

Dairy Products China News

Guaranteed Exclusive Analysis

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Welcome to the June issue of Dairy Products China News.

Visitors to dairy contacts in Inner Mongolia may have come across “*khöröngö*”, effectively the starter culture traditionally used by herders to make yoghurt. The word also means “*wealth*” – a testament to the importance of dairying in that region.

However, it's a lack of wealth (and confidence) amongst consumers which means that China's dairy companies face a considerable challenge this year. After an encouraging Q1, pessimism is back in vogue when it comes to China's economy and it is no surprise that its currency is weakening. Local demand has proven soft in Q2, as illustrated by the low levels of imports and low inflation, by the lowering of interest rates in mid-May and by the discounts offered by the main platforms in during the 618 shopping festival which ran from the end of May until June 18 – China's first major online shopping festival since emerging from the pandemic. On June 15th, the National Bureau of Statistics released the economic data for May. The month's retail sales increased 12.7 % YoY, but this was against a very weak May last year when Shanghai was under lockdown. Moreover, on a MoM basis, the rise was a mere 0.42%. Both foodservice sales and the industrial production index slipped in May, whilst the country's exports dropped as well. The unemployment rate among young people aged 16-24 reached 20.8% in May, a new record high after exceeding 20% in April. This summer Chinese graduates shared photos of themselves theatrically throwing their degrees into bins, underscoring the bleak outlook they face, with many forced to accept jobs way below their expectations. More than 7.7 million applicants took the civil service exam this year, to qualify for about 200,000 government jobs at national and provincial levels, state media reported. As a result of this overall economic malaise, several major banks have cut their 2023 GDP growth forecasts for China.

However, there were at least a few positives in May data. Spending on consumer services continued to rise, helped by a strong rebound in travel spending during the holidays. Car sales increased and household savings continue to grow. This month Fonterra has been expressing its confidence in the China market's prospects, which are broadly correct, we believe. Consumer marketers will be hoping that the government support measures help consumers regain confidence to allow them to spend more freely – though in reality, a deeper policy rethink may be required, something that doesn't seem to be on the cards at the moment.

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▶ Headlines	2
▶ Market Analysis	3
<i>Ningxia Focuses on Growth and Premiumisation in Dairy</i>	3
<i>China's IMF Market in Flux</i>	3
<i>Dairy Brands Push into China's Brewing Coffee Market</i>	4
<i>China's Milk Tea Market Back on Growth Track</i>	5
▶ Governmental Direction	7
<i>The First Association Standard for Formulated Milk Powder for Preschoolers</i>	7
▶ Company Dynamics	8
<i>Milkground Food to Gain 100% Control of Ground Dairy</i>	8
<i>Royal Group Sell-offs to Junlebao</i>	9
<i>Regional Dairy Firms' Listing Status</i>	11
<i>2 Dairy Plants Approved for Construction in June</i>	11
▶ Raw Material Price	13
<i>China's Milk Price Continues Down</i>	13
▶ News in Brief	14
<i>Dairy Imports in May 2023</i>	14
<i>Yili Expands Liquid Milk Production</i>	15
<i>Yili to Expand Yoghurt Capacity in Chengdu</i>	15
<i>Mengniu Keerqin Completes New Construction for 182 t/d School Milk</i>	16
<i>Wahaha Receives Patent for Anti-depression LAB</i>	16
<i>Herds Dairy Launches New Children's Formulae</i>	16
<i>Kabrita Launches Fortified Goat IMF</i>	17
<i>Ausnutria Divests NZ-based Formulae JV to Westland/Yili</i>	17
<i>Tianruixiang Husbandry – Xinjiang's First "National Quality Dairy Engineering Enterprise"</i>	18
<i>Health Food Raw Material Catalogue Adds Whey Protein</i>	18

Headlines

- ▶ *Ningxia achieved growth in both its dairy herd and its raw milk output of over 19% in Q1 2023; and it is notable that more premium dairy businesses are scaling up their operations in the Region.*
- ▶ *China's IMF market is going through a reshuffling process as the industry responds to the new regulations, with a chaotic price war ensuing, mainly driven by businesses losing ground.*
- ▶ *China's coffee market is fast-growing, leading dairy businesses to push innovations to capture their slice of the action.*
- ▶ *China's freshly-made and pre-packaged milk tea market, increasingly popular among youngsters, is expected to rebound this year from the problems it went through during the pandemic.*
- ▶ *The China Nutrition and Health Food Association (CNHFA) has issued China's first Association Standard for Formulated Milk Powder for Preschoolers (T/CNHFA 421-2023), taking effect from 1 June 2023.*
- ▶ *On 31 May, Milkground Food posted a proposal to acquire 42.9% of Jilin Ground Dairy to take full control of the cheese producer.*
- ▶ *On 29 May, Royal Group offered to divest Lesson Dairy and Lesson Intelligent to Junlebao, which would become the lead stakeholder in both firms.*
- ▶ *Recently there have been updates on the listing status of 3 regional dairy firms: Huahuaniu Dairy's listing plan is being accelerated by an injection of state capital, but difficulties have arisen for Wondersun Dairy and Wen's Dairy.*
- ▶ *In June, Huanong Nutritional Food's functional dairy plant and Guangxi Tiantian Dairy's 20,000 t/a dairy product (expansion) project were approved for construction.*
- ▶ *China's raw milk price continued to fall in June, with unstable supply and demand impairing farmers' operations.*

Major Companies and Sites Mentioned in This Issue



Market Analysis

Ningxia Focuses on Growth and Premiumisation in Dairy

Summary: *Ningxia achieved growth in both its dairy herd and its raw milk output of over 19% in Q1 2023; and it is notable that more premium dairy businesses are scaling up their operations in the Region.*

The Ningxia Hui Autonomous Region in northern central China is one of the country's well-known dairying areas. In Q1 2023, the region's total dairy herd expanded by 19.6% YoY to 861,000 head, marking 16 quarters of consecutive growth. For this period, local milk production rose by 19.3% to 926,000 tonnes and the number of standard dairy farms reached 355, with an average 2,300 head, according to the local Bureau of Statistics. Dairy has become one of the key drivers for region's agricultural sector, attracting significant capital in building operations throughout the supply chain, including some major players betting on product premiumisation.

Ningxia State Farm Dairy Co., Ltd. (State Farm Dairy)

State Farm Dairy is the 4th largest dairy farm operator in China with 140,000+ dairy cattle as of May this year. It was founded in 2009 with registered capital of USD34

million (RMB241 million), wholly-owned by Ningxia State Farm Group (Ningxia State Farm). Ningxia State Farm has 19 smart farms in China and total assets valued at USD1.2 billion (RMB8.5 billion). It achieves a milk yield of 11 tonnes per adult milking cow annually, 1.8 tonnes above the national average and 1.4 tonnes above the average in Ningxia. Its milk production amounts to over 1,800 tonnes per day or 600,000 tonnes per year, and it is a major high-quality milk supplier for Mengniu and Yili.

China Mengniu Dairy Company Ltd (Mengniu, Stock Code: HK.02319)

On 28 May, Mengniu announced the start-up of its first fully intelligent dairy factory in Ningxia, which is expected to have an output worth over RMB10 billion annually, once in full operation. It is the largest single liquid milk factory in the world, equipped with 24 imported premium-quality production lines giving a capacity of 4,200 t/d. Compared to the company's other factories, this site reportedly achieves a 37% increase in space utilisation, 67% increase in packaging efficiency, 20-fold productivity, and almost 43% reduction of overall energy consumption.

Inner Mongolia Yili Industrial Group Co., Ltd. (Yili, Stock Code: 600887)

On 26 May, Ningxia Yili Group Co., Ltd. held a celebration of its cumulative production of dairy products exceeding over 30 billion units. It has built 53 smart production lines processing 4,700 tonnes raw milk per day. Its production covers 60+ items, including the very successful range Ambrosial (AMX UHT yoghurt) and Yili Pure Milk. Its net profit in 2022 reached USD76.8 million (RMB545.3 million).

The region is still seeking new growth opportunities. On 28 May, the "2023 Ningxia Dairy Industry Conference" was attended by 300+ domestic dairy-related companies, the key topic on the agenda being how to build a more premium and intelligent dairy industry in the Northwest. On 29 May, the "2023 China (Ningxia) – The Netherlands Cattle and Poultry Industry Cooperation Conference" took place, aiming to encourage more Dutch enterprises' participation in the local development of these sectors and to strengthen international cooperation in intelligent animal husbandry and dairy processing.

China's IMF Market in Flux

Summary: *China's IMF market is going through a reshuffling process as the industry responds to the new regulations, with a chaotic price war ensuing, mainly driven by businesses losing ground.*

Since the new "strictest ever" national standard for IMF products took effect in Feb this year, China's formula market has become increasingly concentrated amongst the leading brands, which are accelerating their formula registrations

and renewals. There are 214 formula series registered under the new standard, most held by leading brands such as Yili, Mengniu, China Feihe, Danone and FrieslandCampina, whilst the registrations renewals of smaller brands are reducing, as shown by data as of May 2023. This affects overseas supply of course – it was recently reported that only 3 companies out of 9 Australian IMF producers previously approved to sell in Chinese retail are now looking to register to the new standards.

2022 Market Review

Last year proved tough for the industry. Spiralling commodity prices drove up the prices of raw materials, whilst China's pandemic measures severely constrained logistics between regions, and new and secondary formula registrations to meet the new national standards brought higher production costs. Worse still, the country announced another decline in its birth rate, a figure that in effect has been falling in terms of births per 1,000 people over the 2018-2022 period (from 10.9 to 10.4, 8.5, 7.5 and then 6.8 respectively).

The year also saw a chaotic price war in the IMF market:

- To sell off old products not complying with the new standard, many SMEs – typically with marginal production levels and market shares – sold off such products at heavy discounts, and many were sold off outside the stores authorised by the manufacturer, both practices making the market highly unstable
- The top brands also fueled the price war, seeking to maintain their shares through lowering pricing on their

older products to the market average, whilst they went through the process to renew their formula registrations for newer products, which can take a full year

According to distributors, the retail prices of some popular IMF items were down 10%-15% YoY in May 2023. according to a survey in Beijing, Shandong and Shaanxi by the business news company Yicai – a trend substantiated by the recent large discounts online by major brands.

Current Situation

The market disorder in terms of pricing looks set to last for a while, although the declining birth rate is the key problem, without a doubt. However, the general market situation appears to have been rectified to some extent by the main manufacturers' responses and at this point; the disorder seems likely to end after brands have completed their registration/renewal processes by the end of this year, allowing stable supply of formula products that are up to the standard and satisfy current consumers' needs.

Dairy Brands Push into China's Brewing Coffee Market

Summary: *China's coffee market is fast-growing, leading dairy businesses to push innovations to capture their slice of the action.*

China's coffee chain market has been growing over recent years, up from USD19.2 billion (RMB136.4 billion) in 2020 to USD28.3 billion (RMB200.7 billion) in 2022 and expected to reach USD52 billion (RMB369.3 billion) by 2025. This is according to the 2023 China Urban Coffee Development Report jointly issued by Hongqiao International Coffee Harbor (HICH), Meituan (Chinese food delivery giant), the Institute of Cultural Innovation and Youth Development of Shanghai Jiao Tong University, and CBNDData (a business data aggregator).

As of March 2023, China had 132,833 coffee outlets and 733 coffee chain brands registered. Among those, the top 21 chains accounted for 25,000+ outlets, concentrated in 1st and 2nd-tier cities.

As the penetration of such stores increases, there has been demand for more innovation and often the inclusion of dairy – latte and cappuccino were favoured by over 90% of coffee consumers in China, the Report showed.

This has spurred dairy manufacturers to launch more dairy products designed to complement fresh coffees, mostly high-priced fresh whole milks with higher levels of fat (enabling a creamier texture) and protein (which creates excellent tiny bubbles or 'microfoam').

Apart from their product development, dairy brands are also exploring other opportunities in the coffee sector:

- Bright Dairy has supported and participated in the Shanghai Coffee Master Competitions of 2021 and 2022 to promote its liquid milk products

- Junlebao hosted a series of coffee-related events including barista competitions and themed fairs to encourage use of "Yuxianhua" in coffee
- Meiji has announced a collaboration with Peets Coffee with gift sets of its "Chunyi" products and ground coffee

The coffee sector trend has also assisted plant-based dairy alternatives though, notably oat milk. According to the Report, "Oat Milk Latte" is the leading take-away coffee in terms of sales value. Recently, Yili has started to cooperate with 8 standalone cafe shops offering a summer range – "Plant Selected Icy Oat Milk Latte" – a development which may well take the coffee market and some dairy brands in a rather new direction.

TABLE I: Major Dairy Brands' Products for Fresh Coffees

Company/Brand	Product (series)	Category
Bright Dairy & Food Co., Ltd. (Bright Dairy)	High-Quality Cow Milk	Fresh milk
	Milk for Cappuccino	Modified milk
	1L High-Quality Pure Milk	Ambient milk
	Bright Dairy Fresh Milk (Milk for Frothing)	Fresh milk
Junlebao Dairy Group Co., Ltd. (Junlebao)	"Yuexianhuo"	Fresh milk
Nanjing Weigang Dairy Co., Ltd. (Weigang Dairy)	"Xinlv Yuan Cow Milk"	Ambient whole milk
Ningxia Saishang Dairy Co., Ltd. (Saishang Dairy)	Filtered Milk	Ambient milk
	Light Milk	Fresh milk
	Half & Half Cream	Whipping cream
	Lactose-free, Ultra-filtered Milk	Modified milk
New Hope Dairy Holdings Co., Ltd. (New Hope Dairy)	"Zhaori Weipin"	Fresh (organic) milk
Shanghai Biru Foods Co., Ltd. (BeFood)	Eisbock Milk	Fresh (organic) milk
Meiji Dairies (Suzhou) Co., Ltd. (Meiji)	Original Milk for Coffee	Fresh milk
Adopt A Cow Holding Group Co., Ltd. (Adopt A Cow)	700ml Jerseys Milk	Fresh milk

Source: CCM

China's Milk Tea Market Back on Growth Track

Summary: China's freshly-made and pre-packaged milk tea market, increasingly popular among youngsters, is expected to rebound this year from the problems it went through during the pandemic.

2022 was a gloomy year for businesses across the board in China, including most of the milk tea brands. However, in the context of the country's recovering retail figures year to date, the milk tea market – comprising both the freshly made and the pre-packaged segments – is becoming revitalised, encouraged by innovations and price cuts, and the key businesses in the sector are in expansion mode.

Last year, most of the leading milk tea chains reported declines in revenues, despite increased store numbers and an array of new launches that failed to deliver the expected growth:

- **Nayuki:**

- Revenue dipped 0.1% to USD604.7 million (RMB4.29 billion), mostly made in physical stores, supplemented

by lower-than-expected sales of bottled drinks and tea and drinks gift sets. It made a net loss of USD65 million (RMB461.3 million), as demand eased off and overall costs rose

- This came despite its considerable efforts during the year, opening 251 stores and launching 1-2 new products every month
- **HEYTEA:**
 - Revenue fell 12.2% to USD662.3 million (RMB4.7 billion) from USD754.2 million (RMB5.4 billion) in 2021
 - In the year it opened 93 new stores in 37 cities countrywide, 17 of which were completely new markets for the chain, including Changchun (Jilin Province), Harbin (Heilongjiang Province), Longyan (Fujian Province), Linyi (Shandong Province), Xiangyang (Hubei Province) and Quzhou (Zhejiang

Province). As of 2022, it has launched in 83 cities (including 5 stores in Singapore). It has launched 1-2 new products every month, often in partnership with brands from other categories

- HEYTEA made its name with innovative fruit tea drinks, consuming over 17,500 tonnes of fresh fruits and 10,000 tonnes of milk last year, making an average of 20 tonnes and 12 tonnes respectively per store

This Q1, China's total retail sales of consumer goods increased by 5.8% YOY, suggesting a recovering consumer market. Many companies in the milk tea sector are now putting forward expansion plans, despite their problems last year:

- Nayuki targets 600 new physical stores in 2023, many more than last year. As of March 2023, it had 1,106 sites operating
- HEYTEA is prioritising 3rd- and 4th-tier cities in its 2023 expansion plan and is planning launches in markets as diverse as Japan, Singapore, Thailand, Vietnam, Malaysia, the US, Canada, the UAE and Australia. YTD May, it has opened 430 new stores in China, most located in 3rd- and 4th-tier cities
- Auntea Jenny plans to add 3,000 stores this year, pushing its total up to 10,000 nationwide
- CHAGEE has opened 320+ new stores nationwide in April 2023 alone and is planning to boost overseas locations up to 100 this year
- Sweet7 plans to add 1,000+ locations this year, which will push its total to 2,000+
- MORE YOGURT is the fastest-expanding freshly-made tea drink chain in recent times, on average, opening 10+ new locations each day in over 190 cities, and targeting a total of 2,000 operating stores by the end of 2023 – it already has 1,000+ stores in China
- Wondersun Dairy announced the opening of its first tea drink store in Beijing last month, with an aggressive expansion agenda which involves launch 2,000 stores in five years, including 100+ in Beijing within 2 years

The pre-packaged milk tea market also seems to have picked up, with Zhejiang Xiangpiaopiao Food Co., Ltd. (Xiangpiaopiao, Stock Code: SH. 603711) leading the category, and Uni-president's Assam Milk Tea, Sexy Tea, Yili's Yiran, Wei-Chuan and others emerging.

In Jan.-April 2023, Xiangpiaopiao's revenue surged by 43.4% YoY to USD123.2 million (RMB874 million), and its net profits overturned the deficits in the same period of previous year. In 2022, its revenue dropped 9.76% due to the pandemic conditions. In the decade from 2012 to 2022, Xiangpiaopiao has retained leadership in the powdered milk tea segment and has diversified into ready-to-serve (RTS) ranges of juice tea and milk tea, to counter the rising competition.

Profit constraints and solutions

For the milk tea chains, new locations and branding has driven higher footfall, but increasing repeat purchase levels has proven difficult to achieve in the face of widespread competition. Expansion has necessitated higher staff, marketing and operational costs, all challenging these businesses' profitability. Countermeasures such as price cuts, franchising, brand cooperation and marketing to stimulate sales uplifts are all proving necessary to revive profits.

- Nayuki started to build a strong member base since 2019. By the end of 2022, it had recorded 56.6 million registered members and 3.2 million active users, with monthly repurchase rates of roughly 26.3%
- HEYTEA announced price cuts at the beginning of 2022, saying it would stop launching products of over USD4.23 (RMB30). Now 80% of its product items are priced at USD2.11-USD2.67 (RMB15-RMB19). After the price adjustment, it recorded both daily and monthly sales per store went up by 20% YoY in H1 2022. Nevertheless, price cutting is of course only a short-term necessity to drive sales

In pre-packaged tea drinks, products need to be moved towards healthier versions for the growing health-conscious population, as expenses for product innovation, market research, channel construction and brand building are rising on an ongoing basis. Xiaopiaopiao highlights its efforts to improve its product mix and manage costs to sustain its profitability. Overall, for long-term, sustainable sales and profitability, milk tea businesses need to focus heavily on differentiating their brands in a crowded category and building customer loyalty in 2023 and beyond.

Governmental Direction

The First Association Standard for Formulated Milk Powder for Preschoolers

Summary: *The China Nutrition and Health Food Association (CNHFA) has issued China's first Association Standard for Formulated Milk Powder for Preschoolers (T/CNHFA 421-2023), taking effect from 1 June 2023.*

On 31 May, the China Nutrition and Health Food Association (CNHFA) issued an Association Standard for Formulated Milk Powder for Preschoolers (T/CNHFA 421-2023), effective as of 1 June 2023. This Standard is the first designated as being for preschoolers, laying out strict requirements on ingredient usage, production processes, product labels and packaging, storage and transport. This is a response to evidence of clear nutritional deficiencies amongst preschoolers – whose body growth and eating behaviour are closely linked to the rising incidence of obesity and related chronic diseases in adolescence and adulthood. The Standard sets out to improve the overall nutritional quality of these products and to facilitate market monitoring, consumer choice and healthy development of the industry.

Key Contents of T/CNHFA 421-2023

Definition of terminology: Formulated milk powders for preschoolers are milk powder produced with cow/

goat/sheep milk and their derivatives as raw materials, fortified by proper amount of vitamins, minerals and/or other nutritional materials, with milk solids content of above 70%, and produced for children aged 3-5 years (or pre-primary-age).

Raw materials

- The raw materials should comply with the related national food safety standards and regulations; no ingredients containing risks to preschoolers' health should be added
- Sugar reduction is encouraged, with the recommendation that sugar addition (excl. lactose) should be no higher than 10g/100g
- No salt should be added
- Protein content should be at or above 16.5g/100g
- No hydrogenated oils and fats nor any materials exposed to radiation should be added

Food additives & nutrition enhancer

To address malnutrition issues and meet special nutritional needs, technical requirements on the essential and optional ingredients are listed to ensure the products' overall nutritional quality:

- Food additives: subject to the provisions for modified milk powders in the National Food Safety Standard – Standards for Uses of Food Additives (GB 2760)
- Nutrition enhancers: subject to the provisions for modified milk powders in the National Food Safety Standard – Standard for Nutritional Fortification Substances in Foods (GB 14880)

Nutritional ingredients

A scientific range for the content of each essential ingredient is given, aiding increased nutrient use efficiency and design of an all-around formulation for such formulated milk powders. Key items including:

- Vitamin B1: 0.20-2.06 mg/100g
- Calcium: 500-2,000mg/100g

Microbiological limits

Based on concerns that the current processing of milk powders is insufficient to sterilise all microorganisms and that dairy products can support the growth of microorganisms, a higher bar is set on the microbiological limits for these products compared with the national food safety standards:

- Total plate count: 5×10^4 CFU/g
- Escherichia coli limit: 100 CFU/g

Company Dynamics

Milkground Food to Gain 100% Control of Ground Dairy

Summary: On 31 May, Milkground Food posted a proposal to acquire 42.9% of Jilin Ground Dairy to take full control of the cheese producer.

On 31 May, Shanghai Milkground Food Tech Co., Ltd. (Milkground Food, Stock Code: 600882) notified an acquisition proposal to offer USD84.7 million (RMB601.2 million) to purchase a 42.9% stake in Jilin Ground Dairy Science & Technology Co., Ltd. (Jilin Ground Dairy) from Inner Mongolia Mengniu Dairy (Group) Co., Ltd. (Inner Mongolia Mengniu). Currently, Milkground Food holds a 57.1% stake, so this acquisition will give it full ownership of Jilin Ground Dairy.

Jilin Ground Dairy fully owns Milkground (Tianjin) Food Tech Co., Ltd. (Tianjin Milkground) and Shanghai Zhiran Dairy Technology Co., Ltd. (Shanghai Zhiran Dairy), major cheese suppliers for Milkground which together produced 39,800 tonnes of cheese products in 2021 – about 70% of Milkground Food's total cheese production.

As of 30 June, 2022 (the base date of assets evaluation), Jilin Ground Dairy's net profit attributable to the parent was USD136.1 million (RMB966 million) on book value and its assessed value was USD197.6 million (RMB1.4 billion), at an appreciation rate of 45.12%.

Milkground Food's earnings in Q1 2023:

- Revenue: USD144.1 million (RMB1.02 billion), down 20.47% YoY
- Net profit attributable to equity shareholders: USD3.4 million (RMB24.20 million), down 67.08% YoY
- Net profit attributable to equity shareholders excl. extraordinary gains/losses: USD826,994.2 (RMB5.87 million), down 91.47% YoY, due to reduced sales and margin from cheese products

According to the company statement, Milkground Food's Q1 figures represented an improvement as its 2022 Q4 performance was affected by the impact of the epidemic. In 2023 Q1 the market was recovering, so the figures showed gradual improvement compared with Q4 2022, despite

the negative trends, and its leading market share has been maintained. In its strategic development plans, it prioritises promotion of cheese stick products for breakfast consumption, making the category a staple for Chinese consumers; and accelerating its transition from being a bulk cheese supplier to one focused on consumer products.

- On 5 Jan., 2020, Inner Mongolia Mengniu acquired 42.88% of Jilin Ground Dairy for USD64.5 million (RMB457.64 million)
- On 13 Dec., 2020, Inner Mongolia Mengniu acquired 100 million shares in Milkground Food in a private placement, for USD422.7 million (RMB 3 billion)
- On 14 May, Milkground Food proposed to acquire 42.9% of Jilin Ground Dairy, but withdrew the deal on 13 Jan. 2023, citing the impacts of the pandemic and vagaries in the capital market
- On 31 May, 2023, Milkground Food resumed the acquisition proposal to gain full control

Jilin Ground Dairy was founded in 2015 with a registered capital of USD69 million (RMB490 million). It produces cheese sticks and slices, natural and processed Mozzarella and Cheddar cheese products. Its sales were USD194.3 million (RMB1.38 billion) in 2022 and USD44.7 million (RMB317 million) in Q1 2023; net profits were USD11.7 million (RMB83.06 million) in 2022 and USD3.3 million (RMB23.57 million) in Q1 2023.

Tianjin Milkground was founded in 2011 with a registered capital of USD2.05 million (RMB14.51 million). Its sales were USD51.9 million (RMB368.62 million) in 2020, USD68.8 million (RMB488.43 million) in 2021, and USD48.2 million (RMB342.08 million) in H1 2022. Its sales are expected to contract by -7% this year but to be growing by 13% by 2027, with an average gross margin of 12%.

Shanghai Zhiran Dairy was built in 2015 with a registered capital of USD18.2 million (RMB130 million). Its sales were USD114.5 million (RMB812.45 million) in 2020, USD127.3 million (RMB903.29 million) in 2021, and USD44.5 million (RMB315.60 million) in H1 2022.

Royal Group Sell-offs to Junlebao

Summary: On 29 May, Royal Group offered to divest Lesson Dairy and Lesson Intelligent to Junlebao, which would become the lead stakeholder in both firms.

On 29 May, Royal Group Co., Ltd. (Royal Group, Stock Code: 002329) committed to sell its remaining shares in Yunnan Royal Lesson Dairy Co., Ltd. (Lesson Dairy) and Yunnan Royal Lesson Intelligent Dairy Co., Ltd. (Lesson Intelligent) to Junlebao Dairy Group Co., Ltd. (Junlebao). This is a follow-on offering, after the first one raised in Jan. 2022, and will make Junlebao the major shareholder in these companies.

Disclosed details of the follow-on transfer:

- Royal Group proposes to transfer its 32.9% stake in Lesson Dairy and 32.9% stake in Lesson Intelligent to Junlebao for a

total price of USD46.4 million (RMB329 million) – comprising USD42.9 million for Lesson Dairy and USD3.5 million for Lesson Intelligent

- After the completion of the deal, Royal Group will have exited both companies completely and Junlebao will hold 57.9% stakes in each
- It was noted that the shares' transfer price was offset against a RMB263 million loan from Junlebao in Feb. and April 2022

Lesson Dairy, founded in 2001 with a registered capital of USD8.5 million (RMB53.8 million), focuses on dairy products and protein drinks, growing forage and feeds, and breeding goats and dairy cattle. Currently, it markets 80+ products across 6 categories – yoghurt, fresh and UHT

milk, milk beverages, cheese and plant-based protein drinks. It has a dairy production processing capacity of 570 t/d and output of 137,000 tonnes in 2022. It owns around 80% of the dairy buffalo in Guangxi Zhuang Autonomous Region and is the only producer of buffalo cheese in China. At present, Guangxi is home to 1/5 of the national buffalo herd (=approx. 4.38 million head, 1.8 million of which are brood cows).

Lesson Intelligent, founded in 2018 with a registered capital of USD8.5 million (RMB53.8 million), operates a 18.6-ha "smart dairy plant" with a milk processing capacity of 750 t/d (operational since the end of 2021); it is planning a 2nd-phase project to consolidate its facilities for R&D, distribution and logistics, due to involve an investment estimated at USD32.3 million (RMB229.4 million).

TABLE 2: Financials of Lesson Dairy and Lesson Intelligent, 2022-Q1 2023, million USD

Company	Full 2022			January – March 2023		
	Revenue	YoY change	Net profit	YoY change	Revenue	Net profit
Lesson Dairy	183.8	38.70%	5	-34.10%	29.9	0.7
Lesson Intelligent	61.8	1,772.30%	-4.4	-398%	6.5	-1

Source: Royal Group's Equity Transfer Agreement

Royal Group's Lingering Insolvency

- By the end of Q1 2023, Royal Group still carried USD174.0 million (RMB1.2 billion) in short-term loans and USD130.9 million (RMB928.6 million) in non-current liabilities due within a year, which its cash at bank and on hand of USD107.0 million (RMB759.1

million) were far from covering

- However, the sell-offs are expected to bring USD27.7 million (RMB196.6 million) in net profit which may ease the Group's financial strain and provide some support in continuing its "Dairy Buffalo Breed Strategy". This involves establishing semen

production units for buffalo embryos through a high-quality In Vitro Fertilization (IVF) process and buffalo farms in Pakistan, construction of a 10,000 dairy buffalo smart farm in Fuyang City (Anhui Province) and business expansion to East China.

TABLE 3: Royal Group's Channel Revenue Split by Main Business in 2022, USD

Distribution channel	Category	Revenue	YoY change	Gross Margin Ratio
Distributor	Fresh milk	124,570,416.10	5.14%	24.73%
	Ambient milk	144,707,697.00	28.20%	11.69%
	Food & beverage	6,545,586.20	-3.10%	3.77%
DTC (direct to consumer)	Fresh milk	1,458,079.30	36.94%	41.28%
	Ambient milk	15,458,636.70	56.62%	29.89%
	Food & beverage	8,323.90	-58.15%	44.33%

Source: Royal Group's Financial Report for 2022

Note: Fresh milk – includes standard, modified and cultured milks; Ambient milk – UHT standard and modified milks; Food & beverage – milk beverages, plant-based protein drinks, and bakery products

TABLE 4: Royal Group's Production and Inventory by Main Business in 2022, tonnes

Category	Item	2022	YoY change
Fresh milk	Output	107,908.57	1.11%
	Year-end inventory	677.01	9.28%
Ambient milk	Output	158,811.47	16.67%
	Year-end inventory	6,959.05	49.34%*

Source: Royal Group's Financial Report for 2022

Note: *built up to meet the growing market demand

Junlebao's Growth via Acquisition

Junlebao is stronger in North, East, South China than in the southwest region, which prompted this follow-on acquisition to foster its business there. It also pointed out that the niche category of buffalo milk shows great growth potential.

On top of that, it is apparent that Junlebao has diversified rapidly:

- In Aug. 2022, the company took over the operational assets of Xi'an Yinqiao Dairy Industry (Group) Co., Ltd., including the production of goat milk, goat milk formulae, etc.
- In Jan. 2023, it increased its holding in Shanghai Cheespirit Health Technology Development Co., Ltd., a startup known for its innovative cheese sticks providing "five-dimensional nutrition" to boost kids' bones, muscles, vision, brain development and digestive health

Regional Dairy Firms' Listing Status

Summary: Recently there have been updates on the listing status of 3 regional dairy firms: Huahuaniu Dairy's listing plan is being accelerated by an injection of state capital, but difficulties have arisen for Wondersun Dairy and Wen's Dairy.

In some important respects, China's dairy industry as a whole seems to be struggling. For some relatively well established regional brands, however, issues like milk oversupply and depressed prices are being seized upon as an opportunity to go public. Three regionally-focused dairy firms have updated on their listing progress recently.

Henan Huahuaniu Dairy Group Co., Ltd. (Huahuaniu Dairy)

In May, Huahuaniu Dairy completed a restructuring of its board of directors and formally became a mixed ownership enterprise after the state-owned Henan Agriculture Investment Group Co., Ltd. had taken up a 26% stake in April, becoming the leading shareholder. According to the board's statement, Huahuaniu Dairy aims to list on the main board market in the next 3-5 years and enter the Top10 National Dairy Firms as Henan Province's leading dairy processor. At present, Huahuaniu Dairy has 13 dairy farms and 3 dairy plants with overall processing capacity of 1,300 t/d.

Beidahuang Wondersun Dairy Co., Ltd. (Wondersun Dairy)

On 15 June, Wondersun Dairy terminated Pre-IPO Tutoring for Beidahuang Wondersun Dairy Co., Ltd. – the 4th listing suspension for the company since its first attempt two decades ago. The latest IPO process was started in 2019 with Wondersun Dairy expecting a successful IPO and both revenue and market value to exceed USD1.4 billion (RMB10 billion) by 2025 – referred to internally to as the "Double 10 Billion Target". This has been postponed to 2028 due to weak recent results: sales of its main business (liquid milk and

formula products) were only USD715.8 million (RMB5.08 billion) in 2021 and USD712.5 million (RMB5.06 billion) in 2022. Driven by its planned IPO, Wondersun Dairy has been investing in the emerging new tea beverage sector, opening 36 new freshly-made milk tea drink stores this year so far – 16 company-owned locations in its home city of Harbin and 20 franchised sites in Heilongjiang, Beijing and Shanghai, with plans to grow to 2,000 across the country in 5 years.

Guangdong Wen's Dairy Co., Ltd. (Wen's Dairy)

On 25 May, Wens Foodstuff Group Co., Ltd. (Wens Group, Stock Code: 300498) proposed to sell a 35% stake in Wen's Dairy to Guangdong Juncheng Investment Holdings Co., Ltd. for USD62 million (RMB440 million). This deal will reduce Wen's Group's holding to 29.57% from the current 64.57%, with the financials of Wen's Dairy no longer being incorporated in group results.

In Nov 2020, Wen's Group had announced plans to spin off Wen's Dairy for a public listing. However, results have proven discouraging: Wen's Dairy's revenue fell from USD149.7 million (RMB1,062 million) in 2021 to USD133.4 million (RMB946.767 million) in 2022, when it incurred a net loss of USD921,017.4 (RMB6.54 million). In Q1 2023 alone its net loss has exceeded the total net loss in 2022, at USD3.1 million (RMB22,341 million). In this Feb., Wen's fresh milk failed quality tests on its aerobic bacterial counts, seemingly a repeat of the quality issue on this product that occurred before in 2013 and 2020. In June 2022, Wen's pure milk also failed a MSNF (Milk Solid Non Fat) test.

Given such poor performance and food quality issues, there may well be little progress in the spin-off IPO of Wen's Dairy in the short term.

2 Dairy Plants Approved for Construction in June

Summary: In June, Huanong Nutritional Food's functional dairy plant and Guangxi Tiantian Dairy's 20,000 t/a dairy product (expansion) project were approved for construction.

On 6 June, the pre-construction environmental impact assessment was accepted on a proposed functional dairy products plant for Guangzhou Huanong University Nutritional Food Co., Ltd. (Huanong Nutritional Food), with details disclosed as follows:

- Construction nature: New construction
- Total investment: USD10.7 million (RMB76.2 million), 3.3% (=USD0.4 million/RMB2.5 million) of which for environmental protection
- Location: Conghua Pearl Industrial Park, Guangzhou City
- Site & floor areas: 8,128 m² & 12,779 m²
- Main construction content: a 3-storey workshop and an underground wastewater treatment station
- Production capacity:
 - Fresh milk – 21,583 t/a
 - Pure milk – 11,866 t/a
 - Yoghurt – 12,326 t/a
 - Lactobacillus drinks – 10,387 t/a
 - Ice cream – 5,376 t/a
- Working system: 90 workers in three 8-hour shifts for 300 days a year
- Construction duration: 12 months

Huanong Nutritional Food was set up by Guangzhou Huanong University Nutrition Technology Co., Ltd. in Nov. 2022. The latter company is a JV between South China Agricultural University and Changjiang Great Wall (Guangzhou) Catering Co., Ltd.

– a technology-based integration of a national-level engineering centre and state laboratories. It focuses on premium dairy products and nutritional / health foods. South China Agricultural University has been involved in dairy processing since the early 1950s,

operating at its "Huanong Dairy Plant" and with the "Huanong" brand a household name in Guangdong across a wide range of dairy products, such as UHT/fresh milk, yoghurt, lactobacillus drinks and various milk beverages.

TABLE 5: Product Plan of Huanong Nutritional Food

Item	Spec.	Capacity, t/a	Total capacity, t/a
Fresh milk	236g/carton	2,039	21,583
	1,000g/carton	2,724	
	210g/carton	2,419	
	2,000g/carton	14,400	
Pure (UHT) milk	200g/carton	11,866	11,866
Yoghurt	100g/cup	2,304	12,327
	135g/cup	4,666	
	200g/carton	1,728	
	210g/bottle	3,629	
Lactobacillus drinks	200g/bottle	9,062	10,387
	460g/bottle	1,325	
Ice cream	80g/cup	5,376	5,376

Source: Huanong Nutritional Food

Separately, on 14 June a project was also approved for Guangxi Tiantian Dairy Co., Ltd. (Guangxi Tiantian Dairy) as follows:

- Construction nature: Expansion
- Total investment: USD1.4 million (RMB10 million), 0.6% (=USD8,454/RMB60,000) of which for environmental protection
- Location: Chongzuo City Industrial Zone, Buzhai Village, Taiping street, Jiangzhou District, Chongzuo City, Guangxi Zhuang Autonomous Region

- Main construction content: Add a 20,000 t/a production line for carton dairy products; replace 2 biomass boilers with 2 sets of biomass-powered steam generators (capability: 2t/h & 4t/h)
- Production capacity:
 - Pure buffalo milk – 5,000 t/a
 - High-calcium buffalo milk – 10,000 t/a
 - Buffalo yoghurt – 5,000 t/a (milk sourced from own farms)

- Working system: existing workforce in 3 8-hours shifts for 365 day annually
- Construction period (estimated): 10 months from April 2023 to Jan. 2024

Guangxi Tiantian Dairy was founded in 2004, specialising in buffalo milk processing. It owns a regionally-recognized brand "Zuojiang" used on UHT/fresh milk, chilled yoghurt and high-calcium milk products, and has 7,200 t/a production capacity for UHT milk, 7,200 t/a for milk beverage, and 80 t/a for condensed milk.

Raw Milk Price

China's Milk Price Continues Down

Summary: China's raw milk price continued to fall in June, with unstable supply and demand impairing farmers' operations.

In the week ended 14 June, China's raw milk price averaged USD536.9 (RMB3,810) per tonne, down 0.8% from the first week of the month and down 8.0% YoY. The price is expected to stay low for now at least, with a supply and demand imbalance persisting.

Supply and Demand Imbalance

Changes in China's population structure have reduced overall demand for baby formulae. According to the National Bureau of Statistics (NBS), the number of births in China in 2022 was 9.56 million, down by 1.06 million from 2021. Total fertility rate (births per woman) was down to 1.07 in 2022 from 1.52 in 2019. The fertility rate of first time births was down to 0.5 in 2022 from 0.7 in 2019. The newborn number is expected to slip further, to 7.88 million in 2023, meaning a further loss of demand for IMF. Some formula manufacturers have cut back on their production after seeing lower sales and operated with milk sourced mainly from their own farms, contracting out less for supply.

On the other hand, China's population aged 65 or above reached 200,978,000 in 2022, accounting for 14.9% of the total population vs. 13.5% in 2020. However, the slow transition toward dairy consumption among the

elderly and the minor volumes of adult nutrition products on the market suggest that demand for adult formula products will not cause a substantial shift in this basic position, despite the demographics.

On the supply side, excessive dairy farm construction and the imbalance in farm locations between the South and North remain. Data from the China Dairy Industry Association (CDIA) showed national production of milk (from all species) exceeded 40 million tonnes in 2022; in the past 6 months, at least 5 new largescale dairy farms (>10,000 cattle) have entered operation or reached their final stage of construction. Most of the country's dairy farms are in Northeast, Northwest and North China, specifically in Inner Mongolia Autonomous Region, Xinjiang Uygur Autonomous Region and Hebei, whilst demand continues to be strongest far away in the South, meaning distribution challenges and limiting responsiveness to market changes. In Q1 2023, national milk production rose by 8.5% to 8.34 million tonnes. However, the growth trend is effectively reaffirming a long established problem for the industry.

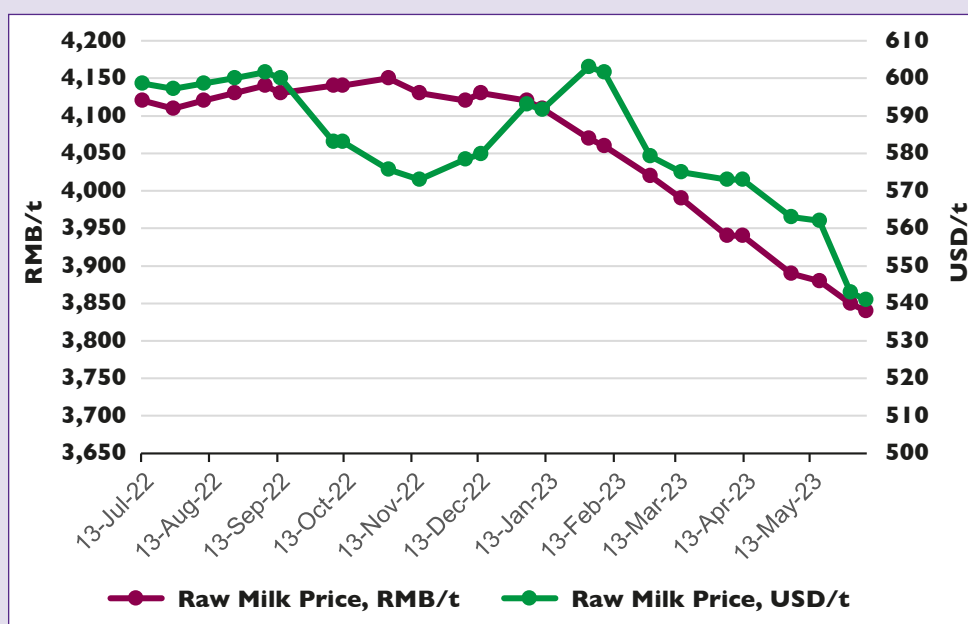
Risks in Dairy Farming

Although feed prices came down slightly this month, the raw milk price has dropped at a faster pace – and feed prices are still high in an historical context.

Feed price update as of 14 June:

- The national price of corn averaged USD411.5/t (RMB2,920/t), up 0.3% from the first week of the month and down 2.7% YoY; the average in major production regions (Heilongjiang, Jilin and Liaoning) was up 0.4% to USD376.2/t (RMB2,670/t) compared with the first week; and the price in the main demand area (Guangdong) stayed at USD421.3/t (RMB2,990/t)
- The national price of soybean meal averaged USD601.7/t (RMB4,270/t), down 1.2% from the first week of the month and down 5.3% YoY

FIGURE 1: Trends in China's Raw Milk Price, July 2022–June 2023



Source: Ministry of Agriculture and Rural Affairs (MARA)

Major players like Yili, Mengiu, Bright Dairy and New Hope Dairy have been extending upward through the supply chain, integrating milk sources through cooperation or direct investment to develop their milk supply. Mid-size and small farms are left with milk surpluses and become more

vulnerable to milk price drops due to the lack of demand; some have already wound up their businesses. Data from the Ministry of Agriculture and Rural Affairs (MARA) shows that the number of certified farming householders by Q1 2023 was down by 2.1% QoQ and down by 19.1% YoY.

News in Brief

Dairy Imports in May 2023

The May import figures provided some encouragement for exporters, showing notable YoY growth in import volumes for a range of products including WMP, whey, cheese (excluding fresh cheese), lactose and caseinates, offsetting declines in liquid dairy and milkfats.

TABLE 6: 2023 May Imports, tonnes

HS code	Product	202205	202304	202305	MOM	YOY
04011000	Milk & cream, fat ≤1%, not concentrated or sweetened	9,190.5	5,988.5	5,668.5	-5.3%	-38.3%
04012000	Milk & cream of >1% but ≤6% fat, not concentrated or sweetened	57,507.3	37,425.8	43,690.3	16.7%	-24.0%
04014000	Milk & cream, 6%	4.7	3.8	0.3	-91.5%	-93.2%
04015000	Milk & cream, fat >10%, not concentrated or sweetened	26,148.9	21,464.6	20,239.9	-5.7%	-22.6%
04021000	Milk & cream in solid forms, fat ≤1.5%, concentrated/sweetened	25,728.5	35,483.2	32,068.5	-9.6%	24.6%
04022100	Milk & cream in solid forms of >1.5% fat, concentrated, unsweetened	48,161.5	41,030.0	52,512.9	28.0%	9.0%
04022900	Milk & cream in solid forms of >1.5% fat, concentrated, sweetened	182.6	50.9	57.4	12.8%	-68.5%
04041000	Whey and modified whey	44,579.7	52,621.3	57,034.4	8.4%	27.9%
04049000	Products consisting of natural milk constituents, nes	724.9	399.1	634.9	59.1%	-12.4%
04051000	Butter	7,637.0	7,100.5	7,397.9	4.2%	-3.1%
04059000	Other fats & oils derived from milk	3,138.0	2,363.5	1,370.7	-42.0%	-56.3%
04061000	Fresh cheese, incl. whey cheese, curd	7,938.2	5,362.6	4,958.7	-7.5%	-37.5%
04062000	Grated or powdered cheese	4,628.0	3,478.5	5,589.4	60.7%	20.8%
04063000	Processed cheese, not grated or powdered	1,060.7	1,113.4	1,679.1	50.8%	58.3%
04064000	Blue-veined cheese, other-veined cheese prod. by penicillium roqueforti	4.5	9.2	9.0	-1.9%	99.2%
04069000	Cheese, nes	3,154.4	3,057.0	3,783.8	23.8%	20.0%
17021100	Anhydrous lactose, lactose wt. ≥99%	9,991.1	17,358.9	17,178.7	-1.0%	71.9%
17021900	Lactose syrup & other lactose	23.6	40.9	0.5	-98.8%	-97.9%
19011010	For infant food retail packaging formula, the defatted cocoa content < 5%	24,118.5	24,936.2	22,819.8	-8.5%	-5.4%
35011000	Casein	1,543.1	1,798.6	1,466.0	-18.5%	-5.0%
35019000	Caseinates	1,307.3	1,153.8	1,843.4	59.8%	41.0%
35022000	WPC80/WPI	3,276.3	2,565.2	2,055.5	-19.9%	-37.3%

Source: China Customs

Yili Expands Liquid Milk Production

On 24 May, Daqing Yili Dairy Co., Ltd. (Daqing Yili) posted the Environmental Protection Acceptance and Monitoring Report for its completed liquid milk expansion project.

Project details:

- Construction nature: Expansion
- Total investment: USD7.3 million (RMB51.84 million), 0.04% (=USD2,818.3/RMB20,000) of which for environmental protection
- Location: Economic and Technological Development Zone of Lindian County, Heilongjiang
- Main construction content: 2 standard 250ml UHT milk lines, each with capacity of 112 t/a
- Throughput per line: Cow milk – 73 t/a; Organic milk – 39 t/a
- Working system: 57 new employees working for 300 days per year
- Commencement of construction: 17 May, 2022
- On-site monitoring: 4 May–5 May, 2023

Daqing Yili is part of Yili's liquid milk division and its biggest premium liquid milk production site in North / Northeast China, prior to these additions having 26 production lines for ambient yoghurt (in Tetra Top & Tetra Prisma Aseptic packages) and ambient milk line (in 250ml slim packages, 250ml resealable caps, aseptic cold filling PET bottles).

Yili to Expand Yoghurt Capacity in Chengdu

On 6 June, the Ecology and Environment Department of Qionglai City published the interim technical review on the environmental impact assessment of the yoghurt plant expansion project proposed by Chengdu Yili Dairy Co., Ltd. (Chengdu Yili).

Project disclosure:

- Construction nature: Conversion and expansion
- Total investment: USD7.8 million (RMB55 million), 0.27% (=USD21,137.2/RMB150,000) of which for environmental protection
- Location: Economic and Technological Development Zone of Qionglai City, Sichuan Province
- Site area: 21,674.8 m² of the existing facility
- Main construction content: Add chilled yoghurt production system and transform the original system in the pre-processing yoghurt plant; add a gable-top carton filling line and packaging equipment; convert the existing PET filling line to handle fresh milk and yoghurt products; upgrade a line for yoghurt cups
- Working system: 30 new employees working in three 8-hour shifts for 300 day per year
- Construction duration: 5 months

After the expansion, Chengdu Yili will have an output capacity of 529,179 t/a – 121,179 t/a for chilled yoghurt and fresh milk, 330,000 t/a for ambient yoghurt, and 78,000 t/a for ice cream and ice milk.

TABLE 7: Chengdu Yili's Expansion Plan

Item	Specification	Adding Capacity, t/a
Chilled yoghurt cup	100g	10,077
	90g	1,608
	Sub-total	11,685
Gable top carton fresh milk	200mL	759
	950mL	2,271
	Sub-total	3,030
"Jindian Fresh milk"	235mL	471
	780mL	993
	Sub-total	1,464
Total		16,179

Source: Chengdu Yili

Mengniu Keerqin Completes New Construction for 182 t/d School Milk

On 4 June, Inner Mongolia Mengniu Dairy Industry Keerqin Co., Ltd. (Mengniu Keerqin) announced it has added 2 school milk lines which have been officially approved:

- Construction nature: Expansion
- Total investment: USD18.8 million (RMB133.4 million), 0.31% (=USD59,184/RMB420,000) of which for environmental protection
- Location: Economic and Technological Development Zone of Tongliao City, Inner Mongolia Autonomous Region
- Site & floor areas: 100,600 m² & 14,522 m²
- Main construction content: Added 2 school milk production lines and upgraded the flat warehouse into stereo warehouse
- Production capacity: School milk capacity increased by 182 t/d or 54,600 t/a
- Working system: 40 new employees working in three 12-hour shifts for 300 days per year
- Start of construction: 3 July 2022
- Commissioning time: March 2023
- Site acceptance test: 3 April – 4 April, 2023

Mengniu Keerqin was set up in 2002 by Mengniu China Mengniu Dairy Company Ltd (Mengniu, Stock Code: HK.02319). On the completion of this project, the subsidiary now has capacities of 120 t/d for pure milk, 673 t/d for school milk and 110 t/d for walnut milk, so 903 t/d in all.

Wahaha Receives Patent for Anti-depression LAB

On 26 May, Hangzhou Wahaha Group Co., Ltd. (Wahaha)'s patent for a *Lactococcus lactis* and its application in countering depression was formally accepted (license No. CN1135125148, applied for on July 2021).

It was found that *Lactococcus lactis* WHH2078 can alleviate depression significantly, with useful properties in terms of adhesiveness, tolerance to acid and choline salts and intestinal barrier protection through balancing serum corticosterone levels and adjusting in vivo neurons that are found with depression. It can be used in fermented dairy products, as well as medicines and healthcare products, for this purpose.

According to the National Depression Blue Book 2022 published by Chinese Academy of Sciences (CAS), patients aged under 18 years accounted for 30.28% of all China's depression-afflicted people. From this cohort, 50% were school students, 41% of which had experienced school dropout. There are also emerging cases in workplaces, and especially among those in cases of postpartum, menopause and old age. There would appear to be a good market opportunity for this patented strain be used in cultured milk products.

Wahaha has been known as a company focused on lactobacillus (LABs) drinks since its establishment in 1993, despite its recent efforts in developing other lines like mineral water and congee containing milk. How it would sell anti-depression products to the mass consumer market and appear credible in doing so remains an open question. However, our work analysing patenting trends in China shows that this example is reflective of considerable investment in IP in China's dairy industry over the last decade or so and one that deserves deeper attention.

Herds Dairy Launches New Children's Formulae

This month, Shaanxi Herds Dairy Co., Ltd. (Herds Dairy) announced 2 new milk formulae for children – "Aozhijian Children's Growth Formula Goat Milk Powder" and "Heercong Children's Growth Formula (Cow) Milk Powder" – a further push into the segment.

The company highlights that these products meet the growing requirement for a variety of milk types (cow/goat) and nutritional intakes for children, whilst adding lactoferrin, hydrolysed egg yolk powder, taurine, DHA, prebiotics, inositol and various vitamins and minerals to fortify immunity, improve digestion and absorption. (Taurine is an interesting element in light of this month's New Scientist report that taurine supplements extend lifespan and health in old age in mammals). The products are based on milk from Herds Dairy's own farms in Longxian County, Shaanxi Province.

The children's formula segment shows great growth potential in China: according to the National Bureau of Statistics, by the end of 2022, China's population included around 239 million people aged 0-14, over 200 million of whom are above 3 years old. At the same time, the country is seeing new-generation parents with stronger nutritional awareness asking for more than just general formula products for their kids.

These new products now sit alongside Herds Dairy's previously launched "Round Care Children's Growth Goat Milk Powder" and "Peigao Children's Growth (Cow) Milk Powder", aiming to provide a more complete range to the market.

PICTURE 1: Herds Dairy's Children's Formulae Range



Source: Herds Dairy

Kabrita Launches Fortified Goat IMF

On 6 June, Ausnutria's goat milk brand Kabrita launched a new goat IMF series "Yuehu", with stage 1-2-3 products for infants needing an extra boost for immunity.

The new series has been co-developed by Ausnutria and Yili (its controlling shareholder) and produced in Yili's factory in Hohhot City, Inner Mongolia. In addition to the basic fortifiers of choline, inositol, taurine, DHA (96mg/100g), ARA, L-carnitine, prebiotics and nucleotide, "Yuehu" products are supplemented with OPO (4.2g/100g). The goat milk raw materials come from the Dutch goat cheese producer Amalthea Group which were purchased by Ausnutria in 2022, and now supplies around 45,000 tonnes of goat milk annually for Ausnutria. In the Netherlands, Ausnutria has set up a production facility for goat WPC and has one for base powders under construction, due for completion by the end of 2023.

"Yuehu" joins Kabrita's existing goat IMF series ("Yuebai" and "Youzhuang") and goat milk powder products for children and pregnant women on the market. In 2022, Kabrita's overall sales rose by 6.6% to USD520.1 million (RMB3.6 billion) – sales in China growing by 5.5% to USD468.5 million (RMB3.3 billion) and overseas market sales by 21.8%.

Last month, the Research Center for Food and Drug Industry Development and Regulation at the Chinese Academy of Social Sciences published its Research on the Development of the Goat Milk Formula Industry In China, highlighting Kabrita's

PICTURE 2: Kabrita's "Yuehu Stage 3 Goat Milk Formula"



Source: Kabrita

role as the leading brand and expecting its dominance to continue as the market concentrates further in the coming years.

Ausnutria Divests NZ-based Formulae JV to Westland/Yili

On 6 June, Ausnutria Dairy Corp Ltd. (Ausnutria, Stock Code: HK.01717) notified Ausnutria NZ's sale of 60% in its Pure Nutrition JV to Westland Milk worth USD18.9 million (NZD31.1 million). Westland Milk is owned by Inner Mongolia Yili Industrial Group Co., Ltd. (Yili, Stock Code: 600887), through the wholly-owned subsidiary Hong Kong Jingang Trade Holding Co., Ltd. This makes Westland Milk/Yili the sole proprietor of Pure Nutrition. Assuming it is approved, the deal will enable Ausnutria to focus its capital and management resources on its existing business, it indicates.

Venture Portfolio:

- Pure Nutrition was jointly established by Ausnutria NZ and Westland Milk in New Zealand in 2016, with 60% and 40% stakes respectively, formed through an initial investment by Ausnutria of USD4.5million, and a transfer of Westland-owned land at its Rolleston site on the edge of Christchurch in New Zealand/s South Island with a value of USD3 million
- The 30,000 tonne capacity JV has been in the red since its establishment due to mismanagement in the depressed market. In 2021 and 2022, its pre-tax losses were USD5.7 million (RMB40.2 million) and USD5.1 million (RMB36.2 million) respectively; and its liabilities amounted to about USD27.9 million as of 31 March 2023
- Pure Nutrition mainly produces baby formulae and other milk-based powders, which registered sales of USD43,824 (RMB311,000) in 2021 and USD224,195 (RMB1.6 million) in 2022. As of the announcement date, it has no registered baby formulae in China and only supplies milk powders to the country; its formulae only sell in NZ, Australia, the Netherlands and other countries. However, it still stands a good chance of selling formulae in China and so boost its overall performance once it obtains Chinese registration before the end of 2024
- Pure Nutrition and Westland Milk are both located in Rolleston – the latter has long supplied base milk powders to the former, so their combination should counter Pure Nutrition's losses and create greater synergy to tap the JVs potential in the future

Tianruixiang Husbandry – Xinjiang's First "National Quality Dairy Engineering Enterprise"

On 30 May, Xinjiang Tianruixiang Animal Husbandry Co., Ltd. (Tianruixiang Husbandry) won the title of "National Quality Dairy Engineering Enterprise"; it is the first business in Xinjiang Uygur Autonomous Region to receive this award, highlighting that the quality of its raw milk production is above the national average.

The company was founded in June 2021 with a registered capital of USD16.91 million (RMB120 million), by Xinjiang Ruiyuan Dairy Co., Ltd. (Ruiyuan Dairy). It runs a 387-ha dairy farm equipped with 3 silage silos with an overall storage capacity of 60,000 tonnes, and produces 40,000 tonnes of milk annually in Hejing County. In order to enable better milk quality, the company has contracted with local farmers to ensure it can purchase quality forage within a fair price range.

Meanwhile, Xinjiang Wanruihe Animal Husbandry Co., Ltd. – another dairy business owned by Ruiyuan Dairy, registered in March 2020 with capital of USD7.05 million (RMB50 million) – is building a smart dairy farm in Hejing County. This farm is to span an area of 52 ha with an investment of USD42.27 million (RMB300 million) and will provide annual milk production of up to 16,000 tonnes.

The "Quality Dairy Engineering" initiative of the Technology Innovation Alliance of the National Dairy Industry has been a priority in the National Health Commission (NHC)'s National Nutrition Plan since 2021. It aims to develop a special logo system for "Quality Dairy Engineering", to push farming technology development and to standardise dairy processing techniques nationwide. So far, 71 dairy firms across the country have committed to the initiative and 41 have received awards in this way.

Health Food Raw Material Catalogue Adds Whey Protein

On 14 June, the State Administration for Market Regulation (SAMR) issued the Health Food Raw Material Catalogue – Whey Protein, with requirements on recommended daily intake, functionality, production techniques, etc., taking effect on 1st Oct., 2023. The catalogue is formulated in accordance with the Food Safety Law of China, and the Measures for Health Food Raw Material Catalogue and Health Function Catalogue Management, and whey protein is a new inclusion, with conditions as follows:

- Definition of terminology: powdered product with whey as raw material processed via separation, concentration, drying and other processes
- Recommended daily intake: 6g–25g
- Applicable people: Adults with low immunity caused by inadequate protein intake
- Property requirements: The product should be dried powder, white or yellowish, odourless and with no agglomeration, with protein content (dry basis) ≥ 80 g/100g

TABLE 8: Physicochemical Indicators for Whey Protein

Item	Index
Water, %	≤ 6.0
Ash content	≤ 9.0
Aflatoxin M1, $\mu\text{g}/\text{kg}$	≤ 0.5
Lead (in the form of Pb), mg/kg	≤ 0.3
Total arsenic content (in the form of As), mg/kg	≤ 0.5
Mercury, mg/kg	≤ 0.3

Source: Health Food Raw Material Catalogue – Whey Protein

TABLE 9: Indicators for Whey Protein Microorganisms

Item	Index
Total plate count, CFU/g	$\leq 30,000$
Mould and yeast, CFU/g	≤ 50
Coliforms, MPN/g	≤ 0.92
Salmonella	$\leq 0/25\text{g}$
Staphylococcus aureus	$\leq 0/25\text{g}$

Source: Health Food Raw Material Catalogue – Whey Protein

PRIORITY ORDER FORM

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Note: All subscriptions are invoiced in full on commencement of each subscription period

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To Order, Please Send Confirmation To:

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