# **Special Feature**

Special Feature 01 The Process for Value Creation in Each Domain

# Value Creation in the Food & Beverages Domain

Various talent collaborated cross-divisionally to make delicious chuhai from non-standard fruits, thereby reducing food loss and supporting fruit farmers. Unity throughout the value chain gave birth to the KIRIN HYOKETSU mottainai series.

# **Basic Research**

Typical Value Chain

Starting with fermentation and biotechnology, we create next business opportunities and develop technology that supports future business. This is a driving force for developing the technology that serves as a foundation for the Food & Beverages, Health Science, and Pharmaceuticals Domains and for advancing each business.

# **Technology and Product** Development

We develop technology for product content, containers, and packages, design new products such as alcoholic and non-alcoholic beverages, and develop functional ingredients, adding new value to both society and the economy.

## Procurement

While maintaining a bird's-eve view of the entire value chain, we collaborate with suppliers to pursue quality and cost optimization for ingredients, materials, and indirect materials. We also address sustainable procurement in terms of the environment and human rights.

## Production

We efficiently produce highquality products throughout the manufacturing process. To achieve stable manufacturing, we manage production and quality on a daily basis, reduce environmental impacts, and save energy.

# **Supply Chain** Management

In response to consumer demands we ensure timely delivery of necessary products in the required quantities. Aiming for sustainable logistics, we proceed with initiatives such as efficiency improvements and joint logistics.

## Sales and Marketing

Through proposals that benefit consumers, business partners, and our company, we build win-win relationships to deliver products and services that contribute to consumers' fulfilling lives through various channels such as restaurants, retailers, and vending machines.

Many distributors supported the

90% of major mass retail chain

we established a mechanism of

who agreed to provide flexible

support, such as by extending or

shortening the sales period. This

product achieved around 1.6 times the

launched in the past three years (since

2022), and we successfully passed

the baton from growers to stores

and consumers through the KIRIN

shipping volume of limited editions

companies adopted it. Additionally,

eliminating discarded unsold products

in cooperation with business partners

concept of this product, and around

## Consumers

# Social Value

Food loss reduction: reducing the food loss equivalent to approximately 34,000\* Hamanashi Japanese pears grown in Yokohama and approximately 310,000\* Ponkan oranges grown in Kochi Prefecture \*Calculated using 2024 shipping results

## Farmer support:

Approximately 6 million ven\* in donations made to fruit farmers in 2024 through KIRIN HYOKETSU mottainai Hamanashi (limited edition)

\*The total of (1) the shipping results from its launch to the end of August (1 yen/can), (2) sales during the event held on May 11 and 12 (200 yen/ can), and (3) the number of posts for a social media campaign held during the aforementioned event (100 yen/post)

Approximately 5.7 million yen\* made in donations to fruit farmers in 2024 through Kirin HYOKETSU mottainai Ponkan (limited edition)

\*The shipping results from its launch to the end of December (1 yen/can)

The 2024 sales of the KIRIN HYOKETSU mottainai project reached approximately 270,000 boxes of Hamanashi and 270,000 boxes of Ponkan. Starting from April 2025, the project evolved into the "Let's Transform Mottainai! to Tasty!" Project, a cross-company initiative, expanding efforts.

Fruits that are not standard ingredients (we call these "mottainai fruits") are often discarded by growers, so we had difficulty grasping the actual situation. However, engaging with suppliers and directly reaching out to Japan Agricultural Cooperatives led to commercialization. In product development, we valued co-creation with growers and stakeholders, keeping in mind that not only the deliciousness of the fruits but also the growers' challenges and passion would come across through products with a sense of reality.



Kana Yamaoka RTD and Spirits Category Strategy.

# The KIRIN HYOKETSU mottainai project

In developing the content of KIRIN HYOKETSU mottainai, we visited fields to taste the fruits actually used, had discussions with farmers and stakeholders, and fostered ideas. It is a challenging but fun process to integrate the deliciousness of the KIRIN HYOKETSU series with the features of mottainai fruits and the farmers' emphasis. To convey how tasty the fruits we ate on-site were to consumers, we decided on the recipe after testing many patterns of ingredient proportions.





Example

I joined this project by identifying mottainai fruits, which are evaluated as non-standard and discarded, throughout Japan through suppliers and introducing them to other departments. After the candidate fruits were chosen. organized the process and timeline for the delivery from farmers to our Group's plants in collaboration with internal and external stakeholders. I strived to deliver products to consumers in the very best condition.





Keita Noguchi Ingredient Group,

The role of production management is to establish standardized recipes across various plants to consistently reproduce the same flavor created by the product development team, which leverages the natural characteristics of Hamanashi pears and Ponkan oranges. We conduct test production at a plant scale and confirm the results. After mass production begins, we examine quality and evaluate flavor to ensure that the quality is stable and matches the product concept, continually pursuing higher quality.





Daisuke Jike Production Department

determining stock quantities at shipping centers around Japan based on daily shipping situations and forecasts. In this project, we closely communicated with the sales team and ensured timely updates on distributors' sales expectations, thereby formulating precise forecasts. We also collaborated with production and procurement teams to increase the demand-supply flexibility, both maximizing sales and minimizing disposals.

We achieved a stable supply by









Kouiirou Matsuda Distribution Office No.3,

Kohsuke Shirai

Planning, mer Marketing Team,

ales Support Department.

Foundations for innovation include diversity and inclusion, culture for innovation; core technology that assures value creation; consumer-centric marketing expertise; and ICT accelerating value creation.

**Particularly** relevant foundations for innovation

Talent with communication skills for sincerely dealing with suppliers. growers, and agricultural stakeholders

- Technical capabilities in product development cultivated through approximately 500 types of KIRIN HYOKETSU series products sold to
- Competent talent who take action while fostering understanding among internal and external stakeholders to pursue better flavors leveraging fruits' natural characteristics
- The network involving suppliers responsible for procuring fruit juice
- A climate where members tirelessly discuss and deliberate initiatives toward implementing CSV
- The assessment system aimed at preventing quality incidents
- Collaboration with procurement. production, and sales teams
- Swift response demonstrated from
- Talent capable of achieving a stable
- Sales capabilities that align manufactured quantities with sales in collaboration with production and
- Proposal capabilities that foster understanding among stakeholders
- Corporate culture that values consumers above all Brand development capabilities

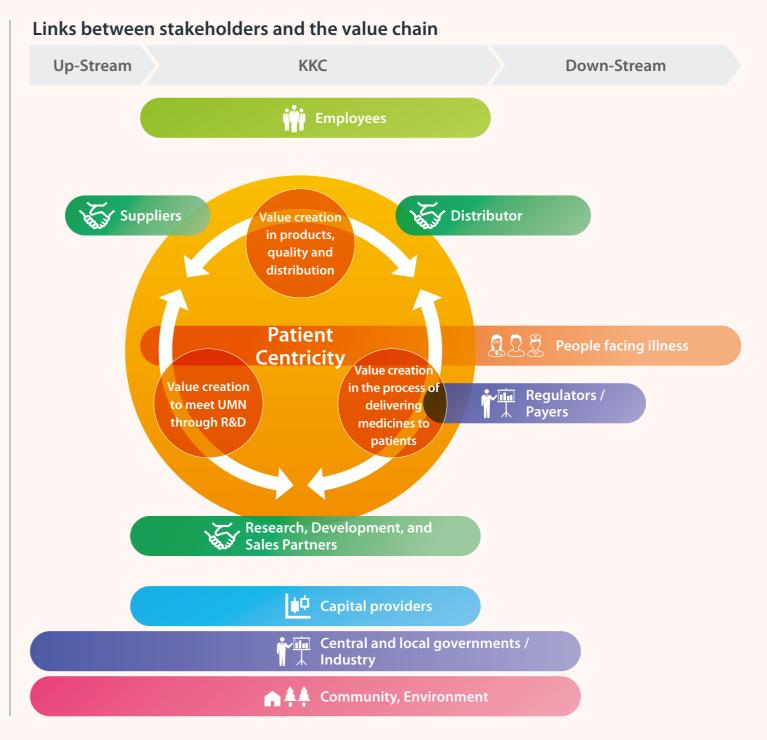
### **Special Feature 01** The Process for Value Creation in Each Domain

# Value Creation in the Pharmaceuticals Domain

## Co-Creation of Value With Stakeholders at Kyowa Kirin

Creating value relies heavily on cooperation and collaboration with various stakeholders. Here we illustrate the connections between stakeholders who play a central role in value creation and the value chain as defined by our business model and value creation story. In particular, we believe that in order to continue creating life-changing value that makes people facing illness smile, it is necessary to listen carefully to their voices at various stages of the value chain. This idea is illustrated in the figure below. Under the concept of Patient Centricity, we will create value together with our stakeholders.

# Our stakeholders Co-creation of value ▶ Patients, caregivers ▶ Life-changing value ▶ Patient-centric People facing illness ▶ Engagement ▶ Skills development **Employees** ► Partners (suppliers and ▶ Equitable business transactions ▶ Co-creation of life-changing value **Business** Sales Partners partners 中 Increase corporate value ▶ Shareholder returns **Capital** providers ▶ Improving QOL of patients by providing ► Central and local governments appropriate medicines ► Regulators / Payers ▶ Maintain and improve the public health Policymakers, ► Industry care system Industry Communities ▶ Coexisting with local communities ▶ Reducing environmental impact Community. **Environment**



Example

Initiatives in co-creating value with patients

Kyowa Kirin Co., Ltd., is running a Healthcare Café with two Japanese pharmaceutical companies. The goal of this initiative is to gain an understanding of the true needs of patients and their families by engaging in dialogue, and to harness this knowledge in drug discovery. The theme of the seventh Healthcare Café was hematopoietic stem cell transplantation. We listened directly to patients and their family

donors about their experiences. Additionally, we also received specialized knowledge from doctors and transplant coordinators and discussed concrete actions to take.

By learning about specific needs and challenges that can be difficult to elucidate in medical settings, researchers can incorporate the patients' perspectives into their drug discovery activities, in turn

laying the foundations for more patient-centric drug development. Going forward, we will continue to incorporate the experience and knowledge gained from talking to patients into our research, as we strive to develop the medicines that patients truly need.

### **Special Feature 01** The Process for Value Creation in Each Domain

# Value Creation in the Health Science Domain

The effects of Lactococcus lactis strain Plasma (LC-Plasma, a postbiotic) have been confirmed through about 40 years of basic research on the immune system. Combined with our marketing, technical, and sales capabilities and networks cultivated in other domains, the iMUSE Immune Care Supplement was born.











# Starting with fermentation and

biotechnology, we create next business opportunities and develop technology that supports future business. This is a driving force for developing the technology that serves as a foundation for the Food & Beverages, Health Science, and Pharmaceuticals Domains and for advancing each business. We also develop the functions of ingredients considering regulations in various countries.

**Basic Research** 

# **Technology and Product** Development

develop technology for product content containers and packages design new products, and develop functional ingredients, adding new value to both society and the economy. We handle product development, including applying for the certification of foods with functional claims in Japan.

LC-Plasma is a functional

component of iMUSE Immune

Care Supplement. With the goal of

promoting and instilling the habit

of immune care, we developed

dual health claim products that

combine functions for maintaining

foundational health and addressing

individual health issues. We aim

to expand the supplement user

health issues, such as visceral

fat, sleep, and muscle strength.

As of 2024, the number of dual

health claim items has reached six

stock keeping units, significantly

Immune Care Supplement.

contributing to the sales of iMUSE

Erika Hayashi

base by focusing on familiar

## **Procurement**

While maintaining a bird's-eye view of the entire value chain, we collaborate with suppliers to pursue quality and cost optimization for ingredients, materials, and indirect materials. We also address sustainable procurement in terms of the environment and human riahts.

## **Production**

We efficiently produce highquality products throughout the manufacturing process. To achieve stable manufacturing, we manage production and quality on a daily basis, reduce environmental impacts, and save energy.

# **Supply Chain** Management

In response to consumer demands we ensure timely delivery of necessary products in the required quantities. Aiming for sustainable logistics, we proceed with initiatives such as efficiency improvements and joint logistics.

# Sales and Marketing

Through win-win-win proposals that benefit consumers, business partners, and our company, we strengthen relationships to deliver products and services that help resolve consumers' health issues through various channels such as retailers and our in-house EC.

By communicating the value

of ingredients and products

to consumers as part of the

purchasing touchpoints. We

and apply consumer insights

gained through various sales

channels to our marketing

delivery process and fostering

understanding, we develop diverse

then leverage these touchpoints

strategies, accelerating the cycle

## Consumers

## Typical Value Chain

The Kirin Group explored lactic acid dendritic cells (pDCs), which are the leaders of the immune system, and discovered LC-Plasma.

Example

bacteria that activate plasmacytoid Furthermore, we examine not only the elucidation of the mechanism of how LC-Plasma activates pDCs but also how it impacts pDCs when ingested by humans, having accumulated reliable research results







# Based on market research, we

# iMUSE Immune Care Supplement

In collaboration with our Group's technology development departments, such as the Institute of Health Sciences and the Institute for Bioprocess Technology, we have adopted LC-Plasma production technology at plants with excellent fermentation technology and manufacturing experience, such as Koiwai Dairy Products Company, Limited. By optimizing manufacturing conditions, we have established a system for stably supplying ingredients with safe and secure quality. For other ingredients and materials, we collaborate with suppliers to optimize procurement so that we can obtain them at a proper cost.





Risa Nishikido

quality assurance system to meet consumers' expectations for safety and quality. Although the plants face various challenges, our skilled and experienced members work together to optimize manufacturing processes, thereby ensuring continuous improvement and a stable supply.

Our Group's supplements are

plants with global food safety

certifications under a proprietary

produced at manufacturing





Kosuke Osumi Production and Quality

In our in-house EC business, we have established end-user-oriented processes to ensure the delivery of valued products to consumers. To avoid disrupting consumers' daily lives and achieve smooth delivery, we regularly coordinate with logistic centers to optimize stock management, improve packaging operations, and enhance delivery quality.



Kunitaka Araki



of hypothesis testing across the organization and increasing the likelihood of success. Our goal is to improve the consumer experience in collaboration with relevant departments so that more people adopt the habit of immune care.



Yoshitaka Kamiya

### Social Value

Helping consumers develop immune care habits (Approximately 780,000 people continuously ingested products containing LC-Plasma in 2024.)

The annual sales of iMUSE Immune Care Supplement for 2024 grew by approximately 30% compared to the previous year.

Foundations for innovation include diversity and inclusion, culture for innovation; core technology that assures value creation; consumer-centric marketing expertise; and ICT accelerating value creation.

**Particularly** innovation

- More than 40 years of basic research on the immune system
- Innovation based on accumulations, such as combining the strengths of research that are not directly linked
- Exploration of highly acceptable health claims through consumer research, and product development
- our unique ingredient
- R&D capabilities that reveal the relationship between visceral fat and the immune system
- R&D capabilities related to microbial breeding and fermentation
- evaluation system
- Favorable relationships with suppliers and subsidiaries
- Our Group's manufacturing plants that have global food safety
- Abundant knowledge in supplement production and experienced staff
- Standardized transportation, distribution, and operations that consider the market environment

Limited

- capabilities based on our Group's expertise
- Collaboration with development, procurement, production, and sales
- Competitive superiority based on solid material evidence supported by research
- Communication design based on consumer insights gained through various channels such as stores and online sales

- Many years of research on lactic production technology based on these findings Supply chain establishment relevant acid bacteria, which are harmful to Abundant materials information - Utilization of LC-Plasma, which is Our Group's quality assurance foundations for stored in the materials safety system and its proper operation

Message from the Senior Executive Officer of Health Science Strategy

# Aiming to Resolve the World's Growing Health Issues and Become One of the Largest Health Science Companies in the Asia-Pacific

## Achieving steady growth in core markets

The Kirin Group aims to be a global leader in CSV and is committed to resolving social issues through its business operations. There are many companies in the domain of health, but the goal of our Group is to help each person in the regions in which we operate to realize joy and a fulfilling life through health.

We are promoting initiatives to resolve consumer issues by using our unique approach, which focuses on "building natural health as the foundation" and "individual health issues." Daily meals, exercise, and rest are important, but it is also vital to build natural health as the foundation to enhance our innate human capabilities by incorporating immune care into our routines. We believe building natural health as the foundation will enable us to effectively address individual health issues related to lifestylerelated diseases, brain function, skin health, and more. We will fully leverage our Group's strengths, ranging from technology centered around R&D for product development that meets market needs based on a deep understanding of consumers to other indispensable functions, including marketing capabilities, optimized supply chains, as well as brands and sales channels. In this way, we will tackle consumer health issues head on with everything from our materials to our services.

We have established a foundation of growth for the Health Science Domain by acquiring the Australia-based Blackmores Limited in 2023, making FANCL Corporation a consolidated subsidiary in 2024, steadily expanding the *Lactococcus lactis* strain Plasma (LC-Plasma, a post-biotic) Business, and restructuring the business of Kyowa Hakko Bio Co., Ltd.

Blackmores possesses strengths in the form of a wide range of consumer touchpoints in the Asia-Pacific region and its leading position in natural health—characteristics not previously associated with the Kirin Group. In 2024, Blackmores secured profits as planned in Australia, China, Southeast Asia, and South Korea and led the global development of our Health Science Business.

FANCL's strength is the development of its Cosmetics and Health Food Businesses based on the strong philosophy of "Eliminate 'negatives." The deep understanding of consumers that the company has gained through its stores and online sales channels also constitutes a great strength. Kirin Group and FANCL have engaged in numerous collaborations since establishing a capital and business alliance agreement in 2019 and, with the company becoming a fully owned subsidiary of the Group last year, FANCL is launching new initiatives to further raise its value. We have high expectations that FANCL will enhance its brand strength in Japan and will formulate and implement an overseas growth strategy utilizing that strength.

What will support us in developing the Health Science Domain is steady growth in core markets. The status of our brands differs between countries, so effectively leveraging our strong brands of supplements, skincare, beverages, and dairy products in different markets and countries, along with making active investments, will allow us to further solidify ourselves as a market leader in the core areas of our brands.

Additionally, combining the strengths of Kirin,\*
FANCL, and Blackmores will enable us to create
new value that cannot be created by one company
alone. For example, Kirin and FANCL are considering
joint initiatives in inner and outer beauty. These
initiatives constitute a new consumers proposal that
combines the value of the two companies, based on
the theme of "A new approach to better skin health
and beauty that goes beyond focusing solely on



Developing numerous LC-Plasma products both within and outside our Group

# Toru Yoshimura

Director of the Board, Senior Executive Officer, Kirin Holdings Company, Limited



either the inside or outside of the body." We will codevelop and market products and services that utilize technologies, materials, and various resources from FANCL and Kirin to address skin-related "negatives" that previously only had solutions for appearance or that were temporary.

\* In this message, "Kirin" refers to Kirin Holdings, Koiwai Dairy Products, and Kyowa Hakko Bio

# Becoming profitable for the first time and beginning a journey of growth

The key to this new value creation will be our high value-added materials. Our LC-Plasma products that centered around the Immune Care series, available in various forms including beverages, supplements, and yogurt, grew steadily in 2024 as well, and achieved nearly 20% growth year-on-year, with a revenue of 24.0 billion yen. We believe the value of LC-Plasma as a material still has very strong growth potential. We are continuously promoting not only marketing in Japan but also research toward the development of pharmaceuticals, including vaccines. Going forward, we will further solidify our foundation in Japan while leveraging Blackmores' sales capabilities to promote global development. In March 2025, the Blackmores brand launched its first LC-Plasma supplement in Taiwan. This is also the first time an LC-Plasma product has entered the Taiwanese market. This



A photo of speakers at the Kirin Group Health Science Business Strategy Briefing Session in March 2025.

From left: Hideki Mitsuhashi, FANCL Corporation President, Representative Director Executive Officer; Toru Yoshimura, President of the Health Science Business Division, Kirin Holdings Company, Limited; Alastair Symington, CEO, Blackmores Limited

success was achieved in only about eight months, a speed unattainable by Kirin alone, by using Blackmores' expertise on Taiwanese market regulations and their sales channels. Following this achievement, we plan to enter new markets every year, such as Australia, Thailand, and Vietnam. We will accelerate the growth of our LC-Plasma Business by expanding overseas and developing new channels, including out-licensing.

Furthermore, collaborations between the Health Science and Pharmaceuticals Businesses are in full swing. In September 2024, Kirin and Kyowa Kirin Co., Ltd., co-funded the establishment of Cowellnex Corporation. This joint venture will innovate through R&D, venture investments, and collaboration in business development. In January 2025, FANCL launched a website, *Nagomi time*, which provides comprehensive information on changes in cancer patients' appearance and care methods, and began distributing an awareness booklet. Planning of this initiative started in collaboration with Kyowa Kirin in December 2022, and the project was originally a part of Kirin and FANCL's efforts to address issues related to appearance care for cancer patients.

In this way, we aim to achieve organic growth by enhancing our business in core markets and creating added value through group-wide efforts. Our targets are to realize a revenue of approximately 300.0 billion yen and a normalized operating profit of at least 30.0 billion yen by 2030. We will also aim to become one of the largest health science companies in the Asia-Pacific by pursuing acquisitions, creating new businesses, taking on challenges, and addressing various social health issues as ways of searching for medium- to long-term growth opportunities.

The year 2025 will be a key milestone for us to achieve profitability for the first time in the Health Science Business and put it on a growth trajectory. The restructure of Kyowa Hakko Bio is progressing, as the transfer of our amino acid business is on track, and the company is stepping onto a new stage. Koiwai Diary Products Co., Ltd., also has strong sales of yogurt products as a business that plays a role in the Health Science Business with dairy products. All of us are strongly committed to growing the Health Science Business.

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A little joy, every day.

**FANCL** 

Focused on the Beauty and

Health Food Domains, FANCL

from the world. Furthermore

we provide customers with

strives to eliminate "negatives"

products through various sales

Special Feature 02 The Future of the Health Science Business

# About FANCL

## FANCL's Philosophy

FANCL Corporation's Cosmetics and Health Food Businesses are rooted in the desire to eliminate consumers' "negative" experiences, following our Foundational Philosophy: "Eliminate the 'Negatives' with a Sense of Justice." Furthermore, under our Corporate Philosophy of "Can Achieve More," we have strived to develop products that balance functionality and safety and improve our services, such as by introducing designated place and deliver services in 1995. We are continuing to attempt to address the worries of a range of targets, such as seniors, kids, and men in our cosmetics business and pre-seniors in our health food business.

Turning unease into ease, dissatisfaction into satisfaction, discomfort into comfort, and inconvenience into conveniencefocusing on what will bring happiness to our customers, we will continue to face various "negatives" with a sense of justice and challenge ourselves to resolve them.

## **FANCL's main businesses**

brand quality at a reasonable

## **Beauty Domain Cosmetics Business** FANCL A natural cosmetics brand developed to bring out your skin's true beauty, based on the latest dermatological research **ATTENIR** A brand specializing in aging care that provides luxury

### **Health Domain**

## **Health Food Business**

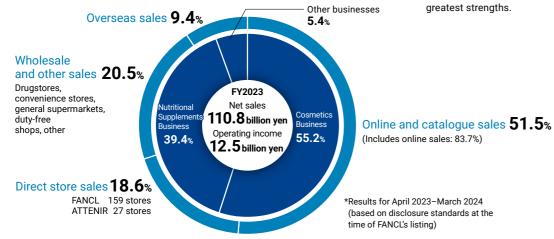
FANCL entered this market offering highquality, low-cost supplements. We provide high-quality supplements that focus on a "product efficacy in our body" design that delivers nutrients to where they are needed in the body based on solid evidence











## FANCL's strengths

R&D capabilities

FANCL Research Institute performs everything from basic research to applied research that leads to product development, researches safety and functionality, and shares research results with each business in aim of further evolving.

# **High-quality** manufacturing and stable supply

FANCL engages in safe and secure manufacturing in a safe environment under strict management by setting standards in line with product characteristics at all factories, such as filling natural cosmetics in booths as clean as the ones used in pharmaceuticals manufacturing.

# **Connections with** customers

We have widely developed our online sales. direct store sales, and distribution channels. Online and direct store sales account for 70% of our net sales, and we are engaging in attentive communication with our customers.

# Enhancing Brand Strength and Building a Foundation for Business Expansion

Taking action with an eye toward the future

Since being appointed president in December 2024, I have been reminded through visiting stores and hosting dialogue meetings that FANCL Corporation's channels, which directly connect the company to customers through online sales and offline stores, are one of our greatest strengths. In addition, FANCL employees are overflowing with entrepreneurial and innovative spirit, and just like the Kirin Group, FANCL has many hard-working employees.

Looking back on our performance over the past few years, despite the increase in inbound tourism and steady implementation, we had to prioritize short-term performance and were unable to improve our brand strength from medium- and longterm perspectives due to external factors including the COVID-19 pandemic, reputational impact of the discharge of treated water from the Fukushima Daiichi Nuclear Power Station, and the red yeast rice problem. While valuing our existing long-term customers, we need to enhance brand strength and acquire the next generation of customers.

Thus, our top issue for 2025 is to create a grand design where all company activities ultimately contribute to increasing our brand value. Organizational reforms and various initiatives for realizing this design are already underway. Additionally, in order to enhance our brand strength over the medium- and long-term, we need to focus on not only indicators related to sales revenue and profits but also on those concerning brand strength. For example, we will select appropriate KPIs for measuring brand strength, including an NPS (Net Promoter Score) and changes in the number of customers, and all divisions will then work to achieve these KPIs as targets.

Leveraging strengths in the beauty and health domains

The supplement business is a business that we have in common with other companies in the Kirin Group, and we are steadily integrating and streamlining our back-office operations, including systems and logistics. By combining the raw materials and fundamental research of Kirin Group companies with our research capabilities and pharmaceutical production technologies, we should be able to further enhance our business.





Furthermore, FANCL operates the Kirin Group's one-and-only cosmetics business, and our unique strength is having businesses in both the beauty and health domains. We are currently collaborating with Kyowa Kirin Co., Ltd., in appearance care for cancer patients and have plans to work together with other Group companies to further enhance our inner and outer beauty products.

I also believe the shared aspects of the two domains, including our ability to build relationships with customers, high level of understanding, and efficient supplement inventory management knowhow, are strengths that enable us to contribute to the Kirin Group. Going forward, we will make full use of both corporations' resources to accelerate business growth.

A future growth driver will be the overseas business, but first we must establish our brand's position in the Japanese market and gain more customer support. In order to continue to be chosen by overseas customers, it is essential for us to have high support from customers in our home market of Japan. Also, our cosmetic brand Attenir is performing extremely well, and we are committed to cultivating it with the aim of expanding it overseas. Furthermore, just like the skincare series FANCL CLEAR UP, released for elementary school aged children in 2024, we will continue to challenge ourselves in new domains without being confined to existing markets and concepts, and strive to grow our business by leveraging our entrepreneurial spirit.







# Measuring Social Impact and Visualizing Social Value Created by Kirin

The Kirin Group is collaborating with stakeholders to create social and economic value and aims to sustainably grow together with society. We believe the key to realizing sustainable growth is visualizing the value created through our business activities. Visualizing social value in addition to economic value-which is reflected in business performance—will lead to better activities and further value creation. Additionally, we also believe it will promote more communication with stakeholders. To start, we looked at Lactococcus lactis strain Plasma (LC-Plasma, a postbiotic) as an example and formulated a logic model.\*



society and the Kirin Group.

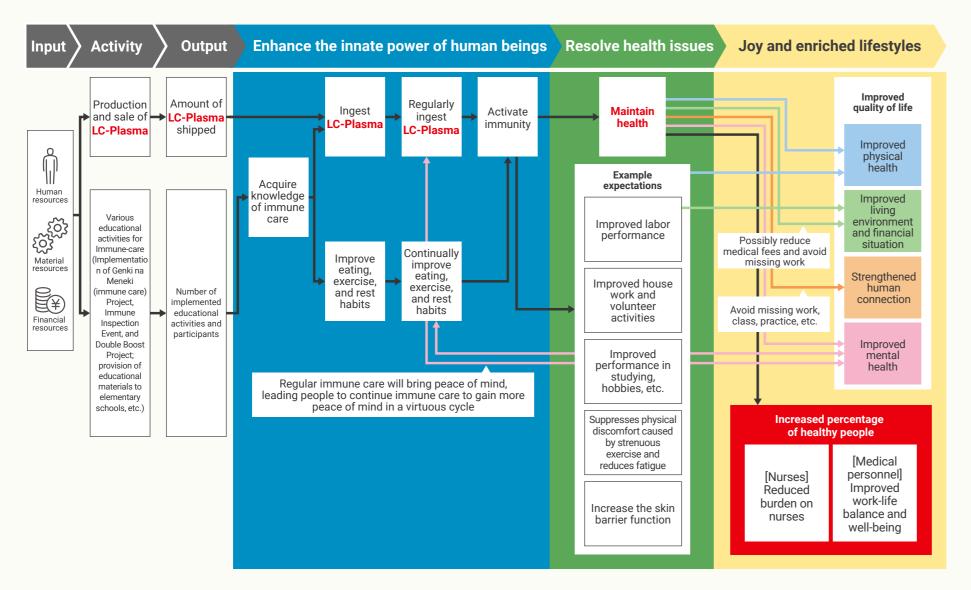
L. lactis Plasma (Various effects) https://health.kirin.co.ip/en/other effects/index.html

"Immunity-Activating Lactic Acid Bacteria," Section 10, Article 5, Strategy for Maintaining and Using Microbial Resources.

"Discovery and Development of a Lactic Acid Bacterium that Defends Against Viral Infections and Activates the Leader of Immunity," Microbiome Science 1, no. 2 (2022): 38-42

\*Amounts were calculated using the Kirin Group's research results and public data, following a few assumptions, such as no one intakes LC-Plasma daily, and without taking into account market shares.

## Logic model



### Disclosure items

By promoting healthy habits (eating well-balanced meals, exercising appropriately, and getting sufficient sleep) and providing LC-Plasma, our Group is enhancing the innate power of human beings and resolving health-related issues, in turn bringing joy and enriching lives.

## Bringing joy and enriching lives

TCFD • TNFD

Joy and enriched lives are brought about by improved quality of life. Our Group aims to improve consumers' quality of life by proposing to maintain health based on four perspectives.

## <Four perspectives on quality of life>

- (1) Improve physical health: Being able to exercise and move at a pace that fits you, getting enough sleep and nutrients, etc.
- (2) Improve mental health: Having a positive self-image, experiencing few negative thoughts, concentrating well, etc.
- (3) Strengthen human connection: Satisfaction with human relations, feeling supported by friends, etc.
- (4) Improve living environment and financial situation: Living in a safe environment, having access to necessary information, being able to afford necessities, etc.

## <Improving quality of life by maintaining health>

- In "Improve physical health" and "Improve mental health," we believe maintaining health will enhance both physical and mental health. By maintaining the health of a total of 34.98 million people, we will contribute to improving physical and mental health.
- In regard to "Strengthen human connection," if someone becomes unwell, it gets difficult to interact with people, such as through going to work, school, family gatherings, and activity groups. By maintaining health, it is possible to avoid missing opportunities to socialize with people. In Japan, it is believed at least 1.19193 billion hours of free time a year, which could be used to meet people, are lost due to sickness or other reasons. Maintaining health will enable us to gain back a maximum of 526.06 million of these hours. Additionally, it is thought students miss at least 143.40 million hours of class a year across Japan due to falling ill or other reasons. Maintaining students' health will prevent them from missing a maximum of 63.38 million of these hours.
- · Concerning "Improve living environment and financial situation," when people fall ill, they may face financial costs and losses from paying medical fees or missing work. Maintaining health will reduce these costs and losses. The total amount of annual medical expenses due to illness in Japan is estimated to be at least 1.3801 trillion yen. A maximum of 990.2 billion yen could be saved by maintaining health. Additionally, it is believed at least 3.4807 trillion yen of income is lost due to people missing work for illness or caring for sick family members. Maintaining health could reduce this by a maximum of 1.5374 trillion yen.

## Resolve health issues

The Kirin Group contributes to improving consumers' quality of life by helping to activate their immune systems and driving various effects, such as maintaining their health. We have also discovered other benefits through researching LC-Plasma. It can be expected to improve the performance of businesspersons, homemakers, students, the elderly, and others in various daily activities. In addition, LC-Plasma can be expected to reduce fatigue from sports training and have other effects.

## **Enhance the innate power of human beings**

The Kirin Group will not only promote healthy habits (eating well-balanced meals, exercising appropriately, and getting sufficient sleep) but also provide LC-Plasma to support the maintenance of consumers' immune systems. It is well-known that general lactic acid bacteria activate immune cells, but they only affect some immune cells. LC-Plasma activates plasmacytoid dendritic cells (pDCs), the leader of the immune system. The activated pDCs in turn activate all immune cells,\* thus supporting the immune function of healthy people.

\*Natural killer cells, B-cells, killer T-cells, and helper T-cells

## Conclusion

As can be seen above, LC-Plasma is a lactic acid bacterium that demonstrates an array of effects and can bring about a major impact on society. We will continue to contribute to society by producing and providing LC-Plasma.