

Providing value through protein

Research and development into diverse proteins

Under our Vision2030 of "Unleash new potentials for protein," we continue to take on the challenge of expanding the possibilities offered by proteins. One of the ways we are doing this is by advancing research and development into alternative proteins in response to concern about protein shortages in the future. It is also forecast that the alternative proteins market will be large. In 2020, we launched the NatuMeat brand of sov meat products. and since then, the Group has developed and launched a variety of plant-based products. In recent years, we have also been developing products that use malt as an ingredient. Furthermore, we are currently conducting research on cell-based

food (cultivated meat) which is cultured from animal cells. It is hoped that cell-based foods can become a more environmentally friendly source of animal protein.

We believe our mission is to provide consumers with high-quality protein by realizing stable protein procurement and supply. Protein has the power to realize a future where people can enjoy delicious, easy-to-prepare food every day no matter how busy they are, and can eat meat healthily no matter how old they are. We will work to make this delicious, healthy future a reality.

| Source: Yano Research Institute Ltd. | 2021 | 2022 | 2027 | 2035 (forecast) |
|---|----------|----------|------|-----------------|
| Global alternative protein market size forecast | ¥568.7bn | ¥639.5bn | | |

Healing Healin

The value of protein

Proteins are essential nutritional elements making up about 20% of the human body. They are not only the building blocks for various parts of the body, including muscles, internal organs, skin, bones, and hair, but also essential for the production of digestive enzymes, immunological substances, and hormones. As nine of the 20 types of amino acids cannot be produced internally, they must be replenished through food. Additionally, proteins enhance the body's immunity and helps maintain the functions of the brain and other organs, regulate the body's balance, and facilitate mental stability. Proteins derived from animals in forms such as meat and dairy products offer the most well-balanced amino acid content, making them an extremely high-quality source of nutrition. In Japan, which is coping with demographic aging, protein is an important means of tackling frailty, which is the decline in muscle strength and other physical and mental functions that develops with age. Protein deficiency is thought to be one of the causes of frailty, particularly as a decrease in meat consumption makes it easier to lose muscle strength. Imidazole dipeptide is found in meat and is effective for maintaining muscle strength, so proper protein intake is a way to prevent frailty.

¥4,906.4bn

¥1,722.0bn

Providing the joy of eating sustainably - Mealin' Good

We established our Sustainability Business in 2023. Under the *Mealin' Good*⁺¹ brand, it provides products and services that increase the number of choices that both people and the planet can feel good about, with the aim of realizing a better future where a wide range of different ethical viewpoints and values can coexist together.

The first product to be developed by the Sustainability Business was *Gras Foie*. As demand for chicken liver drops during winter, we are using the surplus supply to create an alternative to *foie gras*. As the amount of *foie gras* being produced drops because of animal welfare concerns, *Gras Foie* is being evaluated highly for the new value it provides.

The next products to be developed were *NatuMeat Fishless Fried Fish Fillets* (plant-based) and *Popcorn Shrimp* (commercial use), which use soy meat with a view to protecting marine resources. Furthermore, in 2024, plant-based tuna sashimi, which is made from plant-based ingredients such as konjac powder, was launched onto the market. This product is bringing joy by offering a new option to people who cannot eat raw fish. These alternative products were used in the lunch boxes provided to attendees of the World Bank⁺² Understanding Global Risk Forum 2024, which was held on June 18, 2024, in

Appreciate

the value

of life

Provide new food choices Himeji, Hyogo prefecture. It earned great acclaim as an appropriately sustainable food for a global event.

- *1 A brand that combines "Feeling Good" with "Meal" to convey our commitment to "a comfortable and better everyday life for both people and the planet."
- *2 An aid organization that works to reduce poverty and share prosperity on a livable planet.

Food provided at the Understanding Global Risk Forum 2024



Freshly cooked Gras Foie

Nigiri sushi made with
plant-based tuna sashimiNatuMeat Fishless Fried
Fish Fillets (Plant-based)



Lunch box

Providing products and services that both people and the planet can feel good about

Mealin' Good is a sustainable business established by the Company in 2023. It aims to show respect for diverse values and ethical viewpoints and provide choices that are "good" for both people and the planet. Since starting the business, we have developed and launched upcycled products and alternative proteins, with a particular focus on processed livestock products, and these efforts have been well received. Going forward, we will continue to contribute to the realization of a sustainable society and healthy lifestyles by providing products and services that consumers can choose with peace of mind.

Kenji Takasaki General Manager of Business Development

& Strategy Division



Entering into a limited partnership with a venture capital fund to accelerate external co-creation activities

In July 2024, we made an LP⁺ investment in the GB-IX Growth Fund Investment Limited Partnership operated by Global Brain Corporation, a major independent venture capital firm. Through this partnership, we will seek to accelerate efforts to promote open innovation that goes beyond our organizational boundaries and expand our businesses through R&D.

* Limited partnership. This is a kind of investment made via venture capital and the investing partner is only liable for the amount of money they invested (limited liability).

Issues concerning protein

The approaching protein crisis

In the near future, it is predicted there will be a protein crisis as the effects of global warming drive a decline in yields of the grains that make up animal feed, leaving protein supplies unable to keep up with rapidly growing global demand. Existing protein sources will not be enough to overcome this crisis, so there is an urgent need to develop and commercialize sustainable alternative sources of protein. This also requires a review of new food production technologies.

A threat to the sustainability of livestock farming

Japan is facing a decline in the number of livestock farmers as current farmers are aging and there is a lack of successors to take over their work. Therefore, improving work environments has become an urgent challenge. On top of this, production costs are increasing due to health management requirements and rising feed prices, while the large volumes of greenhouse gases emitted are also an issue. To realize a stable supply of protein, these issues need to be solved and comprehensive measures must be taken to realize sustainable livestock farming.

Our role as a supplier of protein

In order to deliver the joy of eating and reliable supplies, we need to take on the challenges of stably procuring protein and providing diverse food choices in a way that

| values the bounty of nature. | Overall | Animal protein | Livestock-derived | Meat |
|-------------------------------------|---------|-------------------|-------------------|-------|
| Protein intake (per person per day) | 71.4g | 40.1g | 27.9g | 17.6g |
| NH Foods Group's share | 6.0% | 10.6% | 15.3% | 23.5% |

Estimated by NH Foods from internal product volume data and various external sources, including the nutrition chart published by the Ministry of Education, Culture, Sports, Science and Technology in 2019, and results from the National Health and Nutrition Survey conducted by the Ministry of Health, Labour and Welfare in 2019

A 100-billion-yen brand by fiscal 2030– Our vision for Schau Essen

Schau Essen is a brand of coarse ground pork wiener sausages established in February 1985. It's authentic flavor, realized by using a German manufacturing method in which sheep casings are filled with pork and then smoked, has become extremely popular.

One of our growth strategies is to increase sales of flagship brand products so we have set the target of growing annual net sales of *Schau Essen* to 100 billion yen^{*} by fiscal 2030. This will be an increase of about 30% compared to current annual net sales of 74.6 billion yen.

*Retail sales of *Schau Essen* products in Japan and overseas.

FY2014 **¥63.5** billion

Schau Essen net sales over time

FY2009 ¥52.4 billion FY2023 **¥74.6** billion FY2030(target) **¥100 billion**



Making *Schau Essen* a global brand

In April 2024, we took an important first step on the road to growing Schau Essen into a global brand. The Asahikawa Factory operated by Nipponham Hokkaido Factory Ltd. became the first of the Group's factories to obtain approval for export to Singapore. Global expansion will be essential for achieving our target of 100 billion yen in net sales by fiscal 2030. Singapore will be the first country targeted in this expansion, and exports will begin in October. In order to grow exports, we are implementing a project that takes advantage of the power of the Hokkaido brand, which is popular throughout Asia. In 2025, which will mark the 40th anniversary of Schau Essen, the brand will embark on a new challenge with the aim of taking a leap forward to becoming a globally recognized name.

Holding the *Schau-1 Grand Prix* to encourage taking on challenges through innovation

One of the ways in which we are pursuing our target of 100 billion yen in net sales by fiscal 2030 is to take on challenges through innovation. We established the *Schau-1 Grand Prix* as a venue for new product development proposals that go beyond the previous framework of the *Schau Essen* brand. The contest evaluates proposals by scoring them in terms of the four categories of idea, deliciousness, novelty, and feasibility.

The first contest was held on June 3, 2024, and prizes included the grand prix, a runner-up award, and a special award in each of the four categories. Work is underway to commercialize the most outstanding proposals.



The Schau-1 Grand Prix award ceremony

The golden Schau Essen trophy

The Schau Essen brand map **Specific use** Hokkaido Premium Special Long Classic UNDIGHU 24200 BM Schau Essen Hot Chili Cheese 10 million Schau Slice Schau Slice 3-pack General INF mp. Niche flavor palatability Calczone DEDICHE Mini Jumbo Schau Essen pack Schau Essen Pizza Trees all the Drv Schau Long Schau Essen Ìmmmi Schau Essen 005050500 Dog ・ライジャン (frozen product) Augusta ES CON FIELD HOKKAIDO Schau Essen Hotdog Cooking image

Broader use

Changing with the times to realize and even more loved *Schau Essen*

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Schau Essen is a brand that has become familiar for its delicious flavor that fills the mouth from the first bite. Since its launch in 1985, it has become a favorite of many customers. Cumulatively, approximately 20.7 billion Schau Essen wieners have been sold, which is enough to circle the earth 100 times*. In February 2025, the brand will celebrate the 40th anniversary of its launch. Unlike today, there were no genuine wiener products on the market when Schau Essen first launched, so the brand cultivated a new market as a pioneer pursuing an authentic flavor. Since then, consumer lifestyles have changed and their needs have become more diverse, so Schau Essen has changed accordingly. We have ended our avoidance of microwavable products to meet the needs of the growing number of single households and households where both partners work, both of which are short on time. In consideration of the environment, we switched to eco-friendly pillow-type packaging in 2022. This was widely showcased to customers through the "Schau Essen had its topknot cut" promotional campaign. In order to cultivate even more love for Schau Essen products, we are aiming to build a brand that will become an even more familiar choice for customers through natural means such as word of mouth. * Estimate as of March 31, 2023

Masayuki Osada

General Manager Brand Strategy Section and Marketing Section Marketing Management Division Processed Foods Business Divisior





Branding and brand extension

Following the launch of *Schau Essen*, we steadfastly stuck to creating products that have to be boiled and maintaining a specific flavor. In doing this, we neglected to take on new challenges involving the brand. As a result, the main customer demographic did not grow beyond people aged 50 and over, and no approaches were made to younger generations. Therefore, in 2019, we began to transform the brand. Through measures such as making products microwaveable, creating more variety by adding flavors such as cheese, and developing a pizza with a sliced *Schau Essen* topping, we began to win over younger demographics. By expanding our product lineup (brand extension), while also implementing branding activities using advertisements and social media, we grew sales from 72.3 billion yen in fiscal 2019 to 74.6 billion yen in fiscal 2023.

Going forward, we will be even more proactive in diversifying our lineup of products, while also developing marketing strategies that further strengthen *Schau Essen's* brand power with the aim of winning the support of fans of all ages.

Special feature

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Creating new value through co-creation with brands

We are actively engaging in the cultivation of fresh meat brands and co-creation with external partners to realize the sustainable future of food.

Aiming for further consumer-oriented growth through *Sakurahime* domestically produced chicken

Sakurahime is a brand of chicken that has been produced using a unique feed formula. It is characterized by its translucent pink color and the whiteness of its fat, and it has less odor and more than three times as much vitamin E compared to regular chicken (based on a comparison using values from the 2015 Standard Tables of Food Composition in Japan). The chickens are reared in a way that is considerate of their health, including the provision of spacious clean poultry houses and appropriate temperature control. There is also a traceability system in place that tracks every process, from production through to shipping, to ensure safety and peace of mind.

Mugikomachi—A flagship domestically produced pork brand

Mugikomachi is our flagship brand of domestically produced pork. The results of a comparison with regular pork showed that it contains higher levels of vitamin B1 and glutamic acid, which is one kind of umami constituent^{*}.

* Glutamic acid: According to the results of a study by the NH Foods Research & Development Center (October 26, 2021) that compared the values of pork sirloin from a large pig six days after slaughter with the Japan Society of Nutrition and Food Science's Free Amino Acids Database. Vitamin B1: According to the results of a study by the NH Foods Research & Development Center (October 26, 2021) that compared the values of pork sirloin from a large pig with the 2020 edition of the Japanese Standard Tables of Food Composition in Japan (8th revision).

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Mugikomachi Domestically produced pork



Aiming for meat brands that meet customer needs

We have always worked to showcase the value of our brands while creating touchpoints with customers, including being particular about feed, visualizing deliciousness, and implementing various campaigns. In recent years, lifestyles have become more diverse and food choices have become more numerous, so we feel we need to show clear reasons why consumers should choose our products. Therefore, we will work to strengthen communication with customers. By developing products that leverage our fresh meat brands to meet diverse needs and co-creating with other companies, we will advance projects that are in step with the daily lives of our customers to provide new excitement and a sense of shared purpose. In this way, we will strive to develop fresh meat brands that will become the first choice for many customers, including *Sakurahime* domestically produced chicken and *Mugikomachi* domestically produced pork.



Mako Sakaguchi Fresh Meat Marketing Section Fresh Meats Business Division





Efu-no-Chikara—Realized through industry-academia co-creation rooted in Hokkaido

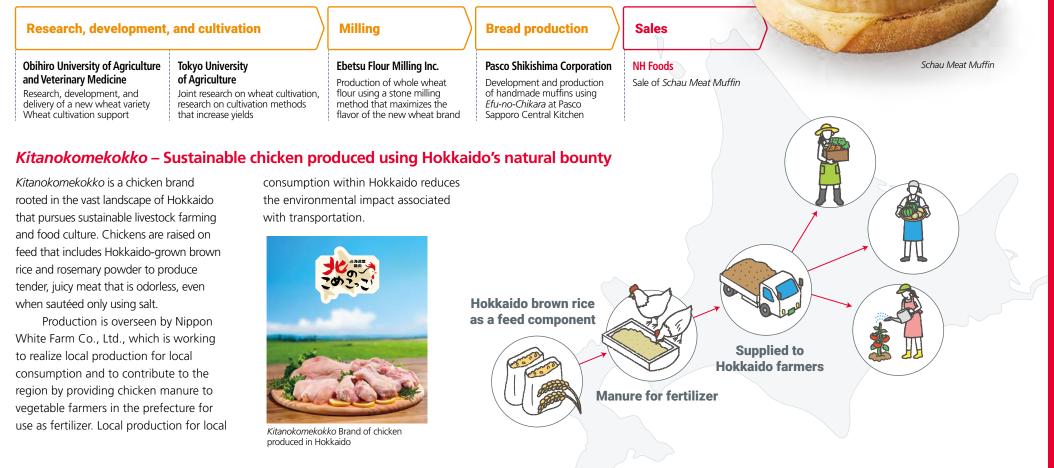
Efu-no-Chikara is a brand of Hokkaido-produced wheat. It is a new variety of wheat developed by Obihiro University of Agriculture and Veterinary Medicine that has been grown on fields owned by the NH Foods Group using by-products from the pig farming business as fertilizer. In February 2024, we released *Schau Meat Muffin*, a new product made using *Efu-no-Chikara* that was developed through industry-academia collaboration with Obihiro University of Agriculture and Veterinary Medicine, the Tokyo University of Agriculture, Ebetsu Flour Milling Inc., and Pasco Shikishima Corporation. *Efu-no-Chikara* is providing new value as a representative brand of sustainable agriculture and regional contribution.



Chapter 2

Special feature

Efu-no-Chikara: From research and development through to commercialization



The strengths of the two companies and issue themes to be solved through the business partnership

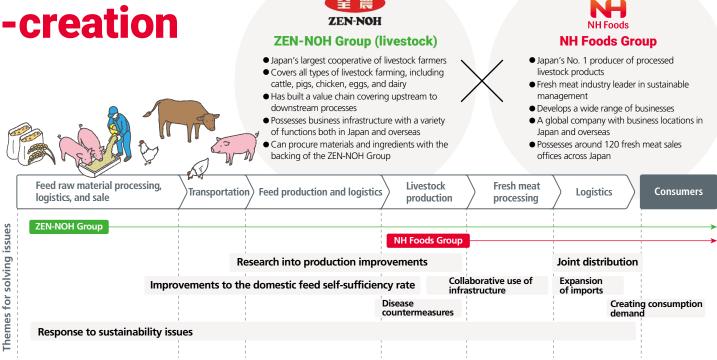
Start of the ZEN-NOH X NH Foods Co-creation Project

Creating the future of livestock farming through collaboration between the leading organizations in the fresh meat industry

In July 2024, NH Foods and the National Federation of Agricultural Cooperative Associations ("ZEN-NOH") formed a business partnership to launch a new co-creation project with the aim of realizing the sustainable development of the livestock industry in Japan. ZEN-NOH's mission is to deliver domestic agricultural and livestock products to consumers across Japan in a stable fashion. The project will work to solve issues by combining ZEN-NOH's extensive value chains with the NH Foods Group's production technology and sales capabilities.

The co-creation project will also pursue a sustainable domestic livestock industry, including by creating standards for carbon neutral farms and improving the domestic feed self-sufficiency rate. It will also advance animal welfare, the effective use of livestock farming resources, and energy generation with the aim of establishing a new model for livestock businesses.

Furthermore, it will also realize a stable supply of protein through the mutual use



and automation of fresh meat processing facilities and the streamlining of logistics operations. From September 2024 onward, loin ham will be produced at ZEN-NOH's fresh meat processing facilities. Additionally, there are also plans for collaboration on the export of domestically produced fresh meat. Although the business environment is difficult due to high fuel prices and labor shortages, NH Foods and ZEN-NOH will work together to create new livestock business value with the aim of advancing the sustainable development of the domestic livestock industry.

Overview of ZEN-NOH × NH Foods Co-creation Project

| Pursuing sustainability in the domestic livestock industry | Animal welfare initiatives Initiatives to develop standards for carbon neutral farms Initiatives to reduce plastics Improved domestic feed self-sufficiency rate | | |
|---|---|--|--|
| Establishing a next-generation livestock industry model | Joint research and business development in the livestock sector Conversion of manure and methane into energy Utilization of livestock-derived materials | | |
| Stable supply of livestock protein | Utilization and coordination of processing facilities Initiatives to expand the overseas export of domestic products (Wagyu domestically produced beef, etc.) Product development utilizing domestic livestock products | | |
| Co-creation spanning the businesses of both parties | Coordinated production and utilization of fresh-packed meat, hams and sausages using ZEN-NOH facilities Solutions to logistics challenges through coordination (joint deliveries, etc.) | | |

Our commitment to the provision of enhanced value

The NH Foods Group will continue to respond to the expectations of all stakeholders by taking up the challenge of creating value.

