. Compared with the company's existing GUMP –

Weilaixing, selling at USD27.7/can (800g, RMB176/can) – Mengniu M8 is positioned as a more high-end product, selling with a positioning based more clearly on the nutritional benefits it can offer to children's diets.

Mengniu has contracted with 2 retail chains – Huaihua Sunbaby Maternity-Baby-Children Co., Ltd. and Jiajiayue Group Co., Ltd. (Jiajiayue, 603708) – as strategic cooperation partners on Mengniu M8.

#### GUMPs have become a hot spot

The rising cost of acquiring customers for IMF products has made GUMPs increasingly attractive, as the round-up of recent launches shows.

2020:

- Abbott Nutrition announced the launch of Eleva (stage 4), an organic product
- Moohko, a brand under Mille, introduced Lexiang
- Inner Mongolia Yili Industrial Group Co., Ltd. (Yili, 600887) launched QQxing in May, with 3 other new products in this range in Dec.
- Ausnutria Dairy Corp Ltd. (Ausnutria, Stock Code: 1717) introduced Allnutria

- Shijiazhuang Junlebao Dairy Co., Ltd. (Junlebao) launched Xiaoxiao Luban All-round Care
- Wyeth introduced Wyeth Nutrisure with A2 milk

In 2021:

- Ausnutria launched an Hyproca 1897 GUMP
- Wyeth is to expand its GUMP range this year (and its Blue Diamond range is about to enter the market)

Numerous SMEs have also jumped on the GUMP bandwagon, and for all suppliers the attractions are clear:

- Fierce competition in the current IMF market, with frequent price wars and production and R&D costs pushed up by the new national standard and secondary registration policy
- Large target market – the proportion of population aged 0 to 14 went up by 1.35 percentage points to 17.95% (253.38 million) in 2020, despite the declining birth rate, according to the 7<sup>th</sup> population census
- Less strict requirements for production of GUMPs, which can be produced with existing production lines, and to no fixed standards
- Wide price range – from USD15.7+ (RMB100+) to USD62.9+ (RMB400+). For instance, according to JD.com, Zhuge Xiaojiang from Beidahuang Wondersun Dairy Co., Ltd. is priced at USD20.1/can (750g, RMB128/can), and Wyeth illumina organic GUMP imported from Ireland (stage 4, age 3–6) is priced at USD62.8/can (900g, RMB399/can). The wide price range provides flexibility for suppliers
- Market demand. Chenghong, member of the national committee of the Chinese People's Political Consultative Conference (CPPCC) and vice chairman of the CPPCC of Beijing said at the 3<sup>rd</sup> Session of the 13<sup>th</sup> National

**IMAGE 4.1-1 Mengniu M8 growing-up formula**



Source: Mengniu

Committee of the CPPCC that the main indicators of physical health amongst children and teenagers have been declining for 20+ years in a row, with health problems seen in 33% of this group, including myopia, obesity, diabetes and mental illness in particular.

## Primavera Capital to acquire IFCN China from Reckitt Benckiser

**Summary:** *Reckitt Benckiser announced on 5 June that it would sell IFCN China to Primavera Capital for an implied USD2.2 billion, a deal expected to complete in H2 this year.*

Reckitt Benckiser Group (Reckitt Benckiser) announced on 5 June that it has signed an agreement with Primavera Capital Group (Primavera

Capital) to sell its Infant Formula and Child Nutrition business in China (IFCN – Mead Johnson its major brand) to Primavera Capital (headquartered in China) at an implied USD2.2 billion. Once settled, Reckitt Benckiser will still hold an 8% stake in IFCN China, and will gain USD1.3 billion cash to reduce its debt.

### Transaction Underway

The sale will include the IFCN plants in Nijmegen (Netherlands) and Guangzhou, along with a royalty-free perpetual and exclusive license for the Mead Johnson and Enfa brand ranges in Greater China, leaving Reckitt Benckiser to retain these brands and market them outside Greater China.

IFCN China is based in Guangzhou, employing 3,000 employees and managing major brands such as Mead Johnson Nutrition, Enfamil, Enfagrow, Enfa Gentlese, Enfaschool, MultiGrow, NutriPower, Enfinitas Mama, Enfa Mama and Enfinitas. By 31 Dec., 2020, it had:

- Net revenue of USD1.2 billion (GBP861 million, GBP1 = USD1.3988, sourced from Hexun.com on 17 June)
- Operating profit of USD118.9 million (GBP85 million)
- Gross assets of USD7.6 billion (GBP5.4 billion)
- Net assets of USD4.8 billion (GBP3.4 billion)

Laxman Narasimhan, CEO of Reckitt Benckiser, said that the transaction marked a further step forward for growth generation and long-term value strategy implementation. He added: "Reckitt Benckiser will remain a leader in infant nutrition in North America, ASEAN and Latin America, and will be committed to the development of Hygiene, Health and VMS portfolios in China."

Reckitt Benckiser has initiated negotiation with its works council in the Netherlands, and will take up the matter with other employee unions later. The transaction is expected to complete in H2 this year.

### High Bid Wins

In May this year, Reckitt Benckiser put IFCN China up for sale for USD2.0 billion, which attracted dairy companies such as Inner Mongolia Yili Industrial Group Co., Ltd. (600887), Shijiazhuang Junlebao Dairy Co., Ltd. (Junlebao) and New Hope Dairy

Holdings Co., Ltd. (New Hope Dairy, Stock Code: 002946) and private equity firms such as Bain Capital, CITIC Capital Holdings Limited, DCT, The Carlyle Group and KKR. In the end, Primavera Capital won with its offer of USD2.2 billion.

When asked the reason for the acquisition, Primavera Capital stated that:

- China has the largest IMF market on earth, worth USD23.6 billion (RMB150 billion), and is forecast to keep growing annually by 3% in the future
- Mead Johnson leads the international brands in the Chinese IMF market, and has valuable brand assets such as specialised infant formula products and the Enfinitas brand which is well-positioned amongst high-end customers

According to the internal letter issued by Enda Ryan, SVP of Reckitt Benckiser's Health and Nutrition Sector in Greater China, Primavera Capital and Reckitt Benckiser will form a long-term partnership in R&D and supply under the transaction. This means Primavera Capital has the right to cooperate with Reckitt Benckiser in cutting-edge R&D and product innovation, supported by long-term manufacture and supply agreements.

### Mead Johnson's Future?

This is not Primavera Capital's first initiative in IMF. On Junlebao's initiative, Primavera Capital teamed up with Ping'An Capital and Shijiazhuang Junqian Enterprise Management Co., Ltd. to acquire 51% of Junlebao from China Mengniu

Dairy Company Ltd (Stock Code: HK.02319) back in Nov., 2019. Now Chunhua Shaojing (Tianjin) Equity Investment Partnership and Qiushi Xingde (Tianjin) Investment Center (both limited partnerships) hold 12.12% of Junlebao, making Primavera Capital a key shareholder in Junlebao.

The fact that Primavera Capital will have 2 well-known dairy/IMF brands after the deal has attracted a good deal of attention from the market. The dairy industry commentator Song Liang speculated that:

- Junlebao may swap shares with Mead Johnson before going public
- Unit IPOs of Mead Johnson, Junlebao and capital behind Junlebao may be launched
- Junlebao may acquire the entire Mead Johnson business after going public

He noted that based on the current size of Junlebao, its total capital value could be between USD3.1 billion (RMB20 billion) to USD4.7 billion (RMB30 billion) after listing, making acquisition of Mead Johnson quite possible. As a private equity firm, Primavera Capital can only make profits by selling a targeted company or withdrawing from it after a flotation, and the second course of action seems more likely.

In operational terms, Mead Johnson will gain financial support from Primavera Capital, and tap into Junlebao's channels in 3<sup>rd</sup>/4<sup>th</sup>-tier cities and team resources to grow in these promising markets.

## Youran Dairy Goes Public

**Summary:** Youran Dairy went public officially on 18 June, and its total value reached USD3.0 billion (HKD23.3 billion) by the close of trading on the day.

China Youran Dairy Group Ltd (Youran Dairy, HK.09859) was listed on the main board of the Stock Exchange of Hong Kong Ltd. on 18 June. The company planned to raise about USD643.8 million (HKD5 billion, USD1 = HKD7.7663, sourced from Hexun.com on 23 June) by the IPO, and achieved a total value of USD3.0 billion (HKD23.3 billion) by the close of trading on the date. The extra funds raised by the IPO, USD468.4 million (HKD3.6 billion), are mainly to be used for expansion of its business over the next 2 years:

- Around USD340.1 million (HKD2.6 billion) – 72.6% of the net proceeds – is for projects including 5 farms that are under construction (combined capacity of 70,000 cows) and 3 new farms (combined capacity of 34,000 cows)
- Around USD70.3 million (HKD546 million) – 15.0% – will be used for importing 20,000 Holstein cows from Australia and New Zealand
- Around USD11.2 million (HKD87 million) – 2.4% – will be used for construction of a feed plant in Lindian County, Heilongjiang Province
- Around USD46.9 million (HKD364 million) – 10.0% – will be used mainly to supplement working capital

Dairying is currently booming, as more and more people have formed the habit of drinking milk after the pandemic in 2020, which has acted as a market catalyst in this regard; moreover, consumers are drinking better quality milk, and paying a higher price per litre on average because of this. However, supply remains limited and it takes at least 2 years for farms to expand their production, meaning the key dairy businesses are focusing upstream more than ever.

One of the reasons why Youran Dairy's IPO has attracted so much attention is its prominent role in local dairying in this wider context.

### Youran Dairy synergies

The firm's businesses cover the whole supply chain from feed to breeding to raw milk production. In 2020, it grew its revenues by 53.6% to USD1.85 billion (RMB11.8 billion – consolidated with Inner Mongolia Saikexing Breeding Biotechnology (Group) Co., Ltd.)

There are clear synergies between its 3 business activities:

- Raw milk (59.4% of its 2020 turnover)

Frost & Sullivan reported last year that Youran Dairy was world's largest dairying business – in H1 2020 it led the very fragmented raw milk supply sector with 2.9% of total cow numbers and 4.5% of milk production. The top 5 companies' combined market shares were only 8.1% and 14.1% respectively.

This remains the case. Mengniu's holding subsidiary Modern Dairy completed the acquisitions of Fuyuan International on 23 March and Zhongyuan Muye on 8 April, taking it to around 307,000 cows, but still slightly smaller than Youran Dairy's Natural Dairy:

- Farms: By 31 Dec., 2020, Natural Dairy was running 67 farms and raising 308,195 cows, consolidated with Inner Mongolia Saikexing Breeding Biotechnology Co., Ltd. (Saikexing). 8 farms were under construction, projected to go into operation within 2 years
- Production:
  - Its production increased from 670,196 tonnes in 2019 to 860,413 tonnes in 2020, up 28.4%
  - Its milk yield per cow (Jersey cows excluded) improved from 10.4 tonnes in 2019 to 11.0 tonnes in 2020
  - Behind its focus on quality, it provides milks higher DHA content, with higher A2  $\beta$ -casein content and organic milk

**TABLE 4.3-2 Revenue of Youran Dairy by Product, 2018–2020, million USD**

Product	2018	Revenue proportion	2019	Revenue proportion	2020	Revenue proportion
Raw milk	410.6	41.2%	481.9	40.0%	1100.3	59.4%
– Quality raw milk	204.1	20.5%	245.7	20.4%	760	41.0%
– Speciality raw milk	206.5	20.7%	236.3	19.6%	340.2	18.4%
Supplies for ruminants	585.7	58.8%	724.3	60.0%	752.9	40.6%
– Feed	551.9	55.4%	688.4	57.1%	691.5	37.3%
– Dairy farming consumables*	33.8	3.4%	35.8	3.0%	53.5	2.9%
Cattle semen	/	/	/	/	8	0.4%
<b>Total</b>	<b>996.3</b>	<b>100.0%</b>	<b>1206.2</b>	<b>100.0%</b>	<b>1853.2</b>	<b>100.0%</b>

Source: Youran Dairy

Note: \*These include veterinary drugs, breeding equipment, etc., from various suppliers.

- Feed (37.3% of its 2020 turnover)

Youran Dairy provides concentrated feeds for the full life cycle of ruminants including cows, milk goats, beef cattle and sheep. By the end of 2020, it was running 7 feed factories and cooperating with 5 other feed producers. Its production of feed came to 1,013,886 tonnes.

Additionally, it supplies cost-effective roughage (alfalfa and oat grass mainly) to customers, based on large-scale planting areas. According to Frost & Sullivan, by its the sales volume of alfalfa in 2020, Youran Dairy led supplies with a roughage market share of 3.2%.

- Breeding (0.4% of its 2020 turnover)

Natural Dairy is able to provide cows and frozen beef cattle semen to farms, after acquiring Saikexing on 8 Jan., 2020. Data from Frost & Sullivan showed Saikexing was the largest

supplier of frozen cattle semen in 2019.

### Yili, the biggest customer of Youran Dairy

Founded in 1984, Youran Dairy was originally 100% owned by Inner Mongolia Yili Industrial Group Co., Ltd. (Yili, 600887). In 2015, Youran Dairy was funded by PAG, an alternative asset management company in Asia, and became mainly independent, although Yili retains a 40.0% leading stake in the business.

Youran Dairy grew its customer base for its raw milk from 20 to 37 and then 49 in 2018, 2019 and 2020 respectively. However, Yili has always been the biggest and has become even more important, accounting for 91.7%, 92.9% and 95.8% of Youran Dairy's raw milk revenues over the 3 years. Conversely, in 2020, Youran Dairy accounted for close to 25% of Yili's total raw milk purchase volume – the 2<sup>nd</sup> largest supplier only accounted <7%.

## Sunshine Dairy's Listing Accepted

**Summary:** On June 19, Sunshine Dairy's IPO application was accepted – it intends to raise RMB600.8 million (USD94.5 million) for funding its expansion.

On June 19, China Securities Regulatory

Commission noted the acceptance of an application for an IPO by Jiangxi Sunshine Dairy Industry Group Co., Ltd. (Sunshine Dairy / Yangguang Dairy), making it a step closer to becoming the province's first dairy processor to go public.

Sunshine Dairy is to issue 70.7 million shares – 25.01% of its total share capital after the issue. It plans to raise RMB600.8 million (USD94.5 million) for expansion of its operations and for building its sales and marketing channels.

**TABLE 4.4-2 Planned Use of Funds from Sunshine Dairy's IPO**

No.	Project	Total investment (USD million)
1	Expansion, Testing, R&D and Upgrade of Dairy Plant in Jiangxi Province	44.5
2	Phase II Construction of Dairy plant in Anhui Province	22.4
3	Marketing Channel Building and Brand Promotion	27.6
<b>Total</b>		<b>94.5</b>

Source: Jiangxi Sunshine Dairy Industry Group Co., Ltd.

### Chilled Dairy as a Core Focus

Sunshine Dairy Business sells 100+ types of chilled and UHT dairy products such as milk and milk beverages. In 2020, its total dairy production capacity reached 74,100 tonnes, up 5.4%. However, its production and sales volumes decreased to 49,200 tonnes and 49,900 tonnes, by 9.9% and 9.6% respectively, for reasons which are not revealed in the prospectus.

In 2020, its sales of chilled milk and yoghurt dominated its business:

- Its operating income was RMB522.6 million (USD82.2 million), down

3.8%; net profit was RMB103.2 (USD16.2 million), down 0.4%

- Its sales of chilled dairy products were
  - RMB425.0 million (USD66.9 million), down 1.1%, accounting for 81.3% of the company's total revenue, up 2.2 percentage points vs. 2019
  - 34,953 tonnes, taking up 71.3% of its total sales volume, up 2.8 percentage points vs. 2019.

Deliveries to customers in fulfilment of online orders are the company's main sales channel, building high consumer

loyalty and facilitating repeat orders, ensuring a stable customer base and keeping out other brands.

Its focus on chilled dairy products has made milk supply a key challenge for the company, which sources from its own 2 small farms and contracted external suppliers. As of December 31, 2020, the company had only 885 dairy cows, of which just 503 were adult cows – so supply well under its required volume. In 2020 it purchased approximately 25,000 tonnes of raw milk and 2,000 tonnes of milk powder (including colostrum powdered milk, WMP (both cow and goat milk varieties) and SMP.

**TABLE 4.4-4 Revenue and Output of Sunshine Dairy by Product Category in 2020**

Products	Income (million USD)	Percentage	Sales Volume (tonnes)	Percentage
<b>Chilled Dairy Products</b>	66.9	81.3%	34,952	71.3%
<b>UHT Dairy Products</b>	6.7	8.1%	4,553	9.3%
<b>Chilled Milk Beverages</b>	3.7	4.5%	2,749	5.6%
<b>UHT Milk Beverages</b>	4.9	5.9%	6,586	13.4%
<b>WMP</b>	0.1	0.1%	159	0.3%
<b>Total</b>	<b>82.2</b>	<b>100.0%</b>	<b>48,999</b>	<b>100.0%</b>

Source: Jiangxi Sunshine Dairy Industry Group Co., Ltd.

**IMAGE 4.4-5 Sunshine Dairy Chilled Milk Products**



Source: Jiangxi Sunshine Dairy Industry Group Co., Ltd.

**IMAGE 4.4-6 Sunshine Dairy Chilled Yoghurt Products**



Source: Jiangxi Sunshine Dairy Industry Group Co., Ltd.

### Key sales region

Jiangxi Province is the key market for Sunshine Dairy:

- "Tiantian Sunshine" known as a "Jiangxi time-honoured brand" and enjoying high level brand awareness in the chilled fresh milk segment
- The firm has a relatively strong competitive edge in terms of delivering directly to households

In 2020, Jiangxi region provided sales of the company of RMB510.7 million (USD80.3 million), accounting for 97.8% of its total income. Currently it is the only large-scale dairy processor in Jiangxi Province, as none of the industry's major national brands have plants locally.

In order to open up new markets, in 2019 it established Anhui Huahao Sunshine Dairy Co., Ltd. in Anhui Province, where there seems to be strong potential. Here it competes with New Hope Dairy Holdings Co., Ltd. (New Hope Dairy, Stock Code: 002946), Yili, and Anhui Yiyi Dairy Industry Co., Ltd.

The 2 plant expansions are part of its strategy to further strengthen its development of new markets while consolidating its existing home sales market. At full capacity the Jiangxi plant is to produce up to 70,000 tonnes of dairy products per year, the Anhui plant up to 40,000 tonnes per year.

## Raw Milk Supply

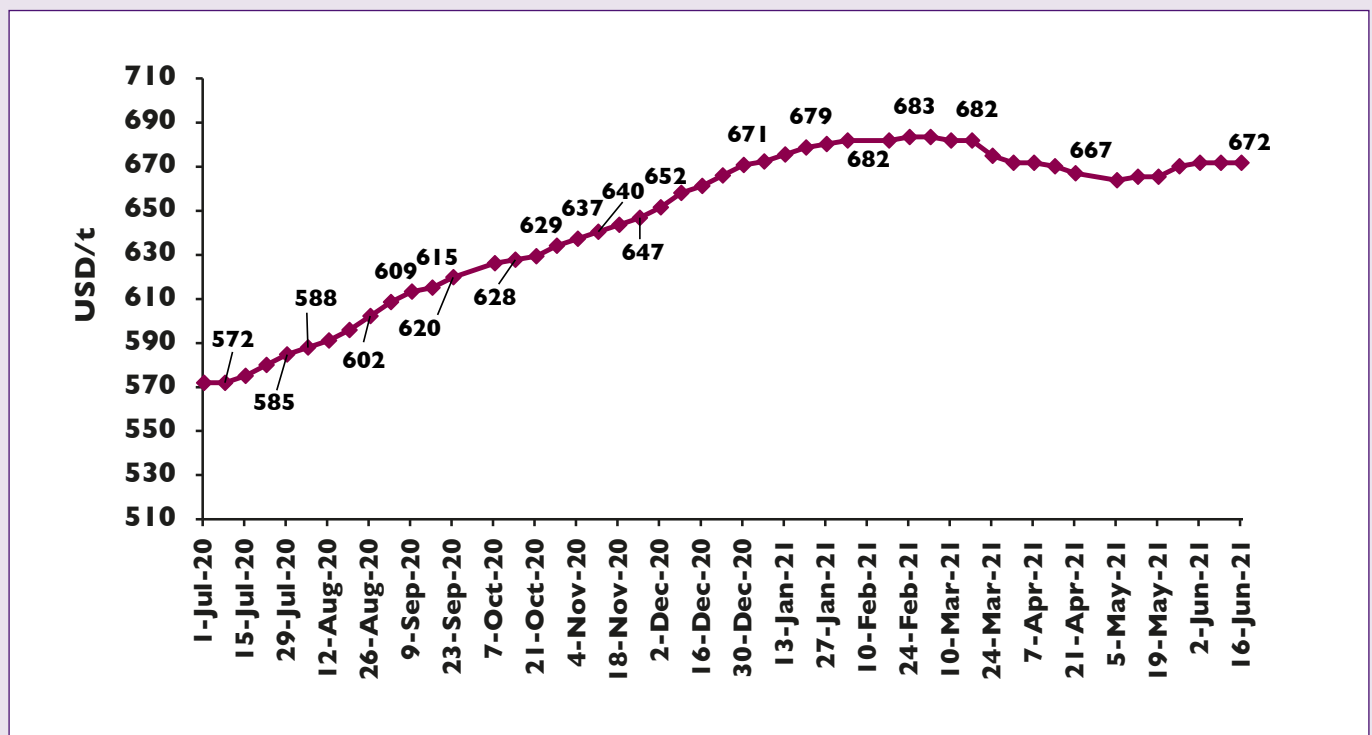
### Raw Milk Prices Rise Moderately in June

**Summary:** The average price of raw milk rose moderately in June and is currently RMB4,270/t (USD671.7/t). The shortage of supply and rising costs, as well as the steady demand growth, remain the key factors behind the high milk prices.

The price of raw milk in June ended the slight decline in May with a modest upturn, reflecting short supply and rising costs, as well as the steady growth in demand. According to the monitoring report of the country's 500 county market fairs and collection points by Institute for the Control of

Agrochemicals, Ministry of Agriculture and Rural Affairs (ICAMARA), in the 3<sup>rd</sup> week of June (collection day is June 16), the average price of raw milk in 10 major dairy-producing provinces including Inner Mongolia and Hebei was RMB4,270/t (USD671.7/t). This was an increase of 0.9% MoM (19.6% YoY), regaining the level seen in early April this year. According to the raw milk cost survey working group of the Shanghai Dairy Industry Association, the basic milk purchase price for dairy farms in Shanghai in H2 of 2021 is RMB4,170/t(USD655.9/t), an increase over H1 and up 3.5% YoY.

**FIGURE 5.1-3 China's Average Price of Raw Milk in Jul. 2020 – Jun. 2021**



Source: Institute for the Control of Agrochemicals, Ministry of Agriculture and Rural Affairs

### Milk supply

This continues to be insufficient, with numerous major dairy companies actively investing in building their own farms:

- On May 28<sup>th</sup>, Funan Large-scale Ecological Smart Dairy Farm Project of Bright Dairy & Food Co., Ltd. (Bright Dairy, Stock Code: 600597) started operating, after a total investment of about RMB360,0 million (USD56.6 million). The starting herd of 7,000 dairy cows is expected to generate about 40,000 tonnes of raw milk annually
- On June 18, the Huabei Wantou Ecological Smart Dairy Farm Project of Bright Dairy started – it has 12,000 dairy cows and plans annual production of approx. 70,000 tonnes
- At the start of June, the Phase I 10,000-Head Dairy Farm Project of New Hope Dairy Holdings Co., Ltd. (New Hope Dairy, Stock Code: 002946) was commissioned. It entails a total investment about RMB530,0 million (USD83.4 million) and will be divided into two phases, with herd goals of 5,000 in the 1<sup>st</sup> phase and 5,000 in the 2<sup>nd</sup> phase. Completion of the 1<sup>st</sup> phase is to provide daily production of 20 tonnes, and by the end of this year, the annual production capacity will reach 10,000 tonnes. The 2<sup>nd</sup> phase will start construction process next year with a goal of achieving full production in 2024 or 2025. Once the 10,000 or so cows are in place, the expected average daily yield will be 33 – 35 kg per cow

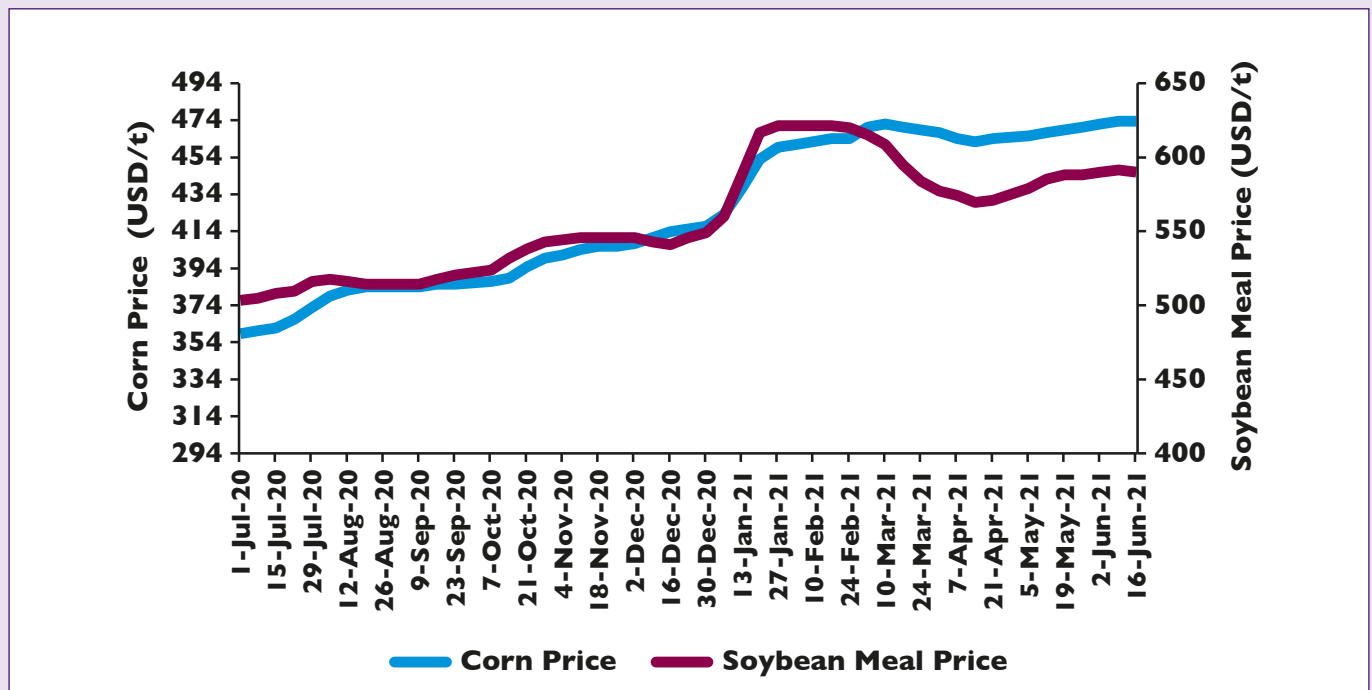


At the same time, the prices of feed ingredients such as corn and soybean meal continued to climb from a high level in June, keeping up the pressure on production costs. According to Shanghai Dairy Industry Association's raw milk cost survey working group, the average cost of raw milk for dairy farms in Shanghai in H2 of 2021 increased by 2.0% compared with H1.

Feed Prices (3<sup>rd</sup> Week of June):

- The national average price of corn was RMB3,010/t (USD473.5/t), up 1.0% MoM and 35.0% YoY
  - The average price in the 3 northeastern provinces – the main producing areas – was RMB2,750/t (USD432.6/t)
  - In Guangdong Province – the main sales area – the price was RMB3,140/t (USD493.9/t)
- The national average price of soybean meal is RMB3,750/t (USD589.9/t), up 0.3% MoM and 16.1% YoY

**TABLE 5.1-4 China's Average Corn and Soybean Prices in Jul. 2020 – Jun. 2021**



Source: MARA

### Demand side

China's dairy production has been stimulated by consumers trading up and growing in 3<sup>rd</sup> and 4<sup>th</sup> tier cities. According to the latest data from the National Bureau of Statistics in Jan. – Apr. 2021:

- Liquid dairy products
  - The national output of was 9,077.9 thousand tonnes, up 25.6% YoY
  - The output in April was 2,304.1 thousand tonnes, up 12.5% YoY (during the pandemic last year, production was low, making this growth rate relatively high)
  - However, since April last year, liquid milk production has gradually recovered – the YoY growth in April this year was lower than the equivalent figure for March

- Other (non-liquid) dairy products (milk powders, IMF products, cheese, whey powder, etc.)
  - Production 599,000 tonnes, up 7.3% YoY
  - In April alone the figure was 150,900 tonnes, down 7.91% YoY
  - National production of milk powders and IMF products was 308,500 tonnes, down 8.2% YoY
  - In April alone the figure was 72,300 tonnes, down 22.6% YoY

In addition, the "6.18 E-commerce Shopping Festival" this month has boosted consumption. According to the monitoring of 22 e-commerce platforms by Syntun data, during the 6.18 promotion period this year (midnight on June 1 through to midnight on June 18), total sales were RMB578,480 million (USD91 billion), up 26.5% YoY. New retail (home deliveries of grocery products within the hour) provided sales of RMB17,800 million (USD2.8 billion), in which dairy and bakery products ranked 2<sup>nd</sup>.

## News in Brief

### Dairy Imports in May 2021

The strong import figures seen this year continued in May, with whey just one of the sector's showing strong demand, as noted at the start of this edition – along with the recent familiar decline in infant nutritional imports.

**TABLE 6.1-1 Dairy Imports, tonnes**

HS code	Product	202005	202104	202105	MOM	YOY
04011000	Milk & cream, fat ≤1%, not concentrated or sweetened	9,730.5	10,806.0	14,998.6	38.8%	54.1%
04012000	Milk & cream of >1% but ≤6% fat, not concentrated or sweetened	46,345.2	68,077.1	92,031.7	35.2%	98.6%
04014000	Milk & cream, 6%	27.8	2.4	7.8	224.0%	-72.0%
04015000	Milk & cream, fat >10%, not concentrated or sweetened	13,472.3	20,724.0	26,813.9	29.4%	99.0%
04021000	SMP	20,312.1	35,735.7	42,625.4	19.3%	109.9%
04022100	WMP, unsweetened	43,251.7	65,695.0	74,365.2	13.2%	71.9%
04022900	WMP, sweetened	1,542.1	398.5	450.8	13.1%	-70.8%
04041000	Whey and modified whey	52,475.0	66,465.5	73,395.7	10.4%	39.9%
04049000	Products consisting of natural milk constituents, nes	367.0	499.9	507.5	1.5%	38.3%
04051000	Butter	4,537.8	9,168.4	10,394.9	13.4%	129.1%
04059000	AMF	2,337.4	6,058.1	3,994.1	-34.1%	70.9%
04061000	Fresh cheese, incl. whey cheese, curd	1,902.4	5,745.2	8,342.2	45.2%	338.5%
04062000	Grated or powdered cheese	1,179.7	3,791.5	2,582.1	-31.9%	118.9%
04063000	Processed cheese	1,190.2	1,982.3	1,862.5	-6.0%	56.5%
04064000	Blue cheese	7.9	8.0	4.3	-45.9%	-45.6%
04069000	Cheese, nes	1,556.6	3,813.3	3,565.4	-6.5%	129.0%
17021100	Anhydrous lactose, lactose wt. ≥99%	8,777.9	12,560.0	10,742.5	-14.5%	22.4%
17021900	Lactose syrup & other lactose	1,006.8	509.9	427.2	-16.2%	-57.6%
19011010	Infant formula	28,292.5	19,476.7	24,683.3	26.7%	-12.8%
35011000	Casein	900.9	1,691.3	1,763.0	4.2%	95.7%
35019000	Caseinates	830.3	1,983.7	1,569.9	-20.9%	89.1%
35022000	WPC80/WPI	2,722.4	3,211.5	3,174.4	-1.2%	16.6%

Source: China Customs

## Zhongdi Dairy to be Delisted on 28 June

On 21 May, it was jointly announced by China Zhongdi Dairy Holdings Company Ltd (Zhongdi Dairy, Stock Code: HK.01492) and its acquiror Wholesome Harvest Limited (Wholesome Harvest, a holding subsidiary of Inner Mongolia Yili Industrial Group Co., Ltd. (Yili, 600887)) that Zhongdi Dairy has applied for delisting from Hong Kong Exchanges and Clearing Ltd. (HKEX). This is expected to take effect on 28 June, 2021. On the same day, notices of the mandatory acquisition of the remaining shares were sent to shareholders.

Timeline of the acquisition:

- In Sept., 2020, Yili announced that it planned to make its new holding subsidiary Wholesome Harvest responsible for the acquisition of shares of Zhongdi Dairy by tender offer
- On 11 Jan., 2021, transfer of stock rights from Zhongdi Dairy to Wholesome Harvest was completed
- On 8 Feb., 2021, Yili said that it would purchase the rest shares of Zhongdi Dairy in a mandatory acquisition, with the plan to privatize and delist Zhongdi Dairy after this

Zhongdi Dairy is a dairy farming business founded in Oct., 2014 – it had set up modern ecological farms in Beijing and Tianjin, Hebei, Shanxi and Liaoning Provinces, Inner Mongolia Autonomous Region and Ningxia Hui Autonomous Region, and listed on the main board of HKEX in Dec., 2015.

## China Feihe launches a world 1<sup>st</sup> patented organic OPO

On its "Chinese Babies' Day" event held on 28 May, China Feihe Ltd (China Feihe, Stock Code: HK.06186) announced what it claims as the world's first patented organic OPO – so competing with Advanced Lipids and other Chinese-based suppliers of OPO ingredients. It stated that it will launch a product incorporating this ingredient soon, expanding its IMF portfolio.

OPO is meant to mimic the fatty acid profile of human breast milk. It was reported that palmitic acid is a completely saturated fatty acid helping provide energy to babies and promote their neurodevelopment – but that it can easily mix with calcium in food, becoming a calcium soap and potentially causing reduced fat content and skeletal dysplasia in babies. The OPO fat structure, like that of the fat in breast milk, can retain the palmitic acid, ensuring that it is absorbed by babies. China Feihe has added OPO in its IMF products previously, so this is described as a refinement of its strategy to date, opening up a new segment.

This OPO is synthesized from palm oil. It took 5 years for China Feihe and Yihai Kerry (Wilmar) to develop this version – the first 2 years to achieve organic soil and water for the production, the latter 3 years to grow organic oil-bearing crops. The organic OPO was produced through enzymatic interesterification of the extracted vegetable fat.

## Mengniu's New Fresh Milk Plant Commissions

China Mengniu Dairy Company Ltd (Stock Code: HK.02319) held a commissioning ceremony for its fresh milk plant in Jingkai District, Ma'anshan City, Anhui Province on 28 May. Its planned output of 330,000 t/a fresh milk and other dairy products is mainly aimed at the Yangtze River Delta region – this location will permit it to supply customers there within 4 hours of orders.

Project overview:

- Area: 75,000 m<sup>2</sup>
- Content: 18 advanced production lines for fresh milk and dairy products
- Production capacity: 330,000 t/a fresh milk and other dairy products
- Expected annual sales: USD629.2 million (RMB4 billion)

Mengniu has continually increased investment in its production base in this area since its establishment in 2005: it now has locally 54 advanced production lines that can produce nearly 150 kinds of products covering ice cream, yoghurt, fresh milk, UHT milk and milk beverages.

In 2020, the base achieved a total industrial output value of USD1.16 billion (RMB7.35 billion). Ma'anshan Base is now the group's 2<sup>nd</sup> largest production base after its headquarters in Inner Mongolia.

On the same day, Mengniu CEO Lu Minfang said that it was focusing on the future development of Anhui Province as an operating location given the importance of demand in the Yangtze River Delta region.

## Adults buying cheese for kids

On 1 June Kantar on Wechat noted that cheese for kids has become extremely popular and experienced rapid growth in the recent 2 years.

- In 2019, 11% of its sample were buying these kinds of cheeses
- In 2020, over 15% families in cities bought cheese for kids, making such families the major buyers of these products as you might expect, but the survey revealed that 30% of cheeses for kids were bought by families without kids, making this segment an important one!

There is a long tradition in many markets of adults from university students upwards being significant consumers of products for babies and kids – this seems to be another such example.

## Foodservice a key driver for Fonterra in Greater China in 2021/22

Fonterra's results for the first 3 quarters of the FY 2021/22 were issued on 26 May. Up to 30 April, 2021, its adjusted net profit after tax surged 61% YoY USD414.9 million (NZD587 million, USD1 = NZD1.4148, sourced from Hexun.com on 17 June). Its performance in Greater China was key again, with an operating income of USD3.3 billion (NZD4.68 billion) and adjusted profit before tax of USD323.0 million (NZD457 million), up 30% YoY.

Foodservice led its Greater China performance, with its profit before tax of USD199.3 million (NZD282 million), up by 49% YoY. It attributed this to innovative product applications and development of new sales regions. Its foodservice team in Greater China launched 106 new product application recipes, including ice bread, Anchor Cream Daifuku, Xuexuanfeng cream topped beverages and various baked rice dishes. It has also developed business in 4 new cities in the period. Fonterra indicates that so far the Anchor range sells in 376 cities in China, covering 78,000+ foodservice outlets.

## Yili to Raise Funds for Liquid Milk and IMF Expansion

On 4 June, Inner Mongolia Yili Industrial Group Co., Ltd. (Yili, 60087) released a Plan for Private Placement of 2021, which showed that the company intended to raise up to USD2.04 billion (RMB13 billion) for increasing its daily production capacities of liquid milk by 6,148 tonnes, of IMF products by 100 tonnes and of mineral water by 1,296 tonnes, as well as for its digital marketing project.

**TABLE 6.7-2 Yili's Planned Projects**

No.	Project	Total investment (million USD)	Planned allocation from the funds raised (million USD)	Production capacity
<b>1</b>	Liquid milk production base project	1,404.2	862.0	78 production lines in total 6,148 t/d
<b>1.1</b>	- Demonstration project of liquid milk production by using green, 5G and AI technologies in Hohhot	607.2	569.4	32 production lines 3,181 t/d
<b>1.2</b>	- Liquid milk production base project in Lindian County	267.9	48.8	18 production lines, 903 t/d
<b>1.3</b>	- Green and intelligent manufacture project of Yili's dairy products in Wuzhong Dairy Industrial Park	214.1	17.3	11 production lines, 828 t/d
<b>1.4</b>	- Demonstration and application project of producing 530,000 t/a liquid milk by green technologies and new AI mode in Hulunbeier	140.3	70.8	9 production lines, 658 t/d
<b>1.5</b>	- Demonstration project of liquid milk by using 5G industrial Internet platform and new intelligent manufacturing technologies	174.6	155.7	8 production lines, 578 t/d
<b>2</b>	Demonstration project of IMF by using 5G+ industrial Internet platform and intelligent manufacturing technologies	333.4	243.8	3 production lines, 100t/d
<b>3</b>	Natural mineral water project in Changbaishan Mountain	117.0	42.5	2 production lines 1,296t/d
<b>4</b>	Digital transformation and IT upgrading	288.31	196.63	/
<b>5</b>	Dairy new product development	97.85	92.81	/
<b>6</b>	Supplement of working capital / repayment of bank loan	607.19	607.19	/

Source: Yili

## Mengniu's Overseas Market Development

China Mengniu Dairy Company Ltd (Mengniu, Stock Code: HK.02319) issued its Sustainable Development Report for 2020 on 21 June, outlining its latest progress in developing overseas markets. It is now selling in markets which include Singapore, Mongolia, Burma, Cambodia, Indonesia, Malaysia and Canada. It also has a plant in both Australia and New Zealand, and annual group production capacity of 9.9 million tonnes (adding the overseas sites to its 41 domestic plants).

Mengniu's progress in developing overseas markets:

- Europe:
  - Kicked off a strategic partnership with Arla Foods
  - Built farms for high-quality milk sources in Denmark, Germany and Austria
  - Set up the European Invention Center of Mengniu in Netherlands
- Asia:
  - Constructed a factory with a designed capacity of 260 t/d
- Oceania:
  - Cooperated with Shanghai Pengxin (Group) Co., Ltd. and Miraka to build farms and the Yashili factory in New Zealand
  - Acquired Bellamy's Australia
- South America:
  - Signed a framework agreement on cooperation with Uruguay's Conaprole

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## Nestlé China Launches Partially-Hydrolyzed GUMP (stage 4)

Nestlé China launched its first partially-hydrolyzed GUMP (stage 4) – NAN.H.A. – on JD.com on 7 June. This is marketed as a formula adapted to the nutritional requirements of Chinese children including vitamins and minerals commonly deficient amongst local kids aged 3–6, as well as DHA, active probiotics Bb-12 and dietary fibre. This came just a week after its launch of NAN Pt. GUMP (stage 4), showing its ambition to expand this category in China.

The group's NAN range in China now comprises NAN, NAN. H.A. and NAN Pt. It also markets formulae for special medical purpose including Pre NAN, PDF for premature and lactose-intolerant infants and NAN LF, covering all stages (0–6 years of age) as a result.

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## Synutra Focuses on Goat Dairy Market Potential

Synutra International Inc. (Synutra) held a symposium regarding its goat milk production project with the officials from the Governmental of Qianyang County, Baoqi City, Shaanxi Province on 8 June.

It plans to invest USD314.6 million (RMB2 billion) in the project which will be built in 3 phases:

- Phase I will set up 2 milk goat farms and equip 3 production lines for IMF, cheese and whey powder
- Phase II will build 4 milk goat farms and a production line for goat milk formula for special medical purposes
- Phase III will construct 4 milk goat farms, as well as a digital marketing and management centre

Additionally, the Synutra Base for Sightseeing and Breeding of Milk Goats in Gaoya Town will be built to showcase the company's activities and expertise in goat dairying.

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