

# 5

## The Integrated Food Solution Business

### (1) Increasing the importance of the BtoBtoC field

#### The struggling BtoBtoC field

Within the Ajinomoto Group, areas such as monosodium glutamate (MSG) for packaged food companies have been playing an important role, particularly in our cultivation of markets in Europe and North America. In Japan, alongside this business for packaged food companies, the expansion of the markets for food service and ready-made meals since the 1970's has enhanced the importance of the BtoBtoC field (business targeting intermediary companies such as food manufacturing and food service). As of 2009, our business for industrial food manufacturers, food service, and ready-made meal producers was the responsibility of our Food Company's Food Ingredients Department and Food Service Department and following the return to a business headquarters system in April 2010, they were positioned within the Food Products Division.

At that time, both fields were experiencing severe market conditions. Overseas, there was price competition over MSG from Chinese companies and others. In Japan, factors such as low birthrates, an aging population, and sluggish earnings growth led to market contraction in the food service industry. Using a broader definition of the food service industry, which includes food product retailers (such as ready-made meal businesses selling precooked foods), market size remained roughly level from its peak of almost 33 trillion yen in 1998 (according to materials by the Japan Foodservice Association) through to 2011. Although there was a slight increase from 2012 onward, customer unit prices continued to fall overall. This also reflects the ratio of money spent on food outside of the house (spending on both food service and ready-made meals), which peaked in 2007 at 45.6% and then continued to decline slightly.

Under this environment, we aimed to expand business in a way that avoided getting dragged into price competitions. It took a strategy of raising competitiveness by providing customers such as packaged food manufacturers and food service companies with products that realized their needs for deliciousness, and safety and security. In order to achieve this, in addition to technological capabilities, we needed a deep understanding of the industries through engagement with medium-size food product manufacturers and food services which are drawing out the wisdom required to compete with major players. Amid a situation where the overall retail and service industries were becoming dominated by chains, in the food service field, the ratio of medium and small-size businesses to major businesses was mostly unchanged, which indicated that these medium and small-size food service had the knowledge and expertise to compete against scale. Therefore, we also focused on engaging these companies other than the high-efficiency major businesses.

### (2) Developing the business for industrial food manufacturers

#### A change in style from focusing on umami products

Our business for industrial food manufacturer field mainly comprised umami products, such as MSG and nucleotides, and *Tencho* (savory seasonings) and enzyme preparation products that enhance the flavors, tastes, and textures of foods, and in 2009, the majority of profit was produced by the former.

Our MSG, or *AJI-NO-MOTO*®, creates a strong, rich umami taste through the combination

of the inosinic acid and guanylic acid nucleotides, umami substances that are found in bonito and shiitake (mushrooms) respectively. It is used in a wide range of packaged food products, such as instant soups (including instant noodle soups) and flavor seasonings, and we were efficiently selling large volumes of products to major global food companies. However, these products had become commodified, and from 2011 onward, competition from manufacturers in China and other countries became fiercer, leading to a significant reduction in profits.

On the other hand, although our *Tencho* and enzyme preparation products were not at the same level as umami products in terms of scale and popularity, it was possible to use technology to differentiate and raise the added value they offer, meaning there was plenty of room for growth.

Therefore, in the business for industrial food manufacturers, through most of the 2010's we adopted a basic policy of securing stable profit through our umami products and realizing growth by expanding our *Tencho* and enzyme preparation product lineups.

### **Reducing the cost of umami products**

For our umami product lineup, which was being exposed to severe price competition, we strengthened price competitiveness through cost reductions and adopted a policy of shifting from bulk business targeting major global food companies to consumer business. Following this, we invested about 17 billion yen to establish a plant for the integrated production of *AJI-NO-MOTO*® in Ayutthaya, Thailand (which started operation in July 2013 with an annual production capacity of 64,000tons).

In regard to cost reductions, besides halting investment in facilities except in cases that corresponded with our policy of shifting to consumer business, the main initiatives we implemented included reducing manufacturing costs and lowering selling, general, and administrative costs. To reduce manufacturing costs, from the FY2014-2016 Medium-Term Management Plan onward we fully engaged in advancing measures such as introducing new manufacturing methods and biomass boilers (see "History" p.65). For new manufacturing methods, depending on the situation at each production location (such as the raw materials being used), we developed and introduced optimal resource-saving fermentation technologies which contributed to reducing environmental impact and steadily lowering costs.

To compete with companies from China and Indonesia, we filed anti-dumping lawsuits in Europe and the U.S. to try and improve the unfair competitive environment created by the price difference between products made within a country or region and imported products. As a result, we improved the prices and sales volumes of our products in both markets, thereby greatly enhancing the profitability of the industrial-use MSG business.

Also, for our umami product lineup, we began to switch the contract period used in our deals with major global customers from the previous one year to three months. Year-long contracts make it easy to formulate sales plans, but it also means that profit can be affected by fluctuation in raw material and fuel prices and exchange rates, so we focused on realizing a way to trade more agilely.

Furthermore, we made stronger approaches to influential local and medium-size food product manufacturers. It was important for us to utilize our *Tencho* and enzyme preparation products and the expertise we had accumulated in the industrial food manufacturer field in order to make each of the manufacturers realize added value that was commensurate with price. We also collaborated with these companies to carry out initiatives to raise the added value of MSG and nucleotides as part of our customer-oriented policy, and we then applied the expertise gained through these initiatives to our business with major companies in a strategy that led to an increase in sales volumes.

### **Basic strategy for *Tencho* and enzyme preparation products**

Our *Tencho* and enzyme preparation product lineups were positioned as drivers for growth in the packaged foods field and they were used to add *kokumi* (mouthfulness, thickness, viscosity, and consistency) and aroma and to improve texture. The *Tencho* products we sell include products that combine hydrolyzed vegetable and animal proteins and yeast extract, and products that use extracts from various marine products such as dried bonito flakes and extracts from meat such as chicken and beef. Also, regarding enzyme preparation products, we were the first

company to successfully mass-produce transglutaminase (TG), an enzyme that enables the cross-linkage of protein molecules. We have formulated TG to create the food enzyme preparation *ACTIVA*® (launched October 1992) which is used around the world in a wide range of fields, including seafood processing, meat processing, and noodles.

For both product lineups, our basic strategy was to not only continuously develop original materials and technologies, but also expand our library of materials by actively advancing external partnerships, and then use these materials to strengthen these product lineups and grow sales.

### Setting targets for each region

In the *Tencho* field, we advanced:

- the practical application of new *kokumi* substances, such as glutamyl-valyl-glycine, and the development of materials containing new *kokumi* substances (new yeast extracts) through alliances with external partners

- the strengthening of our portfolio of products that meet the needs of each country (local blends for traditional businesses, *Tencho* products that use flavor constituents from meat stock).

Additionally, in the enzyme preparation field, amid increasingly severe competition from other TG manufacturers, we advanced the following two initiatives:

- realizing cost reductions and increased added value through strengthening our alliance with Amano Enzyme Inc.
- developing differentiated enzyme preparations (*ACTIVA*® series).

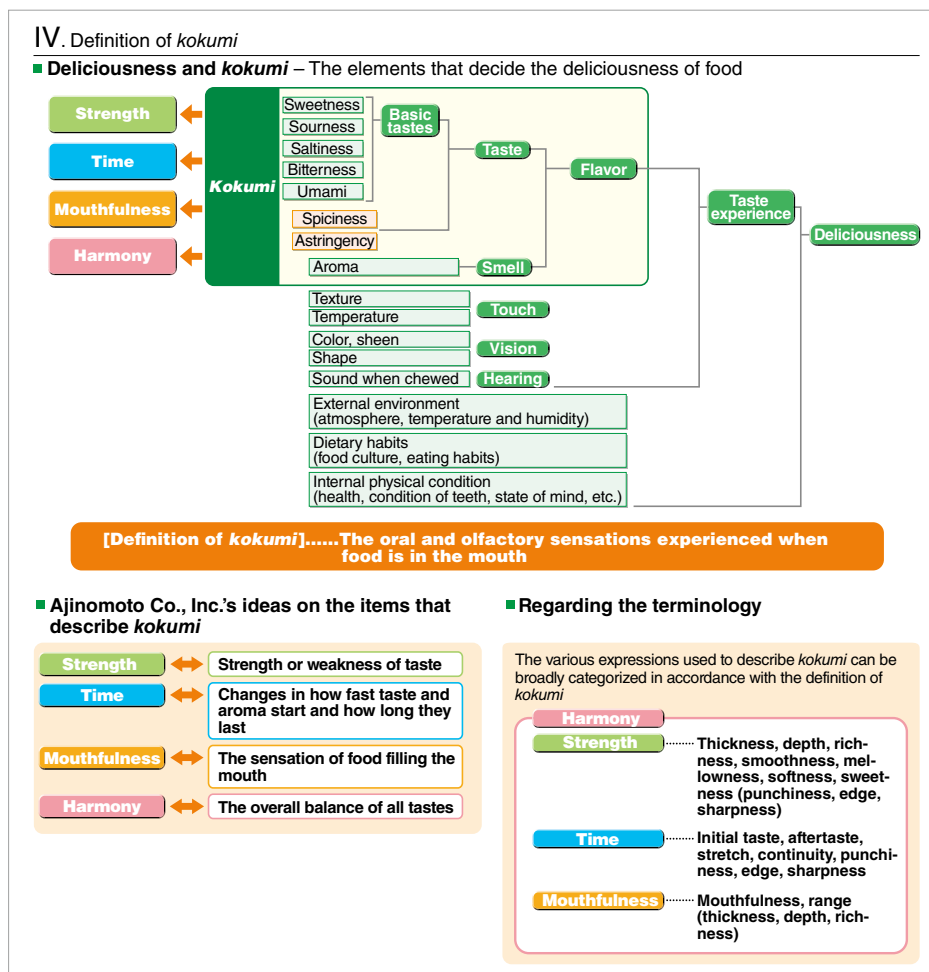
From the FY2014-2016 Medium-Term Management Plan onward, we came up with integrated food solutions based on the concept of the fusion of flavor, taste, and texture, and in order to speed up the expansion of business not only in existing areas, but also growth areas and other new areas, we accelerated the application of our proprietary ingredients and technologies in a wide range of fields, including sweet products.

Our main targets in terms of markets and new areas were as below:

- |           |  |
|-----------|--|
| Japan:    | Major food service chains, the market for ready-made meals centered on convenience stores, retailers' private brand products, the frozen foods markets, the three businesses of dairy, sweets, and beverages |
| Overseas: | The instant noodles and snack markets (all of Asia), the meat processing market (Europe and the U.S.), the dairy, sweets, beverages and animal protein substitutes areas (Europe and the U.S.)               |

We steadily advanced initiatives and produced new successes. We continued to promote our strength in developing world-class materials and enhanced our ability to propose integrated food solutions by developing advanced applications inspired by customer issues, and this led to the

Figure I-3: Definition of *kokumi*



Source: Introduction of AJINOMOTO "Tencho" Product Lines

expansion of a high-added value business with a high barrier to entry. In order to further expand this business going forward, we are clarifying our targets and strategy in each region as below and strengthening our approach.

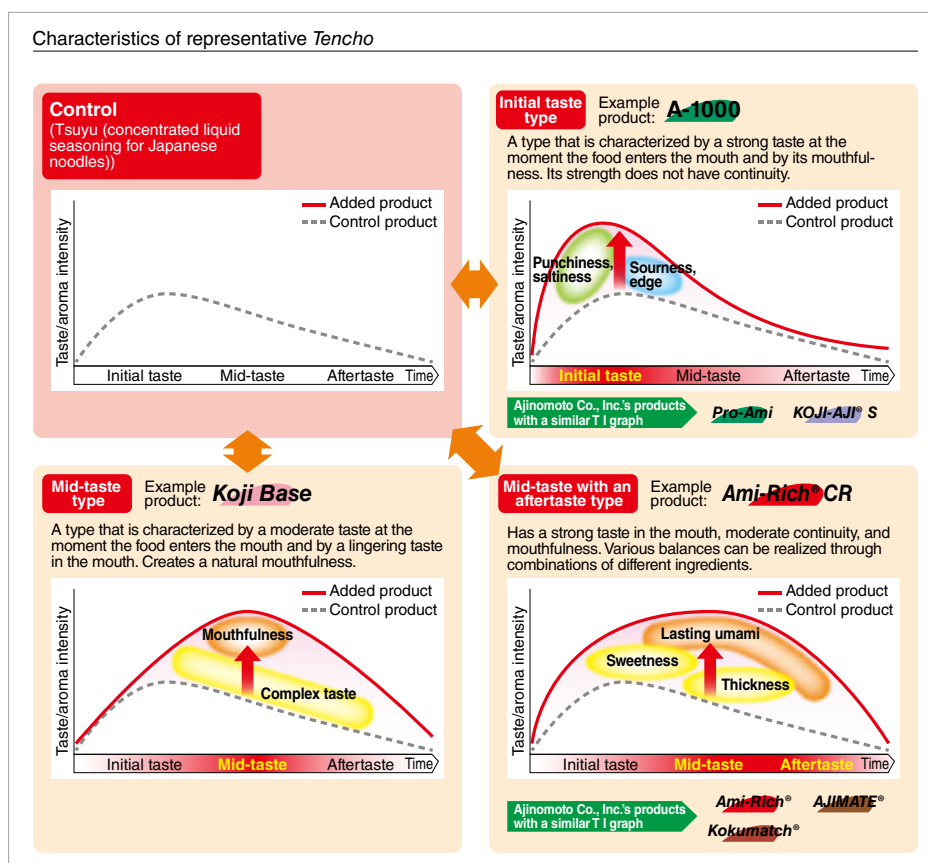
- Japan: Expand sales to key accounts in the food processing industry by strengthening one-to-one engagement with them  
Expand sales in the food service field to visualize the market, including individual shops, and launch and promote new products  
Expand cultivation of new areas by strengthening collaboration within the Ajinomoto Group and with other companies
- Europe and the Americas: Expand sales through clean label ingredients combined with reduced salt and sugar formulations, and alternative applications for food resources throughout all markets and areas  
In North America, cultivate food service and ready-made meals markets through collaboration with the new liquid seasonings Group company More Than Gourmet Holdings, Inc. (see p.46)  
In Europe and South America, recover growth in the enzyme preparation business by developing differentiated preparations
- Asia, including Southeast Asia: Expand business in the meat processing and instant noodles fields through reduced salt and food resource alternatives  
Expand sales in food service and ready-made meals areas using customer base in Japan  
Expand the application of our proprietary ingredients and technologies to spicy products

### Development of industrial use *Tencho*

The *Tencho* products used by industrial food manufacturers combine a base of various natural extracts with umami substances such as monosodium glutamate, inosinic acid, and guanylic acid. In addition to traditional businesses such as fermentation (miso, soy sauce), seafood cakes, and pickling, our main targets have grown to include companies handling instant noodles (soup), frozen foods, meat processing, liquid seasonings, precooked foods, and cooking and processing. One of our basic policies was, in addition to our previous focus of products that are a single extract of a natural material, leveraging our accumulated taste analysis and formulation technologies to improve our lineup of enhanced functional products that strengthen aroma according to the kinds of packaged foods they are being used in.

Our products derived from bonito dashi include

Figure I-4: Characteristics of representative *Tencho*



Source: Introduction of AJINOMOTO "Tencho" Product Lines

*EXISMATE® Katsuo NK* (2010), *Seasoning Base Katsuo GA* (2012), *Seasoning Base Dosshiri Katsuodashi* (2014), and *Katsuobushi Extract N* (2017) arranged to meet aroma and taste needs. Alongside *Seasoning Base Konbu H* (2013), this is a lineup of original products that have become the materials that showcase the appeal of our “palatability design technology.”

### Providing “*kokumi*,” a new element

Our “palatability design technology” are technologies that realize incredible “deliciousness” by minutely analyzing taste, aroma, flavor, texture, and the mutual interaction between these, and fully utilizing technologies that control these factors. Within this, the core factor is taste, which is made up of the five basic tastes of saltiness, sweetness, bitterness, sourness, and umami, and the important new material which we have added to these is “*kokumi*.”

“*Koku*” comes from the Japanese words for “*koshi*” or “*koku*,” and it describes the sensation created by the overall relationship between taste, flavor, and texture, characterized by the complex ways of multiple components mixture within the mouth in terms of both time and space. Furthermore, “*koku*” can be realized through a delicate balance of these elements because if there is too much of one element, the sensation become too strong. In addition to scientifically analyzing “*koku*,” we have also been successful in transferring it to products aimed at industrial food manufacturers, realizing products such as *AJIMATE® C (Marudori Type)* (2009) and *PRO-NEEDS® S* (2013).

We also discovered glutamyl-valyl-glycine, a substance that enhances this (“*kokumi*” substance), and which received designation as a food additive in Japan in August 2014. This success was first leveraged to enhance the quality of the Group’s products and was used to upgrade and create new seasonings and frozen food products (see “History” p.54). We also launched *Kokumidoru®* (for richer sweets) (2018) and *Kokumidoru®* (for freshness) (2019), our first products in the sweetness/beverage area expect sweeteners such as aspartame, and the launch was a huge driver for cultivating the growing sweets market.

### A product lineup that simultaneously provides aroma and *kokumi*

In the pursuit of deliciousness, we have accumulated research on aroma, which derives from taste and flavor, and by combining them with the newly discovered *kokumi*, we created new *Tencho* products for packaged foods such as *Takumi Base®* and *Aromax®*. Both of these products were made into series, as shown below, and they have become highly regarded as seasonings that enable their characteristic aroma and *kokumi* to be added simultaneously.

#### *Takumi Base®*

2009: *Takumi Base® SG* (adds a natural gelatinous feel to noodle soups, etc.)

2015: *Takumi Base® for boiled foods* (adds a mellow, home-cooked aroma and taste)

#### *Aromax®*

2011: *Aromax® SN* (enhances aroma and taste like natural meat stocks)

2015: *Aromax® Spicegear* (enhances the aroma of various spices)

2017: *Aromax® Takidashi Tonkotsukou* (adds an authentic pork bone soup aroma)

2018: *Aromax® Garlic Booster* (enhances natural garlic aroma and taste)

### Enzyme preparations centered on transglutaminase

The pillar of our enzyme preparations business is transglutaminase (TG), which we filed a patent for in 1987. It is an enzyme that links protein molecules and in April 1993 it went on sale as the food enzyme preparations *ACTIVA® TG-K* (for seafood cakes) and *ACTIVA® TG-B* (for meat processing). These are used in the manufacturing of restructured meat products and *Kamaboko* (restructured fish paste cakes). However, the basic patent for TG lapsed in Japan in 2007 and in major countries in Europe and North America in 2009, and successive patents for its application in products were also going to lapse, which resulted in competition with generic products, so it became important to realize the advanced development of products offering even more sophisticated functions.

One of our strategies for advanced development was to realize optimal textures for specific target products, leading to the development of the following.

- 2011: *ACTIVA® TG-SH* (adds a natural texture that improves both the firmness and elasticity of sausages)
- 2012: *ACTIVA® TG-G* (realizes desired texture, such as juiciness, crumbliness, and granular feel of hamburger meat and helps to retain its size when heated)
- 2013: *ACTIVA® Super Shrimp* (improves yields while retaining the shrimp's fibrosity, size, and color)

Furthermore, we developed the products with focused appeal points that could be used in a wide range of industries.

*ACTIVA® TG-K Danryoku Plus*, released in 2014, has the effect of adding elasticity to products such as *Kamaboko* (restructured fish paste cakes) and *Chikuwa* (tube-shaped fish paste cakes) made from varying grades of fish paste, enabling a wide range of fish to be used to make products. *ACTIVA® TG-B Konamabushi Gelatine Type*, released the same year, maintains the same usability and adhesive properties as the existing product *ACTIVA® TG-B Konamabushi* without using seven specified allergens (eggs, wheat, milk, shrimp, crab, buckwheat, and peanuts), enabling it to be used in allergen-free products.

*ACTIVA® Super Tender*, released in 2015, softens the tendons of meat while retaining its essential fibrosity, providing a function that enables even thick cuts of meat to be chewed naturally. This has become an important product for cultivating the market for senior meal services.

### (3) Developing business for food service and ready-made meal industries

#### Initiatives aimed at major food service chains

Regarding food service and ready-made meal products handled by the Food Service Department, the economic downturn and lack of earnings growth that followed the 2008 financial crisis (the Lehman shock) led to the contraction of the food service and ready-made meal markets and major food service chains lowering prices, resulting in a difficult business environment up to FY2013, during which sales remained roughly level. The Food Service Department responded with the aim of securing profit and growth by expanding business with a focus on customized products tailored to the menu of each client, while reinforcing business centered on our mainstays of regular powdered seasoning products (*AJI-NO-MOTO®*, *Hi-Me®*, *Chuka Aji*, *HON-DASHI®*, and *Marudori Gara Soup*).

In regard to marketing, we clarified our strategy for each product lineup. For seasonings, one of our strengths, we decided to leverage our brand power and technological capabilities to further reinforce our standing as “No. 1 for *DASHI* products,” and for packaged foods, an area in which it is difficult to demonstrate strengths, we conducted the thorough implementation of a policy of specializing in niche areas. Furthermore, we focused on consumer-oriented marketing to not only address the direct needs of food service and deli stores, but also adopt a collaborative approach in order to provide products that offer benefits and value to consumers. Our initiative of expanding sales of powdered seasonings to individual shops, which we had been steadily advancing since



HON-DASHI® Katsuo-dashi



HON-DASHI® Konbu-dashi



HON-DASHI® Iriko-dashi



HORYO® DASHI TAKUMI®  
1kg bag



FY2007, continued to be an important focus as the ratio of independently owned food service remained high, even as the service industry in general became increasingly dominated by chains, and *DASHI* Pack products produced by YAMAKI CO., Ltd., which became the Group company in February 2007, performed successfully.

We also placed importance on disseminating information, establishing a website dedicated to food service and ready-made meal products in April 2009. In addition to containing product information, the website also has a bi-directional function, providing useful information about allergens and category-specific useful information, pro-use recipes, and creative methods for using our products.

We also engaged in the development of products that strengthened functions for preserving pre-prepared food, and our Choriyo for making meat or fried chicken more tender and juicier or cooking fluffier rice helped to improve the quality and stability of major chain food service meals and convenience store pre-prepared lunchboxes and side dishes while reducing costs. In addition to this, we expanded efforts regarding areas like bread, noodles, and sweets, with the aim of realizing further growth by delivering products that add the above functions.

There was also expansion in markets such as meal services for seniors, and our ability to provide functional support such as helping people with locomotive syndrome (see "History" p.52) and stimulating and improving appetites led us to expand our business while contributing to maintaining the health of people.



Dedicated website for food service and ready-made meal products

## A rich lineup of food service and ready-made meal products in the Japanese, Western, and Chinese stock fields

In order to expand business in the BtoBtoC market, Ajinomoto Co., Inc. expanded its product lineup to solve issues faced by food service and ready-made meal producers in meeting consumer needs.

For key seasonings, in addition to large-volume consumer products, we have also developed the products like the ones shown in tables I-2 and I-3.

We also offer a strong lineup of reduced salt products for hospital meals (including *Katsudashi*, *Consommé*, and *Marudori Gara Soup*) under the *Kondatesan*® brand.

In addition to these, we have menu-specific seasonings such as *Cook Do*® (*Mabo Tofu*, *Hoikoro*, *Chinjao Rosu*, *Kanshao Sharen*, *Kurozu Subuta*, etc.), *Ajinomoto KK Chuka Awase* (*Mabo* sauce, *Amazu* sauce, *Umani* sauce, *Oyster* sauce, and *Chili* sauce), mayonnaise, dressings, and sauces, and ready-to-eat products including potato salads.

Additionally, the *One's Dressing*® (*Baisen Goma*, *Gudakusan Yasai*, *Hokkaido Cheese Caesar*, *Kokusai Yasai no Komi Wafu*, *Kanjuku Tomato no Thousand Island*) series that was launched in January 2017 offer sales appeal through strong performance in terms of price and quality.

## Adding functionality to food service and ready-made meal products

We have been launching products for food service and ready-made meal industries that increase the simplicity of cooking and improve the end results as "Seasonings and Choriyo for Enhancing Foodstuffs and Cuisine."

In our products that increase simplicity, *Chuka no Mikata*® (*Mabo* flavor, *Amazu* flavor, *Chili* flavor; launched July 2010) adds taste and thickness in a single application to produce a long-lasting glaze, luster, and thickness, making it perfect for side dishes and lunchboxes.

In our products that improve the end results, *Ajinomoto KK Oniku Yawaraka Choriyo* (launched July 2010), which uses the power of enzymes to tenderize meat after being coated for just five minutes and adds a salt and pepper taste, has been well received for its usefulness in shortening the time it takes to make boiled dishes and improving the grade of tough meat, and the functionality of our food service and ready-made meal products has been attracting attention. We have created a lineup of functional products for meat, including *Ajinomoto KK Kara-Age/Oniku Juicy Choriyo* (launched July 2011), which is soluble in base seasoning or water that can be used to make thick cuts of meat (*Karaage* (fried chicken), steak, breaded pork cutlets, etc.) juicier just by marinating them, and

*Kondatesan® Yawaraka Up Oniku/Osakana* (launched September 2013) aimed at seniors.

For vegetables, we have products such as *Oishisa Nagamochi® Syakitto Yasai Itame* (launched February 2012) which helps retain the moisture of the vegetables during cooking to maintain deliciousness for long periods of time, and the *VegeCook* series (from January 2014; fragrant basil, cheese and pepper, smoke and garlic) which can be used to easily add a stir-fried, fried, or boiled vegetable flavor to fresh vegetables.

The *Koku no Chikara®* series (from July 2012), having a wide range of applications, can draw out the *koku* and aroma of foodstuffs, give food the same richness as dishes that have been cooked over a lot of time, and reduce salt while providing a satisfying taste by just adding a single spoonful of the products. Customers can select a product according to the main foodstuff they are using from five varieties – beef, dried scallop, crustacean, fish, and chicken.

These products focus on the issues faced by customers, such as deterioration over time and foodstuff quality, and by providing solutions that leverage our unique materials and technology, they have become a pillar of profit among our food service and ready-made meal products.

Table I-2: Main umami and basic seasonings

Product name	Characteristics, etc.
<i>AJI-NO-MOTO® S</i>	An Umami seasoning derived from dried bonito flakes and <i>Shiitake</i> (mushrooms)
<i>AJI Plus®</i>	<i>AJI-NO-MOTO® S</i> with added citric acid to produce a sharper taste
<i>Hi-Me®</i>	An umami seasoning of MSG fortified with other umami derived from dried bonito flakes and <i>Shiitake</i> (mushrooms) so that its small volume gives a strong umami taste

Table I-3: Main flavor seasonings

Product name	Characteristics, etc.
<i>HON-DASHI®</i>	A high-quality bonito flavor seasoning created using carefully selected ingredients and original technology
<i>HORYO® DASHI TAKUMI®</i>	An optimally balanced combination of dried bonito flakes and dried baby sardines
<i>HONZUKURI DASHI Pack</i>	The main ingredient is dried bonito flakes specially developed by the Ajinomoto Group to give a strong aroma. Available as <i>Katsuo</i> , <i>Awase</i> , <i>Iriko Awase</i> , <i>Katsuo Konbu Awase</i> , and the gold label version of each of these (premium products)
<i>HONZUKURI ICHIBAN DASHI</i>	A straight liquid stock. Available as <i>Awase</i> , <i>Gokumi</i> , etc.
<i>DASHI-JIMAN</i>	An concentrated liquid stock that provides dishes with heat and time resistance. Available as <i>Noko Katsuo</i> , <i>Noko Kansai Awase</i> , <i>Noko Konbu</i> , <i>Noko Iriko</i> , etc.
<i>Knorr® Consommé</i>	<i>Chicken</i> , <i>Beef</i> , etc.
<i>Chef-Use® Chicken Bouillon</i>	Has a rich chicken flavor and robust <i>koku</i>
<i>Knorr® Bouillon</i>	<i>Beef</i> , <i>Fish</i> , <i>Granules</i> , <i>Cubes</i>
<i>Chuka Aji</i>	A versatile granular product comprising a high-quality pork and chicken base with added spices and lard
<i>Marudori Gara Soup</i>	A flavor-enriching granular soup stock made from carefully boiled whole chicken meat and bone
<i>Ajinomoto KK Hondaki Gara Soup</i>	A soup that is mildly concentrated with domestically produced chicken and pork bones
<i>Feitan</i>	An concentrated liquid soup containing a balanced blend of chicken and pork-extract, seasonings, spices, etc.



#### (4) Establishment of the S&I Department

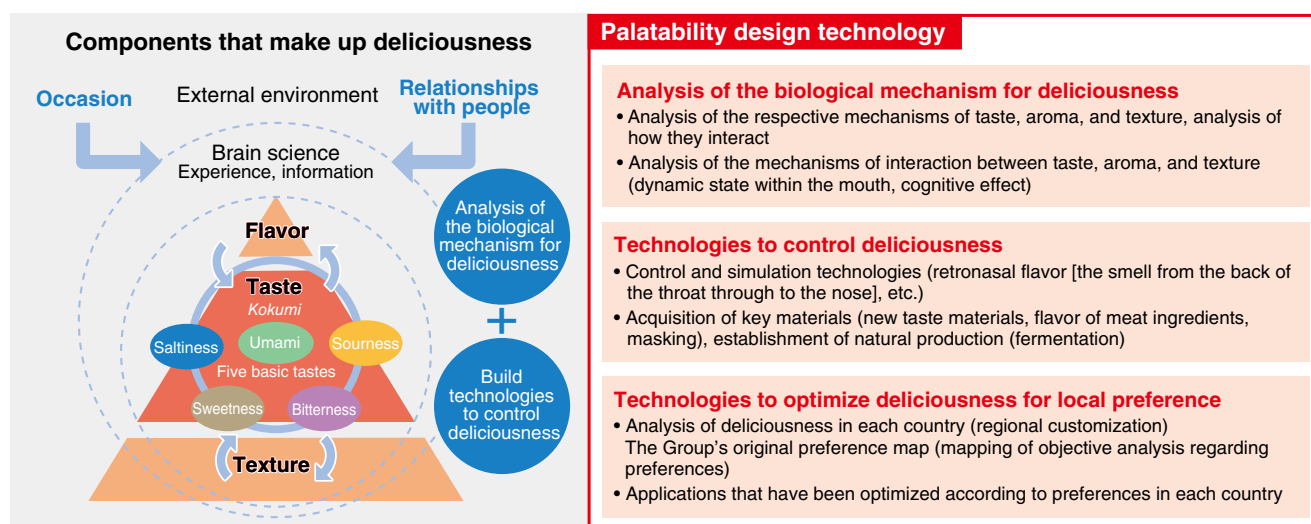
In April 2018, we integrated the Food Ingredients Department and Food Service Department to establish the Solution & Ingredients (S&I) Department with the aim of expanding our business for industrial food manufacturers, food service, and ready-made meal industries. The new department strengthened structures for both product development and marketing and set the mission of expanding integrated food solutions for industrial food manufacturers, and food service and ready-made meal industries.

“Palatability design technology,” which are key in terms of product development, are technologies that comprehensively utilize the taste, flavor, and texture technologies and original materials accumulated by the Ajinomoto Group to systemize and concentrate analysis of the biological mechanism for deliciousness, technologies to control deliciousness, and technologies to optimize deliciousness for local preference. These technologies enable the proposal of products and menu improvements that meet the needs of consumers (reduced salt, reduced fat, reduced sugar, food ingredient safety and security), including latent needs, and address social issues such as food resource and environmental sustainability. In terms of marketing, we also planned to solve the issues of consumers by strengthening the Group-wide customer-oriented sales structure through collaboration with client companies.

In July 2018, the department was moved into the Foods Research Building on the premises of the Kawasaki Plant to build a structure for closer collaboration between business and R&D and to enhance its speed and ability to respond to the needs of client companies. It is also further strengthening its solution-providing capabilities in coordination with the concentration and technological integration of the R&D functions of the four Group companies (Ajinomoto Co., Inc., Knorr Foods Co., Ltd., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc.) at the Kawasaki Plant, which was announced in December 2017 and was due to be completed in the first half of 2020.

Additionally, in August 2019, we acquired 50.1% of shares in the U.S.-based More Than Gourmet Holdings, Inc. (MTG) through our consolidated subsidiary Ajinomoto Health & Nutrition North America, Inc. (AHN). MTG was founded in 1993 and operates a liquid seasoning business that offers a deep knowledge of the U.S. consumer trends and preferences. It boasts original manufacturing technologies for realizing high-quality products and strong connections with food service and packaged food product companies through customized proposals by corporate chef supervisors. Through the acquisition of these shares, we are leveraging MTG’s menu proposal capabilities in food service market and direct sales channels to food service companies to expand our integrated food solutions business in North America through the combination of our original materials and taste and texture technologies.

Figure I-5: Breakdown of deliciousness



# 6

## The Sweeteners Business

### Reinforcing the structure of the industrial use business

The Ajinomoto Group's sweeteners business began in the 1970's with the establishment of a manufacturing method for aspartame (a combination of the amino acids asparagine and phenylalanine which is about 200 times sweeter than sugar), which was discovered by the U.S.-based G.D. Searle & Company. As a high intensity sweetener, it was adopted by the U.S.-based Coca-Cola Company in 1983 for use in *Diet Coke*. In Europe, we established a joint sales company with G.D. Searle & Company and we launched a product for industrial use in Japan. In 1991, we established Euro-Aspartame S.A. (a manufacturing company) in France through a joint venture with the NutraSweet Company (formerly G.D. Searle & Company) and set up manufacturing and sales structures in the U.S., Europe, and Japan. In 1999, we ended our agreement with the NutraSweet Company and began direct sales for industrial use in North America. We also established an independent company in Europe (Ajinomoto Sweeteners Europe S.A.S.) and in 2007, we controlled close to a 50% share of the global market.

Although the sweeteners business had been developing smoothly, from 2000 onward the market of aspartame for industrial use saw the entry of a succession of new competitors from China and South Korea resulting in excess supply on a global scale. This led to a fall in unit selling prices and a continuous struggle in terms of profitability. Although we reduced costs, such as changing manufacturing methods, in response to this, profitability generally failed to improve.

In October 2015, we decided to concentrate aspartame production in the Tokai Plant, and all shares of Ajinomoto Sweeteners Europe S.A.S. were transferred to HYET Holding B.V. in the Netherlands. This greatly reduced fixed costs and total assets and combined with the success of technological improvements and stable production at the Tokai Plant, it led to the significant structural reinforcement of the industrial use business. As a result, in 2015, the overall business recorded a positive revenue for the first time in eight years and in 2016, the industrial use business itself also returned to profitability.

### Strengthening the PAL SWEET® brand in the consumer business

In the consumer business, we launched the consumer product PAL SWEET® in Japan in 1984 and began sales to the drugstores through Taisho Pharmaceutical Holdings Co., Ltd. from 1985. We captured a 60% share of the market for low-calorie sweeteners and also expanded into Asia.

In August 2009, we carried out a total renewal of the product on the occasion of the 25th anniversary of PAL SWEET®, and achieved more sugar-like sweetness. Following this, in August 2011, we appealed to use SLIM UP SUGAR® (a product combining granulated sugar and aspartame) for cooking. In August 2012, we also renewed PAL SWEET® Calorie Zero, and the renewal of our main products was completed. Behind this background, especially since the start of Specific Health Checkups<sup>1</sup> in 2008, the importance of improving lifestyle and daily dietary management has been noticed, and the number of middle-aged and elderly people who take "a well-balanced diet" and "calorie intake" into consideration has increased.

The part of the overseas consumer business was transferred to the Overseas Foods & Seasonings Department in 2016 and the Sweeteners Department has started to focus on the Japan consumer business. While strengthening the structure of the industrial use business, we aimed to prioritize and expand the consumer business in Japan as a growth driver in the sweeteners business. Therefore, a new communication strategy centered on the promotion of use for cooking was once again promoted through the cooperation of branches. In addition, we have



PAL SWEET® Calorie Zero  
(liquid-type)

1. For the purpose of reducing the number of people and the reserve force in the case of Metabolic Syndrome, which serves as a hot bed for diabetes, hypertension, hyperlipidemia, etc., blood pressure, lipid, blood sugar, etc. are measured for all public insurance policy holders from the age of 40 to 74 years old.

positioned our main product, *PAL SWEET® Calorie Zero* (liquid-type), as a priority product for further growth. In August 2017, we conducted a renewal of both packaging and recipe, and also implemented measures to raise the awareness of brand and the product through commercials featuring *Nikujaga* (a Japanese meat and potato stew) as a promotional menu. As a result, *PAL SWEET® Calorie Zero* (liquid-type) greatly improved in terms of the handling rate, purchase rate, and repeat rate, and drove the double-digit growth for the business. In August 2017, we consolidated the brand of low-calorie sweeteners for consumers into the *PAL SWEET®*, including *SLIM UP SUGAR®*, to further strengthen its brand power.

#### Launch of advantame

Advantame is a new amino acid-based high intensity sweetener developed by Ajinomoto Co., Inc. and in June 2010, it acquired the FEMA GRAS (Flavor and Extract Manufacturers Association) certification. This is also recognized in Southeast Asia and South America, where it was launched as a flavor modifier. In addition, in May 2014, we received the approval as a food additive from the European Commission and the U.S. Food and Drug Administration (FDA). In June 2014 in Japan, it was designated as a food additive and became widely used in beverages and confections to improve taste and reduce costs.



PAL SWEET®

# 7

## The Establishment of the Consumer Data Analysis & Business Creation Department

### Establishment of a department for promoting digital transformation

In April 2018, Ajinomoto Co., Inc. established the Consumer Data Analysis & Business Creation Department. This department is expected to promote the digital transformation (see “History” p.90) advocated by the Ajinomoto Group in its FY2020-2025 Medium-Term Management Plan formulated following the establishment of the department.

The department’s mission is to “contribute to strengthening the growth potential of the entire Group by accumulating and analyzing consumer behavior and awareness data as all the bases to advance the ‘creation of new businesses, products and services that transcend existing boundaries’ and ‘promotion of digitalization to make existing businesses more advanced and efficient’ throughout the Group.” It has established structures at a swift pace and as of July 2019, it had a staff of 35 (including people serving concurrently in other areas). The main themes of its activities include making marketing more advanced, creating new businesses, and expanding the e-commerce business.

### Activities of the Consumer Data Analysis & Business Creation Department

The Consumer Data Analysis & Business Creation Department aims to make marketing more advanced by building a consumer analysis data management platform (DMP), establishing methods for the predictive analysis using social networking services (SNS), and visualizing the increased sales by promotion activities.

Consumer analysis DMP is a platform that will organically link Ajinomoto Co., Inc.’s unique “collected data” (such as feedback from various surveys and interviews, and customer feedback received by the Group Customer Service Center) and “accumulated data” (big data<sup>1</sup>). It will then aggregate and analyze these data to build a single source that coordinates all qualitative and quantitative data regarding consumer’s food habits. If this can be achieved, it will become possible to understand the eating habits and food-related behavior and issues of each consumer demographic (categorized by gender, age, place of residence, income, work, academic experience, etc.) so that we can define user personas and customer journeys for each of these. This information can be used to consider the specifications, functions, price, and appeal of new products and to predict the reaction to planned new products. At the same time, we are building a framework that enables the systematic alignment and use of consumer data.

The aim of visualizing the increased sales by promotion activities is to accumulate and compare the effects of each product and sales promotion measure in a way that will help to formulate marketing plans that offer maximum cost-effectiveness, as well as to optimize the entire value chain based on sales promotion measure and sales increase simulations.

Currently we are advancing collaboration with external partners, such as retailers, household accounting applications, and credit card companies, and we are building a framework for accumulating big data related to eating habits.

Furthermore, as an initiative for creating new businesses, we have started considering and building businesses that address these new customer values using the aforementioned wide range of data and future prediction to capture the change and expansion of the values for “food.” By combining the knowledge accumulated by the Group with the data technology offered by other companies, we are building core technologies that enable applications addressing various food values and we are developing businesses that use these applications (based on this development concept, we launched “Alatable” [trial version], a community service led by “food”

1. The development of IT such as the Internet has made it possible to process and accumulate large volumes of data in addition to conventional POS data, including online purchasing and browsing data, communications logs, card purchasing history, and action history through GPS, in a way that is high resolution (precisely detailed demographic and secondary information), high frequency (generated and circulated by large numbers of people in many places on a daily basis) and varied (sources include surveys, businesses, the Internet and various sensors), enabling the combination and comprehensive analysis of these data. This kind of data, which cannot be handled using conventional databases, is known as big data.

in June 2020, and we are scheduled to start providing a support service for the personalization and optimization of “food” by the end of FY2021). Also, by realizing this technology as an application programming interface<sup>2</sup> (API), license, and other forms, we are making it available to a wide range of partners beyond the industry with the aim of building an ecosystem that will enable consumers to enjoy more diverse “food” values.

2. A business that provides an interface through which other companies can use our consumer analysis DMP in exchange for a fee.

In regard to expanding our e-commerce business, although e-commerce accounted for almost 9% of consumer purchases in categories such as seasonings, soups, low-calorie sweeteners, and sports nutrition in FY2018, for Ajinomoto Co., Inc., this ratio was less than 1%. In order to bridge this gap, we are advancing measures such as:

- Using e-commerce for cross border business, e-commerce platforms in China
- Introducing e-commerce products (eliminating a problem concerning the sale of a single item by the case through the introduction of multi-item shipments and dedicated e-commerce products)
- Selling ready-made meal and food service products (to small or medium-size restaurants) and products developed by the Group companies in Southeast Asia
- Developing operations for export to East Asia

Also, in e-commerce, it is extremely important that our website appears at the top of online search so we are putting effort into initiatives such as search engine optimization (SEO) and strengthening relationships with platform operators.

If we can take the lead in gaining expertise and establishing a structure for accumulating, analyzing, and using large volumes of information on consumer eating habits through this series of initiatives, we will be able to conduct business with a significant advantage, even compared to major global food companies.



The Ajinomoto Group's flagship store on the Tmall Global Site operated by the Alibaba Group in China



The page for Hokkaido Potage Corn Soup on the Tmall Global Site



# 8

## The Trend of Major Group Companies in Japan

The Ajinomoto Group began to diversify its business from the end of the 1950's. We have developed our wide-ranging food products business through alliances with overseas companies and other means. We launched products such as soups, mayonnaise, frozen foods, coffee, cheese-type chilled desserts, and margarine, including edible oils, which we had launched before World War II. Within these, some businesses such as frozen foods, coffee, and edible oils were handled by the Group companies and the companies, including companies that joined the Group in the 2010's through new establishment, capital participation, or acquisition, have a large presence. Here is a brief overview of the movements of our main food companies in Japan over the 10-year period.

### (1) Ajinomoto Frozen Foods Co., Inc.

#### Development of the frozen foods business and new "Reliable Quality"

Our frozen foods business started in 1972 with the launch of 12 side dish products for consumer use and then expanded to include food service products (1974) with the addition of cooked rice dishes and frozen vegetables. In October 2000, Ajinomoto Fresh Foods Co., Inc. (a frozen foods production subsidiary) was merged with the departments engaged in frozen foods business to create Ajinomoto Frozen Foods Co., Inc. (FFA), integrating development, manufacturing and sales functions into a single company.

At the time of launch, FFA had a starting capital of 4.7 billion yen and around 1,400 employees, and it had subsidiaries in Thailand, the U.S., and China. Following this, it also engaged in other initiatives including acquiring and merging with FREC DESSERT CO., LTD.<sup>1</sup>, a company with strengths including desserts, as well as cultivating vegetables from

1. The "FREC" brand continues to exist as a food service brand under FFA.



12 side dish products for consumer use (1972)

designated farms as ingredients, establishing the ingredient development and import company FFA International Co., Ltd., and implementing SPF<sup>2</sup> pork production in Thailand. Through these initiatives, FFA realized “Reliable Quality<sup>3</sup>.”

In 2008, there was a food poisoning incident involving Chinese-produced frozen *gyoza* sold by another company, so FFA applied the three concepts of “ingredients,” “process management,” and “information” as starting points for a new “Reliable Quality” initiative that pursued safety and further improvement in quality. New “Reliable Quality” was established as a system for ensuring safety and security for users, based on the “visualization” of various aspects such as those below.

- |              |   |
|--------------|---|
| Ingredients: | Regular checks of farm management as suppliers, manufacturing equipment and processes, etc.<br>Switch to using vegetables and meat produced in Japan in <i>Gyoza</i> (Japanese-style dumplings) (2018), integrated management from egg of chicken used for fried chicken<br>Shrimp purchased only from designated suppliers and monitored |
| Production:  | Facilities operated and managed under strict in-house standards<br>Improvement of manufacturing methods to realize best possible taste<br>Proposal of cooking methods to consumers (cooking fried chicken in a toaster oven, etc.)  |

Product labeling: Allergens are clearly labelled

This initiative continues to evolve today.

#### From the “Value Create declaration” to “*Reikatsu*”<sup>®</sup>

The effects of low birthrates and an aging population in Japan, as well as factors such as a food poisoning incident involving Chinese-produced frozen *gyoza* and the 2008 financial crisis (the Lehman Shock), led to continuing decline in consumption volumes in the Japanese frozen foods market in 2008-2009. Looking to rejuvenate this market, in addition to “safety and security,” FFA implemented the “Value Create declaration” in 2009 with the aim of “Creating New Value” in the form of “frozen foods that are an essential part of lifestyles.” Specific measures included strengthening side dish products for dining at home (hamburg steak, fried chicken, deep-fried marinated pork), developing series for the bento boxed lunch making market and snack products for lunchtime (pilaf, fried rice, gratin, doria, etc.) in line with consumer needs, and improving the quality of frozen vegetables.

Furthermore, under our FY2011-2013 Medium-Term Management Plan, the pursuit of specialty and the overseas foods business became drivers for growth so from 2011, frozen foods began to play a bigger role. In Japan, from 2011, FFA showcased the six values of preservability, convenience, safety and security, deliciousness, health, and environment under the slogan “Deliciousness that is Good for the Body.” At the same time, under the banner of “Action! FROZEN FUTURE,” it began to develop strategies for the four categories below and attempted to expand the possibilities of frozen foods through initiatives such as cultivating the bento boxed lunch making market for adults.

- Build a “*Gyoza World*”: Improve the quality and enhance the variety of *Gyoza*
- Innovate fried products: Pursue healthiness, including through original technologies such as the high-temperature vapor frying method (frying using high-temperature vapor rather than oil that realizes delicious fried products while keeping calories and fat low) and cultivate the dining at home and bento boxed lunch making markets for adults
- Chicken and pork solutions: Enhance products using the familiar ingredients of chicken and pork
- Take on challenges in new areas: Acquire new customers by establishing the frozen desserts market

A fundamental part of this was promoting and continuing consumption among the middle-aged and elderly customer segments, which included showcasing products that use vegetables and strengthening snack-type products that focus on concepts such as “portions that are suitable for one person,” “affordable prices,” and “appealing main dishes that you want to eat yourself.” Following this, FFA confronted headwinds in the market in Japan through measures such as

2. Specific Pathogen Free

3. “Reliable Quality” was advanced by Masatoshi Ito, who was President of FFA at the time (now Chairman of the Board of Ajinomoto Co., Inc.).

strengthening the natural thawing series<sup>4</sup> that meets the needs of homemakers in their 40's and 50's for "varied menus," "cold storage in summer," and "simple preparation," enhancing products aimed at the dining at the consumer market which was growing as more people began to eat at home, and from 2013, adopting various new manufacturing methods and communicating with consumers through "Deliciousness Innovation!"

From November 2015, it promoted "*Reikatsu*®," involving smart ways to use frozen products as ingredients in everyday cooking, and proposed new ways to use frozen foods through initiatives such as sharing recipes through a special feature pages on *Cookpad*, Japan's biggest cooking-related website, sharing the local "*Reikatsu*®" recipes on FFA website, and implementing the "Yoshimoto "*Reikatsu*®" Sousenkyo," a campaign featuring celebrities managed by Yoshimoto Kogyo Co., Ltd.

### Renewing the management vision and logo

A succession of measures was implemented in a consistent manner based on the management vision formulated in 2014.

1. Create impressions through innovation "Value Create"  
FFA works to contribute to creating happiness for people and realizing a better society through frozen foods that offer original value backed by technology.
2. Grow into a world-class frozen foods business  
FFA expands and brings happiness to a greater number of people by providing products and services around the world.
3. Make "Cultivating Fans" the most important goal of the business  
FFA positions increasing the number of fans both inside and outside the company as central to its business and considers the viewpoint of consumers and users when carrying out all activities in every workplace.
4. Become a good company for employees  
FFA aspires to be a company full of joy of work by thinking about business in a way that involves all employees and growing together, based on a culture of respect for diversity.

Additionally, in July 2017, it redefined the unique value of frozen foods as great products that capture the freshest and the most delicious moments of food, and renewed its brand logo to reaffirm its passion and determination to deliver the value of freshness. At the same time, it also introduced *Aji-Pen*® as its corporate character.

### A frozen foods lineup realized through innovation and new technology

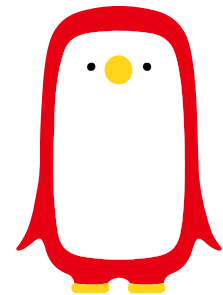
The "*Karada Okazu*" series launched in March 2008 are products that combine an assortment of multiple side dishes in a single bag with a focus on vegetables and FFA marketed them as "side dishes comprising a well nutritionally balanced assortment of ingredients." For example, *5-shu Yasai Irodoriage* contains three pieces of Renkon Hasamiage and three pieces of Funwari Yuba Shisomaki, and these kinds of products containing multiple side dishes are used for bento boxed lunches or for snacks and side dishes in the evening in single-person households. Following this, it developed products such as *3-shu Yasai no Mushi Ankake* and *Renkon Kushi & Norimaki Kushi* in the same series.

"*Agezuni Sakutto-san*" series, which began with the launch of *Fukkura Shiromizakana* in August 2010, use the high-temperature vapor frying method, original technology by FFA that enables frying without oil by using high-temperature steam, sealing in taste and juiciness while making the surface crisp and crunchy. Furthermore, it avoids oiliness and keeps calories and fat low, making it a recommended item for uses such as bento boxed lunches for adults. Following this, FFA also developed products such as *Double Cheese Chicken*, *Nikujaga Korokke*, and *Beef Katsu*. This concept was continued in the *Non-Fry* series launched in 2014 (now discontinued).

The ★*CHA-HAN*, launched in August 2015, aimed to recreate the savory fried rice made from simple ingredients at Chinese restaurants, in contrast to FFA's long-selling *Gomoku Chahan*, a series of consumer products that use six ingredients. It was targeted at men as fried rice that can be eaten voraciously, with an aroma strengthened using garlic oil made from parched garlic and spring onion oil and a composition that included *kokumi* substances developed by Ajinomoto

4. The products are highly regarded for their ability to act as refrigerants for bento boxed lunch in summer. Two pieces of the natural thawing series products have roughly the same refrigeration ability as 30g of refrigerant.

あじペン®



Aji-Pen®

Co., Inc. (see “History” p.54) and deliciousness derived from fats. FFA fully committed to the concept of targeting men through initiatives such as selling it in 600 g packs containing two 300 g portions, the standard volume for Chinese restaurants, rather than the 450 g packs frozen fried rice usually came in, using rectangular packaging, and printing the products features in large gold letters on a black background. There were some doubts about this product within the company, but the targeted deliciousness and a major advertising campaign centered on TV commercials made it a hit, and in December 2016 *The ★® Shumai* was launched based on the same concept.



*The ★® CHA-HAN*  
(at time of launch)



*The ★® Shumai*  
(at time of launch)

One of the themes of “Deliciousness Innovation!,” implemented from 2013, was strengthening the natural thawing series. Natural thawing frozen foods were launched in 1999 and then grew rapidly, establishing a market presence with an awareness rate of 96% and a usage rate of 78%, according to a survey conducted in 2013. In addition to offering a time-saving benefit, as they did not require heating frequently, there was room for pursuing further deliciousness in areas such as the lightness of coatings, texture, and aroma. Therefore, in February 2014 FFA strengthened products in the *Okazu* field (side dishes that are usually served alongside rice), such as *Tonkatsu* and *Kakiage*, while launching its first cooked rice products *Chicken Rice* and *Dry Curry*. It also applied “Chef’s Kitchen” (conforming to the recipes of first-class chefs) and double fried technologies to pilaf and fried rice products launched in the same year.

Another product that used natural thawing technology was *Onigiri Maru®*, launched in February 2017 under the catch copy of “Changing Japan’s Rice Balls!” This product enabled rice balls to be made by wrapping a macaron-shaped ball of frozen ingredients with hot rice, which can be eaten after waiting 30 minutes. FFA used an original technology that ensured ingredients would not seep out even when they thawed and launched five varieties (*Pork*, *Curry*, *Gyoza*, *Bibimba*, *Kakuni*, and *Mabo Tofu*). In addition to using recipes for good balances of meat and vegetables recommended by registered dietitians from the *Kachimeshi®* sports nutrition program to eliminate tedious routines of ingredients or unbalanced nutrition, these products also pioneered the use of foods with thick, liquid-like textures in rice balls.

In addition to this, FFA also introduced the following new products, including products that use the Group company technologies, products that target the dessert field, and side dishes that provide a feeling of volume.

- 2010: “*Yakudake Bakery*” series (Bread that can be enjoyed after baking for just 20 minutes in an oven, applying technology from AJINOMOTO BAKERY CO., LTD. (see P.68))
- Puchi Cake* (Bite-sized desserts featuring an external design based on Disney characters)
- Kodawari Sangenton no Tonkatsu*, *Buta no Tatsutaage* (use SPF pork)
- 2011: *Yawaraka Buta no Kaoriage*, *Teriyaki Chicken Mayonnaise*
- 2012: *Cheese Tonkatsu*

The six varieties in the “*Yoru kuji no hitori nomi*” series launched in February 2018 were developed through a collaboration with the Japanese gourmet magazine “*dancyu*” with the aim of capturing demand for food to enjoy with alcohol.



*Onigiri Maru®*



### Strengthening and improving current products, including the No. 1 seller *Gyoza*

FFA's sales are heavily weighted towards the three areas of *gyoza*, fried rice, and fried chicken. The market for these basic products, which also includes mainstays such as *shumai* (steamed pork dumplings), hamburg steaks, and minced meat cutlet, is large but competition is also fierce, so it has tirelessly renewed products and added new items.

Launched around the time the frozen foods business started (1972), *Gyoza* has been a popular product for a long time. It is a flagship product that has held the No. 1 spot for sales of single consumer frozen food items for 16 consecutive years since FY2003, and in FY2006, annual single item sales topped 10 billion yen. In order to maintain and strengthen this position, in addition to making continuous improvements to the skin and filling<sup>5</sup>, FFA implemented improvement measures that address customer needs on an almost annual basis, including developing "*Hane no Moto*" technology that enables them to be cooked without using oil or water (2012). In terms of variety, it introduced products such as *Chuka Hanten no Niku Gyoza*, *Naniwa no Otsumami Gyoza*, *Yaitemo Yudetemo Oishii Gyoza*, *Mochi Mochi Atsukawa Yude Gyoza*, *Osaka Meibutsu Pari Pari Gyoza*, *Soup Gyoza*, *Gokusen Gyoza*, and *Fukubuku Gyoza*. Expectations are particularly high for new affordable, environmentally-friendly mainstay products such as *Shoga Gyoza*, a product launched in August 2018 that is flavored with ginger rather than garlic and is popular with women, and *Minna Wai Wai Gyoza*, which contains 36 *Hanetsuki Gyoza* that can be cooked without oil and water in packaging that does not include a tray. In terms of marketing, since 2014 FFA has been collaborating with Kirin Beer Marketing Co., Ltd. on summer selling site proposals that combine "*Gyoza and Beer*" and "*Karaage and Beer*," and since 2018, it has been working on joint projects with the Suntory Group, including "*Ienomi Sei*" (food and drink set to enjoy at home) present campaign.

5. For example, in the February 2013 renewal it started using garlic that kept its *koku* but left less of an odor, and since August 2018, it has ensured that all vegetables and meat used in fillings are produced in Japan.



Gyoza (Japanese-style dumplings, Fall 2012)

For fried rice, in addition to the hit product *The ★<sup>®</sup> CHA-HAN* (see p.53-54), it carried out technological improvements to the "*Gudakusan Chahan*" series (*Gomoku*, *Kaisen*, *Takana*) such as introducing the double fried production technology (February 2013), and *Gomoku Chahan* was brought back due to strong support from consumers after it had been discontinued for a while.

For *Yawaraka Wakadori Karaage Volume Pack*, a core fried chicken product, FFA maintained its market share through measures including improving production technologies, such as introducing double frying (February 2013), to enhance deliciousness and launching increased volume products. However, there was a rapid growth in competing products so in August 2018, it resumed the offensive with the renewed "*Ajikara*' *Yawaraka Wakadori Karaage* '*Juwan Torimomo*'" and "*Ajikara*' *Yawaraka Wakadori Karaage* '*Fukkura Torimune*,'" a product garnished with the "*Ougon Spice*" of ginger and Japanese pepper (*Zanthoxylum piperitum*), as its two main products.

For hamburg steaks and minced meat cutlet, it enhanced the deliciousness of at-home dining products such as *Yoshokutei<sup>®</sup> Juicy Hamburg* and *Yoshokutei<sup>®</sup> Wafu Oroshi Hamburg* and added natural thawing and enhanced the deliciousness of bento boxed lunches products such as *Obento Juicy Hamburg* and *Juicy Menchi*. It also launched new products combining deliciousness and clear appeal, such as *Goronto<sup>®</sup> Nikuatsu Hamburg* and *Goronto<sup>®</sup> Nikuatsu Menchikatsu*, products offering the thickest meat on the market, and *Horensou no Curry Menchi*.

For *Shumai* (steamed pork dumplings), it launched a renewed *Puri Puri no Ebi Shumai* in February 2013 and the new product of *Niku Shumai* to leverage the deliciousness of the ingredients through the introduction of the double wrapped production method which wraps *Shumai* (steamed pork dumplings) in a way that puts the core fillings of shrimp and roast pork inside the other ingredients to emphasize the deliciousness of the core fillings.



In regard to other mainstay products, in November 2016, *Sore Ike! Anpanman Potato* (launched in 1990)<sup>6</sup> became the first frozen food to be given Mother's Selection Award at the eighth round of awards hosted by Japan Mothers Association, reflecting the product's high quality and popularity.

6. A potato snack that combines domestically produced mashed potato with sweet potato, three kinds of green and yellow vegetables, and calcium which is produced without using sugar or any of the 27 designated allergens to create a product that can be safely given to children.

### Strengthening frozen food production structure in Japan and new marketing

Furthermore, in order to operate business that is resilient to changes in the environment and build a strong business foundation for future development, from FY2011, FFA engaged in the restructuring of production sites in Japan. As part of this, in order to accelerate growth and advance the cultivation of new areas through the reinforcement of key product areas, in 2012 work started on the renovation of the Kanto Plant (Ooizumi-machi, Oura-gun, Gunma, Japan), one of its major plants in Japan, and in September 2014, the first phase was achieved with the completion of Plant Building No. 1. This enhanced quality and realized a more efficient production structure, including the introduction of a new production line for desserts, a key product area, and secured supply capacity and production space for future business growth. At the same time, it also eliminated Chlorofluorocarbon (CFC) emissions and realized energy savings. The new plant building had a total area of around 4,600m<sup>2</sup> and a total floor area of around 13,300m<sup>2</sup>, realizing an annual production capacity of 9,200tons (around 1 million cases). In July 2018, FFA acquired and absorbed the production subsidiaries Komec Co., Ltd. (Osaka Plant and Tokyo Plant) and FREC KANTO CO., LTD., and the production plants of each company were incorporated into its production department, realizing a framework that can swiftly realize optimized production structures as FFA's Osaka Plant, Chiba Plant, and Saitama Plant.

On the marketing side, FFA tried new initiatives such as the "Reikatsu<sup>®</sup>" campaign (2015 onward; see p.52) involving the arrangement and use of frozen foods, and support packages for students studying for entrance exams (2016) which combined *Soup Gyoza*, *Goronto<sup>®</sup> Nikuatsu Hamburg*, and *Ebi Yose Fry*.

In 2017, it marked the 45th anniversary of the launch of *Gyoza* with "*Gyoza Station*," an experience event where customers enjoy eating *gyoza* that they have cooked themselves in the extraordinary setting of JR Ryogoku Station's phantom platform No. 3. It has been well received as an event that enabled many customers to experience the appeal of frozen *gyoza*. Additionally, in September 2017, amid rising interest in Japanese cuisine overseas, it opened *GYOZA IT.* in Akasaka, Tokyo. With the number of foreign visitors to Japan expected to rise during the Tokyo 2020 Olympic and Paralympic Games, this restaurant will be open for a limited period with the goal of communicating the appeal of Japanese-style *gyoza* to these overseas tourists and foreigners living in Japan. These initiatives have strengthened both the consumer and food service brand as bases for communicating information that enables people to experience the allure of *Gyoza*.

Furthermore, in regard to initiatives based on ASV, from spring 2011 FFA strengthened the communication of information regarding its environmental efforts by displaying the *Aji-na Eco* mark (for products and information provided by the Group that are well-made [= Aji-na] and environmentally conscious [= Eco]) developed by the Group on the packaging of consumer products, such as products that come in large packages without a tray and natural thawing products that reduce the amount of energy used for cooking. In regard to the modal shift from truck transport to ship and rail transport that has been advanced since FY2000, in the period up to FY2018 it managed to expand efforts on 10 major long-distance routes, raising the shift percentage to 22%. It has also been working on fully phasing out CFC-emitting refrigerators. In FY2001, FFA had 26 of these refrigerators and it has been successively replacing them with equipment using natural refrigerants<sup>7</sup>, which is due to be completed during FY2020 (see "History" p.65). Also, for five consecutive years from 2011 it donated one yen from every pack of *Gyoza* sold to the "Go Tohoku! Cultivate for Tomorrow Project" realizing a cumulative contribution of 85 million yen for the organization, which supports the recovery of agriculture in Tohoku.

7. Substances found in nature that can be used as refrigerants (such as CO<sub>2</sub> and ammonia)

## (2) Ajinomoto AGF, Inc.

### To the second founding of Ajinomoto AGF, Inc.

Ajinomoto AGF, Inc.'s origins are in the establishment of General Foods, Inc. in March 1954 as the Japanese subsidiary of U.S.-based General Foods Corporation (now Mondeľz International, Inc.). In August 1973, Ajinomoto Co., Inc. acquired 50% of General Foods, Inc.'s shares to establish Ajinomoto General Foods, Inc. (AGF). Following this, AGF grew through the launch of the "Blendy®" and "MAXIM®" brand products and the development of gift sets, and it began handling regular coffee (commercial and consumer use) and bottled drink products with three plants in Itami (Hyogo; closed in 1998), Suzuka (Mie), and Ojima (Gunma) in Japan.

Under the slogan "becoming Japan's No. 1 Full Line Coffee Manufacturer," AGF adopted basic strategies including creating value added products, reducing cost, advancing technology and R&D, and cultivating human resources<sup>8</sup>. In terms of products, although products such as a range of stick type products launched from 2002 drove growth, factors including sharp rises in coffee bean prices made it difficult to increase profit. Therefore, from FY2014, it adopted the slogan "From Volume to Value" and shifted from a focus on sales to a focus on profit as a co-creating company that works with customers to create value. At AGF Suzuka, Inc., the enhancement of production equipment (doubling of production capacity) for commercial-use roasted coffee beans carried out in August 2014 and the launch of a new production line of stick type products in September 2018 (1.2 times greater capacity) were production-focused measures to expand sales of commercial-use products (online and BtoB) and stick type products, which were both positioned as drivers for growth.

In April 2015, Ajinomoto Co., Inc. acquired the shares in AGF (50%) held by Mondeľz International, Inc. for 27 billion yen making it a fully owned subsidiary, and in October 2016, it acquired all trademarks for AGF products such as *Blendy*® and *MAXIM*® for 25.9 billion yen, marking the rebirth of AGF as a company (see "History" p.45-46).

In its medium-term management plan focused on 2020, AGF set the vision of "striving to be a well-loved Japanese beverage manufacturer." In March 2015, in order to further strengthen efforts to "Create AGF Fans," one of the measures for achieving the vision, it formulated the new corporate message "Comfort, any time. AGF®" and started using it that April. Within the meaning of "any time" is the change in direction from coffee-focused business to handling all non-alcoholic beverages in order to get closer to various life stages and lifestyle situations, while "comfort" incorporates AGF desire to provide customers with deep emotional value through non-alcoholic beverages.

In July 2017, AGF's name was changed to Ajinomoto AGF, Inc. starting the real rebirth of the company.

In the FY2017-2019 Medium-Term Management Plan, advanced under the new company name, Ajinomoto AGF, Inc. set targets such as reliable quality, responding to various lifestyles, living with the society and the Earth, and co-creating value with diverse human resources, under the slogan of "aiming to be a high quality, highly profitable specialty company." Growth drivers for achieving this included strengthening brands, optimizing portfolio, strengthening specialty, and building new growth strategies.

Additionally, in regard to external collaboration, in May 2010 it formed a sales partnership with Starbucks Coffee Japan, Ltd. and acquired the rights to sell multiple Starbucks Coffee Company's consumer coffee products in Japan. This alliance stemmed from the background that Kraft Foods Company, which was one of AGF's parent companies, was selling Starbucks Coffee Company's products at the time in the U.S.

8. Initiatives carried out included in-house study sessions held by staff lecturers who visit workplaces (January 2011 onward), the "Miraibako" in-house proposal system (June 2011 onward), and acquisition of FSSC22000 certification, an international standard for food safety systems (April 2012, Suzuka and Ojima Plants).

### Integrating the gift product business

In October 2015, Ajinomoto Co., Inc. announced that in April 2016, it would transfer its gift business to AGF and integrate both companies' gift businesses. The aim was to leverage the assets of both companies to create specialty gift products focused on foods, non-alcoholic beverages, and health to establish a presence in the growing market for personal gifts and strengthen our gift product business overall.

The gift products business was an important business for both Ajinomoto Co., Inc. and AGF in which they could demonstrate their brand power. However, the markets for traditional summer and year-end gifts which were central to the business continued to shrink and it became essential to review product portfolios and improve profitability by making areas such as business operations and sales structures more efficient.

From September 2010, AGF launched gift products on sale throughout the year, including *AGF Coffee Gift*® and *Starbucks Origami*® *Personal Drip*® *Coffee Gift*, and it followed this by actively developing personal gift product and events, such as *Hello Kitty Gift*, *AGF Stick Type Coffee Gift*® designed as a gift for courtesy calls, the “*Haru no Santa ni Narou*” campaign which enabled customers to give coffee gifts to friends through social media (March 2013), and the tablet-shaped *Starbucks Origami*® *Personal Drip*® *Coffee Gift*. In May 2015, it was presented with the Award for Coffee Gift Development at The Japan Gift Awards 2015 (it also won the same award in 2016 and 2017).

Following the integration of the gift products business, from spring 2016 it developed traditional summer and year-end gift products across Japan based on the concept of “A New Style of Giving for Japan.”

### Expanding stick type products and a coffee style for Japan

Demand for personal instant coffee products rose due to trends such as individualized diets, smaller households, and the diversification of personal preferences. Accordingly, the use of stick type products, which can be conveniently enjoyed by just adding water or hot water, increased at home, in offices, and even outdoors. This resulted in the size of the market increasing to more than 30 billion yen as of 2018. AGF positioned stick type products as a driver for growth and developed a wide variety. It also expanded the field to include fruit teas, Japanese green tea, and smoothies, and continued to maintain a leading market share (approx. 60% as of 2019). In development outside of the coffee field, it differentiated through technology for completely powderizing fruits and vegetables and fresh fruits aroma technology which extracts aroma constituents from natural fruits and seals them in an aroma capsule. For coffee products, it continued to realize improvements such as aroma technology that uses the aroma constituents of café au lait, a hybrid production method that enables ground beans comprising 100% high-grade beans from specific plantation areas to be concentrated and freeze-dried, and a new powdered coffee creamer that reproduces the *koku* of milk. In regard to personal products, it also developed chilled cup-type and single serving-type products.



Blendy® Stick  
Café au Lait  
Mild Caffeine-free



Blendy® Stick Tea au Lait



MAXIM® BLACK IN BOX  
assortment

To realize variety in coffee products, it enhanced product lineups such as the *Blendy® Plus* series of Foods for Specified Health Uses targeting health-conscious consumers and its series offering half-calorie, sugar-free, or added dietary fiber, espresso-related products that responded to the boom in Seattle-style coffee including *Triplesso* (a rich café latte containing a triple-concentrated espresso that allows the deliciousness of the milk to come through), and one-grade-up products focused on a specialty characteristic, such as products supervised by an expert coffee appraiser and drip-brewed coffees.

From 2015, it pursued “JapaNeeds Coffee®,” an original coffee style for Japan. Through repeated taste tests, it quantified over 30 flavor categories that make up the aroma of coffee and based on this data, identified over 1,000 flavor constituents and over 100 taste constituents. It then used this information to introduce new *T²ACMI Baisen®* (Time and Temperature Aroma Controlled by Master’s Innovation) technology for both regular and instant coffee. This technology alters the roasting temperature depending on time to control the chemical reactions affecting the raw coffee beans, balancing the bitterness and sourness while drawing out a stronger flavor. This realizes a subtle flavor that fits the delicate Japanese sense of taste when combined with the soft water found in Japan. In terms of products, it was used for the regular, drip, and instant versions of *MAXIM® Chotto Zeitakuna Kohiten®*, as well as “*Sen*” (regular and drip coffee), a new brand launched in August 2015. “*Sen*” was inspired by the robust aroma of Kyoto’s bancha green tea and it has been precisely roasted to draw out the character of carefully selected beans so that when mixed with Japanese water, it produces coffee with a refined, subtle flavor and clear taste that evokes a sense of Japan.

In terms of marketing, it strived to win fans through the innovative activities shown below, including support for student exam takers and the “Office Stick Break Campaign” (2010) that aimed to promote usage of stick type products in offices.

Table 1-4: Major campaigns

Fiscal year	Campaign period	Details
2012	3/9~8/31	<i>Blendy® Stick</i> “The Two-Billion Hot or Iced Cup Thank You Campaign”
2013	4/15~	<i>Blendy® Stick Tea Heart</i> , which everyone is talking about, is rolling out a huge promotion! – Ads on public transport, samples distributed to 100,000 people on the streets, launch of a Tea Heart Café on Facebook –
2014	5/1~	Reaching almost 10,000 applications for “Stick Drink Bar Office Partners!” – Make your office coffee more affordable and fun ♪ –
2018	1/9~4/30	Win a mug featuring the “ <i>Guutara Sengen</i> ” logo designed by popular illustrator <i>Wakaru-san</i> !! Implementing the “Luxurious, Relaxing Tea at Home Campaign” for <i>Blendy® Stick Tea au Lait</i> and <i>Blendy® Stick Peach Tea au Lait</i> ! Launching limited edition sticks featuring a message of support from <i>Milk-chan</i> , the relaxed and carefree cat!
2019	9/30~	Manga artist Ms. Misato Konari and <i>Blendy® Stick Café au Lait Unsweetened</i> “Nagi’s Long Vacation” spin-off creations: Launch of “Snack Bubble: Candid Agony Aunt” on September 30 (Monday) Ms. Konari commented, “Please enjoy it with a cup of unsweetened café au lait in one hand!”

### Enhancing commercial-use products

In the FY2014-2016 Medium-Term Management Plan, AGF positioned expanding sales of commercial-use products as a growth driver and as a specific measure, in February 2015, it introduced the commercial-grade brand “AGF® Professional.” The market for non-alcoholic beverages consumed outside the home was huge at a scale of about 42.1 billion drinks per year,



2012FY campaign



2013FY campaign



2014FY campaign



2018FY campaign



2019FY campaign



and AGF planned to grow in this market by leveraging various technologies (such as cold-water solubility) it had developed for consumer use products to provide a wide range of solutions for food service.

Its first step was to increase its lineup to include six products in the powdered soft-drink 2-Liter Pitcher series (green tea, oolong tea, black tea, instant coffee, peach tea, apple tea) for which each bag had the optimum amount of powder to create two liters of drink, three products in the 1-Drink series (café au lait, black tea with milk, matcha tea with milk) of stick type products featuring the most balanced blends, and later, it launched the *Koime* series (thicker than the former ones) and expanded the lineup of one-liter series. It also developed a dedicated website to expand sales of products that offer customer savings in terms of preparation time, efforts, and garbage disposal. In addition to this, it expanded the lineup of this brand (AGF® Professional) to include powdered products for beverage machines and the like.

It also grew the business through a contract for roasting the coffee used in *Seven Café* products sold at 7-Eleven stores across Japan from February 2013.

### Providing social value through environmentally friendly containers, etc.

Under the FY2017-2019 Medium-Term Management Plan, Ajinomoto AGF, Inc. formulated “AGF® Shared Value” (AGF SV) with the goal of creating social value (health for mind and body, connections between people, coexistence with the global environment). Accordingly, it developed various products aimed at providing the 3R’s (Rest, Relaxation, and Refreshment). Preceding this, it had been contributing to environmental preservation since 2009, including through product containers, and had carried out activities such as providing support for the recovery of the Tohoku following the 2011 Great East Japan Earthquake and supporting Japanese culture in combination with the launch of “*Sen*”.

In relation to environmental preservation, in June 2009, *Instant Coffee Refill Packs* became the first powdered food products to acquire Eco Mark Certification from the Japan Environment Association. Following this, it also acquired the same certification for powdered creamer, and by November 2010, a total of 81 products from the “*Blendy*®,” “*MAXIM*®,” and “*marim*®” brands had become Eco Mark products. In February 2011, AGF also received the Silver Award at the Japan Environment Association’s Eco Mark Awards 2010.

In 2012, it successively introduced “Friendly Bottles,” a new environmentally friendly type of PET bottles manufactured using recycled PET bottles as a main material, in all bottled drink product lines. From spring 2016, environmentally friendly heat-resistant plastic bottles made from 100% recycled PET resin began being used for all major bottled coffee products and this initiative was awarded the Ministry of Economy, Trade and Industry Minister’s Award at the 2016 Awards for Resources Recirculation Technologies and Systems.

In order to support recovery after the 2011 Great East Japan Earthquake, it established the *Blendy® Utsuwa no Kizuna* Project and carried out activities to support the devastated pottery industry in Tohoku, including:

- Supporting kiln repairs in potteries in the three prefectures of Aomori, Miyagi, and Fukushima
- Donating kilns to *Bakke-yaki Hiro-kama* potters in Miyagi whose kilns had been rendered unusable
- Introducing traditional Tohoku pottery ware across Japan through gift sets combining *Utsuwa* (coffee cups and saucers) made by potters in the four Tohoku prefectures with *Blendy*® instant coffee
- Holding tea parties for the people of Tohoku using *Bakke-yaki Hiro-kama* ware

Furthermore, from 2016, the project continued activities with world-class designer Ms. Junko Koshino as a project partner.

In addition to this, from 2014 it also participated in a corporate forestation project by the Mie government, naming a section of Forest of *Blendy*®. In addition to raising awareness among employees, this initiative also promotes forestation activities around the Suzuka River, which is a water source for the AGF Suzuka, Inc. production plant (Suzuka-shi, Mie, Japan). In 2015, AGF launched a second



Eco Mark Certification



*Blendy® Utsuwa no Kizuna* Project in Tohoku



forestation initiative through forest conservation activities around the southern slopes of Mount Akagi, which is the source of the Arato River that provides the water used by AGF Kanto, Inc. (Ota-shi, Gunma, Japan), AGF's East Japan production base.

It also carried out activities that contribute to resource and culture stewardship, and the regions in which it does business, such as in 2015, when it launched the World Cultural Heritage Site Kamigamo Shrine Fixed-Interval Relocation Commemoration Culture Project with the goal of communicating “culture and the importance of water” to future generations and cultivating attitudes of respect for nature, and in 2017, when it sponsored a sweets festival held in Mie, Japan and participated in a project supporting coffee bean production on Tokunoshima, one of the Amami Islands in Kagoshima, Japan.



Providing *Kouyama Yusui Coffee* as part of the Kamigamo Fixed-Interval Shrine Relocation Commemoration Culture Project

### (3) J-OIL MILLS, INC.

#### Becoming a “Oishisa Design Company,” creating delicious flavors that move the hearts of our customers

J-OIL MILLS, INC. was established through the business merger of Ajinomoto Oil Mills Co., Inc., which had been formed by the spinning off of our edible oils business in 1999, and HONEN CORPORATION in 2002 and then the addition to the merger of Yoshihara Oil Mill, Ltd. in April 2003. The core reason behind this was industry reorganization<sup>9</sup> due to factors such as slowing demand caused by oversupply, declining birthrates and an aging population. At the time of its establishment, J-OIL MILLS, INC. had eight plants (Chiba, Yokohama, Shizuoka, Asaba, Yokkaichi, Kobe Fukae, Kobe Sumiyoshi, and Wakamatsu) and sales offices in major cities across Japan.

Following the merger, it formulated a medium-term management plan and implemented structural reinforcement and growth strategies.

In its second medium-term management plan (2007-2010), it worked to reduce costs and enhance productivity through structural reinforcement under the slogan “Change & Strong.” It also developed *TEE UP Production Method* for oil production, which can be used for long periods of cooking with reduced odor, and worked to cultivate high added value products. Following a business alliance with FUJI OIL CO., LTD. in 2007, it integrated its operations for the contract manufacturing of consumer use margarine with commercial use margarine operations carried out by a subsidiary to create a unified structure for the entire oil and fat packaged products. In 2011 it introduced the corporate slogan “Delicious energy for happiness ♪” and steadily promoted this in coordination with the corporate philosophy of “contributing to the happiness of our stakeholders.”

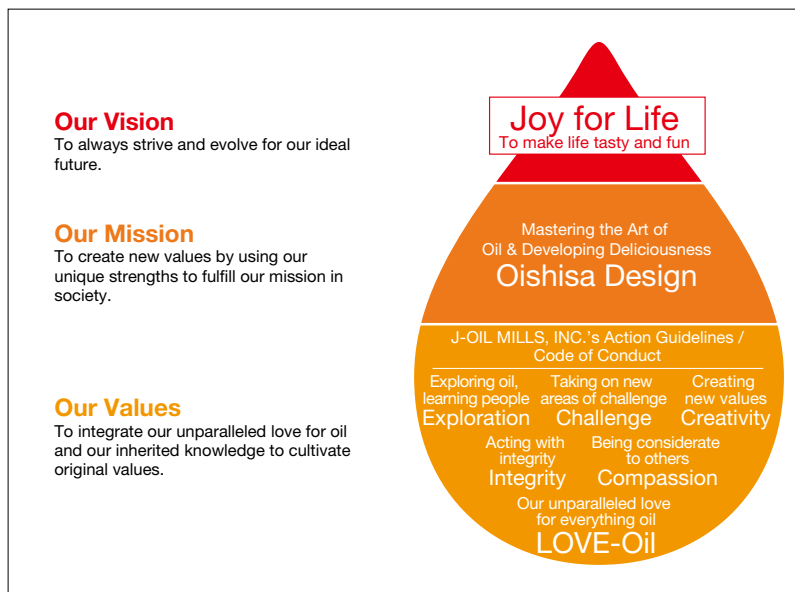
In its third medium-term management plan (2011-2013), amid prolonged deflation in Japan and rises in resources prices, especially international prices for soybeans and canola, which are crucial raw materials for edible oils, it adopted the core policy of “Stability and Growth 2020” which strived to make product prices reasonable and cut costs. Furthermore, in addition to conventional liquid and solid edible oils, it newly entered into the powdered edible oils business and completed construction on a production plant. In addition to use in the Group's various products such as powdered soup and coffee, further development was advanced through our collaborations.

In its fourth medium-term management plan (2014-2016), the effects of rising raw material prices and the Trans-Pacific Partnership Agreement (TPP) had made competition in the edible oils market even more intense, so J-OIL MILLS, INC. engaged in the structural reinforcement of each business and innovation of the quality of operations, organizations, and human resources under the main theme of “structural transformation hand in hand with quality enhancements.” This involved the strategies of realizing overseas sales and developing products that contributed to improved nutrition in the foods and fine chemicals areas, including reviewing oil milling locations in the edible oils business, developing in the healthcare field, and accelerating the development of the overseas business. On the organizational side, it carried out initiatives such as introducing a business headquarters system and restructuring and concentrating organizations.

In the fifth medium-term management plan (2017-2020), which started in 2017, under

<sup>9</sup>. From 2002 to 2004, The Nisshin Oil Mills, Ltd., Rinoru Oil Mills Co., Ltd., and Nikko Oil Mills Co., Ltd. merged to form the Nisshin Oil Group, Ltd., which alongside J-OIL MILLS, INC., is one of two major producers of edible oils for consumer and commercial use.

Figure I-6: J-OIL MILLS, INC.'s Corporate Philosophy



Source: J-OIL MILLS REPORT 2019



Oishisa Design Studio

the theme of “Mastering Edible Oils to Create Happiness 2020,” J-OIL MILLS, INC. aims to thoroughly pursue the value and expand the possibilities inherent in edible oils to become an “Oishisa Design Company,” which moves the hearts of our customers. Its basic policy is centered on the growth strategies and structural reforms shown below.

**Growth strategy:**

1. Expansion of sales of high-value-added products in each business area
2. Strengthening of solution-based operations in the BtoB market
3. Accelerating development in Asia
4. Enhancement of the profitability of general-purpose oil and fat products

**Structural reform:**

1. Pursuing efforts to raise the efficiency and quality of the value chain
2. Optimizing production sites from a medium- to long-term perspective
3. Selection, concentration and increasing efficiency

Based on these measures, it aims to create a business foundation that is not easily swayed by the external environment and steadily advance growth strategies by further enhancing the technological expertise, ability to propose solutions, and front-line capabilities needed to address customers' issues.

In 2017, the same year as the launch of this plan, it also formulated the new corporate philosophy of “Joy for Life – To make life tasty and fun,” which clarified that “Deliciousness” is at the heart of J-OIL MILLS, INC.'s business activities. In July 2018, it gave a physical form to this philosophy by opening the “Oishisa Design Studio,” a multi-use presentation facility, in Hatchobori, Chuo-ku, Tokyo. The studio is gaining a good reputation as a venue that leverages the knowledge and expertise J-OIL MILLS, INC. has cultivated to provide customers with optimal solutions.

Furthermore, in 2019, it also started promoting ESG management that aims for sustainable growth into the future by identifying materialities as priority issues to be addressed.

**Establishing and strengthening a business foundation and advancing growth strategies and structural reforms in Japan**

Over four medium-term management plans, J-OIL MILLS, INC. responded to an increasingly severe business environment by establishing a business foundation in Japan and strengthening growth strategies. To establish a business foundation in Japan, in 2012 it completed construction of a plant for powdered edible oils



Shizuoka Factory for powdered edible oils

within its Shizuoka Plant as the production center for its entry into the new field of powdered edible oils.

Also, in June 2017, it completed construction of the Kurashiki Factory, its first new soy-bean oil milling facility in about 50 years. This was a joint project together with JA NISHINIHON KUMIAI SHIRYU Corporation and ZEN-NOH Silo Corporation to realize a food and feed combine through collaboration between the three adjoining companies with value chains covering areas such as raw material storage, oil milling, feed production, and product storage and shipping. Transportation processes that were previously carried out using trucks or ships were now undertaken using conveyer belts, greatly reducing transport costs and making production more efficient. Also, production lines at the Kurashiki Factory were automated and rationalized by downsizing and using cutting-edge equipment which enabled stable operations to be maintained with a minimum of employees, while lowering operating costs and producing high yields, making it an important location in the building of an optimized production structure for the entire company.

Following this, in April 2019, J-OIL MILLS, INC.'s subsidiary handling the manufacturing of chemicals such as adhesives for wood and surface finishing agents (J-CHEMICAL, Inc.) renewed its plant in Shizuoka (Yutaka Chemical, Inc.'s Shizuoka Factory) with cutting edge equipment, enabling it to respond flexibly to steadily growing demand for products targeting its main customers of plywood board manufacturers.

Furthermore, following the discontinuation of milling processes at Yokkaichi Factory and NIKKA OIL MILLS CO., LTD.'s Wakamatsu Factory (Kitakyushu-shi), which had been carried out up to 2008, the operation of the Kurashiki Factory enabled operations to be discontinued at one of J-OIL MILLS, INC.'s aging Kobe Factory (Sumiyoshi). In regard to business, J-OIL MILLS, INC. carried out a process of selection and concentration that involved withdrawing from the nutritional supplement food business in June 2018, restructuring its mixed feed business to outsource production in September 2019, and transferring management of Sakaide Logistics Center<sup>10</sup>, which had been operating J-OIL MILLS, INC.'s warehousing and real estate businesses since 1943, along with its businesses in December 2019.

J-OIL MILLS, INC. also actively worked to strengthen its business foundations through alliances in Japan. In December 2009, it formed a business and capital alliance with Tsuji Oil Mills Co., Ltd. (headquarters: Matsusaka-shi, Mie, Japan) through which it advanced initiatives such as joint procurement of raw materials and ingredients, reciprocal usage of production facilities, and the effective utilization of both companies' functional food ingredients. In April 2013, it acquired additional shares in Tsuji Oil Mills Co., Ltd. and made it an equity method affiliate. Additionally, since February 2016, steam produced by the cogeneration system at the Nissan Motor Co., Ltd.'s Yokohama Plant has been supplied to J-OIL MILLS, INC.'s Yokohama Factory as the first initiative in Kanto to involve the transfer of steam between plants from different industries on separate sites. This collaboration enables an annual energy saving of about 3% (equivalent to 1,400 kilo liters of crude oil per year) and an annual 5,700ton reduction in CO<sub>2</sub> emissions, realizing cost savings and environmental preservation that benefit both parties. Another ESG-related collaboration was realized in September 2019 when J-OIL MILLS, INC. joined the "Izu Mirai Olive Project" being promoted by the Tokyu Group, through which it is cooperating to build Izu olives as a brand and vitalize the region through business collaborations with TOKYU CORPORATION and Izukyu Holdings Co., Ltd.

In March 2020, it agreed an oil milling business collaboration with the Nisshin Oillio Group, Ltd. Demand for edible oils and oil cakes in Japan is expected to shrink in the long-term as the birthrate falls and an aging population, while international competition will become fiercer due to the development of trade agreements such as the TPP and the securement of food resources. These factors are making the external environment more severe. This collaboration with J-OIL MILLS, INC.'s biggest competitor in Japan aims to respond to this environment by developing Japan's edible oils business, which is crucial to maintaining a stable food supply for the country, and maintaining and enhancing



Kurashiki Factory

10. Construction of Sakaide Factory started in 1943 and in 1946, it began to operate a sales and warehousing business (for silos, etc.). In 1949 it began milling operations, which it maintained until 1965. Following this, its operations were only warehousing and real estate. J-OIL MILLS, INC. transferred shares of Sakaide Yutaka Services, Inc., a full subsidiary responsible for the 100,000m<sup>2</sup> Sakaide Logistics Center site and its operations, and this transfer was completed in December 2019.



The Izu Mirai Olive Project

international competitiveness. Both companies have agreed to keep their uniqueness and healthy competitive relationship while working together to build structures that can realize a long-term stable supply of safe and high quality edible oils and oil cakes even during dramatic change in the business environment through initiatives such as building relationships for outsourcing milling processes, and carrying out the joint transportation of oilseed and raw materials for oils.

J-OIL MILLS, INC. has also strengthened various collaborations with the Group companies. In 2013, as part of business continuity planning efforts, it entrusted part of its order intake operations, which at that time were concentrated in its Tokyo head office, to AJINOMOTO LOGISTICS CORPORATION (now F-LINE CORPORATION) and established an ordering center in Saga-shi. In 2017 it also joined the Group Procurement Center of Ajinomoto Co., Inc., a Group-wide packaging procurement scheme, realizing greater efficiency and cost reductions through the joint procurement of packaging materials and horizontal collaborations with each Group company. It has also strengthened its ability to make proposals to customers through collaborations involving research, development, and sales, contributing to problem solving by providing solutions that leverage our combined capabilities.

### Developing overseas business

J-OIL MILLS, INC. has advanced its overseas business, which is important to its growth strategies, through product development and alliances.

*MAMENORI-SAN*<sup>®</sup>, originally launched in 1985, is a sheet-shaped, soybean protein-based material for use in cooking, and it has taken advantage of a boom in the worldwide popularity of Japanese food to gain a good reputation overseas, especially with sushi restaurants. In North America in particular, the product has become well-known in the market and become established as a brand due to strong support from vegetarians, vegans<sup>11</sup>, health-conscious individuals, and members of the millennial generation.

In regard to alliances, in June 2011 it acquired a 10% share in FUJI OIL (THAILAND) CO., LTD. (established 2010), an overseas subsidiary of alliance partner FUJI OIL CO., LTD. Following this, in May 2014, it established J-Oil Mills (Thailand) Co., Ltd. (J-OIL MILLS, INC. share: 49%) as a joint venture with a local company. In addition to selling modified starch to Japanese food product manufacturers expanding into Thailand, the new company also exports to other countries in Southeast Asia.

During this period, in June 2013, it formed a business collaboration with Shandong LongDa Vegetable Oil Co., Ltd. (headquarters: Liaocheng, Shandong), a manufacturer of edible vegetable oils as part of China-based LongDa Foodstuff Group. Following this, in August 2013, it established Ruchi J-Oil Private Ltd. as a joint venture with Ruchi Soya Industries Ltd. (Madhya Pradesh), a major Indian edible oil company, and Toyota Tsusho Corporation. However, due to changes in the market environment, it withdrew from the two businesses in China and India in FY2017.

In October 2019, it agreed a business and capital alliance with the holding company Premium Nutrients Pte. Ltd. (PNPL), headquartered in Singapore, which operates a business of manufacturing oil and fat packaged products in Malaysia. This involved making investments totaling US\$ 12 million in PNPL subsidiaries Premium Fats Sdn Bhd. (PF) and Premium Vegetable Oil Sdn Bhd. (PVO). The confectionary and bakery markets are growing in Southeast Asia and through PF and PVO, PNPL is building a structure for supplying high-value-added products that meet international standards. By cooperating with these three companies, J-OIL MILLS, INC. is working to develop new products and cultivate markets using its oil modifying technologies, flavor technologies and application proposal capabilities it has cultivated.

### New products leveraging technology (1) Household-use edible oil products

J-OIL MILLS, INC.'s business is primarily focused on edible oil products but also includes oil and fat packaged products such as margarine and powdered oils and fats, starch, fine material products, soybean sheet foods, and chemical products.

By combining materials, especially edible oils, and fully utilizing the strengths it has cultivated to date, it aims to thoroughly pursue the various values inherent in edible oils to become an "Oishisa Design Company," creating delicious flavors that move the hearts of our customers.

11. Veganism is a type of vegetarianism in which people eat full vegetable diets that contain absolutely no animal-derived foods, including eggs and milk products.



MAMENORI-SAN<sup>®</sup>



It offers a wide-ranging lineup of household-use edible oil products, mainly sold under the **AJINOMOTO** Brand, including basic oils such as cooking oil and canola oil, olive oil, sesame oil, flavor oils, functional oils for specific uses, and a Food for Specified Health Uses.

It has a large share of the consumer market in Japan for olive oil in particular, and it has driven the growth of the olive oil market in Japan by developing and supplying high quality products. In August 2016, based on the concept of “Olives are Fruits,” it launched **AJINOMOTO** Olive Oil Extra Virgin FRUTIA PREMIUM made from fresh olives picked from specific olive plantations in Australia, and this product has earned a good reputation. In FY2018, the tasting panel team that supports the production of J-OIL MILLS, INC.’s olive oil products achieved a first-place score on the historic and authoritative American Oil Chemists Society (AOCS)’s Olive Oil Sensory Panel test, providing proof of J-OIL MILLS, INC.’s high quality. Additionally, a series of Japanese TV commercials from 2017 featuring Mr. Satoshi Ohno, leader of the popular idol group *Arashi*, greatly boosted the product’s appeal.

In premium oils, **AJINOMOTO** Olive & Lemon Flavor Oil 70g was launched in August 2017 and played a part in further boosting the boom in products that add a finishing touch and a little extra flavor to dishes. As a result, **AJINOMOTO** Butter Flavor Oil was launched the same year and the lineup was further expanded in August 2018 with **AJINOMOTO** Kaoritatsu Chahan Oil and **AJINOMOTO** Kasho Oil, contributing to the creation of enriching home-cooked meals. It also launched **AJINOMOTO** Flaxseed Blend Oil in 2016 and **AJINOMOTO** Perilla Blend Oil in February 2018 to provide products that cater to a variety of preferences.

Furthermore, in 2019 it launched **AJINOMOTO** Karaage no hi no abura (oil for fried chicken), the first oil developed specifically for Karaage (fried chicken), and this proposal of an oil for a certain cooking scenario was well received.

In regard to consumer margarine products, in 2011 it launched *Butter zuki no tame no Margarine* based on the longtime favorites *Rama Soft* and *Rama Butter no Kaori*. This product’s main feature was a aroma rich in flavor and *kokumi*, and it also proposed new value as it could be used for cooking. *Rama Soft Reduced Salt*, which was released the same year, used the taste clear production technology to realize both salt reduction and deliciousness, and this technology was recognized with the New Technology/Food Development Award presented by THE JAPAN FOOD JOURNAL Co., Ltd. In addition to these, the launch of *Calpis Soft*, a product jointly developed with Calpis Co., Ltd., in March 2013 realized a great response and the development of a margarine specifically for making sweets and new products based on sunflower and rice oil strengthened a lineup that really communicates the deliciousness of oil.

It also focused on developing containers and the **AJINOMOTO** Sesame Oil 340 g series launched in 2011 used 20% less glass than existing products, winning the Mio Nemoto Award, the Judge’s special award at the Glass Bottle Awards 2011 hosted by the Japan Glass Bottle Association. For the 180 g series of the same product, the bottle was shaped in a way that cleverly allowed for it to be transported in cardboard boxes without partitions, winning the Food Packaging Award at the Japan Packaging Contest 2015 hosted by the Japan Packaging Institute. *UD Eco Pouch* series launched in 2015 took universal design into account and was the first container in Japan to combine layers of plant-derived biomass PET film and an evaporatively deposited film coating with strong barrier properties, and it won the new creation category at the 38th Kinoshita Awards (FY2014) hosted by the Japan Packaging Institute. This packaging was also used for **AJINOMOTO** Karaage no hi no abura (oil for fried chicken), launched in 2019, and further improvements to its usability through the incorporation of new technology won it an Accessible Design Packaging Award at the Japan Packaging Contest 2019 and earned it an Eco Mark.

Also, as the world focuses on environmental issues related to plastic, J-OIL MILLS, INC. is working to develop environmentally conscious packaging and it has adopted seals made from biodegradable plastics for some of its products.



AJINOMOTO® Olive Oil  
Extra Virgin FRUTIA PREMIUM



Rama Soft Reduced Salt



## New products leveraging technology (2) Professional-use products

J-OIL MILLS, INC. has a large share of the professional-use edible oils market and it handles various products that meet the needs of the food service and ready-made meal markets.

In addition to oils that provide the conventional function of heating, it is also leveraging technologies for edible oils that have cooking functions, add flavor, or provide seasoning functions, to expand the scale of the business. Additionally, it is creating a range of values by combining edible oils with materials such as starch with the aim of contributing to society through products that solve social issues.

In July 2009, it unified the branding of 11 products sold in 16.5 kg cans, including basic refined oils (soybean, canola) and cooking oil, using the “J-OIL MILLS” brand logo.

In 2019, it renewed the *Cho Cho Toku Toku* series, a popular series of long-resistant edible oils launched in 2008, to further extend its long-resistant effect. These edible oils remain useable for 30% longer than regular edible oils for frying, which not only provides indirect support for the labor shortage-hit food service industry by reducing the number of work created by changing edible oil, but is also expected to reduce CO<sub>2</sub> emissions across the supply chain including cultivation of raw materials in the cultivating countries and its transportation, production, product delivery, and storage. This has enabled the series to attract attention as a product that is solving social issues, such as the SDGs.

In 2017, it developed a new brand, *J-OILPRO Seasoning Oils for the Professional Cook*, designed to realize deliciousness through flavor and *koku*. These edible oils are thoroughly infused with both the flavor of the materials themselves and the flavor that is released through cooking (cooking flavor). These flavors can be drawn out any time for a variety of cooking situations and have become highly regarded as delicious cooking oils that can enhance the taste of cooking. As of 2019, they are available in 18 varieties, including *Garlic Oil* and *Sauteed Onion Oil*.



*Cho Cho Toku Toku*



*J-OILPRO Seasoning Oils for the Professional Cook*

In professional-use margarines, following the traditional and trusted “Meister” brand, in April 2014, it developed the new “*GranMaster*” series of butter compound margarines that combine the rich taste of carefully selected butters with original flavoring technologies cultivated by J-OIL MILLS, INC. over many years. Butter shortages have been common in Japan over recent years, so these products provide support for confectionary and bread making companies by meeting their needs. In 2019, it released mixed flours produced by Backaldrin International The Kornspitz Company GmbH (Austria), one of Europe’s five major confectionary and bread ingredient manufacturers, strengthening its lineup of products with its margarine.

In regard to starch products, it made a wide-ranging contribution in various food areas by launching products that improve texture and preserve quality, including the *HI-TRUST* series of quality improvement agents for meat processing, the *NeoTrust* series that improves the texture of food products, the *AMYCOAT* series that improves the quality of cooked rice, and *AMYLOFIBER* resistant starch.



Backaldrin International The Kornspitz Company GmbH (Austria) mixed flours

#### (4) YAMAKI Co., Ltd.

##### Chronicle

YAMAKI Co., Ltd. was founded in 1917 and began the manufacturing and sale of *Hanakatsuwo* (mixture of dried bonito flakes and others). Headquartered in Iyo-shi, Ehime, it is a long-standing food company with an annual business worth of 46 billion yen (fiscal year ended March 2019) that primarily handles dried bonito flakes and has also developed products such as *Mentsuyu* (concentrated liquid seasoning for Japanese noodles), *Shiradashi* (liquid seasoning made of bonito extract, light soy sauce, sweet sake, etc.), *Dashi no Moto* (bonito flavor seasoning using carefully selected ingredients and original technology), and *Niboshi* (dried baby sardines). Ajinomoto Co., Inc. formed a capital alliance with YAMAKI Co., Ltd. in March 2007, acquiring 33.4% of its outstanding shares through the issuance of new shares through a third-party allocation and a share transfer, making YAMAKI Co., Ltd. an equity method affiliate. Both companies use dried bonito flakes as a core ingredient and the goal of this alliance was to use this as a base for communicating the value of Japanese cuisine and *Dashi* to consumers worldwide and to contribute to delicious and healthy diets. At the same time, YAMAKI Co., Ltd. acquired 20% of the outstanding shares of Bonito Technical Laboratory Co., Inc., our affiliate. Additionally, we engaged in strengthening the value chain through this alliance, such as outsourcing the manufacture of some of the Group's products to YAMAKI Co., Ltd.

FY2009 in particular was an epoch-making year for YAMAKI Co., Ltd. It used a violation of the Act on Japanese Agricultural Standards (raw materials not meeting Japanese Agricultural Standards) that occurred in January as an opportunity to put its Quality Assurance Department under the direct control of the President and to transform company structure in a way that enabled speedy decision making optimized for the entire company by shifting from a vertically divided organizational structure to a system of supervision by the directors. It also strengthened governance through measures such as the adoption of a compliance day system.

In the following year, FY2010, it completed construction of Minakami Plant in Gunma, Japan, its first plant outside of Ehime, realizing a structure with a hub in each of West and East Japan. This was the manifestation of Business Continuity Plan (BCP), which had been a long outstanding issue for YAMAKI Co., Ltd.

In FY2012, sales growth slowed due to the effect of factors such as the 2011 Great East Japan Earthquake and an insufficient response to rises in raw material prices led YAMAKI Co., Ltd. into the red for the first time since its founding. However, it realized a V-shaped recovery in FY2013 by concentrating on cutting costs. In its three-year medium-term management plan starting from FY2014, it worked to create stable profit through structural reforms and built an engine for next-generation growth as a platform for speeding up business activities, and in FY2017, it celebrated its 100th anniversary. During this period, it steadily expanded sales from the 42.9 billion yen recorded in FY2009.

##### Towards the future of food

Preceding the 100th anniversary, FY2014 marked the 20th anniversary of the launch of *Kappo Shiradashi*®, one of YAMAKI Co., Ltd.'s main products. YAMAKI Co., Ltd. had cultivated this product through many years of effort as a third category in addition to dried bonito flakes and *Mentsuyu*. It has maintained a leading market share since its launch and even now, it has seen six consecutive years of double-digit growth.

It has also expanded production sites to include locations in Shanghai (China) in FY2014, Indonesia in FY2016, South Korea in FY2017, the U.S. in FY2018, and the Maldives in FY2019.

In FY2017, 100 years after its founding, it renovated its corporate identity and began developing businesses in South Korea and the U.S. It also steadily engaged in communicating the appeal of *Dashi* to the world through initiatives such as issuing "Secrets of Dried Bonito Flakes and *Dashi*" as a volume in the "Manga De Yoku Wakaru Himitsu" series published by Gakken Holdings, Co., Ltd., a series of books through cartoons, and donating copies to elementary schools and public libraries across Japan.



Toku-ichiban Hanakatsuwo  
(dried bonito flakes)



Mentsuyu  
(concentrated liquid seasoning  
for Japanese noodles)



Kappo Shiradashi®  
(liquid seasoning made of  
bonito extract, light soy sauce,  
sweet sake, etc.)



Secrets of Dried Bonito Flakes  
and *Dashi*

## (5) AJINOMOTO BAKERY CO., LTD.

### Business development by AJINOMOTO BAKERY CO., LTD.

AJINOMOTO BAKERY CO., LTD. (AJB) has a head office in Chuo-ku, Tokyo and has a production plant in Shimada-shi, Shizuoka, Japan. It is engaged in the development, manufacturing and sales of frozen bread dough and frozen bakery products. It was established as Ajinomoto Frozen Bakery Co., Ltd. in December 1993 when Ajinomoto Co., Inc. spun off the departments operating its bakery business as a new company and it changed its name to AJB in March 2004.

The frozen bread dough business began in 1993 with the establishment of Ajinomoto Frozen Bakery Co., Ltd., producing products for major convenience stores (CVS). Frozen bread dough technology had been introduced into Japan in the late 1960's and it had evolved since then through the development of freezing technology, freeze-tolerant yeasts, and frozen goods logistics networks. Following this, demand for frozen bread dough had grown due to factors such as rapid increases in the number of bakery chain and CVS. Ajinomoto Frozen Bakery Co., Ltd. was established to meet this demand.

From the mid-1980's to the 2010's, the volume of overall bread production in Japan saw only slight growth while frozen bread dough production continued to grow by leveraging the advantage of being able to deliver mass-produced products across the country using fewer people. As of 2019, in regard to bread distributed to retail channels in Japan, a maximum of over 30% goes to supermarkets, including instore bakeries, and about 30% goes to CVS, combining to make 60%. In regard to bread distributed to bakeries, around 60% goes to chain stores. This situation suggests there is a demand for frozen dough.

From the 2010's, demand for industrial use products has grown due to worsening labor shortages within the food service and ready-made meal industries and increased demand from hotels driven by in-bound tourism. CVS demand has also been steady due to the spread of donut sales and coffee services, and the provision of eat-in areas.

Within this environment, AJB is strengthening its competitiveness by enhancing its original technological development capabilities, including developing technology that uses Ajinomoto Co., Inc. enzyme preparations to prevent a loss in quality after baking, industrial technology that ensures frozen breads dough has the same moistness and aroma as dough handmade from scratch, and technology that helps shorten the preparation time of bakery products.

Also, following the acquisition of ISO9001 certification in 2004 and ISO14001 in 2005, in June 2010 it acquired Occupational Health and Safety Assessment Series (OHSAS) 18001 certification, an international occupational health and safety management standard. Furthermore, in February 2020 it acquired ISO45001, the successor to OHSAS18001, and it is carrying out risk management from occupational safety, sanitation, and health perspectives and promoting smooth, sound organizational management.

In 2019, AJB formulated a new corporate philosophy (comprising a mission, vision, and values) and it will continue taking on challenges as a professional frozen dough business with the aim of "becoming an indispensable existence by being loved by customers as a professional in the frozen bread dough business in Japan and overseas" through its strengths of "unparalleled ability to provide solutions," "strong cost competitiveness," and "the best development speed."



A view of the Shimada Factory



Melon bread before baking



Melon bread after baking