

# Functional Food Business

The Functional Food Division engages in business activities based on its vision which is “Operating within a pharmaceutical company, the Functional Food Division proposes solutions to social challenges, including promoting health and ensuring food safety and security, thereby contributing to building a sustainable society.” To realize this vision, Nippon Shinyaku pursues product development and awareness raising activities to provide value that helps people continue to lead healthier and happier lives, and contributes to solving issues faced by society, such as improving health through food and nutritional problems.



Developing products that contribute to solving social issues from the unique perspective of a pharmaceutical company

**Hitoshi Ishizawa**  
Director, Functional Food

The Functional Food Division operates the B2B bulk materials business in health food ingredients, preservatives, and protein preparations, and the Supplements business, which is mainly B2C. Food is a daily necessity, but at the same time, food loss has become a social problem. Therefore, there is high demand for preservatives, which have been achieving annual growth of around ¥100 million as a product that helps to extend the shelf life of food. Nippon Shinyaku has started using AI at the research and development stage and has developed a system that can identify putrid bacteria formed in food to verify the effectiveness of preservatives in a day, a process which used to take over a fortnight. In the future, the Company will aim to further contribute to food waste reduction by responding rapidly to the requests of food manufacturers.

WINZONE Whey Protein, a B2C product, has strong support among casual users as well as athletes due to its great taste, in addition to the fact it is easy to drink and nutritionally balanced, which differentiates it from rival products. In Japan, there is data indicating that protein intake among the elderly and children is inadequate. Nippon Shinyaku approaches these groups through food education activities and promotes initiatives to solve the social issue of extending healthy life expectancy. It is also looking to expanding into East and Southeast Asia, where economic growth is striking.

Researchers in the Functional Food business incorporate different perspectives into their research by gaining new inspiration through exchanges with researchers from the Pharmaceuticals business. The Company will continue aiming to develop products that live up to the high level of trust users them have in pharmaceutical companies.

## Feedback from an Athlete

### A feeling of confidence supported my physical health during a grueling schedule

**Mika Shibata** Japan women's volleyball team



The most difficult thing for me about playing in the French professional league was the three daily meals. I had to think seriously about the meals I ate as I was cooking the three meals myself and had experienced a serious Achilles tendon rupture in the past.

In France, there is a game nearly every week during the season, and we travel around a big country in an eight-seater minibus. One of the factors that got me through the season without getting sick in this grueling environment is WINZONE Whey Protein and the sports supplement WINZONE Energy Series.

I found I was less likely to still be tired the next day if I took WINZONE Whey Protein during training and before going to bed. Also, some games last more than two hours, but using WINZONE Energy Series stopped me running out of stamina. Nippon Shinyaku's products are made in Japan and have received anti-doping certification\*, so they can be used with safety.

In the future, I think that if the required intake and timing for each sport was indicated, the products would be easier to use for people who don't know how much to use for their sport or when.

I hope you will continue to provide support for athletes.

\* Anti-doping certification: A global standard anti-doping certification program for sports supplements with a system for checking whether supplements are contaminated by substances whose use is prohibited by the World Anti-Doping Agency (WADA) using advanced analysis technologies and manufacturing plant audits

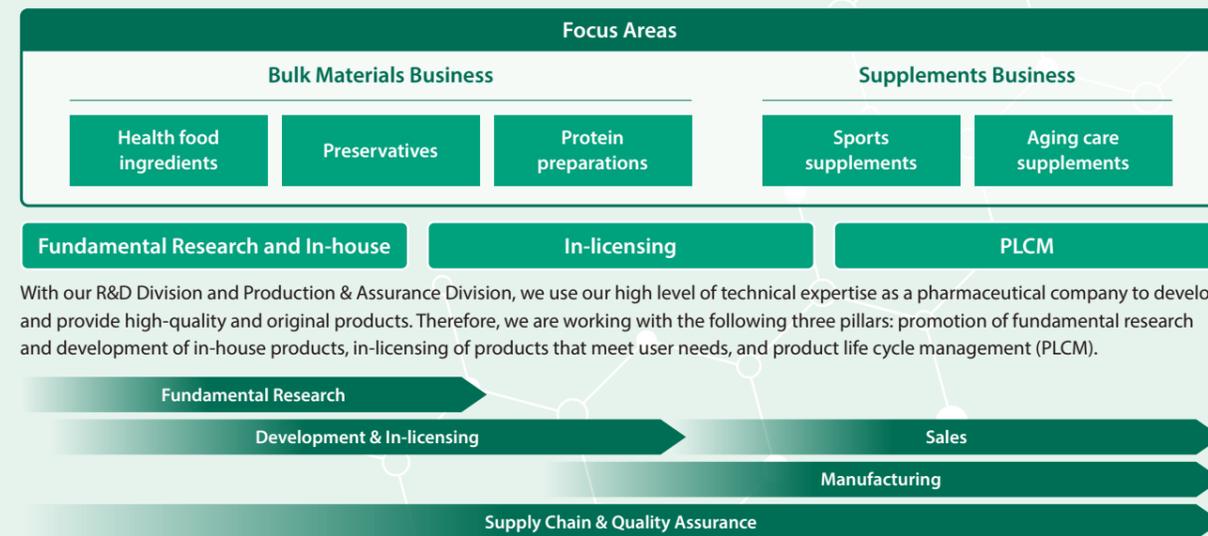
Mika Shibata

Born in 1994 in Kyoto City, Kyoto Prefecture. She played for JT Marvelous in Japan's V. League before joining Vandoeuvre Nancy Volley Ball (VNVB) in the French women's A league for the 2022-2023 season. In 2022, she represented Japan in the AVC Cup, contributing to the team winning the competition, and also receiving the MVP prize. She plays as setter.

Materiality	Realizing a healthy future by creating innovation	
Main Activities	FY2022 Activities	Issues and FY2023 Strategies
<ul style="list-style-type: none"> <li>Providing unique healthcare products and health food ingredients to promote health through food</li> </ul>	<ul style="list-style-type: none"> <li>Launched WINZONE Soy Protein and Kiwami Select Collagen as new healthcare products</li> <li>Foods with Function Claims accepted for products containing the Company's health food ingredients, such as garcinia extract: 16</li> </ul>	<ul style="list-style-type: none"> <li>Enhancing healthcare product lineup</li> <li>Further increasing number of Food with Function Claims accepted</li> <li>Providing new value through PLCM activities for existing products</li> </ul>
Materiality	Strengthening efforts to protect the global environment	
Main Activities	FY2022 Activities	Issues and FY2023 Strategies
<ul style="list-style-type: none"> <li>Developing high-quality stable preservatives that do not impair the taste of food, in order to extend shelf life and reduce waste</li> </ul>	<ul style="list-style-type: none"> <li>Isolated and genetically analyzed bacteria that cause food spoilage from commercially-available lunch boxes, processed foods and other food products</li> </ul>	<ul style="list-style-type: none"> <li>Investigating additives that are effective against low temperature growth and acid resistance of isolated bacteria that cause food spoilage</li> </ul>
Materiality	Resolving social issues and coexisting with the community	
Main Activities	FY2022 Activities	Issues and FY2023 Strategies
<ul style="list-style-type: none"> <li>Conducting dietary education activities for children in order to foster an interest in food</li> </ul>	<ul style="list-style-type: none"> <li>Created booklets for the lower grades of elementary school to raise awareness about the importance of protein intake and reducing food loss and distributed them in public facilities in Kyoto</li> <li>Provided on-site classes at several elementary schools and other facilities in Kyoto</li> </ul>	<ul style="list-style-type: none"> <li>Launching WINZONE Junior Protein, the first product related to food education activities</li> <li>Promoting activities centered on WINZONE Junior Protein for junior high school students to raise awareness about eating breakfast, such as on-site classes and sponsoring events organized by local governments</li> </ul>

## Functional Food Business

### Functional Food Division Business Model



With our R&D Division and Production & Assurance Division, we use our high level of technical expertise as a pharmaceutical company to develop and provide high-quality and original products. Therefore, we are working with the following three pillars: promotion of fundamental research and development of in-house products, in-licensing of products that meet user needs, and product life cycle management (PLCM).

### Helping to Solve Social Issues Related to Food

The Functional Food Division engages in fundamental research and obtains evidence for ingredients traditionally assumed to be good for the body, with the priority on the safety and quality that Nippon Shinyaku has built up as a pharmaceutical company. The Company works to improve the quality of life of all people and solve social issues by developing and providing products that are highly nutritious and cost-conscious to ensure affordability for all. These products include protein-fortified foods to improve health and extend healthy expectancy and products suited for the complete and balanced nutrition field such as concentrated liquid foods used in medical institutions and care facilities for the elderly.

Applying the high-level technology built up in the pharmaceutical field to microbial control, Nippon Shinyaku also pursues initiatives for food safety and security to help solve long-standing social issues with the aim of realizing a sustainable society, such as reducing food waste by extending the best before dates for food. In addition, by developing awareness-raising activities for food education and developing products, it will continue helping to solve social issues related to food for all generations. These food-related issues include the problem of younger people not eating breakfast and frailty, sarcopenia among the elderly and extreme weight loss among women caused by low nutrition. The Company is implementing initiatives with local governments, educational institutions, and other organizations to foster interest in food and promote healthy eating habits.

### Progress of the Medium-term Management Plan and FY2022 Overview

#### Bulk Materials business

In the health food ingredients field, Nippon Shinyaku is promoting the development of ingredients with health-promoting benefits likely to be accepted as Foods with Function Claims by the Consumer Affairs Agency. Going forward, the Company will continue providing products that contribute to improving health by searching for original ingredients that can precede the needs of the health food industry and engaging in joint development with major health food manufacturers based on those ingredients. In the preservative field, Nippon Shinyaku is aggressively promoting consulting services for processed food manufacturers on extending best before dates as an approach aimed at solving the social issues of food waste. In the protein preparation field, it is introducing high-function proteins and other preparations to meet social needs and working to break away from price competition resulting from commoditization, in addition to promoting joint development with major food manufacturers, both for healthcare and everyday foods.

#### Supplements business

In November 2022, Nippon Shinyaku launched Kiwami Select Collagen, an aging care supplement. This is a high-quality product manufactured in Japan which has minimized the distinctive odor and taste of ordinary collagen. In FY2023, the Company will conduct campaigns to increase product recognition, and launch additional products in the series

containing carefully selected beauty and health ingredients to fulfill a wide variety of customer needs. In February 2023, with the launch of SOY PROTEIN PERFECT CHOICE Kinako Chocolate Flavor, a sports supplement, Nippon Shinyaku added a product made from soybeans to the series, which had up to then used milk-derived whey. In FY2023, the Company will actively expand its presence at sports events and engage in direct communication to increase product recognition and strengthen relationships, thereby providing new value.

#### New initiatives to resolve social issues and expand businesses

As part of the food education-related activities launched in FY2021, Nippon Shinyaku prepared on-site classes and booklets on food education, developed protein and other products for children and the elderly, and investigated the development of an application for collecting and utilizing health information. In its first initiative in overseas expansion, the Company will promote the development of sports supplements in Taiwan.

### FY2023 Initiatives and Strategy

#### Cooperation with Local Governments to Spread Food Education

WINZONE Junior Protein, developed through our educational activities, enables the easy absorption of protein at breakfast by children who tend to lack this nutrient while they grow up.

In popularizing this product, Nippon Shinyaku has collaborated with local governments in the organization of various events aiming to spread food education and promote a balanced nutritional intake and regular eating habits.



Developing products with higher nutritional value with safety and quality as the priority

#### Initiatives to improve customer experience through the use of DX and the promotion of originality

In the preservative field, Nippon Shinyaku aims to improve customer experience by strengthening interactive communication through the construction of an original system using DX, allowing the Company to both deliver the information needed by customers and timely receive their questions and requests for technical reviews.

#### Investigating unique human resources development program for the Functional Food Division

Based on the feedback on SPIRITS, the unique, next-generation leader development program for the Functional Food Division implemented in FY2022, and the digital human resources development program, Nippon Shinyaku will establish a new human resources development program to be implemented in FY2024.



**Tetsuro Yoshida**  
Product Development Section  
Protein Business Department

### Supporting the healthy growth of children with our products

We are involved in development of sports supplement brand WINZONE. So far, we have brought to market 16 high-quality, safe and reliable products that top athletes want to get hold of in the three areas of endurance, joint care, and protein. Since last fiscal year, in a new initiative, we have been focusing on generation-specific nutritional issues as a priority task and we are developing applications that will help people to consume various proteins better. As the first step, we launched WINZONE Junior Protein this spring to solve the issue of inadequate consumption of protein at breakfast time by elementary and junior high school students. We believe it is significant for Nippon Shinyaku to supply this product that safely provides growing children with the nutrients they tend to lack. We will support the healthy growth of children through sales promotion campaigns and food education activities in collaboration with local governments, educational institutions, and other organizations.