

TOPICS 1 Expansion of the Fine Chemicals Business

In 1987, the Fine Chemicals Business began full-scale sales of EPA refined/concentrated from sardine oil and DHA refined/concentrated from tuna oil as health food and bulk food. In 1990 it received manufacturing approval for the pharmaceutical product "EPA-Nissui," which was made by refining EPA to a high-purity form. Its indications has since been expanded and remains to this day one of the major pillars of the Fine Chemicals Business. In addition to these bulk sales, in 1992 it began the manufacture and sales of health products (*Umi no Genki* series) and in 2004 "Imark," the food for specified health use with EPA and DHA as active ingredients. In 2007 the Kashima plant was built (phase 2 of construction was completed in October 2008), and in April 2008 Kyowa Tecnos Co., Ltd. was acquired through a merger and its production functions were consolidated at the Kashima and the Sakaiminato plants, while the Fine Chemicals General Plant (Kashima, Tsukuba, and Sakaiminato plants) was established. Through this move, the sphere of activities, which had previously been disproportionately emphasized on marine based functional lipids such as EPA/DHA, was expanded widely, thereby enabling the Group to acquire sales and manufacturing functions for a wide range of products including active pharmaceutical ingredients, functional lipids, cosmetics ingredients and chitin/chitosan/glucosamine. Furthermore, in December 2008 Hokkaido Fine Chemicals Co., Ltd. was established as a domestic base for storing the main ingredients used in the Fine Chemicals Business and a back-up production base for functional lipids, while in March 2009 TN Fine Chemicals Co., Ltd. was established for the purpose of converting the by-products of marine products processing into functional materials. Nissui's Fine Chemicals Business, with the Fine Chemicals General Plant at its core, together with Hokkaido Fine Chemicals Co., Ltd. and TN Fine Chemicals Co., Ltd., has taken on the challenge of Reforms "to completely utilize marine resources" and "to link resources with everyday life."



Kashima Plant

The qualitative reforms and quantitative expansion of business

Creating value from functional lipids such as EPA/DHA

Development of active pharmaceutical ingredients and ingredients of foodstuffs (supplements, nutritional supplements, infant formula, etc.) centering around Omega 3 unsaturated fatty acid

1. **Pharmaceutical Epa ingredients**
Obstructive arteriosclerosis, hyperlipidemia
2. **Pharmaceutical bulk nutritional supplements**
As nutritional supplements
3. **Food for specified health use**
"For those who are anxious about their triglyceride levels"
4. **DHA oil for infant formula**
Added to infant formula to complement the DHA in breast milk
5. **Health / nutritional foods**
EPA/DHA supplement
6. **Others**

Creation of functional materials from marine products

Expanding the business to include chitin, chitosan and their derivatives, orange roughy oil, cholesterol and glucosamine, and develop cosmetics (skin care, hair care), surface-active agents, and paint/adhesive products.

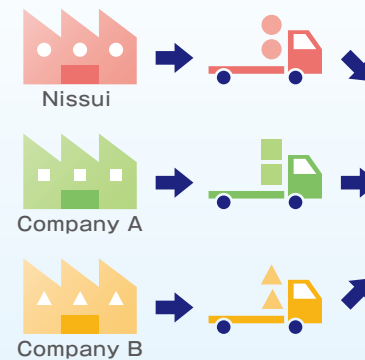
1. **Chitin, chitosan and their derivatives**
2. **Orange roughy oil**
Use as cosmetic ingredients in creams and lotion through the stabilization and purification processes
3. **Cholesterol**
4. **Glucosamine**

Current situation  In the future

TOPICS 2 Joint distribution of frozen foods

In the past, manufacturers used their own delivery trucks to transport their goods to their own refrigerated warehouses in each area, and from these warehouses the goods would then be transported using their own delivery trucks to the logistic centers designated by the clients. This method proved to be highly inefficient in remote areas where the volume of goods was low. Consequently in 1999, the Nissui Group, in concert with other frozen food manufacturers, commenced a joint distribution system that went beyond company boundaries in the Hokkaido, South Kyushu and the Chukyo (Gifu, Mie) areas. In 2007 area coverage was extended to Shikoku and in June 2009, a storage/delivery base that covered the areas of both Shikoku and West Chugoku was newly established in Hiroshima. This base has been certified as a Green Logistics Partnership Council business and constitutes an initiative being undertaken with the aid of NEDO (New Energy and Industrial Technology Development Organization). Because of this initiative, we expect a 14% reduction in CO₂ over our previous emissions. We will make further efforts to improve the efficiency of logistics and to reduce CO₂ emissions through expansion of this effort in the Kansai area, where large amount of energy is being consumed.

Before Individual deliveries

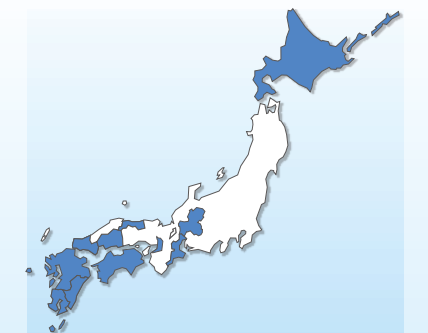


After joint deliveries



Expansion of delivery areas

- 1999 Hokkaido area
- 2000 South Kyushu area (Kagoshima, Miyazaki)
- 2001 Chukyo area (Gifu, Mie)
- 2007 Shikoku area
(Entire Shikoku area covered by distribution center in Osaka City)
- 2008 North and Central Kyushu area
(Fukuoka, Saga, Oita, Nagasaki, Kumamoto)
- 2009 West Chugoku area (West Chugoku area (Hiroshima, Yamaguchi, Western Shimane) and Shikoku area covered by base in Hiroshima)



■ indicates areas covered by joint distribution (As of June 30, 2009)

TOPICS 3

Development of artificial fertilization technology for Yellowtail

In 2005, the Oita Marine Biological Technology Center began research on early collection of eggs for artificial fertilization, in order to provide seed fish to Nissui's Yellowtail farming business (Kurose Suisan Co., Ltd.) off the Eastern Coast of Kyushu. Since then, enough technology has been accumulated to allow for mass production of such fish. In June 2009, Kurose Suisan Co., Ltd. harvested its first batch of Yellowtail produced through this artificial fertilization method. In the past with natural fertilization, the summer months yielded only 3-year old Yellowtails, which had already matured, whereas with this technology, we have been able to harvest high-quality 2-year old fish. Fish grown in this way have not shown any poor growth, which had initially been a concern, few deformities and are comparable to natural fish and have been warmly received by our customers. In the future, we intend to further improve the mass production system, accelerate the growth process and develop disease-resistant varieties through selective breeding, while improving the quality of fish (including their taste and coloring), and aim to establish a sustainable system of farming through artificial fertilization.



The Oita Marine Biological Technology Center

Reproduction of Yellowtail



TOPICS 4

Hachikan Co., Ltd. Frozen Food Plant

For food companies, assurance of safety is a matter of paramount importance and at the core of their corporate activities. Nissui has been thoroughly enforcing controls by setting its own control standard adjusted to a global standard, the HACCP. In particular, Hachikan Co., Ltd.'s frozen food plant, which was completed in October of last year as a state-of-the-art model plant in line with Nissui's long-term strategies, demonstrates unprecedented levels of productivity while embodying Nissui's pursuit of the development and production of high value-added products.



The frozen food plant of Hachikan Co., Ltd.

Food Defense

In order to ensure the safety of its products, a biometric recognition system has been installed at the plant's entrance, as well as external infrared sensors and surveillance monitors, which prevent the intrusion of unauthorized persons into the plant.



Biometric recognition system at the plant entrance



Fence/infrared sensors



Surveillance cameras

Initiatives to ensure safety and reliability

In order to enforce thorough traceability of raw materials and prevent errors in their usage, we are actively working to build a consolidated management system that covers every stage of production from raw materials to the finished products. Nissui has also adopted an Excellent Lab System that enables advanced-level inspections.



Food analysis



Training for quality control staff

Local Links

Hachikan Co., Ltd. maintains its unique competitive edge on the domestic market through its linkage with: Sasaya Shoten, Co., Ltd.; the procurement capabilities of the Hachinohekandzume Enterprise Group; and the sales network of the Nissui Group.

*Local Links refer to a network which aims to create new value through the cooperation of the Group companies in a designated area.

