

Dairy Products China News

Guaranteed Exclusive Analysis

Welcome to the March issue of Dairy Products China News.

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We work worldwide on food and agribusiness markets around Asia, Africa, Central America, Europe, Oceania and so on. They're often fascinating and in many cases very reliant on food imports. However, size matters of course. With the declining births figures from China, it's perhaps easy to forget just how important the market is. A recent World Data Lab update provided a good reminder, assessing the world's number of active consumers at 4 billion now, and pointing out that through the 2020s and beyond China and India will both show much greater growth in this spending class than the mature North American and European regions. The growth in China by their analysis comes to +237 million consumers by 2030. The figure for India is even higher (even though its consumer class is smaller than China's). Their forecast is that the two countries in combination will provide 55% of the world's new consumer class over the decade.

However, China is particularly important because of several factors. One is that China will make up a quarter of the global senior market (65+) by 2030 – we have been seeing this realisation increasingly if belatedly recognised by local and international manufacturers over a number of years. When I visited Chinese formulae manufacturers in the 1990s and early 2000's this wasn't on their agenda, but it certainly is now. According to data released prior to the event by the National Health Commission, the average life expectancy of people on the mainland is now 78.2 years, well up on the previous estimate of 74.8 years. It is no surprise that iiMedia Research estimates show China's anti-ageing market grew by 12.2% in 2021 to RMB72.2 billion (\$10.9 billion) and looks set to exceed RMB100 billion.

A second significant aspect is the sheer accessibility of the target audience for marketers: China is a much more urban market than India and by 2030, China's cities with over 5 million people will have 280 million inhabitants, while India will have 152 million. China's middle class is much larger than India's too, especially in its core and upper income segments.

However, exporters will be very aware that China's major dairy businesses continue to grow and upgrade, with improved ESG credentials as part of this, upping the ante for foreign competitors – earlier this month Longyou Yili Dairy Co., Ltd., one of Yili's sites in Zhejiang Province, became China's first liquid dairy plant to achieve certification to ISO 14046 after passing a water footprint assessment. Just one small recent instance of the local industry's rising level of sophistication.

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Headlines

- ▶ In line with the new national standard for IMF products, major manufacturers have launched differentiated products based on their scientific research.
- ▶ An array of new ice cream products has been launched year to date by such leading dairy groups as Mengniu, Yili, Bright Dairy, Unilever and Mars, indicating the market's great potential.
- ▶ Hi-Road (Stock Code: 300915.SZ), known as "the first Chinese cream stock", broke ground for the Future Food Industrial Park in Shanghai last month, along with cream and frozen bakery plants in the works.
- ▶ In March, updated details were published on the progress of Ganwei Dairy's 129,600 t/a plant and Xiyuchun Dairy's 358,700 t/a expansion project.
- ▶ On 21 Feb., the China Biotech Fermentation Industry Association published a standard – Probiotics Products Lactic Acid Bacteria Postbiotics (T/CBFIA 09001–2023).
- ▶ Nestlé, FrieslandCampina, Danone all reported brisk earnings for 2022, with sales up 8.4%, 22.4% and 7.8% respectively.
- ▶ On 25 Feb., Junlebao highlighted its focus on developing its cheese business by concentrating on scientific nutrition and M&A. This followed its recently increased investment in the cheese startup Shanghai Cheespirit Health Technology Development Co., Ltd., a strategic move to boost the business.
- ▶ On 17 March, Bright Dairy reported revenue and profit declines for 2022, citing slower consumption and rising raw materials costs as the main causes.
- ▶ Namchow Food reported a net profit drop of 56.4% last year, despite relatively stable sales.
- ▶ China's continued depressed dairy market and declining milk price – down 4.8% YoY to USD574.9/t (RMB3,990/t) this month – mean the country needs a range of solutions to address the downturn.

Major Companies and Sites Mentioned in This Issue



Market Analysis

IMF Innovation Increases in the Wake of the New National Standard

Summary: In line with the new national standard for IMF products, major manufacturers have launched differentiated products based on their scientific research.

The new national standard for IMF products became effective on 22 Feb., starting a new era for the industry, driving brands to compete on the basis of innovative formulations, product differentiation and brand building, as far as possible based on scientific research. China Mengniu Dairy Company Ltd (Mengniu, Stock Code: HK.02319), Inner Mongolia Yili Industrial Group Co., Ltd. (Yili, Stock Code: 600887) and China Feihe Ltd (China Feihe, Stock Code: HK.06186) have each showcased their latest research results on breast milk and its application in their new product ranges complying with the new standard.

Mengniu's Ruibuen: Structural Fat MLCT (Medium-and-Long Chain Triacylglycerol)

Mengniu announced 3 product series under the brand Ruibuen on 11 March – "Ruibuen En'zhi", "Ruibuen Qinzhi" and "Ruibuen Qinyi".

"Ruibuen En'zhi" products are claimed to be the world's first infant formulae with MLCT – which is the only new ingredient approved to date for use in formula products by the new national standard. MLCT facilitates better digestion and absorption of lipids to provide rapid energy for babies' early brain and nervous system development, prevents fat build-up and improves protein metabolism. "Ruibuen En'zhi" products also contain the novel ingredient OPO (naturally present in mother's milk, with 60-75% palmitic acid levels in the middle, or SN-2, position, and oleic acid in the outer SN-1 and SN-3 positions) and other nutrients for brain, immunity and digestive improvement.

The "Key Technologies for Enzymatic Synthesis of Structural Fat MLCT and Novel OPO and the Application in Infant Formula" project developed by Mengniu and Jiangnan University is indicated as having achieved a major breakthrough, tackling fundamental problems in using the fat ingredients in infant formula, and enabling the practical use of both these ingredients. The project has applied for 33 invention patents.

Yili's Golden Collar Crown: Application of HMO Scientific Research

At the Boao Healthy Food Science Conference & Expo (FHE) held on 22-24 Feb., Ignatius Szeto, Yili Group Senior Director, Nutrition R&D and Open Innovation, shared a special report on Research Progress of HMO (human milk oligosaccharide) and Breast-milk Derived Probiotics. This highlights the composition features and biological activity of HMO in Chinese breast milk, and its long-term effects on Chinese infant health. Four scientific research achievements around HMO were featured:

- In cooperation with Wageningen University & Research in the Netherlands, cluster analysis examined the compositional difference between the HMO in China and in the Netherlands, establishing a basis for enhancing and innovating in IMF; their in-vitro study model investigated the relationship between HMO and SCFA (short-chain fatty acid from gut microbiota) and potential benefits in improving the infant intestinal microenvironment; in addition, more studies were carried out shedding light on the synergistic effect achieved by combining HMO and probiotics
- In working closely with Tsinghua University, Yili's team further analysed the relation between HMO and gut microbiota of infants and published a series of advanced research results on the various effects of HMO on infant microbiota

Yili's Golden Collar Crown uses the company's patented combination of " α -lactalbumin and β -casein" and a patented nucleotide composition. The recently rollout of the range's "Zhenhu" product involves the addition of "Super 3rd-Generation OPO" which comprises a higher proportion of palmitic acid (= SN-2 palmitate), making it easier for the baby to absorb.

China Feihe's Astrobaby: OPN Preparation and Testing Technology Innovation

Last month China Feihe co-drafted and published the Determination of Osteopontin (OPN) in Infant Food and Dairy Products by High Performance Liquid Chromatography (Association Standard) with the Technology Innovation Alliance of the National Dairy Industry. The method streamlines the process of OPN isolation and extraction for infant formula, making production easier and also lower cost. The release of this standard should accelerate the use of OPN in the industry. Apart from the innovative testing method, China Feihe is working on OPN preparation technology development and the combination and application of functional active nutrients, some of which have been piloted.

The "Zhuorui" and "Zhuoyao" products in the Astrobaby range both feature OPN to help build up babies' immunity, an aspect believed to be prioritised by the new generation of parents:

- "Zhuorui" has a doubled OPN level to activate infants' innate immunity
- "Zhuoyao" features a "Lactoferrin+10-fold probiotics+OPN" formulation, offering multi-dimensional protection for babies

New Ice Cream Product Launches

Summary: An array of new ice cream products has been launched year to date by such leading dairy groups as Mengniu, Yili, Bright Dairy, Unilever and Mars, indicating the market's great potential.

At present, Chinese consumption of ice cream per capita is around 3kg annually vs. the 8kg typical on average in western countries. However, China's ice cream market size has been growing since 2015, to an estimated USD24.1 billion (RMB167.2 billion) in 2022, and is projected to reach USD28.8 billion (RMB200 billion) by 2027, according to the Report on China Ice Cream/Ice Milk Industry Trend published by the China Green Food Association and the China Health Care Association.

This year, several leading companies are moving fast to increase their involvement in this growing category, including Mengniu, Unilever, Yili, Bright Dairy and Mars.

Mengniu Targeting Premium Positioning

On 20 Feb., Inner Mongolia Mengniu Dairy (Group) Co., Ltd. (Mengniu) signed an agreement with the local government in Dongpo District, Meishan in Sichuan Province, to build 8 premium ice cream production lines giving a total daily capacity of 300 tonnes and a cold storage warehouse of 10,000 m² with storage capacity for 1 million packs. It is investing USD216 million (RMB1.5 billion) in the lines and the introduction of production equipment and digital systems.

In marketing, Mengniu just announced a new premium line "Delux" on 24 Feb., with the featured item Frozen Yoghurt Ice Cream selling at RMB36/75g*9. The product contains ≥55% milk and ≥12% processed cheese, described as creating a thick and pure milk taste.

Unilever's Lighthouse Factory

On 1 March, Unilever Wall's conducted a tasting event for multiple new flavours under the brands Magnum, Cornetto, and Wall's. The company said it would roll out 20+ new items this year, all made in the group's Lighthouse Factory in Taicang City, Jiangsu Province. The factory was founded in 2020, based on an investment of around USD104 million (RMB720 million). It is a highly automated operation, with AI and digital systems and providing a flexible production system able to respond to shifts in demand and to accelerate consumer-led innovations. By now, its processes are 80% automated and it produces 9 million packs per year.

Earlier in Jan., Wall's began marketing a new flavour (rose and white peach), priced RMB42.8/73g*3.

PICTURE 1: Cornetto's New Flavour – Two-Colour (Rose and Milk) Ice Cream



Source: Cornetto

Yili, Bright Dairy and Mars Are Catching Up

Inner Mongolia Yili Industrial Group Co., Ltd. (Yili, Stock Code: 600887) introduced some new items recently to various ranges such as "Yili Qiaolezi", "Gemice", "Qixuan", "Xujinhuan", "Ice Factory" and "Yili Pasture". The latest one, a new cheese flavour of "Xujinhuan", was put on the market last month priced RMB145/65g*8; it is zero sugar and has a milk content ≥41%. Yili's ice cream/popsicles made sales of USD1.32 billion (RMB9.2 billion) in Q1-Q3 last year, according to its latest report.

This month Bright Dairy & Food Co., Ltd. (Bright Dairy, Stock Code: 600597) launched an original flavour ice cream based on its "Ubest Fresh Milk" – the product contains ≥4.4g protein per 100g.

Mars Foods (China) commissioned a new ice cream factory in Guangzhou last December and the group plans to triple the size of its global ice cream business to USD1.1 billion in sales by 2024. This March, it launched 2 new products in China: M&M's Ice Cream (milk and chocolate flavours), priced RMB18.9/70g; and Dove Dark Chocolate Crispy Series Ice Cream (light cheese & strawberry and matcha flavours), priced RMB18.9/62g.

Hi-Road Starts Construction of Future Food Industrial Park

Summary: Hi-Road (Stock Code: 300915.SZ), known as "the first Chinese cream stock", broke ground for the Future Food Industrial Park in Shanghai last month, along with cream and frozen bakery plants in the works.

On 27 Feb., Shanghai Hi-Road Food Technology Co., Ltd. (Hi-Road, Stock Code: 300915.SZ), known as "the First Chinese Cream Stock", held a ground-breaking ceremony for the Future Food Industrial Park in Fengxian District, Shanghai. The construction plan also includes building cream and frozen bakery plants. Listed in late 2020, Hi-Road focuses on non-dairy cream and is now preparing to introduce other cream and frozen bakery products.

The Future Food Industrial Park

On 25 Nov., 2020, Hi-Road issued 15 million shares and raised USD139.44 million (RMB967.75 million) for its non-dairy cream and frozen dessert capacity expansion (the original project).

On 30 Sept., 2022, the company changed the originally proposed project to building a Future Food Industrial Park to incorporate more production capacities for premium cream products, plant protein drinks and frozen bakery, which will help optimise its product structure and boost profitability, as it found the market is growing towards premium, differentiated and functional cream products.

- Therefore, the original non-dairy cream expansion project with planned investment of USD9.02 million (RMB62.63 million) has now become the "cream expansion and upgrade project" with investment of USD47.29 million (RMB328.16 million)
- The original frozen dessert plant project with planned investment of USD14.35 million (RMB99.60 million) is now the "frozen bakery plant project" with investment of USD15.71 million (RMB109.06 million)

The park construction is scheduled to complete in Dec. 2024.

The Coffee & Tea Drink Channel

Tea chains' sales of fresh tea drinks in China have been estimated at USD16.37 billion (RMB113.6 billion) in 2020, with growth expected to continue at a high CAGR of over 24% to hit USD48.99 billion (RMB340 billion) by 2025. This suggests strong prospects for cream products which are widely used in the toppings for milk tea drinks.

Hi-Road's plan ("the cream expansion and upgrade project") is to expand and upgrade its cream production lines by importing advanced equipment and adding 2 new lines whilst upgrading the existing 2 to allow production of new products such as whipping cream, milk fat mix, plant protein drinks and plant-based cream to diversify the company's portfolio.

The resulting 4 lines are expected to reach the design capacity of 80,000 t/a in the 4th year of operation, achieving operating revenue of USD282.36 million (RMB1,959 million) and gross profit of USD31.74 million (RMB220 million) once in full operation. The post-tax payback period is 6.5 years (including the construction period) and the post-tax internal rate of return is 20.30%.

The High-end Bakery Market

With an average annual growth rate of 11.2% from 2013 to 2019, bakery retail sales are growing faster than the food industry in general. The penetration rate of frozen bakery in China is around 10% at present, suggesting strong prospects for ingredients such as cream.

The frozen bakery plant in the Future Food Industrial Park is expected to reach its designed capacity of 4,000 t/a in the 4th year of operation and to achieve operating revenue of USD33.74 million (RMB234.31 million) and gross profit of USD4.40 million (RMB30.54 million). The post-tax payback period is 7.6 years (including the construction period) and the post-tax internal rate of return is 14.70%.

Progress on 2 Dairy Plants in March

Summary: In March, updated details were published on the progress of Ganwei Dairy's 129,600 t/a plant and Xiyuchun Dairy's 358,700 t/a expansion project.

On 17 March, Gansu Legend Ganwei Dairy Co., Ltd. (Ganwei Dairy) had its environmental impact assessment for a new 129,600 t/a plant accepted and published on the website of the Ecology and Environment Bureau of Lanzhou New Area, Gansu Province.

Project Overview:

- Total investment: USD61.2 million (RMB425.0 million), 6.60% (=USD4.0 million or RMB28.1 million) of which for environmental protection
- Location: Zhongchuan Park Area of the Lanzhou New Area, Gansu Province
- Site & floor areas: 142,813.51 m² & 80,669.52 m²
- Main construction content: Cheese workshop (1 natural cheese line and 12 processed cheese lines), liquid

milk workshop (2 ambient milk lines and 4 chilled milk lines), whey workshop (1 whey powder line), wastewater treatment station, power house, chemical reagent warehouse and warehouses

- Processing: raw milk – 1,200 t/d
- Production: dairy product total – 129,600 t/a
 - ambient milk – 150 t/d or 45,000 t/a
 - chilled milk – 112 t/d or 33,600 t/a
 - cheese – 161 t/d or 48,300 t/a
 - whey powder – 9 t/d or 2,700 t/a
- Material sources: Raw milk will be sourced from its own farms in Zhangye and Baiyin cities for the production of liquid milk and natural cheese; the processed cheese will be made of the natural cheese produced here or out-sourced
- Construction duration: 12 months

TABLE I: Raw Material Demand for Ganwei Dairy's New Plant

Item	Annual Consumption, t/a
Raw milk	1,200
Strain culture	78
Protein powders	18
Milk Powders	18
Butter	22

Source: Ganwei Dairy's Environmental Impact Assessment

Ganwei Dairy was founded in April 2020 with a registered capital of USD14.4 million (RMB100 million). It is wholly-owned by Gansu Legend Qi Dairy Co., Ltd. (Legend Dairy), and has a plant with a processing capacity of 150 t/d and an output capacity of 500 t/d for products including pure milk, UHT milk, school milk, yoghurt, modified milk, milk beverages and WMP.

Gansu Qianjin Modern Agriculture Development Group Co., Ltd. is Legend Dairy's parent and is an integrated business with activities in dairy farming, forage planting, dairy processing and sale, feed production, organic fertiliser production and sale. Its dairying operation (Gansu Qianjin Animal Husbandry Science and Technology Co., Ltd.) is the largest in the province, with 21 dairy farms and 53,000 cows in total, producing 800 tonnes of quality milk per day.

On 10 March, details were disclosed by Changji Prefecture's government of a 358,700 t/a expansion project approved for Xinjiang Xiyuchun Dairy Co., Ltd. (Xiyuchun Dairy).

Project Overview:

- Total investment: USD5.8 million (RMB40 million), 0.68% (=USD38,900n or RMB270,000) of which for environmental protection
- Location: Hutubi County, Changji Hui Autonomous Prefecture, Xinjiang Autonomous Region
- Area usage: all new construction will be built within the existing plant area
- Main construction content: Adding new production equipment for fresh milk and set yogurt; and add equipment in the workshops for UHT milk, milk beverages and stirred yogurt, to improve capacity
- Capacity change:
 - Raw milk consumption will increase by 300,000 t/a
 - Dairy production will increase by 258,000 t/a, taking the plant up to 358,700 t/a in all – part of planned capacity has been built (see below)
- Construction duration: 3 months

TABLE 2: Xiyuchun Dairy's Expansion Plan

Item	Current Capacity, t/a	Planned Addition, t/a		Capacity after Expansion, t/a
		Constructed	To be Constructed	
Stirred yoghurt	50,000	8,400	41,600	100,000
Set yoghurt	10,000	8,250	11,750	30,000
UHT milk and milk beverage	27,000	89,800	83,200	200,000
Fresh milk	0	10,950	4,050	15,000
Milk powders	10,700	0	0	10,700
Milk tablets	3,000	0	0	3,000
Total	100,700	117,400	140,600	358,700

Source: Project's Environmental Impact Assessment Document of Xiyuchun Dairy

Xiyuchun Dairy was established in 2005 with a registered capital of USD14.4 million (RMB100 million). It is an integrated business with dairy breeding and farming, and dairy processing. It owns 8 dairy farms and has 30,000 cows, with daily milk production up to 300 tonnes. The company owns the brand "Xiyuchun", a household name in

Xinjiang on fermented milk, fresh/UHT milk, modified milk, milk powders and milk beverages. The company accounts for a dairy market share of approx. 40% in Xinjiang Region. In 2022, it sold 121,500 tonnes of dairy products, up 12.29%, and its sales were USD154.8 million (RMB1.1 billion), up 15.36%.

Governmental Direction

China's First Postbiotics Association Standard

Summary: On 21 Feb., the China Biotech Fermentation Industry Association published a standard – *Probiotics Products Lactic Acid Bacteria Postbiotics (T/CBFIA 09001–2023)*.

On 21 Feb., the China Biotech Fermentation Industry Association published *Probiotic Products Lactic Acid Bacteria – Postbiotics (T/CBFIA 09001–2023)*, as a guideline for the production, testing and sale of postbiotics products produced by probiotics from lactic acid bacteria.

Industry Background

In recent years, Chinese consumers have become more health-conscious and interested in diverse solutions for intestinal health. The probiotics industry has grown rapidly in line with this, and China's probiotics market has been estimated to grow at 15% annually to over USD130 million (RMB900 million) in 2022.

Postbiotics are bioactive compounds produced when the gut's probiotic bacteria digest and break down fibres (prebiotics), and – whilst still in their infancy as ingredients – are attracting significant international investments as they offer health benefits including constipation and diarrhea relief, regulating gut microbiota, inhibiting intestinal pathogen, supporting gut mucosa, etc.

Compared with probiotics which bring beneficial effects in active form, and set higher requirements on production, transport and storage, postbiotics are inanimate and can be used in a range of applications, notably including cookies, crackers, fudges, yoghurt and beverages.

Definition of terminology

- Postbiotics are inanimate microorganisms and/or their components that come with a clear genetical background and confer health benefits on

the host, including or excluding its metabolites; excluding without chemically synthesized compounds, viruses/phages and their metabolites

- Postbiotics from lactic acid bacteria are a class of postbiotics made from qualified raw and auxiliary materials after mixing, blending, sterilization and cooling, inoculated with one or several probiotics from lactic acid bacteria in fermentation, and inactivated in the fermented liquids or solids; with or without cell wall components, in separated solid or liquid form, adding or not adding vectors, treated with or without drying

Application Conditions

This Standard underscores the requirements for bacterial strains used in the production of lactic acid bacteria, probiotics, postbiotics products:

- The strain is subject to the List of Bacterium Strains Permissible for Food, released by National Health Commission
- The strain numbers and isolate sources should be identified
- The strain quality and safety should be evaluated by certified organisations and national or international rules
- The strain should go through the whole genome sequencing test and be supported by relevant scientific literature or reports
- Other raw materials to be used are subject to the individual national standards or industry standards

TABLE 3: Composition Indicators for Postbiotics

Item	Bacteria liquid and the metabolites	Bacteria solid and the metabolites	Bacteria liquid after cell lysis	Bacteria solid after cell lysis	Bacteria liquid	Bacteria solid
Water, % ≤	–	10	–	10	–	10
Microbial number, cell/ml >	107	108	–	–	107	108
Free amino acid, mg/100ml >	100	100	100	100	–	–
Organic acids (based on lactic acids), mg/100ml >	20	200	20	200	–	–

Source: TIC/BFIA 09001—2023

Note: 1. Bacteria primarily refer to the inactivated postbiotics.
 2. Bacteria and the metabolites primarily refer to the inactivated postbiotics and the metabolites.
 3. Bacteria after cell lysis primarily refer to the postbiotics and the metabolites after cell lysis.

Company Dynamics

2022 Earnings Reports: Nestlé, FrieslandCampina, Danone

Summary: Nestlé, FrieslandCampina, Danone all reported brisk earnings for 2022, with sales up 8.4%, 22.4% and 7.8% respectively.

In late Feb., Nestlé, FrieslandCampina and Danone all released their 2022 reports, citing growth in China’s infant nutrition and dairy markets. Business highlights were reported as follows:

- Nestlé**
- Global revenue: USD100.9 billion (CHF94.4 billion), up 8.4%
 - Underlying trading operating profit (UTOP): USD17.2 billion (CHF16.1 billion), up 6.5%
 - UTOP margin: 17.1%, down by 30 basis points (bps) on a reported basis and by 40 bps in constant currency
 - Infant Nutrition enjoyed double-digit growth, with broad-based contributions across geographies and brands
 - Dairy saw mid single-digit growth, with continued momentum for coffee creamers, affordable fortified milks and home-baking products
- Zone Greater China (created as a business division in Jan 2022):
- Sales: USD5.8 billion (CHF5.4 billion), with 3.4% growth attributed to strong operational execution, E-commerce momentum and continued innovation
 - UTOP: USD962.8 million (CHF900 million)
 - UTOP margin: 16.1%, up 260 bps
 - It was noted that a favourable product mix and disciplined cost control helped offset cost inflation
 - Coffee, Confectionery and Infant Nutrition all saw strong growth. In Infant Nutrition, the market shares of NAN and Wyeth illumina both improved
- For 2023, the group expects organic sales to continue to grow by 6%-8%, UTOP margin to stand in the range of 17.0%-17.5% and underlying earnings per share in constant currency to increase 6%-10%.
- FrieslandCampina**
- Global revenue: USD15.0 billion (EUR14.1 billion), up 22.4%
 - Operating profit: USD501.3 million (EUR471 million), up 32.7%
 - Net profit: USD310.8 million (EUR292 million), up 69.8%
 - Food & Beverage (incl. dairy products) showed significant growth in operating profit due to higher dairy commodity prices, innovation and the expansion of its distribution network during the recovery of foodservice sector from the pandemic

- Ingredients benefited from the recovery of the infant and adult nutrition market sectors, showing increased sales and operating profit
- Specialised Nutrition's operating profit increased in the improved China market
- Trading was able to significantly increase profit margins on commodity dairy products by acting fast and effectively on market developments.

In China:

- Revenue grew at double-digit rates
- By expanding distribution to small and mid-sized cities, FrieslandCampina's infant formula brand Friso increased its market share to 6.8% nationwide, ranking 5th in the market
- Friso NATURA, the new super premium infant formula launched in Dec. last year, has shown good sales momentum

FrieslandCampina set out clear priorities for 2023, including better nutrition and more sustainable production and packaging alongside continuous investment in the marketing of its brands and in the Professional (dairy) business, to achieve growth.

Danone

- Global net sales: USD29.5 billion (EUR27.7 billion), up 7.8%; its Q4 sales grew by 7.0% to USD7.5 billion (EUR7.0 billion)
- Recurring operating profit: USD3.6 billion (EUR3.4 billion), down 4.3%
- Recurring operating margin: 12.2%, down 154 bps
- Essential Dairy & Plant-Based Products (EDP) and Specialized Nutrition saw sales increases:
- China, North Asia & Oceania made sales of USD3.6 billion (EUR3.4 billion), up 6.7%; their combined Q4 sales were USD869.5 million (EUR817 million), up 3.4%

In China:

- IMF sales continued to grow well from a high base. The performance was led by Aptamil, which continued to gain share for both international and domestic labels
- Adult Nutrition and Pediatric Specialties sustained their growth as well

Danone set guidance for 2023 in line with its mid-term targets: like-for-like sales growth between 3% and 5% with moderate improvement in operating margin.

Junlebao's Major Push Into the Cheese Market

Summary: On 25 Feb., Junlebao highlighted its focus on developing its cheese business by concentrating on scientific nutrition and M&A. This followed its recently increased investment in the cheese startup Shanghai Cheespirit Health Technology Development Co., Ltd., a strategic move to boost the business.

Junlebao Dairy Group Co., Ltd. (Junlebao) held a "Scientific (Corporate) Strategy Conference" on 25 Feb., with the theme of "More Science, More Health". The company's Chairman and CEO Wei Lihua stressed that the event would accelerate its push into the growing cheese market, enabling scientific nutrition solutions and M&A / investment.

Cheese business development

In promoting premiumisation and product diversification, Junlebao has become active in cheese business development over the last 3 years:

- In Jan. 2021, it acquired a 30% stake in Sikeqi Food Technology (Shanghai) Co., Ltd., which produces cheese sticks, cheese

pudding, whipping cream, thick milk (concentrated by low temperature membrane separation techniques and then combined with other milk components) and Mozzarella

- In March 2021, it launched its first cheese stick product and highlighted its ambition to become a leading player in cheese, alongside its intention to invest about USD144 million (RMB1 billion) in building a cheese plant over 5 years
- In Jan. 2023, it announced an increase in its investment in Shanghai Cheespirit Health Technology Development Co., Ltd. (Cheespirit), a startup known for its innovative cheese sticks providing "five-dimensional nutrition" to boost kids' bones, muscles, vision, brain development and digestive health – as a result, Junlebao now owns a 10% stake in this firm. Cheespirit won the 2022 Emerging Brand of the Year on mama.com, a portal for Chinese mothers

Emerging competitors

Last year, Milkground Food, Milkana and Yili accounted for almost 60% of China's retail cheese market, which has grown at a CAGR of 23.2% in the past five years, reflecting rising industry involvement:

- Mengniu and Yili set up cheese divisions early in 2018
- In Aug. 2022, France's Bel Group completed the acquisition of a 70% stake in Shandong Junjun Cheese Co., Ltd., which produces the brand "Cheese Fun" and acts as an OEM for many well-known cheese brandowners like Mengniu, Bright Dairy, Genki Forest, Wei-chuan and Dr.Cheese
- In 2022, Ausnutria (Stock Code: HK.01717) brought 50% stake in Dutch goat cheese producer Amalthea Group

Other major dairy companies such as Bright Dairy, Sanyuan Foods, Wondersun Dairy, Panda Dairy and even Adopt A Cow have dabbled in the cheese category. Junlebao is a relative latecomer but cheese continues

to offer great potential in China, so it is by no means too late to be successful.

Road to going public

The focus on cheese is key to Junlebao's preparation for listing, but in comparison with Mengniu and Yili, Junlebao is approaching this step slowly. In July 2022, its VP Zhong Yan explained that Junlebao targets sales of USD7.2 billion (RMB50 billion) by 2025 and had officially started the legal process to go public in 2025.

Apart from its investment in cheese business, a series of acquisitions and investments has been implemented during the past 2 years to ensure a successful IPO by helping to optimise its product mix and diversify and increase its investments, and so also its valuation in the capital market. Last year these included:

- Investing a total of RMB200 million in acquiring 20% of Yunnan Royal Lesson Dairy Co., Ltd. and 20% of Yunnan Royal Lesson Intelligent

Dairy Co., Ltd. from Royal Group in Jan. to secure buffalo milk supply

- Acquiring Xi'an Yingqiao Dairy Industry (Group) Co., Ltd., a leading sheep dairy enterprise in Shaanxi Province, in Nov.

But clearly such rapid expansion comes with risks: according to the announcement, Junlebao's debt ratios were 88% in 2020 and 45.81% in 2021, far exceeding the average level seen in the industry.

Bright Dairy's Financial Report for 2022

Summary: On 17 March, Bright Dairy reported revenue and profit declines for 2022, citing slower consumption and rising raw materials costs as the main causes.

On 17 March, Bright Dairy & Food Co., Ltd. (Bright Dairy, Stock Code: 600597) reported annual results for 2022:

- Revenue: USD4.1 billion (RMB28.2 billion), down 3.39%
- Net profit attributable to equity shareholders of the listed company: USD52.0 million (RMB360.7 million), down 39.11%
- Net profit attributable to equity shareholders of the listed company excl. extraordinary gains/losses: USD24.3 million (RMB168.7 million), down 61.08%
- Gross assets: USD3.5 billion (24.5 billion), up 4.27%

Main business financials:

- Dairy products:
 - Sales revenue: USD3.5 billion (RMB24.1 billion), down 5.82%
 - Cost of sales: USD2.8 billion (RMB19.1 billion), down 6.76%
 - Gross margin: 20.43%, up 0.8 percentage points
- Dairying:
 - Operating revenue: USD380.6 million (RMB2.6 billion), up 15.33%
 - Operating costs: USD375.4 million (RMB2.6 billion), up 17.20%
 - Gross margin: 1.35%, down 1.57 percentage points
- Other operations:
 - Operating revenue: USD160.0 million (RMB1.1 billion), up 19.36%

- Operating costs: USD121.6 million (RMB844.0 million), up 15.98%
- Gross margin: 23.98%, up 2.22 percentage points

Dairy products data:

- Liquid dairy (fresh/UHT milk + yoghurt):
 - Sales revenue: USD2.3 billion (RMB16.1 billion), down 5.90%
 - Cost of sales: USD1.7 billion (RMB11.9 billion), down 4.53%
 - Gross margin: 26.08%, down 1.07 percentage points
- Other dairy products (bulk milk powders, milk formula, cheese and butter):
 - Sales revenue: USD1.2 billion (RMB8.0 billion), down 5.66%
 - Cost of sales: USD1.1 billion (RMB7.3 billion), down 10.19%
 - Gross margin: 9.06%, up 4.59 percentage points, largely due to the increased margins from the overseas sales of bulk milk powders and formulae.

Drivers behind the financial results:

- China's consumer confidence index fell and dairy consumption growth slowed over the year
- Feed prices and farming costs rose— since the start of 2020, the national corn price has surged by over 50% and has stayed high; the soybean meal prices were also up significantly in 2022 vs. 2021
- Raw milk prices fell from the highs of the previous year, with a downward trend since Feb. 2022. It is worth noting that during that period many largescale new dairy farms came onstream

TABLE 4: Bright Dairy's Production and Sales in 2022

Main product	Production, tonnes	YoY Change	Sales volume, tonnes	YoY Change	Inventory, tonnes	YoY Change
Fresh milk	437,847	-4%	436,198	-3%	20,484	9%
Yoghurt	623,473	-15%	620,804	-15%	29,978	10%
Bulk milk powders and formulae	244,975	-16%	242,278	7%	125,749	2%

Source: Bright Dairy's Annual Report

Key activities in 2022

- Given the pandemic situation, Bright Dairy started to offer services for online groups buying fresh/UHT milk, frozen drinks, milk formulae and cheese products for residential areas
- The publicly funded projects — construction works for new farms in Zhongwei City in Ningxia Autonomous Region, Funan County in Anhui Province, Huaibei City in Anhui Province, and Hachuan Village in Qiqihar City, Heilongjiang Province — have progressed on schedule. In 2021, the company raised USD278.1 million (RMB1.9 billion) of funds, USD195.2 million (RMB1.4 billion) of which was used for farm construction
- To strengthen dairy business in East China, last year its wholly-owned subsidiary Bright Animal Husbandry Co., Ltd. proposed to build a new farm in Yuanding County, Chuzhou City, Anhui Province. This planned farm is to hold 47,500 head of cows and to be invested with about USD395.2 million (RMB2.5 billion)
- Over the year, Bright Dairy's herd produced 11 tonnes of milk each milking cow on average
- New launches:
 - "Ubest Thick & Pure 4.0g Protein High-Quality Fresh Milk", containing 220mg/L immunoglobulin and 500mg/L lactoferrin
 - New blueberry & cheese flavour and yellow peach flavour of UHT Momchilovtsi Yoghurt
 - "Ubest Thick & Pure High-Calcium Cheese Stick", with fresh milk content ≥36% and cheese content ≥51%
 - JCAN Helical ready-to-serve (RTS) probiotics milk powder, adding the patented Lactobacillus plantarum ST-III
 - Others including Ubest Fresh Milk Ice Cream, Bright Grain Series Ice Cream, "Yipin Coffee Popsicle"
- It accelerated digitalisation across the full supply chain, and continued to push online new retails on including short-video platforms and social media, and integration of online and offline channels
- Synlait Milk, its overseas subsidiary based in New Zealand, focuses on bulk milk powders, IMF, cheese and liquid milk selling to 50+ countries and regions including Australia, China and Southeast Asia. Its sales grew 2.63% to USD997.3 million and net profit was USD4.1 million (RMB28.18 million), overturning the deficits in the previous year

For 2023, Bright Dairy targets total revenue of USD4.62 billion (RMB32.05 billion), net profit attributable to equity shareholders of the listed company of USD97.98 million (RMB680.00 million) and return on equity of above 8%.

Namchow Food's Net Profits Fall by Half in 2022

Summary: Namchow Food reported a net profit drop of 56.4% last year, despite relatively stable sales.

The oils & fats, dairy and bakery ingredients business Namchow Food Group (Shanghai) Co., Ltd. (Namchow Food, Stock Code: 605339) has notified its results for 2022, with relatively stable sales but a drop of 56.4% in net profit.

Key figures.

- Revenue: USD412.2 million (RMB2.9 billion), down 0.4%
- Net profit attributable to equity shareholders of the listed company: USD23.1 million (RMB160.6 million), down 56.4%

- Net profit attributable to equity shareholders of the listed company excl. extraordinary gains/losses: USD21.3 million (RMB147.8 million), down 58.2%

Two key factors were noted:

- Costs: The prices of commodities such as palm oil have climbed to the highest level in a decade, due to geopolitical conflicts and changes in the international macroeconomic environment; in addition, labour shortages, export policy changes and shipping disruptions in countries exporting major raw materials also contributed to significant cost increases from the preceding year

- Consumption: China's changing domestic business environment – mainly related to covid lockdowns and control measures – has constrained demand, as some regions saw much lower customer footfall in the chains of restaurants, bakeries and tea drink outlets which are key customers
- By geographic region, East / Central / South China accounted for almost 70% of its total sales; overseas markets made up only 0.2% – mainly oils and fats, and whipping cream

Sales Performance

- By category, sales of its oils and fats, dairy products, whipping cream, frozen dough and bakery fillings) were fairly stable, although dairy products (most are imported) enjoyed the greatest growth of around 18%
- By channel, 56% of total sales came from dealers and 44% from its direct customers (chain businesses) – in the former area, sales via small/medium-sized distributors dropped slightly, affected by domestic market conditions

TABLE 5: Namchow Food's Sales by Category in 2022

Product category	Revenue, USD million	Proportion	YoY change
Oils and fats	221.9	53.90%	-8.91%
Whipping cream	73.5	17.90%	6.90%
Dairy products	85.4	20.80%	18.05%
Frozen dough	28.2	6.90%	10.35%
Ready-to-eat bakery fillings	2.1	0.50%	-12.88%
Other	0.5	0.10%	-9.26%
Total	411.6	100.00%	-0.39%

Source: Namchow Food's 2022 Report Note: Oils and fats: butter and oils for bakery Whipping cream: its own brands "Qjanyi" (whipping cream), "Joy Q" (milk foam topping), "Pleasing" (soft serve milk beverage), plus the "Pleasing Milk Beverage" (imported from the Netherlands) Dairy products: most are imported, such as Lakeland's Millac UHT dairy whipping cream and Lakeland UHT whipping cream (both from Ireland/UK) and Campina butter sheets and AMF sheets (from the Netherlands), etc.

TABLE 6: Namchow Food's Production and Sales Status in 2022

Main Category	Actual Capacity, t/a	Output, tonnes	Sales Volume, tonnes	Inventory, tonnes	Change in Output	Change in Sales	Change in Inventory
Oils and fats	129,747.68	90,294.21	92,251.13	7,627.95	-19.69%	-15.45%	-26.77%
Whipping cream	29,842.56	24,629.38	24,262.78	2,052.20	3.64%	4.48%	12.67%
Dairy products	–	–	15,772.42	3,980.22	–	9.88%	-14.20%
Frozen dough	8,392.81	5,136.88	5,287.28	543.11	-6.85%	12.51%	-36.34%
Ready-to-eat bakery fillings	2,703.36	797.22	775.99	70.97	-7.23%	-9.40%	-15%

Source: Namchow Food

In 2022, the company prioritised production and product portfolio expansion, to meet market demand.

Production Ramp-up

- On 6 Feb., 2022, its 2nd frozen dough plant in Shanghai started up (in addition to its site in Tianjin). Meanwhile, it is planning more investments in its Tianjin, Guangzhou and Shanghai plants in order to scale up its overall capacity for frozen dough and frozen bakery products
- In Aug., it set up a wholly-owned subsidiary – Chongqing Namchow Food Co. Ltd. This is Namchow Food's 4th plant in China, also its first in central / western regions. It involves an investment of USD69.2 million (RMB480 million) in building whipping cream and frozen dough capacities to support its business development in both western China and Southeast Asia. The construction of this plant is divided into 2 phases, with the 1st due to complete in Q2 2025

Product Innovation

Namchow Food introduced numerous products in the year, including the following:

- Oils and fats: Namchow Aussie Compound Butter (natural creamy flavour, alternative to imported natural cream to counter reducing demand and rising costs) and Namchow Danish Pastry Margarine (designed for use in trendy bakery products)
- Frozen dough: More kinds of innovative frozen dough and a new line of frozen bakery products
- Whipping cream: "Qianyi Whipping Cream for Professionals" (targeting growth in the cake market), and "Joy Q" products (creamy topping or milk base for drinks, targeting the growing tea drinks and coffee markets)
- Dairy products: UK imported Lakeland UHT Dairy Whipping Cream (with 35% milk fat content and high stability)
- Bakery fillings: New flavours with real oat grain and dietary fibres, aimed at meeting the consumer trend towards health and wellness

Raw Milk Price

China's Dairy Sector Needs Multiple Solutions

Summary: China's continued depressed dairy market and declining milk price – down 4.8% YoY to USD574.9/t (RMB3,990/t) this month – mean the country needs a range of solutions to address the downturn.

Chinese dairy farming businesses are having a hard time, with earnings hit by the sliding milk price, climbing feed costs, and relatively weak demand – problems difficult to resolve easily.

Milk price updates:

- In the week ended 15 March, China's raw milk price averaged USD574.9 (RMB3,990) per tonne, down 0.5% from the first week of the month and down 4.8% YoY. The price has continued to fall since last November

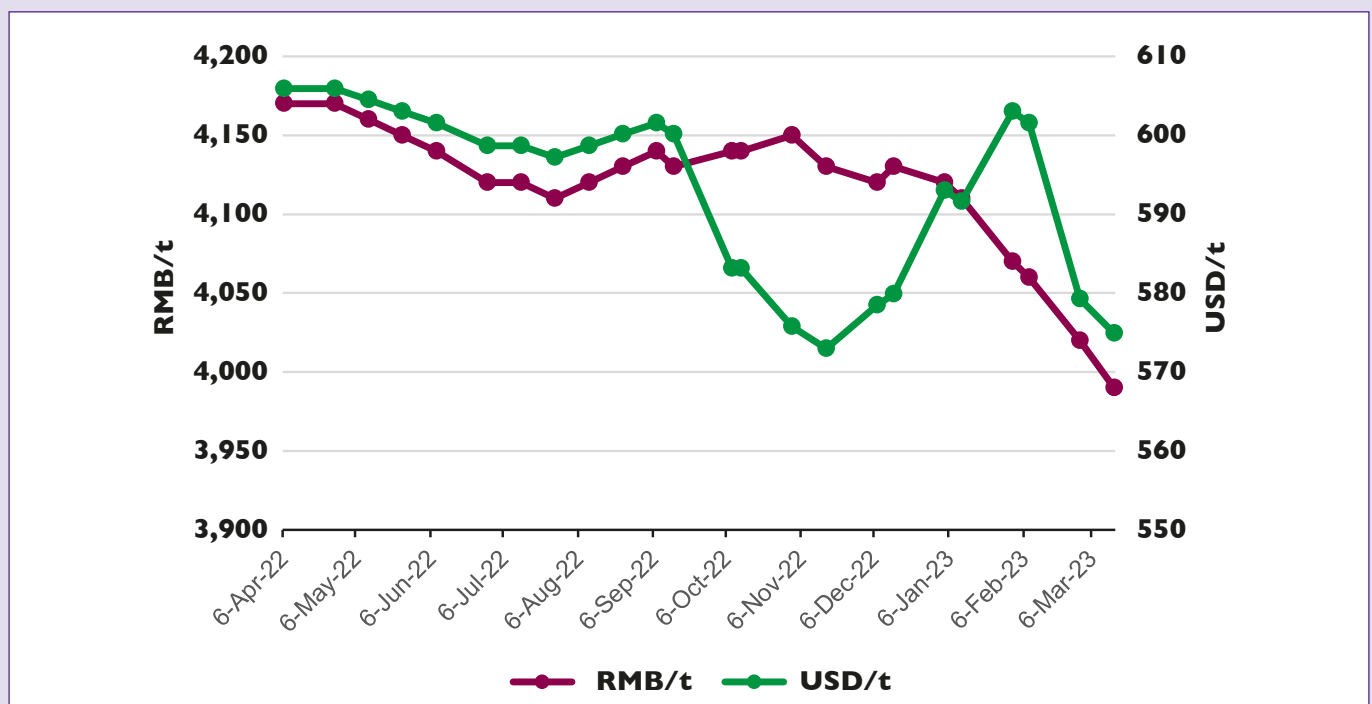
Feed market:

- The national price of corn averaged USD430.8/t (RMB2,990/t), down 0.3% from the first week of the month and up 2.4% YoY; the average in major production

regions (Heilongjiang, Jilin and Liaoning) was down 0.4% vs. the first week to USD394.8/t (RMB2,740/t); the price in Guangdong was also down by 0.3% to USD446.7/t (RMB3,100/t) from the first week

- The national price of soybean meal averaged USD667.1/t (RMB4,630/t), down 1.7% from the first week of the month and down 1.9% YoY; even with the recent dip, the overall price of soybean meal remains high.

FIGURE 1: Trends in China's Raw Milk Price, April 2022–March 2023



Source: Ministry of Agriculture and Rural Affairs (MARA)

On 17 March, a Dairy Frontier Technology Exchange and High Quality Development Summit Forum was held in Beijing. This was run by the Beijing Jingwa Agricultural Science and Technology Innovation Center, a private, non-corporate organization co-founded in July 2021 by the China Agricultural University, the Beijing Academy of Agriculture and Forestry Sciences, New Hope Group Co., Ltd. and JD.com, Inc. At the event, representatives from the Dairy Association of China, the Center and livestock enterprises discussed the current state of the industry and advised on solutions for future development.

Since the beginning of 2022, China's milk price has been falling whilst feed prices have been constantly rising, squeezing profitability. Shao Mingjun, deputy secretary general of the Dairy Association of China, said that a further decline of milk price and the recent milk oversupply that is expected to last throughout H1 at least could cause phased losses in over 60% of farm businesses. On top of this there are other factors such as the overall economic slowdown and reduced production of school milk as the fallouts of the pandemic. Meanwhile, dairy demand has been low in Q4 2022–Q1 2023. However, she was confident about the long-term prospects of the industry,

suggesting that the acceleration of urbanisation, increasing incomes and evolving diets would ensure growth.

Various solutions were raised.

Restructure the dairy market:

- It is key to encourage a restructuring of local dairy consumption. Nearly 80% of dairy products consumed in China are liquid milks with a short shelf-life, so milk surpluses tend to happen when consumption drops, creating a cycle: milk oversupply after the Chinese Spring Festival – lower production in September – tighter supply in October. There is a great difference in dairy consumption between China and developed countries: in most western countries, nearly 40% of raw milk is processed into cheese products with a longer shelf-life, the equivalent of extending the shelf-life of liquid milk. Cheese accounts for less than 5% of the total dairy product consumption in China

More efforts to dairy breeding:

- Promote domestic breeding of dairy cows and expand the population of high-yielding / high-performing breeds

- Hold more international talks on dairy breeding and "exchanges" of genetic materials with countries with strong dairy industries. At present, frozen semen from domestic dairy cows only has 30% or less of the market vs. imported supply at around 70%
- Encourage farming of the economic dual-purpose cattle that supply both milk and beef and exceed Holsteins in key nutrition indexes for milk fat and protein. These will provide notable advantages during the current downtrend in milk prices as they can be fed with lower-quality forage and have strong resistance to natural risks. (Currently, some farms in Anshan City in Liaoning Province have already switched their Holsteins to dual-purpose cattle and are making profits from both farming and processing)

Improve farm management:

- China's promotion of large-scale farming has been positive results in the industry with the increasing number of dairy cows. But this also requires better farm management and higher levels of planning, mechanisation, digitalisation and equipment application, if these changes are to achieve high-efficiency operation requiring lower labour

News in Brief

Dairy Imports in January-February 2023

It would be a serious understatement to say that the combined January-February import volumes were not too encouraging – whey, infant nutritionals and to a lesser extent cheese, lactose and casein provided rare bright lights, but in most segments the volumes declined. After the shocking January figures, WMP has fallen to less than a third of its volume in the same period last year, for instance. Such figures are posing quite a challenge for the industry in New Zealand of course, whilst the US has been benefiting from the turnaround in the pig sector – where the country has been on a drive to rebuild around more commercial scale businesses with greater focus on ration efficiency. Recent data shows that largescale pig farms now account for about 60% of the market – potentially 65% by 2025 – while smaller farms and individual hog producers have dropped from over 90% in 2001 to around 40% this year. Commodity exporters will need to become savvier in the market as the milk deficit is eroded.

TABLE 7: 2023 January – February Imports, tonnes

HS code	Product	Jan.–Feb. 2022	Jan.–Feb. 2023	Trend
04011000	Milk & cream, fat ≤1%, not concentrated or sweetened	18,484.7	12,183.0	-34.1%
04012000	Milk & cream of >1% but ≤6% fat, not concentrated or sweetened	131,693.8	68,196.4	-48.2%
04014000	Milk & cream, 6%	10.8	3.2	-70.7%
04015000	Milk & cream, fat >10%, not concentrated or sweetened	42,860.2	35,552.0	-17.1%
04021000	Milk & cream in solid forms, fat ≤1.5%, concentrated/sweetened	76,304.5	74,723.3	-2.1%
04022100	Milk & cream in solid forms of >1.5% fat, concentrated, unsweetened	300,247.7	95,341.4	-68.2%
04022900	Milk & cream in solid forms of >1.5% fat, concentrated, sweetened	272.0	215.6	-20.7%
04041000	Whey and modified whey	69,269.5	112,567.8	62.5%
04049000	Products consisting of natural milk constituents, nes	1,053.8	999.8	-5.1%
04051000	Butter	20,721.3	15,644.5	-24.5%
04059000	Other fats & oils derived from milk	6,470.9	5,473.3	-15.4%
04061000	Fresh cheese, incl. whey cheese, curd	10,289.4	9,147.1	-11.1%
04062000	Grated or powdered cheese	4,953.6	7,321.5	47.8%
04063000	Processed cheese, not grated or powdered	2,906.7	2,698.6	-7.2%
04064000	Blue-veined cheese, other-veined cheese prod. by penicillium roqueforti	20.2	10.8	-46.7%
04069000	Cheese, nes	6,410.3	6,441.1	0.5%
17021100	Anhydrous lactose, lactose wt.≥99%	14,755.8	20,509.8	39.0%
17021900	Lactose syrup & other lactose	543.2	71.5	-86.8%
19011010	For infant food retail packaging formula, the defatted cocoa content < 5%	35,493.2	47,246.3	33.1%
35011000	Casein	1,755.3	3,038.4	73.1%
35019000	Caseinates	3,989.7	2,735.3	-31.4%
35022000	WPC80/WPI	4,887.0	4,356.8	-10.8%

Source: China Customs

TABLE 8: 2023 February Imports, tonnes

HS code	Product	202201	202202	202301	202302	MOM	YOY
04011000	Milk & cream, fat ≤1%, not concentrated or sweetened	11,693.6	6,791.1	6,746.4	5,436.6	-19.4%	-19.9%
04012000	Milk & cream of >1% but ≤6% fat, not concentrated or sweetened	79,089.2	52,604.6	39,032.7	29,163.7	-25.3%	-44.6%
04014000	Milk & cream, 6%	1.5	9.3	3.2	0.0	-100.0%	-100.0%
04015000	Milk & cream, fat >10%, not concentrated or sweetened	20,341.7	22,518.6	19,608.2	15,943.8	-18.7%	-29.2%
04021000	Milk & cream in solid forms, fat ≤1.5%, concentrated/sweetened	47,986.1	28,318.3	34,265.7	40,457.6	18.1%	42.9%
04022100	Milk & cream in solid forms of >1.5% fat, concentrated, unsweetened	228,989.2	71,258.4	46,252.5	49,088.9	6.1%	-31.1%
04022900	Milk & cream in solid forms of >1.5% fat, concentrated, sweetened	164.8	107.2	72.1	143.5	99.1%	33.8%
04041000	Whey and modified whey	35,492.4	33,777.1	61,007.2	51,560.6	-15.5%	52.6%
04049000	Products consisting of natural milk constituents, nes	781.6	272.2	334.4	665.4	99.0%	144.4%
04051000	Butter	13,324.5	7,396.7	9,364.4	6,280.1	-32.9%	-15.1%
04059000	Other fats & oils derived from milk	2,899.8	3,571.0	3,366.0	2,107.3	-37.4%	-41.0%
04061000	Fresh cheese, incl. whey cheese, curd	4,836.5	5,452.9	4,989.7	4,157.3	-16.7%	-23.8%
04062000	Grated or powdered cheese	2,293.8	2,659.8	3,287.3	4,034.2	22.7%	51.7%
04063000	Processed cheese, not grated or powdered	1,437.0	1,469.7	1,462.9	1,235.7	-15.5%	-15.9%
04064000	Blue-veined cheese, other-veined cheese prod. by penicillium roqueforti	10.2	10.0	3.5	7.3	108.8%	-27.4%
04069000	Cheese, nes	3,498.1	2,912.2	3,364.3	3,076.7	-8.5%	5.6%
17021100	Anhydrous lactose, lactose wt.≥99%	8,822.0	5,933.8	11,913.3	8,596.5	-27.8%	44.9%
17021900	Lactose syrup & other lactose	439.1	104.0	65.7	5.8	-91.2%	-94.4%
19011010	For infant food retail packaging formula, the defatted cocoa content < 5%	18,370.4	17,122.8	23,670.2	23,576.1	-0.4%	37.7%
35011000	Casein	916.5	838.9	1,099.3	1,939.1	76.4%	131.1%
35019000	Caseinates	1,826.2	2,163.5	1,662.7	1,072.6	-35.5%	-50.4%
35022000	WPC80/WPI	2,547.8	2,339.2	2,972.2	1,384.7	-53.4%	-40.8%

Source: China Customs

AustAsia's 2022 Financial Results

On 1 March, AustAsia Group Ltd. announced its 2022 results:

- Revenue: USD562,786 thousand, up 7.8%
- Gross profit: USD130,673 thousand, down 25.7%
- Net profit: USD23,394 thousand, down 77.6%
- Herd size: 117,950 head, up 11.1%
- Average milk yield per milking cow: 13.3 tons, up 4.7%

The Group explained the changes in the year's results:

- The revenue increase was mainly due to the strong rise in sales of raw milk due to higher milk yields and the larger herd
- The drop in gross profit mainly reflects the lower average selling price of raw milk and higher feed costs. In 2022, the former decreased by 7.4% to USD670/ton or RMB4,650/tonne, while the feed cost per kg of raw milk increased to USD0.35 or RMB2.44, representing a significant increase of 16%.

GMemory Dairy Starts Liquid Dairy Project Construction

On 6 March, Zhejiang Good Memory Dairy Co., Ltd. (GMemory Dairy) hosted the ground-breaking ceremony for its liquid dairy project in Bailuzhou Water Economy Industrial Park in Wencheng County, Wenzhou in Zhejiang.

With a proposed investment of USD144 million (RMB1 billion), this project involves a 90,000 m² plant with 6 automated liquid dairy production lines (Swedish and German). The target capacity is 250,000 t/a of reconstituted milk and ambient yoghurt (producing from milk powders sourced from New Zealand and Australia) and the output could reach a value of up to USD144 million (RMB1 billion) per year. The construction of the first 4 lines is planned to complete in Nov 2024, with the last 2 lines completing in March 2025.

GMemory Dairy is a new business, registered on 15 Dec 2022, with a capital of USD4.32 million (RMB30 million). It is owned by Shanghai Zhongkai Guoneng Industry (Group) Co., Ltd..

Two New Food Raw Materials Approved

On 3 March, the Department of Food Safety Standards, Risk Surveillance and Assessment of the National Health Commission – part of the China National Center for Food Safety Risk Assessment (CFSA) – approved food manufacturers' use of *Leuconostoc pseudomesenteroides* and Lactase.

Leuconostoc pseudomesenteroides is a kind of *Leuconostoc* species and is generally isolated from fermented dairy products – it can be used in the production of fermented milk, flavoured fermented milk, cheese, fermented milk beverages and lactobacillus drinks, but not food for infants and children. The food safety requirements for *Leuconostoc pseudomesenteroides* are: lead ≤ 1.0 mg/kg; total arsenic ≤ 1.5 mg/kg; microbiological limits: 0/25g (mL) for *Salmonella*, *Staphylococcus aureus* and *Listeria monocytogenes* (so in a 25g sample, the number of targets detected must be 0).

Lactase is an enzyme for food industrial production, mainly used to catalyse lactose hydrolysis and transglycosylation. The national requirements for lactase are formulated in the *National Food Safety Standard – Food Additives – Enzyme preparation for Food Industry (GB 1886.174)*.

Mengniu's Further Investment in Yashili

China Mengniu Dairy Company Ltd (Mengniu, Stock Code: HK.02319) has progressed its investment in Yashili International Holdings Ltd. (Yashili, Stock Code: HK.01230) this month, with Yashili announcing the completion of its divestment of Dumex China on 2 March. On 9 March, Danone Nutrition's 25% stake in Yashili was officially transferred to Mengniu.

That means Mengniu has met all certain pre-conditions for the increased stake in Yashili, and these completed conditions shall become effective after being approved at the court meeting (date unspecified).

These pre-conditions include:

- The proposed transaction is to be approved by Yashili's independent shareholders at Yashili's first extraordinary general meeting
- The 25% stake in Yashili is acquired in accordance with certain terms
- The Executive's consent has been obtained for the proposed transaction to be a special transaction under the Takeovers Code

Mengniu and Danone terminated their partnership in May 2022, with terms including:

- Mengniu's purchase of 25% of Yashili from Danone and 20% of a yoghurt JV (Danone Dairy (Shanghai) Co., Ltd, completed in Aug. 2022)
- Danone's buyout of Dumex China from Yashili
- Mengniu also proposed an offer price under the privatization proposal of HKD1.20 for each scheme share; the total consideration is around HKD1.37 billion (USD174 million)

Before the completion of the Yashili acquisition, Mengniu held about 51% share of the company, Danone 25%, Yashili founder Zhang Litian's business (Zaesth International Group) nearly 6.4% and other minority shareholders 17.6% combined. So Mengniu's stake is now 76%.

Mengniu Launches M-ACTION Sports Protein Drinks

Mengniu has entered the sports nutrition market with 2 new protein drinks branded M-ACTION, exclusively selling on its flagship store on Tmall.com. So far, Mengniu is the only Chinese dairy manufacturer to have launched this kind of product – following on from Danone's recent introduction in China of YoPRO Animal and Plant Dual Protein Drinks

These are ready-to-drink products designed for consumption within 30 minutes of moderate- and high-intensity exercise and feature low sugar, fat and lactose formulations with whey protein, casein, collagen peptide and 14 kinds of vitamins and minerals.

Product details:

- M-ACTION for moderate intensity (original / aloe and avocado flavours): priced at USD19.0/300mL*6 bottles (RMB132/300mL*6 bottles), currently discounted to USD15.6/300mL*6 bottles (RMB108/300mL*6 bottles); featuring a double fibre formulaion (microcrystalline cellulose + sodium carboxymethyl cellulose) and 15g protein per bottle
- M-ACTION for high intensity (original / banana and avocado flavours): priced at USD24.2/300mL*6 bottles (RMB168/300mL*6 bottles), currently discounted to USD18.9/300mL*6 bottles (RMB131/300mL*6 bottles); featuring a high level of dairy calcium and prebiotics, and 25g protein per bottle.

PICTURE 2: M-ACTION Sports Protein Drinks



Source: Mengniu M-ACTION

Youran Dairy's Goats Arrive

Recently, China Youran Dairy Group Ltd (Youran Dairy, Stock Code: HK.09858) has imported 8,500+ pure breed Saanen goats from New Zealand and Australia – a breed known for its high reproductive capacity and milk yield.

The animals are now under 45-day inspection and quarantine prior to transfer to Youran Dairy's dairy goat farm in Yunnan, operated by Qingshuihe Youran Dairy Co., Ltd.

This farm is based on an investment of USD83.57 million (RMB580 million) and covers an area of 770,096 m². It is now under construction for a target herd size up to 50,000 goats, making it one of the largest single dairy goat farms in China, roughly on a par with the 50,000 goat farm in Hohhot City owned by Inner Mongolia Shengjian Dairy (Group) Co., Ltd. Once in operation (due in H1 2023), this new farm is expected to produce 63 t/d or 14,400 t/a of goat milk.

Youran Dairy is China's biggest supplier of specialised raw milks including organic milk, A2 milk, DHA milk, Jerseys' milk and selenium-rich milk, and has stated that it will continue to diversify its range to meet demand in the growing niche dairy segments where its customers operate.

Yili Announces "Space Probiotic Strains"

On 6 March, Yili together with the International Cooperation Center of China Aerospace announced 3 patented probiotic strains that have been tested in space and will soon be available to use in its dairy products, to drive new growth it hopes. This follows its launch last year of a "Future Dairy Space Lab".

The "Space Probiotic Strains" are: BL-99, K56, ET-22

- BL-99 or Bifidobacterium Lactis BL-99 is indicated to aid digestion and gut microbiota regulation and boost immunity. Mixed with aminobutyric acid, dietary fibres or other functional ingredients, it can be used to produce Yili's ranges such as "Yixiao (Easy to Digest) Yoghurt" and "MeiYiTian" (lactobacillus drink)
- Lactobacillus Paracasei K56 and ET-22 can help regulate gut microbiota levels and reduce stomach fat. They can be widely used to produce yoghurt, cheese, milk powders and ice cream products

These strains will be influenced by the microgravity, high-intensity space radiation, high vacuum and other unique space conditions.

In recent years, the functional food market has seen rapid growth in China, with probiotics the primary functional raw material and ingredient. The category of probiotics has grown faster than the overall dairy industry too, catalysed by the epidemic. However, China is a late starter in probiotics and domestic R&D capability is still insufficient to meet the current needs of Chinese consumers, meaning that approx. 90% of strains used are imported.

InnoOrigin Biological to Build Probiotics Plant and Key Laboratories

On 3 March., the environmental impact assessment (EIA) report of the Production Base and Key Laboratories Project proposed by Tianjin InnoOrigin Biological Biotechnology Co., Ltd. (InnoOrigin Biological) was approved.

Project Overview:

- Construction nature: New construction
- Total investment: USD36.0 million (RMB250 million), 0.74% (=USD0.3 million or RMB1.8 million) of which for environmental protection
- Location: Binhai Science and Technology Park of Binhai High-tech Zone, Tianjin
- Site area: 34,286.3 m²
- Main construction content:
 - Production lines for probiotics powders, powdered and liquid drinks, special dietary food, modified milk powders, probiotic candies, etc.
 - Laboratories for R&D, quality control, animal testing on the probiotics, postbiotics and fermentation processes
- Construction period: April–July 2023
- Designed capacities:
 - Probiotics powder (postbiotics produced by solid fermentation) – 576 t/a, half for sale and half for internal use
 - Probiotics powder (produced by liquid fermentation) – 21.6 t/a, half for sale and half for internal use
 - Probiotics & natto / peptide drinks in sachets – 378 t/a powders and 1,620 t/a liquid
 - Special dietary food in sachets – 810 t/a powders and 756 t/a liquid
 - Modified milk powders in sachets/cans – 1,728 t/a
 - Mixed milk powders (milk solids≤70%) in cans – 3,168 t/a
 - Non-viable bacteria powders – 550.8 t/a
 - Gel candy – 120 t/a
 - Jelly – 378 t/a
 - Press candy – 254.5 t/a
 - Coenzyme Q10 (CoQ10) – 2 t/a

Founded in May 2018 with a registered capital of USD7.2 million (RMB50 million), InnoOrigin Biological is a Sino-US joint venture, 44% owned by Tianjin Hexin Biotechnology Development Co., Ltd. and 25% owned by Bluesky Healthcare, Inc. It specializes in food for special medical purpose (FSMP), foods for special dietary uses, and organic food. It currently has 2 t/a capacity for postbiotics powders and 2 t/a capacity for coenzyme Q10 (CoQ10).

Ausnutria Profit Warning for 2022

On 10 March, Ausnutria Dairy Corp Ltd. (Ausnutria, Stock Code: HK.01717) warned of a substantial decrease in profit for 2022. The downturn of the infant formula market in China due to the declining birth rate, intensifying competition and other adverse impacts of the global pandemic have put its overall sales under significant, the company noted.

Key data cited are as follows:

- Operating revenue: USD1.12 billion (RMB7,780 million) – USD1.13 billion (RMB7,850 million), down 11.5% – 12.3%
- Adjusted profit attributable to shareholders: USD65.56 million (RMB455 million) – USD74.21 million (RMB515 million), down 50.5% – 56.3%
- Profit attributable to shareholders: USD29.53 million (RMB205 million) – USD38.18 million (RMB265 million), down 74.5% – 80.3%

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