



MaiaPotion Business Plan

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Summary

In striving for providing a nutritious and risk-free diet for newborns and a sustainable environment around the globe, Maia Potion company dedicates itself to be part of the mission of creating a better future for younger generations. Via innovative approaches to milk powder production, we aim to make our products environment-friendly and affordable while still maintaining high similarity to actual human milk for maximum nutrition and benefits.

Scientific studies have proven that, as the most abundant substance in Human Milk Oligosaccharide (HMO), or a kind of glycan that can exclusively be found in human milk, 2'-Fucosyllactose (2'-FL) plays a crucial role in modulating intestinal microbiota and developing early immune systems. Despite the high demand for 2'-FL in the milk powder market, because of its importance, ordinary approaches involved expensive and inefficient chemical reactions, not only producing 2'-fl with low purity but also contaminating the environment due to organic agents that are hard to dispose of. In an effort of addressing this supply-demand imbalance and protecting the environment from the by-product, MaiaPotion company innovated on a microbial approach of using *Saccharomyces Cerevisiae* as the fermentation yeast instead of the traditional *Escherichia coli* and using the excellent raw material sweet potato waste (SPW) as the source of glucose. With this brand-new approach, we are not only able to mass produce 2'-FL with much higher efficiency and lower cost, but also to exclude harmful substances to both the user of the milk powder and the environment.

With a comprehensive consideration of the macro business environment using PESTEL analysis, we are confident that our company will have a promising prospect among our target consumers. As quality control has become the most important factor when consumers making purchase decision in China, MaiaPotion will make every effort we can to ensure product safety through quality control. Rising at the time of post-COVID-19 economic recovery also boosts the overall consumption rate in milk powder market, especially boosting domestic milk powder consumption, yielding us more opportunities to thrive.

Overall, through thorough market investigation, we see great potential in MaiaPotion for it leverages the cost efficient SPW 2'-FL milk powder production technology that allows the product to be sold in an affordable price with still enough margin left. Furthermore, the environmental-friendly approach of production naturally enhances the brand image and helps the brand stand out competition. The start-up fund for MaiaPotion will be around 20 million RMB, used for fixed assets, R&D and first 6 months sales and operation.

1. Market Analysis

The demand for milk powder in China is especially huge. According to the Chinese Nutrition Society's (CNS) report, 72.2% of mothers in China feed their babies with the milk powder, and this number increases to 84.2% in urban areas.^[7] Though the birth rate has a reduction, the market shares of the milk powder market are continually growing, as families pay more attention to the quality of milk powders and are willing to spend on milk powders. Besides, under the pressure of the epidemic, people have their incomes decreasing, and material flow is also slower, which increases the difficulties of purchasing oversea brands' milk powder. Therefore, Chinese customers are showing a preference for choosing local milk powder brands in the consideration of convenience and economy. To this extent, we see the crying needs for a kind of milk powder of fair price and high quality. And we decided to launch a new type of milk powder with HMO added in the Chinese market.

When it comes to milk powder, it is generally acknowledged that breast milk provides the optimum nutrition for babies in the early stage, and milk powder should serve similar functions in babies' growth as breast milk. With abundant nutrition, antioxidants, and antibodies, breast milk helps infants establish healthy intestinal microorganisms, strengthen their immune systems, and develop their brains.^[1] Aside from lipid and lactose, the most abundant solid matter in breast milk is human milk oligosaccharide (HMO). HMOs are glycans that can only be found within human milk. "Several studies have reported the health benefits of HMOs, which include modulation of the intestinal microbiota, anti-adhesive effect against pathogens, modulation of the intestinal epithelial cell response, and development of the immune system."^[2] Therefore, a successful milk powder should have around the same ratio of HMO in it as actual breast milk.

Adding HMOs to milk powder is not a creative idea. As early as 2015, the European Food Safety Agency (EFSA) has already proclaimed opinions on adding 2'-FL as a supplementary ingredient in infant food. And within a year, details regulations were announced by EFSA. In 2016, Food and Drug Administration (FDA) ratified 2'-FL as a food additive. While this year (2022), Food Standards Australia New Zealand (FSANZ) also allowed the addition of 2'-FL. However, the Chinese government hasn't appended regulations on the addition of 2'-FL in infant food so far, but China National Center for Food Safety Risk Assessment published an exposure draft about 2'-FL in 2016, which probably suggests that formal regulations might come out in a year or two. This strongly implies that HMOs will soon become a hot racetrack, and now is the best time to join it. In addition, according to a report by Future Market Insights, HMOs' addition owns a big cake. The growing rates from 2017-2027 of the HMOs' market come to 14.6%, with a market valuation of over 76 million dollars.^[8]

Our company's target customers mostly include mothers who either are unable to provide breast milk to their babies or wish to enhance the quality of babies' milk by using supplement milk powder to achieve optimum nutrition absorption. To emphasize our greatest advantage, we position our product as cheaper and more similar to real human milk. Since we do not aim for a huge profit like other large milk powder companies and our cost of production is significantly lower due to our microbial approach of producing 2'-FL, we don't have to sell them at a very high price. We are also able to propagate the fact that we aim to be the same as real human milk because we produce enough HMO and imitate the proportion of substances in real milk in our production of milk powder.

1.2 PESTEL

1.2.1 Political

We will mainly focus on the Chinese market, which is already mature, with systematic regulations. Relevant departments have issued many instructions on strengthening the safety and health of infant food. For example, the work opinions on strengthening the quality and safety of infant formula milk powder, the reply of the State Administration for Market Regulation to the questions of formula and label replacement after the product formula registration of infant formula milk powder has been changed, etc.

It mentioned: (1) The focus of the government's work includes strengthening the supervision and inspection of infant formula milk powder production and operation units and carrying out inspections on the implementation of enterprise production process records and filing systems. Further, standardize the labeling of infant formula milk powder, and increase the supervision and inspection of packaging, labeling, etc., to prevent illegal products from entering the market. (2) Establish and implement an infant formula milk powder risk monitoring and regular supervision and sampling system. The sampling inspection of infant formula milk powder should be fully covered, and the sampling standards, procedures, and results should be announced to the public promptly, etc.

Under strict policy supervision, the quality of infant formula milk powder products in China shows a continuous improvement as the chairman introduced: from 2015 to 2020, the annual national supervision and sampling pass rates of infant formula milk powder in China are 96.10%, 98.90%, 99.43%, 99.79%, 99.79%, 99.89%.^[4]

Chinese government and enterprises focus on product safety and quality control, and under such a strict policy environment, we have gained some advantages and competitiveness that other products do not have.

1.2.2 Economical

Firstly, the market situation of China's food production industry is stable and improving, and the green food market may usher in a "wind" in the future. It is understood that the operating income of maternal and infant products in 2021 will be 2,126.81 billion yuan, a year-on-year increase of 10.0%, and the total profit will be 165.350 billion yuan, a year-on-year decrease of 0.1%. In recent years, the market size of the country's functional food industry has grown steadily, reaching US\$42.709 billion in 2018. In 2019, affected by the introduction of a series of regulatory policies, the functional food industry is facing strong headwinds, and the overall growth rate is declining, the market size was US\$43.848 billion. In 2020, the size of China's functional food market will reach 45.427 billion US dollars, and the compound annual growth rate from 2012 to 2020 will reach 9.47%, exceeding the world growth rate (3.59%), and the prospects are good. [4]

Secondly, the state is stepping up the promotion of economic "internal circulation", leveraging the urban domestic demand market, thereby accelerating the post-COVID-19 economic recovery. The global economy has entered the second year of normalization of the new crown. China's economy has recovered from the impact of the epidemic ahead of other countries. However, the external situation is still not optimistic. The spread of the epidemic and the measures taken by various countries to control the epidemic have seriously affected activities such as international trade and investment and disrupted the normal operation of the current global industrial chain. Our country has begun to build a development pattern with "domestic circulation as the main body, domestic and international dual circulation promoting each other". China adheres to the concept of "waters and mountains are invaluable assets", actively promotes green development, circular development, and low-carbon development, accelerates the formation of a way of life and production that saves resources and protects the environment, and curbs the deterioration of the ecological environment.

Thirdly, against the background of the epidemic and global inflation, people's willingness to buy has subsided, and the purchasing power of cities is weak. 2020 has been an extremely turbulent year for China's FMCG market. According to the data, the sales of fast-moving consumer goods increased by 10.6% in the first quarter of 2021 and fell by 1% in the third quarter. The fast-moving consumer goods industry has been very ups and downs this year. With the effective prevention and control of the epidemic, consumers increased the frequency of shopping, driving sales growth of 4.1%."In the context of the continuing uncertainty brought about by the epidemic, Chinese consumers have resumed shopping." As Bruno Lannes, global partner of Bain Capital, mentioned, "While the market is showing signs of recovery, consumers are also becoming more cautious. Brands must work harder to connect with consumers and highlight their value propositions."

1.2.3 Social

It is understood that the breastfeeding rate in China is declining year by year, and many babies are weaned early before they reach the appropriate age. The current breastfeeding rate in our country is far lower than the breastfeeding standard advocated by the state.

The reasons for giving up breastfeeding may be breastfeeding is too painful, the social competition is fierce thus mother cannot lose her job, or simply because not enough breast milk to feed.

Healthy consumption has become a trend, and its potential consumer group is still very large. Due to factors such as the epidemic, health consumption has shown a rapid growth momentum. Data released by the National Bureau of Statistics show that in 2021, our country's per capita medical and health care consumption expenditure is 2,115 yuan, an increase of 14.8%, and the growth rate is 1.2 % higher than the national per capita consumption expenditure of residents, and the consumption structure of residents is further improved. The "2022 Second Quarter Urban Saver Survey Report" recently released by the central bank also shows that when asked about the projects that they plan to increase spending on in the next three months, the highest proportion of residents chooses education, followed by health care, accounting for 27.4%. More willing to pay for health. Our products can effectively protect the health of babies and are excellent health consumer goods. Healthy consumers are more receptive to our products, so our milk powder is likely to have a high market value. [4]

1.2.4 Technical

Breast milk testing is similar to blood sample testing. The mother provides breast milk, then the professionals use professional instruments to test the concentration of protein, fat, lactose, calcium, iron, zinc, and other nutrients in the breast milk sample. This technology is very mature at present, and it lays a good foundation for our milk test service and customized milk powder as a complement to our core business of selling milk powder.

Breast milk is detected by ultrasonic and infrared spectroscopy. The acoustic wave or spectral technology is used to detect the correlation between the acoustic wave or spectrum and its feedback signal and the concentration of milk components. Nowadays, the technology for customizing milk powder is operational because we have advanced technology and excellent technicians, our technology has been proven by the repeated tests of scientific researchers, which makes our customized milk powder program faster, and healthier, more beneficial to children. Moreover, there are very few companies in China who apply this technology to commercialization. Therefore, we have unique advantages in developing this customized milk powder. [4]

1.2.5 Environment

All our products are developed and mass-produced in first-class sterile laboratories and are part of a green industry chain that will not cause damage to the environment. We utilize sweet potato waste as the source of glucose. According to the statistics, the total planting area of sweet potatoes in China has reached 2.324 million hectares in 2022, with a total output of around 51.264 million tons, ranking first worldwide. In the process of crushing, cleaning, and filtering sweet potatoes to extract the starch, the sweet potato residue obtained is what we call sweet potato waste (SPW).

1.2.6 Legal

Infant formula milk powder is directly related to the growth and development and health of infants and young children. The product quality is generally safe and controllable, but the market still has problems such as too many formulas, excessive formulas, random formulations, and frequent replacements, making it difficult for consumers to choose. With the promulgation of the "Administrative Measures for the Registration of Infant Formula Milk Powder Product Formulas", China has carried out the registration management of formulas and standardized the labeling behavior. Formula management is an important part of food safety and quality control. The relevant person in charge of the CFDA said that under the Food Safety Law and the "Administrative Measures for the Registration of Infant Formula Milk Powder Products", the CFDA has carried out formula registration-related work since October 2016 to standardize infant formula milk powder products. Formula and labeling behaviors and control the chaos of false propaganda in the infant formula milk powder market.^[4]

2. Competitive Analysis

2.1 Comparing Matrix

Main Potion	Product Quality	Product Fidelity	Annual sales in Chinese Mainland(2022)	Customer Service	Price (each can)	Sales Channel
Illume HMO+ 	Three types of colostrum HMO Add 40% OPO	9 million 786 thousand royal consumers online	4.6 million	High quality packaging transportation tips	299yuan/850g	Online Official stores, e-commerce platform self operated stores, E-commerce self-employed households
Aptamil profutura 	Nummos Natural milk fat DHA	5 million 428 thousand royal consumers online	9.6 million	High quality logistics packaging Actively provide invoices tips childcare Consultant	349yuan/900g	Online Official stores, e-commerce platform self operated stores, E-commerce self-employed households, offline shopping
Aptamil platinum 	Scanning code of original tank Dual HMOs lactoficus Milk fat of natural origin High quality DHA	5 million 428 thousand royal consumers online	9.6 million	Milk powder preparation guide, Professional consultation rapid response	240yuan/800g	Online overseas self operated stores

In order to better understand the market competition landscape, we listed out our direct competitors comparing 5 critical metrics including quality (formulae), fidelity, annual sales, online sales service and sales channel. Aptamil platinum which costs 240 RMB, has the best sales performance and it has Dual HMOs and DHA in its formulae.

2.2 Perception Map



If we put all the existing milk powder brands into a perception map, Aptamil will be at the 2nd quadrant with relative high price and high quality. MaiaPotion aim to position at somewhere near the middle of 1st and 2nd quadrant, having a high quality but more affordable price which is ¥240 RMB per can.

2.3 Competitor SWOT

2.3.1 Internal Strength

- mature brand with wide influence

- They already have a fan base, they can push new products immediately
- Stable supply of raw materials and factors
- Efficient in producing, in a great amount
- More employees on solving problems, e.g., customer service.
- Professional and long-term R & D team

2.3.2 Internal Weakness

- Too large a scale is prone to potential production risks
- Insensitive to customer churn
- Unable to respond to bad comments promptly
- High cost of importing HMO from tech supplier
- Expensive price of the product
- Unable to provide targeted services
- Mothers of different constitutions can only buy unified milk powder products
- Research and development of new products takes a long time, the process is complex, and consumers need to wait
- Large factories have different products for different countries and regions, and it is difficult to purchase consumer products across regions

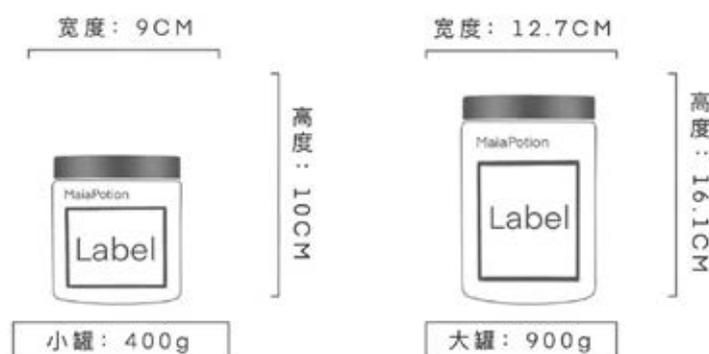
3. 4P

3.1 Production

Our package uses a cylindrical aluminum tank to hold our milk powder products. There are two kinds of packaging, one is 400g per tank and the other is 900g per tank. The 400g per tank is at height of 10 centimeters and width of 9 centimeters. While the 900g one is at height of 16.2 centimeters and width of 12.4 centimeters. We add 2'FL, which is a key element in HMO, in our product to make our milk powder close to breast milk.

The spoon in the packaging helps users to measure a precise amount of 4.6g powder. Baby will normally need 4 spoons of milk powder per meal. The preparation is also very convenient, only 250 ml of 45 centigrade water to dissolve. One tank can be used for 13 days, and the product's shelf-life is 1 month.

The production process is to use the sweet potato dregs as the resource of the glucose and use yeast cell to extract 2'FL. Production will take place in our factory and the compounds we produce will be provided to partner manufacturer, which will add the 2'FL compounds to the milk powder.



3.2 Promotion

3.2.1 ATL

In terms of marketing, we will radio to promote our product. This is because nowadays people go outside by car or bus, and we can use these advantages to expand our brand influence. What's more, radio is a relatively cost-effective way of promotion. MaiaPotion will also implement below ATL marketing channels:

A: push advertising in the app when people enter

In modern life, people use apps on their phones nearly every day. So, we can use this point to increase the famous of our brand largely. Especially every level of the age of our consumers can all focus on our products. Then, more and more mums can find products that are fixed with their children through social media, and our products will be propaganda well.

B: video websites promotion

Nowadays, mums take care of their babies at home and when they are bored, they will watch some video programs. So, we can use this living statement to sell our products. Also, not only the moms will see our products but also influence others to increase our influence.

C: finding maternal and child industry KOL to increase brand awareness

KOL owns a large fan base online and we concentrate on the audience we need. They need a high trust level, and we can let more people feel and use our products. Then broadcast us.

3.2.2 BTL

A: cooperate with the off-line maternity hospital

We can recommend it to people who need it but have never learned about it efficiently. On one hand, we can increase our product sales amount, on the other hand, we can form a nice impression on the audience to let the audience to propaganda products.

B: promote in mother-baby sections in shopping mall

This place is the area where the children's parents come. We can focus on the audience efficiently. Also, people will compare the products with others. From this, we can show the advantage of our products and we can enter the market quickly.

C: host educational lecture and provide product trial

We can target the quality and the safety of our product in the lecture, and we compare the price to propaganda our product and service.

D: cooperate with other milk powder brands

Now, considering the stress of the competitor in the market, our company will not decide to produce the milk powder in amount. However, considering the domestic market lack the ability to research the HMP, we will cooperate with them and provide the nutrient raw material. Based on this thinking, we can consider to propaganda our brand offline to strengthen the ability to cooperate.

E: establish a testing center

We form our breast testing center, and we can provide service to the mum who has special demand. If the mum buys enough amount of our products, we will provide the free of charge testing service.

3.3 Place

According to the Research on the Development Trend and Investment of China's Mother and Baby Product Industry from 2022 to 2027, mother and baby product offline consumption accounted for 66.2% in 2021. With the change in people's consumption habits and the impact of the pandemic, online mother and baby product consumption continues to grow, accounting for 33.8% in 2021. Therefore, while focusing on offline stores, we still need to develop and expand online sales channels to gain strong competitiveness in the future online market.



3.3.1 Offline Sales Channel

According to *the Report of China Mother and Baby Physical Store Consumption Data Analysis of 2021* released by Huiyuanbang Big Data Research Institute, from the regional distribution, mother and baby product sellers concentrated in Zhejiang, Guangdong, Fujian, Shanghai, and Beijing, accounting for 62.4% of the sellers in China. Hence, the general plan of offline product sales can refer to the geographical distribution conditions and take the five provinces or cities above as the main sales places in the first few years, to make use of the high-quality industrial environment and deeply link to the market with large demand.

A: Maia-Hub (Breast Milk Testing Institutions)

So far, there are no breast milk testing and customized services on the market, which will hold strong competitiveness. We plan to open the first Maia-Hub in Shanghai, having the functions of selling our milk powder, testing breast milk, and promoting our product and service. Two years later, more testing institutions like this will be considered to establish in Zhejiang, Guangdong, Fujian, and Beijing to meet the actual demand for the services in the market. If these institutions run well for about 3 to 5 years, the number of Maia-Hub can be increased in the current region and be explored in the new markets of other regions.

B: Maternal and Child Health Care Institutions

According to *the Statistical Bulletin of China's Health Development of 2021* released by the National Health Commission, there were 3032 maternal and child health care institutions in China in 2021, whose number was 20 fewer than the last year. The past five years have been a slight decrease trend, but the number of hospital beds has increased significantly. The result shows that maternal and child health care institutions are moving towards the direction of "reducing quantity and increasing quality" so the demand for high-quality health food and services will also enlarge.

After a comprehensive offline field investigation, including the number of consumers, the consumption ability of the target group, the consumption mode, and the consumption concept, we can contact the procurement department of each maternal and child health care hospital, introduce our existing products and services in detail, and then learn about the specific procurement methods. For example, we can conduct consultations or prepare for bidding to fight for our brand share and reputation.^[5]

C: Mother and Baby Product Store

According to *the Report of China Mother and Baby Physical Store Consumption Data Analysis of 2021* released by Huiyuanbang Big Data Research Institute, after the outbreak of the pandemic at the beginning of 2020, the turnover of chain stores has been reduced by 21.5%. Famous milk powder brands continue to invest resources in their offline stores to control the end market and the stores also enrich the power milk powder categories to obtain more high-value customers, so the sales of milk powder in mother and baby product stores are flat (+ 0.1%). Therefore, milk powder has a certain value in the offline market of mother and baby product stores. However, there is fierce competition between the brands. Thus, based on full publicity, this product can be explored in the core regional markets, such as Zhejiang, Guangdong, Fujian, Shanghai, Beijing, and other places, and business cooperation with mother and baby product stores with direct or potential demand can be coordinated. After the offline investigation, we would go to the headquarters of the chain store brands for negotiation and communication. For instance, we can cooperate with Babemax, Leyou, or other well-known chains of baby products. The sales plan of integrated shopping malls is the same as this. After field investigation, we will negotiate and cooperate with the procurement department of the headquarters of large shopping malls, and then each branch store can copy the procurement mode.

3.3.2 Online Sales Channel

Our online plan is to build an official website first to provide milk powder product information and purchase channels, breast milk testing, and customized service introduction and appointment application. At the same time, we will build a WeChat mini-program sales matrix, which is similar to the official website content but have more direct and simple functions. The next step is to cooperate with large e-commerce platforms trusted by customers, such as JD.com and Tmall supermarket. Furthermore, we can contact KOL (Key Opinion Leader) from Tiktok, Bilibili, Little RED Book, and other social media platforms for promotion and sales.

3.4 Price

The cost of our product is 150 RMB per tank and our price is 240 RMB per tank. The profit margin will be around 40%. We will sell the product in bundle, 4 tanks per bundle. Also, our breast milk testing will be 140 RMB per time.

4. Finance

4.1 Startup Funds (Unit/Yuan)

STARTUP FUNDS				
PRODUCT	FIXED	COST	VARIABLE	COST
milk powder	wage	654,000	raw material	4,500,000
			transportation	60,000
testing	wage	174,000	water & electricity	30,000
			agents	5,000
research & management	wage	1,380,000	water & electricity	6,000
			agents	30,000
fixed total		2,208,000	office supplies	4,800
			variable total	4,635,800
Total Operation				6,843,800
laboratory & office	rent	1,000,000		
	facility	5,100,000		
Maia-hub	decoration	500,000		
	rent	198,000		
factory	decoration	360,000		
	land	1,000,000		
others	facility	1,000,000		
	license	4,000		
Total Overhead				9,162,000
ATL	social media	500,000		
	car radio	500,000		
	KOL	1,000,000		
BTL	supermarket	1,000,000		
	hospital	500,000		
	community	500,000		
Total Marketing				4,000,000
TOTAL		20,005,800		

*the data includes 6 months

*wage for making milk powder includes 20 people in factory

*wage for testing includes 4 people in Maia-hub

*wage for research and management include 7 people in the laboratory and 10 people in office

The table above is the start-up cost breakdown of MaiaPotion, we listed several costs we need to run the corporation. For the accuracy of calculations, numbers are based on some assumptions and refer to the current price for labor, rent, marketing, etc. in China.

We supposed that Maia-hub is a roughly 300-square meters store in a metropolis like Shanghai, while our factory is in small or medium-sized cities with 1,000 square meters, with the laboratory in a science park or university and 200 square meters. We also distinguish the salaries of normal workers with expertise and determine their wages according to reality in the Chinese recruitment market. Also, we estimated the marketing fee by referring to the price sheet in the advertising company and calculated it in the same way.

4.2 Cost Break Down (Unit/Yuan)

COST BREAK DOWN	
raw material	8.30%
package	1.25%
transportation	2.08%
labor	5.83%
marketing	41.54%
interest	40%

As mentioned in the product part, each can of milk powder will be priced at 240

yuan. As a hot track, milk powder’s price is established by predecessors. Considering the prices of similar products, we obtain 240. As you may see, 41.54% of the price will be put on marketing to remove people’s concerns about a new brand, as well as to establish its popularity. Financial reports of big milk powder producers assert the importance of marketing to milk powder companies, too.^[6] In addition, 40% of the price will be our margin, which will be used for covering former investments and later costs, while creating profits.

4.3 Sales Forecast

For the first three years, only a select number of individuals who are prepared to accept private customization will have access to our items, in order to establish our brand's positioning and strong reputation. Consequently, the ongoing growth rate of our total sales will not materially vary within this time frame.

Once our items are firmly established at the top of the market, we will transit to the middle of the market, where we have a larger audience. In the early phases of this phase, we will invest heavily to familiarize ourselves with the new market in order to re-establish "user stickiness" by offering a positive experience to the new user group. Therefore, there is no likelihood that the product's sales rate will improve or even decrease. However, as our 2'-FL technology, which is based on the synthesis of sweet potato pomace and brewer's yeast, is our core competency, our product sales will expand significantly as we build a foothold in the mid-market and win greater market share for infant formula.

Sales forecast (Suppose that the average price of milk powder increases by 7 thousand cents year by year)									Prediction model $y = 637.21x + 6113.3$
serial number	Year	average price	sales	Fixed fee	Variable costs	all-in cost	total sales	Sales revenue	Sequential growth rate
23	2023	240	7600	24.00	36480.00	36504.00	1,824,000	1,787,496	
24	2024	240	7800	24.00	37440.00	37464.00	1,872,000	1,834,536	3%
25	2025	241	8000	24.10	38560.00	38584.10	1,928,000	1,889,416	3%
26	2026	243	8400	24.27	40771.42	40795.68	2,038,571	1,997,775	5%
27	2027	244	9200	24.44	44966.99	44991.43	2,248,349	2,203,358	9%
28	2028	246	9500	24.61	46758.34	46782.95	2,337,917	2,291,134	4%
29	2029	248	9680	24.78	47977.79	48002.58	2,398,890	2,350,887	3%
30	2030	250	9000	24.96	44919.71	44944.66	2,245,985	2,201,041	-7%
31	2031	251	12000	25.13	60312.19	60337.32	3,015,610	2,955,272	26%
32	2032	253	15000	25.31	75917.97	75943.28	3,795,899	3,719,955	21%
33	2033	255	27141	25.48	138328.7104	138354.19	6,916,436	6,778,081	45%
34	2034	257	27778	25.66	142567.366	142593.03	7,128,368	6,985,775	3%



5. Appendix

- [1] Wiciński, M., Sawicka, E., Gębalski, J., Kubiak, K., & Malinowski, B. (2020). Human Milk Oligosaccharides: Health Benefits, Potential Applications in Infant Formulas, and Pharmacology. *Nutrients*, 12(1), 266. <https://doi.org/10.3390/nu12010266>
- [2] Hegar, B., Wibowo, Y., Basrowi, R. W., Ranuh, R. G., Sudarmo, S. M., Munasir, Z., Atthiyah, A. F., Widodo, A. D., Supriatmo, Kadim, M., Suryawan, A., Diana, N. R., Manoppo, C., & Vandenplas, Y. (2019). The Role of Two Human Milk Oligosaccharides, 2'-Fucosyllactose and Lacto-N-Neotetraose, in Infant Nutrition. *Pediatric Gastroenterology, Hepatology & Nutrition*, 22(4), 330–340. <https://doi.org/10.5223/pghn.2019.22.4.330>
- [3] Yu, S., Liu, J.-J., Yun, E. J., Kwak, S., Kim, K. H., & Jin, Y.-S. (2018). Production of a human milk oligosaccharide 2'-fucosyllactose by metabolically engineered *Saccharomyces cerevisiae*. *Microbial Cell Factories*, 17(1). <https://doi.org/10.1186/s12934-018-0947-2>
- [4] <http://www.stats.gov.cn>
- [5] http://www.gov.cn/xinwen/2022-07/12/content_5700670.htm
- [6] https://www.chinafeiheir.com/EnInvestor/FinancialHighlights_cn
- [7] <https://baijiahao.baidu.com/s?id=1740738345697452660&wfr=spider&for=pc>
- [8] <https://baijiahao.baidu.com/s?id=1740738345697452660&wfr=spider&for=pc>