



NAGASE Food Ingredients

Overview



Introduction

Turning Your Nutrition Vision into a Reality.

Nagase Food Ingredients started out by selling Nagase ChemteX enzymes before adding Hayashibara, a manufacturer of performance saccharides. To further strengthen the global portfolio of the food ingredient business, Nagase acquired Prinova, which is strong in nutraceutical ingredients. In April 2023, the Nagase ChemteX biochemical business and Hayashibara were integrated to enhance our capability to develop new materials and to solve problems. Together with our customers, we are opening up a new future for foods.



NAGASE Group Food Ingredients Business
A global network extending across 30 countries and region

- NAGASE & CO., LTD. (Tokyo, Osaka)
- Hayashibara Co., Ltd. (Okayama, Kyoto)
- P Prinova Group LLC. (US, UK, China)
- NAGASE overseas affiliates
- A Application development labs (Okayama, Tokyo, Kyoto, China, Singapore)

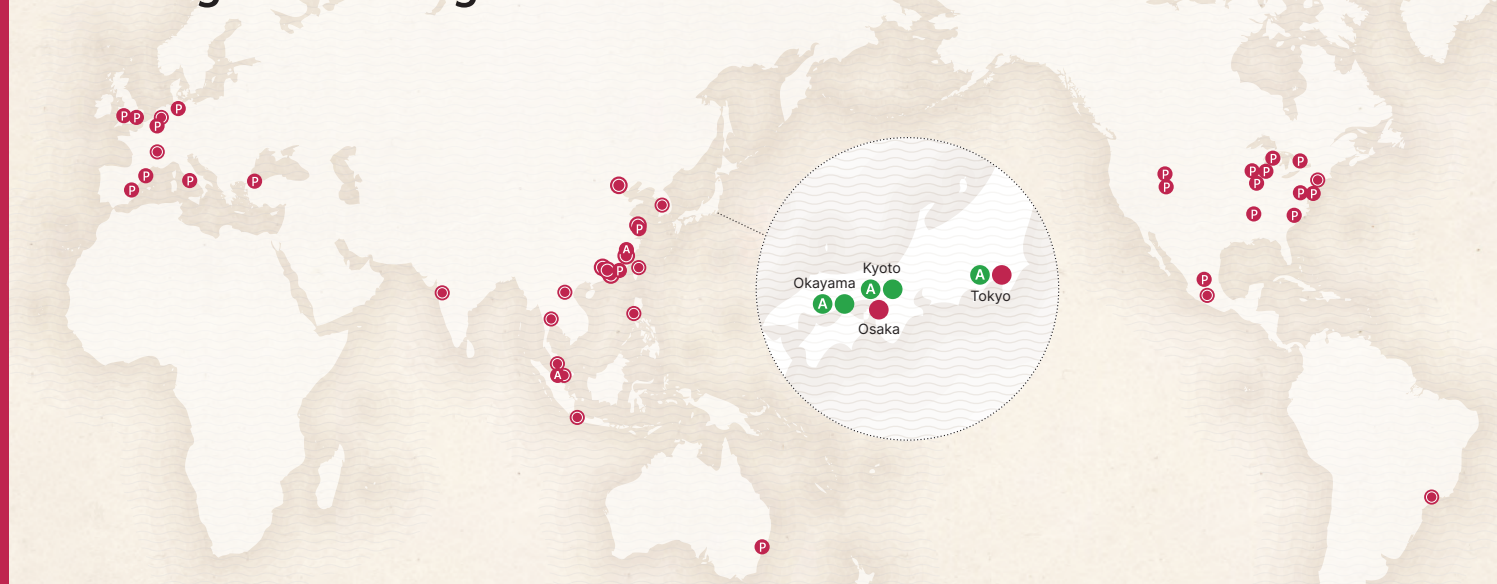


Photo credit : Mitsubishi Estate Co., Ltd

NAGASE & CO., LTD

NAGASE provides a wide range of materials by leveraging its overseas network and manufacturing capabilities based on technical strength. In recent years, the focus has been on food ingredients and other life & healthcare businesses.



Hayashibara Co., Ltd.

Utilizing its background in biotechnology, Hayashibara develops and manufactures enzymes, performance saccharides and functional ingredients with strength in diverse fundamental technologies.



Prinova Group LLC.

Headquartered in the United States, Prinova supplies nutraceutical ingredients to countries worldwide. The business has expanded to provide higher added-value ranging from ingredient sales to processing.



R&D

Hayashibara explores its products' application and functionality in foods in addition to searching for new materials and identifying physical properties. We also use core technologies in synthesis, formulation, and biotechnology to develop new materials and products.



Business Model

Partnering all companies that sustain food

Nagase Food Ingredients leverages overall Group strength to provide a broad range of solutions from ingredient proposals to manufacturing and processing, application development, and regulatory functions.



Application Development

We have set up application development labs worldwide. The labs provide consultation and proposals tailored to customer needs such as recipe development and region-specific applications.



Manufacturing

Hayashibara is a manufacturer of quality and environmentally friendly products that are supplied worldwide. The lineup includes many products that are certified as kosher and halal.



Processing / Contract Manufacturing

We propose vitamins, amino acids, and other premixes matched to customer needs and undertake contract manufacturing at Group companies or partner companies worldwide.



Procurement / Supplies

We support customers to procure ingredients matched to their needs by leveraging our global network including Hayashibara performance saccharides, enzymes, and Prinova nutraceutical ingredients.



Symposiums

Hayashibara hosts the Trehalose Symposium, a multi-disciplinary scientific meeting related to trehalose. It provides a venue for researchers to present their findings and exchange information.



Innovative Solutions

Benefiting from both manufacturing and trading capabilities, we find solutions to issues in the food business through consultation and provide regulatory support.

Products & Solutions

Supporting the food business with original products and solutions

We leverage the NAGASE Group's global network and solutions based on high performance saccharides, food enzymes, and Prinova nutraceutical ingredients.

Main Products



Performance Saccharides

A variety of saccharides including trehalose, maltose, and pullulan



Nutraceutical Ingredients

Animal and plant-based proteins, amino acids, vitamins, etc.



Functional Ingredients

Dietary fiber, citrus polyphenol, Phosphatidyl serine, etc.



Enzymes

Enzymes for baked confectionery and bread, eggs and meat processing, extract manufacturing, dairy processing, etc.

Main solutions
provided by the
NAGASE
Group



Procurement / Supply

Optimal materials
procurement that
leverages Group synergy
and the global network

Application Development

Region-specific applications,
recipe development, and
consultation

Regulatory Functions

Issue resolution when
expanding overseas,
such as compliance with
laws and regulations in
the importing country

Solution

1

Sports Nutrition

Proposing optimal solutions
for high quality ingredients
sourced globally

By adding Prinova, a top-class distributor in the sports nutrition field, to the Group, we have a global network for procuring high-quality ingredients. At the same time, we propose the best ingredients to meet customers needs by leveraging our unique solutions capabilities to add functionality and improve flavor.

Procuring Ingredients



We propose high-quality ingredients for developing nutraceutical products, including animal and plant-based proteins, amino acids, vitamins, and premixes.

Adding Functionality / Enhancing Flavors



We make proposals to boost product value such as TREHA™, energy source, citrus polyphenol for added health-promoting functions, and TREHA™ or enzymes to reduce protein odors.

Trends Information



We have a full range of information on trends including Prinova's Ingredients Market Reports on global food ingredients.



2

Plant-Based Products

Enhancing plant-based products with high-quality ingredients and taste solutions

Amid diversifying dietary needs due to enhanced health awareness, environmental concerns, or allergy issues, plant-based products are attracting a great deal of attention. The NAGASE Group provides comprehensive solutions from procuring ingredients to improving odors and textures unique to plant-based ingredients, and developing recipes.



Procuring Plant-Based Protein Ingredients



We source pea and soy proteins, and other high quality plant-based protein ingredients for developing plant-based products.

Enhancing Flavors / Improving Texture



We suggest TREHA™ and enzymes to improve the texture and reduce the odor of plant-based protein.

Developing Recipes



We meet customer needs by proposing optimal recipes and by adding functionality for differentiation purposes.



Products

Performance Saccharides

- TREHA™
- PULLULAN
- SUNMALT™

Enzyme

Effective on Starch

- DENAZYME™ BBR LIGHT
- DENABAKE EXTRA™
- BETA AMYLASE #1500S

Effective on Proteins

- DENAZYME™ NNC

Effective on Fats

- PLA2 NAGASE

Others

- DENAZYME™ GEL-L1/R
- DENAZYME™ GY2
- Phosphatidyl serine

Nutraceutical Ingredients

Please access Prinova Group LLC. website.



<https://www.prinovaglobal.com/>

- Please contact us for information on the regulatory status for any countries of interest.
- TREHA and SUNMALT are trademarks of Hayashibara and registered trademarks of Hayashibara in Japan, the U.S. and other countries.

We contribute to a sustainable society by achieving the SDGs.

The NAGASE Group also contributes to achieving the SDGs by leveraging not only the food ingredient business, but also the Group's comprehensive strengths to expand food loss and waste measures, to develop functional ingredients that support physical health, and to make the shift from animal-based to plant-based products.



Extending the Healthy Life Span

We research, develop, and provide ingredients and systems that support wellness and day-to-day health maintenance.



Shifting to plant-based products

We source ingredients derived from plants and propose solutions to issues with plant-based products.



Reducing Food Loss and Waste

We offer technical solutions, including ingredients, containers, and food packaging, to extend product shelf life and to improve tolerance to freezing.



Reducing the Environmental Impact

We contribute to reducing wastewater and exhaust from factories and by improving farming and livestock productivity.



Hayashibara Co., Ltd.

**Hayashibara
receives EcoVadis
Silver rating
for sustainability**



Hayashibara Co., Ltd. has been awarded the Silver rating in a sustainability assessment by EcoVadis. EcoVadis assesses suppliers in 175+ countries across 200+ industries. The assessment results are tested on over 100,000 companies. The Silver rating is awarded to companies whose policies, measures, and performance score in the top 25% of all eligible companies in the four fields of Environment, Labor and Human Rights, Ethics, and Sustainable Procurement.

Contact

Nagase Group food ingredients business



<https://www.nagase-foods.com/global/>

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Food Ingredients Department



<https://www.nagase.co.jp/english/>

Hayashibara Co., Ltd.



<https://www.hayashibara.co.jp/data/en/>

Prinova Group LLC.



<https://www.prinovaglobal.com/>